

WEB CREATION

For Beginners

BY **AHTASHAM KHAN**

Beginner's Edition

- Create Responsive Web Designs
- Learn Upto Basics of HTML5 & CSS3
- Web Layouts in DreamWeaver
- Publish Web Pages via cPanel & FileZilla

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Why This BOOK?

- These are not boring pieces of papers in your hands. You will be able to Create and Publish your Website just after READING & UNDERSTANDING this book...
- It has Step by Step Pictorial Guidline which will never let you confuse...
- 100% Practically Style and Useful Hints which will never let you down...

"When you say "it's hard", it actually means I'm not strong enough to fight for it". Stop saying its hard. Think Positive!"
(Da AK)



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By: **Ahtasham Khan**

PREFACE

This book is the ultimate guide for those who are passionate about building a website but have no clue that how to begin. It not only contains recipes including HTML and CSS but, also demonstrates how to put these building blocks together to build a meaningful construction. Unlike other books, it doesn't leave you stranded at the other end (guessing what to do next) but takes you to the final milestone. It builds the learning momentum in the initial chapters with simple and concrete examples. In the last chapters, you go through a website project where you fit in almost all the blocks from the initial chapters. Starting with professional web pages, you're shown how to put life to a website by creating web pages. In the final task of this project, you are provided with step by step instructions to move your website from your development PC to a hosting server on the internet.

From web introduction to hands-on examples and from website designing to its deployment, this book surely is a complete resource for those who know little or nothing about Professional Web Creation.

Web Creation - For Beginners

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ASK Questions to AUTHOR Directly

Incase of any confusion or trouble related to any topic in book, you can ask directly to author. The way really easy not tricky like eating a mango at all. Wooh...

Simply Visit the Following link and ask your Question to Author Directly.

<http://ask.ahtashamkhan.com>

About Author

Ahtasham Khan (Da AK) is a Web Programmer, IT Engineer, Cisco Certified Network Associate and a Microsoft Certified System Engineer. He is a Founder of MRM Network™ which deals to provide web solutions around the globe. He is an IT Professional with over 6 years of hard-earned experience. He started his career as a programmer in 2007.

Author's Message

Hello to Students, Mates & Dear Readers, With the Prayers of my Parents, Teachers, Friends, Students, Colleagues and the most powerful part, the blessings of **Allah Almighty** that Its my First Book in front of you. In this book you will learn the actual meaning, purpose & Working Criteria of a Website. If you want to create a website but have no clue how to begin? then these pieces of papers in your hands will not let you bore anymore. This guide book will walk through you all step by step to creating and publishing a website on the Internet.

“It's not at all important to get it right the first time. It's vitally important to get it right the last time.”

“Always Remember! Computers are good at following instructions, but not at reading your mind.”

"Failure is a Word... Unknown to me!"

- Muhammad Ali Jinnah -

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DEDICATIONS & ROLE

DEDICATED TO

ALLAH Subhana-wa-Ta'ala who is most merciful and beneficent and to My Parents, Siblings and all those by their prayers What I'm today!

SPECIAL ROLE

This Book is Specially dedicated to my Father, who has been a great inspirational statue in my life. His fragrance of amazing motive made me in compulsion to write this book. May Allah always bless him. Aameen!

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Chapter - 1

What - How & Why a Web?

What is a Website?

In With The New as I think the Definition of a Website must be Updated.

In my this book I propose a new definition for the website, as:

"A digital environment capable of delivering information and solutions and promoting interaction between people, places, and things to support the goals of the organization it was created for."

Old Definition: *(Which may be considered a wrong intro according today's)*

For years, the website has been defined as a computer term representing pages on the World Wide Web. This outdated perception is holding brands back from embracing the website for what it really is.

Definition of a website:



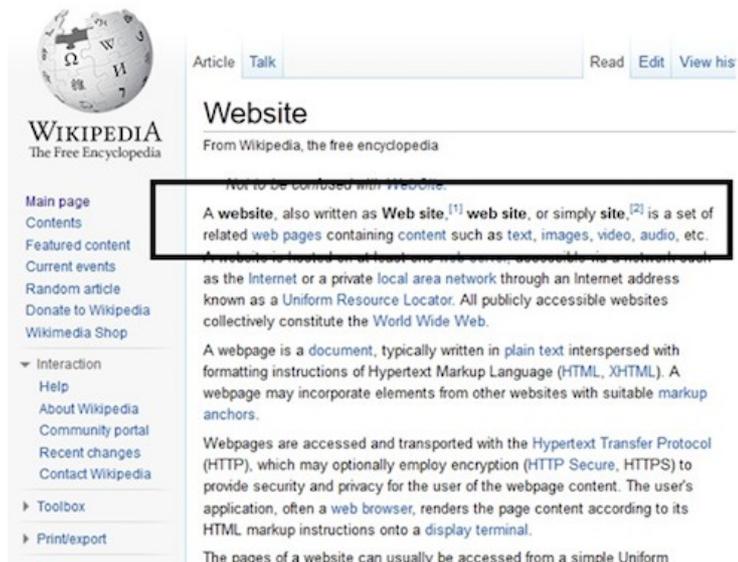
Out With The Old

Unfortunately, the current *outdated* definition of a website has perpetuated the view of a website as an exercise in technology, rather than a function of business.

Merriam-Webster currently defines the website as "a group of World Wide Web pages usually containing hyperlinks to each other and made available online by an individual, company, educational institution, government, or organization."

Here's how Wikipedia defines it: "A website is hosted on at least one web server, accessible via a network such as the Internet or a private local area network through an Internet address known as a Uniform Resource Locator.

Isn't the website more than a mere set of related web pages? Doesn't it have to be more, if it will serve any meaningful purpose?



The Website Process is Broken

In light of the way the website has been defined over the years, it isn't too difficult to understand why in 2013 those responsible for building websites continue to view the website in the same as they did in the 1990s; as a project.

How a Website was Invented?

Before getting started, we should must have the knowledge about the Birth of Word's First Website and its Inventor.

Who Invented?

Tim Berners-Lee, a British scientist at CERN, invented the World Wide Web (WWW) in 1989. The web was originally conceived and developed to meet the demand for automatic information-sharing between scientists in universities and institutes around the world.

Can I see the look of First Web?

Yes! What? Yes Yes! The world's first website can still be visited today :).

Here is the link: <http://info.cern.ch/hypertext/WWW/TheProject.html>



The NeXT computer used by Tim Berners-Lee in 1989 to create the world's first website.

How Websites Work?

A. The Internet

The Internet is a worldwide network of computer systems through which information can be easily shared. The World Wide Web is one method of sharing information through the Internet. Other methods include FTP (file transfer protocol), IM (instant messenger), and email.

B. Browsers

To view information through the World Wide Web, the end user must have a type of software application called a browser installed on a computer that is connected to the Internet. Current browsers include Internet Explorer, Mozilla Firefox, Google Chrome, Safari, and Opera etc...

Because each browser and each browser version interprets code slightly differently, you should test your website on several browsers before it is uploaded to a live web server. I always recommend to my students and mates to go with the updated versions of Mozilla Firefox and Google Chrome only.

C. Web server

A website is composed of many files that are located on a web server. A web server is a computer connected to the internet that has special software installed on it (e.g. Microsoft Internet Information Server or Apache), which allows it to host a web site.

If you work for a large company, the company may have its own web servers. Otherwise, you can purchase an account at a web hosting company, which will provide you with space on their web servers for your website files.

D. URL, Domain Name, and IP Address

To view a web page in a browser, you must know the URL (Uniform Resource Locator) of that web page. The URL is also called a web page address or a website address. It looks like this:

`http://www.example.com/index.html` `http://192.0.2.1/testing/`

The domain name uniquely identifies a website. Examples of domain names are “example.com”, “google.com”, “ahtashamkhan.com”, and “mrmsolution.com”. You can reserve a domain name through a domain name registrar company.

A domain name points to the IP address (Internet Protocol address) of the web server. All web servers connected to the Internet must have an IP address, although they do not have to have a domain name. Examples are “192.0.2.1” and “24.23.247.3”.

If you type the domain name of a website into your browser without specifying a web page URL, your browser will display the designated home page of the website. The home page is a web page that has been marked as the default page to display by the web server.

E. Web pages

In a simple website, each web page is a separate file written in a coding language called HTML (Hypertext Markup Language). These files are often called “html files” or “web page files”. In addition, each html file may link to supplemental files for images, CSS, scripting, or other support materials.

The code in an html file can be written by hand, if you know HTML. However, you can also use a web design application such as Dreamweaver to write the HTML code for you.

F. Different languages for different purposes

Although all web pages must be written in HTML for a browser to display it, there are several coding languages that work together to create a modern web page.

The content of a web page is controlled by the HTML code. The text that appears on a page is typed into the HTML code. The images that appear on a page are inserted by using the HTML code.

The structure of a web page is also controlled by the HTML code. This is the underlying logical structure of the content, such as what text is considered a heading, what content is considered a table, and what code is inside a section (e.g. header, footer, navigation bar).

The presentation of a web page is controlled by CSS (Cascading Style Sheets). The presentation is how the page looks, including the font, font size, alignment, colors, and page layout. Although HTML has been used for formatting in old websites, the recommended method for modern websites is to use CSS code.

The interactivity on a web page is controlled by any number of different languages. For example, a drop-down navigation menu can be created using HTML, CSS and Javascript, as in Ajax. Or an advertisement can be inserted using Flash.

In this course, we will cover how Dreamweaver can create HTML and CSS code for our web pages, but we will not discuss interactivity.

G. Static websites, Dynamic websites, and Content Management Systems

In a simple website, each web page is created and saved individually by a person. This is considered a static website, and this method is best for websites where there are not that many pages and the content does not change often.

In a more complicated site, each web page may not be created by a person. The web page may be created "on the fly" by the web server at the moment a user clicks a link to request that page. This is called a dynamic website. For example, if you click a link on Amazon.com to view a product, the HTML code to display that product page is created at that moment by a server-side script gathering data from a database. Common languages for the server-side script are PHP, Java/JSP, ASP.NET, Perl, and Coldfusion.

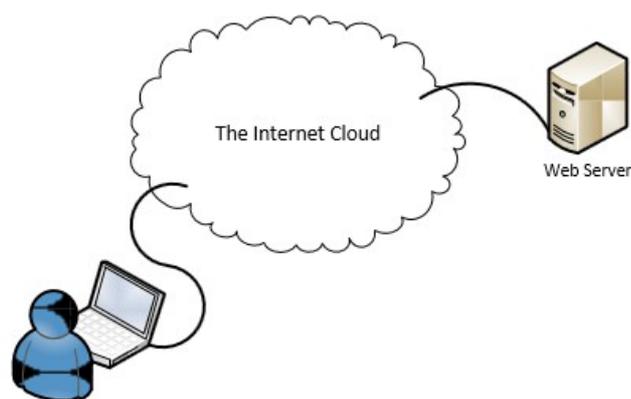
A popular type of dynamic website is a CMS (Content Management System). This is a combination of pre-built server-side scripts and a database. Although a website developer needs to design and setup the CMS initially on a web server, a content manager can easily update the content of a CMS without needing to know HTML or CSS. Common CMS systems include Drupal, Joomla, and the most Popular is Wordpress. **H. How the Browser displays a Web page**

When a user types a URL into a browser or clicks a link to view a new page, the browser sends a request to the Internet to locate the web server to which that URL or link points.

The request arrives at the web server, and a copy of the requested web page is downloaded back to the user's browser.

The browser reads the HTML code in the web page and downloads any additional files as written in the code, such as image files or CSS files. Then, the browser interprets the HTML code and displays the page in its window. If it does not understand any of the coding, the browser may display an error or it may guess what the corrected code should look like.

The copy of the web page and additional files are kept in the temporary internet files cache of the browser. They will stay there until the cache fills up and the old files are removed. If the files are still in the cache when the user tries to view the same web page again, the browser will check the modification dates of the cached files and the website files, and it will display the files from the cache if the dates are the same.



Why Websites are going Important Today?

According to me. 4 reasons to be online (Having a Website)

1. 80% of people search for local businesses online

If you have a business it is and will be more vital than ever to have a presence online. Many search engines display local search results allowing customers to connect to businesses locally; which is much easier than competing with major websites in the same industry. In addition, mobile applications are becoming more popular; with the ability to suggest businesses based upon your location; but if you're not online it's impossible to be found. For less money than a 12oz Coke per day you can have a robust business website.

2. Up-to-date Portfolio/ Resume

Each of you has a talent to share and promote. Whether it revolves around a product or your internal genius; people are looking for talent you possess, be there for them. When I graduated, I contacted many potential employers. Each time I contacted them I told the regular things... which they heard all day from everyone else, who I am, what I like, etc. Then I decided to make my Portfolio/Resume Website which will contact my all bio data. It helped me a lot to deliver the Tremendous Impression on Employers because then I had started to write each email with my website's address at the endings. e.g: "*Click the link to my website containing more information about me*".

3. Your website works 24/7 for you

A website is the best employee and advocate you'll ever have. It works through the night, early mornings and will do everything you say. As support to a traditional brick and mortar store or a full force e-commerce shop your website will give your customers what you need when they need it.

4. It's the cheapest office space you'll ever have

If your business model can function without a physical location, other than perhaps your living room, a website is the cheapest storefront you'll ever have.

*There are Currently two types of Website which are **Static and Dynamic***

Static Website	Dynamic Website
<ul style="list-style-type: none"> • Difficult to update or maintain (Need Coding Skills) • No User Interaction (Just Readable) • Speedy to load on browser • HTML and CSS commonly used (No Database) 	<ul style="list-style-type: none"> • Easy to update with Backend Panel • User Interaction • Takes little bit more time to load than Static Website • PHP or ASP (Integrates with Database)

Requirements to Getting Started

- Pentium-3 or Latest PC with Internet Connection Enabled
- Text Editor like Notepad, but I recommend Notepad++ (Free Available for Download > <http://notepad-plus-plus.org/download>)
- Macromedia Dreamweaver 8.0 or CS5 (Software)
- FileZilla (Free FTP Software)
- Domain & Web Hosting

Why Notepad++ is recommended by me?

Well there is no doubt about the popularity of notepad++ among windows folks. Nowadays nobody (especially a Web Coder) is interested in windows default notepad anymore and have been moved to many other light weight text editors. Among them 'Notepad++' has come to the top of the list. What is the reason of becoming that ugly looking editor to the first place? It is worth having a glance on it.

Some Plug-ins & their Benefits

- **Speech Plugin**
Enables Notepad++ to talk.
- **Falling Bricks**
Will give you a quick mind break.
- **Multiclip Board**
This plug-in allows to keep multiple items in your Notepad++ clipboard.
- **XML Tool**
This facilitates xml editing.
- **HTML Tag for Unicode or ANSI**
Support html and xml editing.

I love to share Some Features of Notepad++ which are:

- Multi Tabbed Editing (Ever best feature)
- Code folding/collapsing
- Split-screen editing
- Built-in FTP browser
- Auto-completion for supported languages
- Syntax highlighting, including parenthesis and bracket highlighting

=====

Chapter – 2 Domains & Hosting

Before We get started, you should understand that **EVERY** Website must have these two things....

1. **Domain Name**
2. **Web Hosting**

Domain Name:

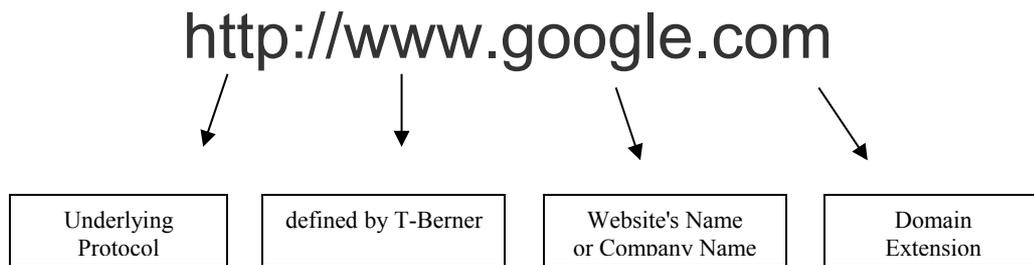
The domain name is a address of your website same like your home or office address. As a example If anybody wants to send some documents at your office address then you will provide him the accurate address of your office which will be unique one in the world.

Same as it is if you want to somebody or your customer visit your website then you must provide them a specific or unique address which is called a Domain Name like yoursite.com etc.

How to get a Domain Name?

Firstly you should know about Domain Registrar who provides the facility of domain registration at the globe. Some Registrars like Godaddy.com, Internetbs.net, Name.com, 1and1.com etc

If you have low budget then I would like to recommend you to buy a domain name from MRM Solution™ (<http://mrmsolution.com>).



Some Extensions of Domain Names

Extension	Category	Description
.com	Commercial	Its open for everyone, used for commercial purpose websites.
.net	Network	Usually used for network of Computers
.org	Organization	Suitable for any organization

	Business	Any company having business on internet can use this.
	Pakistan	Its a Country level domain and open for registration to all.
	United States	Its a Country level domain and open for registration to all.

Difference between gTLD and ccTLD:

gTLD:

gTLD stands for Generic Top Level Domains e.g: **.com**, **.net**, **.org**, **.biz**

ccTLD:

ccTLD stands for Country Code Top Level Domains e.g: **.pk** for Pakistan, **.us** for United States, **.in** for India, **.ca** for Canada etc...

Who is IANA?

The **Internet Assigned Numbers Authority** is the entity that manages the allocation of global IP Addresses, root zone management related to DNS (Domain Name System) and other Internet Protocols (IP).

Partly because the Internet is now a global network, the U.S. government has withdrawn its oversight of the Internet, previously contracted out to IANA, and lent its support to a newly-formed organization with global, non-government representation, the Internet Corporation for Assigned Names and Numbers (ICANN). ICANN has now assumed responsibility for the tasks formerly performed by IANA.

Who is ICANN?

ICANN (Internet Corporation for Assigned Names and Numbers) is the private (non-government) non-profit corporation with responsibility for IP address space allocation, protocol parameter assignment, domain name system management, and root server system management functions, the services previously performed by the Internet Assigned Numbers Authority (IANA). (ICANN is usually pronounced EYE-can, as in "I can at least try to manage the Internet.")

NameServers (or DNS):

Well, after purchasing a domain name the Step two is setting up NameServers or DNS for newly purchased domain.

DNS is a commonly used acronym which, depending on context can mean Domain Name System or Domain Name Servers. Can you use it in a sentence, please? Sure...people usually say something like, "I need to setup DNS for my new domain name." Or, they may ask, "What are the NameServers for our new domain?"

DNS is the least tangible and typically hardest part of the whole website setup process for people to understand so I'll try to make it really simple.

Suppose I register a domain name i.e: ahtashamkhan.com from Godaddy.... Alright? Well... Now the Next step, I have to setup its DNS. Here is a question and that is From where I can get the DNS? Simple answer of a touchy question is the Web Host Provider. When you will purchase a web hosting from any web host then they will provide you a unique DNS and IP address. And this is what you have to put in your domain name panel, with this your Domain Name will be propagated with your Web Hosting.

There are minimum 2 DNS are required for pointing domain to web hosting. If my web host company is MRM Solution then they will provide me NameServers like:

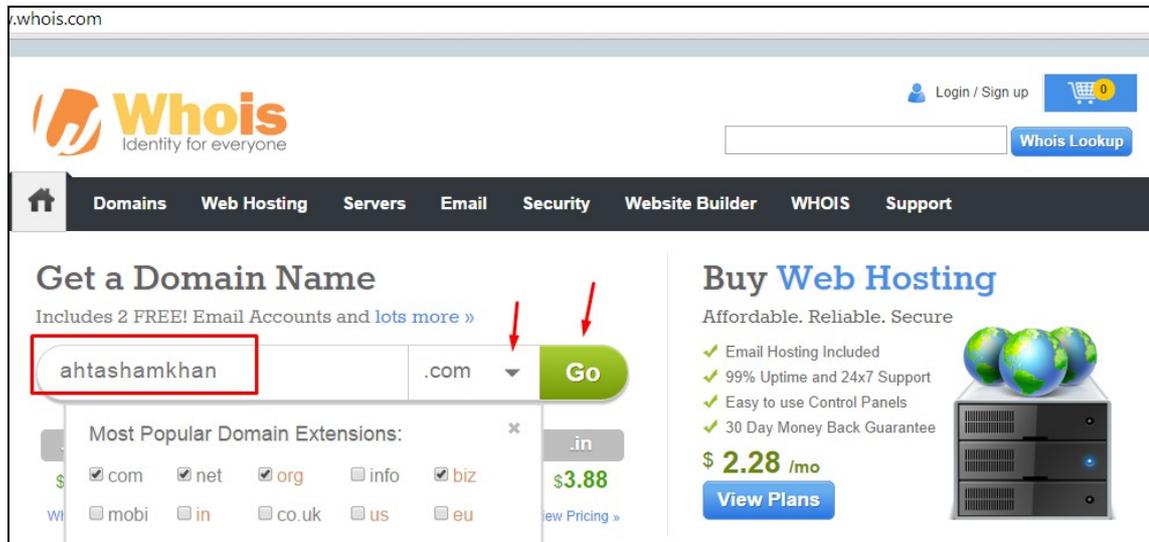
ns1.mrmsolution.com **OR** dns1.mrmsolution.com
 ns2.mrmsolution.com **OR** dns2.mrmsolution.com

In the above example the ns1 and ns2 may be different depend upon the choice of Web Master or Domain Manager of Web Host Company.

Domain Name Availability

Before registering a domain name the domain name should be available. To check domain name availability, there are millions of website on the internet. But I recommend **Godaddy.com , Whois.com and MRMsolution.com**

Lets Suppose, I'm going to check domain availability on Whois.com. The method is really simple, just open <http://whois.com> in any browser and at homepage type the domain name then choose the extension in which you are going to search and at final step press the button GO.



In few seconds you see the results .

Search results			
<input checked="" type="checkbox"/>	ahtashamkhan.com	Taken	Whois Backorder Acquire
<input type="checkbox"/>	ahtashamkhan.net	Available	\$9.88
<input type="checkbox"/>	ahtashamkhan.org	Available	SALE! \$4.88
<input type="checkbox"/>	ahtashamkhan.biz	Available	SALE! \$4.88

Web Hosting:

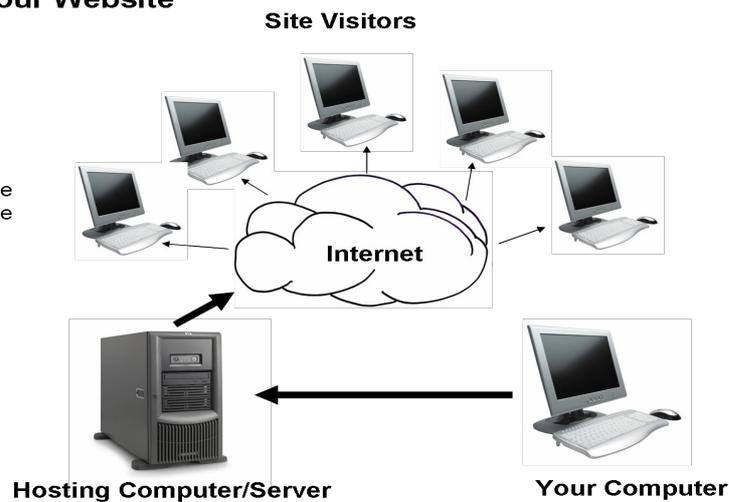
In a simple words, if you want to buy a Computer then with it, you will definitely buy Hard Disk depend upon the storage space you required.

So, Web Hosting is a name of storage space for you web pages and whatever files you need for your website. You will be upload your website to your web hosting space. This is how a website becomes visible on Internet Globally.

As domain names, definitely there must be a company behind Web hosting which called Web Host. Same here I would like to recommend you to buy Web Hosting from MRM Solution™ (<http://mrmsolution.com>).

Hosting Your Website

1. Upload files from your computer to your web host
2. The host computer makes your site available on the Internet
3. Visitors are able to view your site



A diagram which can show you how visitors will reach to your website.

Web Server:

A Web server is a computer system that hosts **websites**. It runs Web server software, such as **Apache** or **Microsoft IIS**, which provides access to hosted **web pages** over the Internet. Most Web servers are connected to the **Internet** via a high-speed connection, offering **OC-3** or faster data transmission rates. A fast Internet connection allows Web servers to support multiple connections at one time without slowing down.

Any computer can be used as a Web Server... What??? Yes Yes I'm alright and in my senses :-P. Any computer can be used as a Web server, as long as it is connected to the Internet and has the appropriate software installed.

Shared Web Server:

Web servers typically host multiple websites. Some only host a few, while others may host several hundred. Web servers that host websites for multiple users are called "shared hosts." This is the most common type of hosting solution and is used for personal sites, small business sites, and websites run by small organizations.

Dedicated Web Server:

Web servers that only host websites for a single person or company are called "dedicated hosts." These types of **servers** are appropriate for high-traffic websites and sites that require custom server modifications. Dedicated hosts are also more reliable than shared hosts,

Creating your Site/Pages:

Its not necessary to buy domain and hosting before creating web pages because you can save your web page on your local machine. Well you can start by using some tools or software like Dreamweaver, Microsoft Publisher or Frontpage, Kompozer and CoffeeCup but as my opinion Dreamweaver is by far, the best and most respected when it comes to website creation and management programs.

Don't forget, If you want to learn how to Code from scratch then in start you must learn HTML & CSS in next Chapter - 3.

Skills Need for the Next Chapter?

- You should know What the Web is? And How it Works...
- You should know the Domain & Hosting and How they works.

Chapter - 3

HTML & CSS

Part 1 - HTML & Basic Touch to HTML5

The primary thing to keep in mind, the super magic key, is that HTML is used for **meaning** and CSS is used for **presentation**. HTML is nothing more than fancy structured content and the visual formatting of that content will come later when we tackle CSS. Here I focus on best practice from the outset and getting into the frame of mind of doing things the right way from the start will lead to much better results in the end InshaAllah Ta'ala.

Lets Start with HTML first. Here are the Main Content which we are going to learn:

- **Getting Started:** What you need to do to get going and make your first HTML page.
- **Tags, Attributes and Elements:** The stuff that makes up HTML.
- **Page Titles:** Titles. For Pages. A difficult concept, I know...
- **Paragraphs:** Structuring your content with paragraphs.
- **Headings:** The six levels of headings.
- **Lists:** How to define ordered and unordered lists.
- **Links:** How to make links to other pages, and elsewhere.
- **Images:** Adding something a bit more than text...
- **Tables:** How to use tabular data.
- **Forms:** Text boxes and other user-input thingamajigs.
- **Putting It All Together:** Taking all of the above stuff and showing it together. Sort of in a recap groove.
- **HTML5 Basic Touch:** Inserting Audio, Video files in web pages and more popular elements of HTML5

Before getting started We should know about the HTML Comments.

HTML Comments:

Comments are piece of code which is ignored by any web browser. It is good practice to comment your code, especially in complex documents, to indicate sections of a document, and any other notes to anyone looking at the code. Comments help you and others understand your code.

HTML Comment lines are indicated by the special beginning tag `<!--` and ending tag `-->` placed at the beginning and end of EVERY line to be treated as a comment.

Comments do not nest, and the double-dash sequence `--` may not appear inside a comment except as part of the closing `-->` tag. You must also make sure that there are no spaces in the start-of-comment string.

For example: Given line is a valid comment in HTML

```
<!-- This is commented out -->
```

Using Comment tag

There are few browsers who supports `<comment>` tag to comment a part of code.

I'm `<comment>not</comment>` Ahtasham Khan.

Multi-line Comments:

You have seen how to comment a single line in HTML. You can comment multiple lines by the special beginning tag `<!--` and ending tag `-->` placed before the first line and end of the last line to be treated as a comment. **For example:**

```
<!--
```

```
This is a multiline comment <br />
```

```
and can span through as many as lines you like.
```

```
-->
```

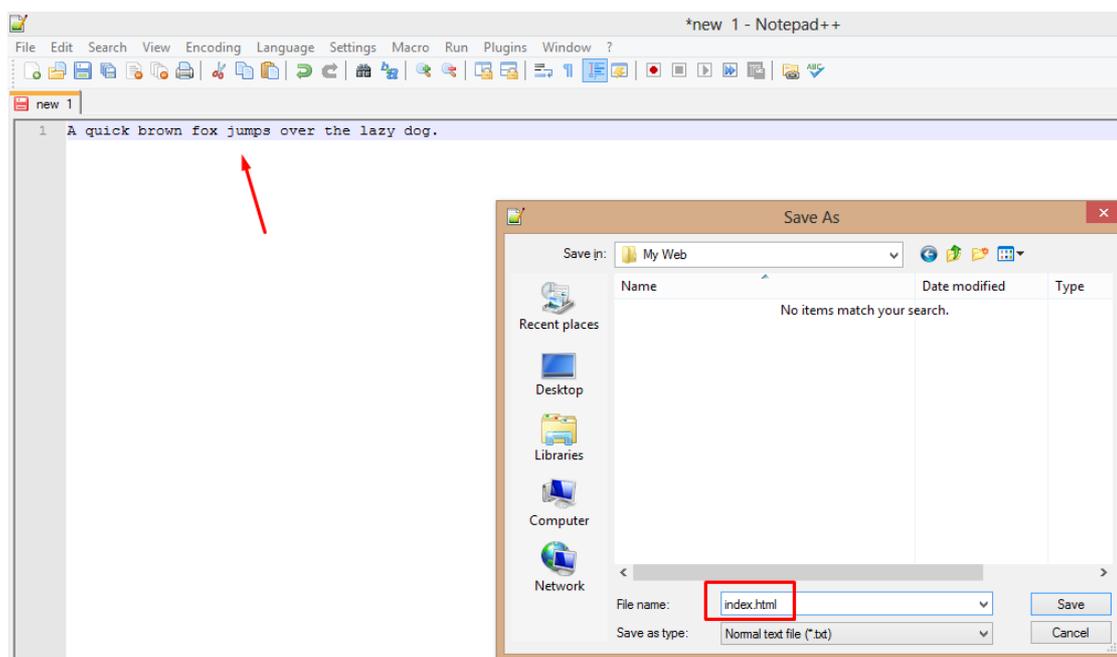
1.0 Getting Started:

As I said before the Notepad++ is best editor in my point of views. So, I'll use Notepad++ here... But any program that lets you fiddle with text you can use.

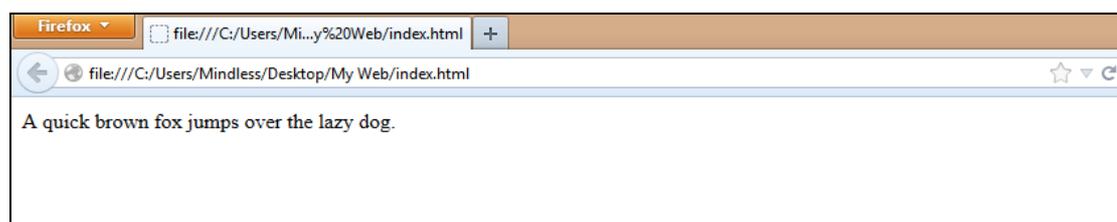
Lets start, type the following in Editor:

```
A quick brown fox jumps over the lazy dog.
```

Then press CTRL+S and save the file at your desire location or simply at desktop. Before saving it you must have to put the HTML's extension at the end of File Name. Just like have given a name to the file is index.html



Now the next step is to open your new file in any Internet Browser e.g: IE, Chrome, Firefox, Safari, Opera etc... I'm using Firefox here...



You can see above, the look of your html page in browser.

IMPORTANT to know before write a code:

- You can use capital or small letters in tags. No Matter! its yours choice.
- After opening any tag you must keep in mind that the closing tag will also be placed.
- use Comments in HTML. (helps a lot for remembering your Code tasks).

2.1 Tags:

The basic structure of an HTML document includes tags, which surround content and apply meaning to it.

Change your document so that it looks like this:

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
A quick brown fox jumps over the lazy dog.
</body>
</html>
```

Now save the same document again and reload the web page in browser. It will give the same result as given last above example picture.

The first line on the top, `<!DOCTYPE html>` is a **document type declaration** and it lets the browser know which flavor of HTML you're using (HTML5, in this case). It's very important to stick this in - If you don't, browsers will assume you don't really know what you're doing and act in a very peculiar way.

To get back to the point, `<html>` is the **opening tag** that kicks things off and tells the browser that everything between that and the `</html>` **closing tag** is an HTML document. The stuff between `<body>` and `</body>` is the main content of the document that will appear in the browser window.

Closing tags in HTML: The tag which contain Forward Slash is called Closing Tag like `</body>` or `</html>`.

2.2 Attributes:

Tags can also have **attributes**, which are extra bits of information. Attributes appear inside the opening tag and their values sit inside quotation marks. They look something like `<tag attribute="value">Hello World</tag>`. Lets check out the more explained example. I want to write one Paragraph at the center of the Page then the code below will be handy enough for me but how we can read the code? The given example will define all by itself.

```
<p align="center"> This is my line </p>
```

`<P` is Opening Tag Paragraph

`align` is Attribute

`center` is value of attribute

`</p>` is closing Tag of Paragraph

2.3 Elements:

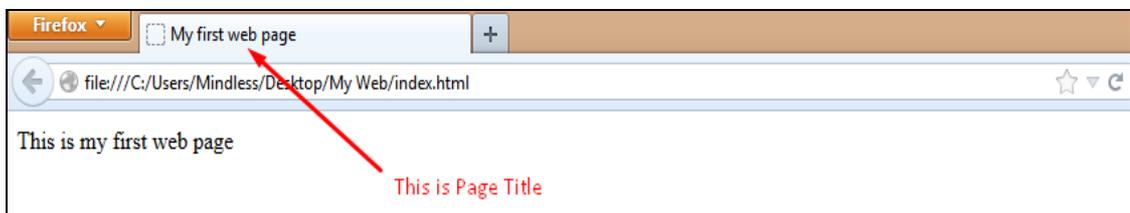
You would say, for example, that everything that is in between (and includes) the `<body>` and `</body>` tags is the body element. As another example, whereas “`<title>`” and “`</title>`” are **tags**, “`<title>My first web page</title>`” is a title **element**..

3.0 Page Titles:

To add a title to your page, change your code so that it looks like this:

```
<!DOCTYPE html>
<html>
<head>
  <title>My first web page</title>
</head>
<body>
  This is my first web page
</body>
</html>
```

It will look in the browser like:



Well... I have added two new elements here, that start with the `head` tag and the `title` tag.

The head element (that which starts with the `<head>` opening tag and ends with the `</head>` closing tag) appears before the body element (starting with `<body>` and ending with `</body>`) and contains information **about** the page. The information in the head element does not appear in the browser window.

And What about **Title Tag**?

If you look at this document in the browser (save and reload as before), you will see that “My first web page” will appear on a tab or the title bar of the window (not the actual canvas area). The text that you put in between the title tags has become the title of the document (surprise!). If you were to add this page to your “favorites” (or “bookmarks”, depending on your browser), you would see that the title is also used there.

4.0 Paragraphs

Okay, before putting Paragraph tags in code lets add just a simple sentence in separate line inside body tag. like: (Hello World)

```
<!DOCTYPE html>

<html>

<head>

  <title>My first web page</title>

</head>

<body>

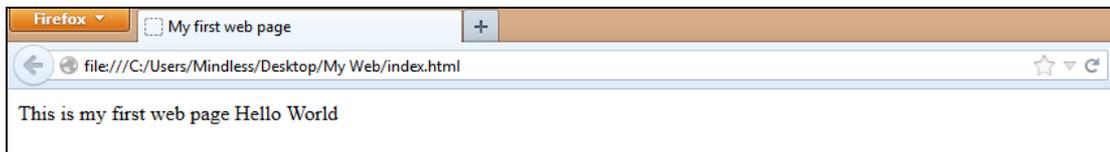
  This is my first web page

  Hello World

</body>

</html>
```

Then save the code and refresh your browser, it will look like:



Check here. Have you noticed? You putted the new sentence in separate line in code but it is displaying in same line in result. What's wrong here???

Don't give up... Cheers the Coding :)... We have to use a Paragraph tag here... Lets make it possible.

Type your code as it is:

```
<!DOCTYPE html>
```

```
<html>
<head>
  <title>My first web page</title>
</head>
<body>
  <p> This is my first web page </p>
  <p>Hello World</p>
</body>
</html>
```

Now here our dream will be complete... Save the code and refresh the browser. It will look like:



4.1 Line Breaks & Formatting:

Line Breaks:

The line-break tag `
` can also be used to separate lines like this:

This is my first web page

Hello World

There's no content involved in breaking lines so there is no closing tag. If you want to give 4 lines break after a line then simply put this tag 4 times in a row or in separate line. No Matter! Choice is your

Formatting:

- Bold
- Italics
- Underline

Bold Tags:

` ` Here "b" stands for Bold.

` `

Italics Tags:

`<i> </i>` Here "i" stands for Italics.
` ` Here "em" stands for Emphasis.

Underline Tags:

`<u> </u>` Here "u" stands for Underline.

I will not define in text here about bold, italics and underline. I'm going to show you the actual stuff. Lets Start.

I'm putting same 4 lines in body tag with Line Break tag at the end of every line but not with the last one.

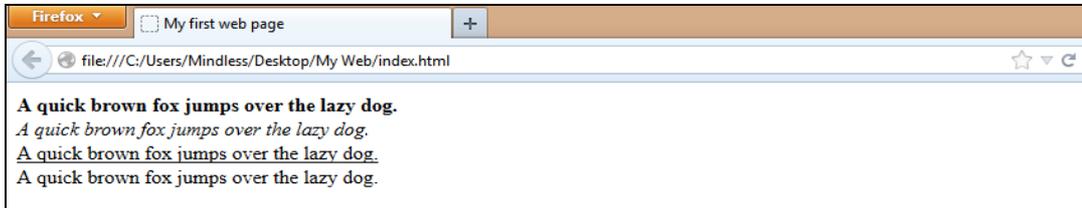
```
<!DOCTYPE html>
<html>
<head>
  <title>My first web page</title>
</head>
<body>
  A quick brown fox jumps over the lazy dog. <br>
  A quick brown fox jumps over the lazy dog. <br>
  A quick brown fox jumps over the lazy dog. <br>
  A quick brown fox jumps over the lazy dog.
</body>
</html>
```

Now the next step is the implementation of Bold, Italics and Underline tags into code.

```
<!DOCTYPE html>
<html>
<head>
  <title>My first web page</title>
</head>
<body>
  <b>A quick brown fox jumps over the lazy dog. </b> <br>
```

```
<i>A quick brown fox jumps over the lazy dog.</i> <br>
<u>A quick brown fox jumps over the lazy dog.</u> <br>
A quick brown fox jumps over the lazy dog.
</body>
</html>
```

Here is a preview in browser:



You simply can judge the results. I used **Bold** tag in 1st line, *Italics* tag in 2nd line, Underline tag in 3rd line and have left the 4th line simple.

5.0 Headings:

In HTML, there are respectively six headings which are:

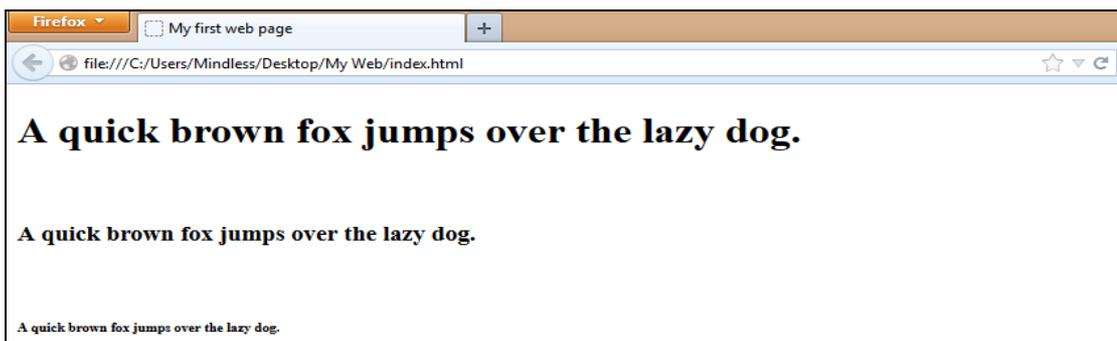
h1, h2, h3, h4, h5 and h6.

H1 is Biggest Size Heading.

H6 is a Smallest Size Heading.

Lets apply in the code. I have just replaced the last entire body code with the following one:

```
<body>
<h1>A quick brown fox jumps over the lazy dog. </h1> <br>
<h3>A quick brown fox jumps over the lazy dog.</h3> <br>
<h6>A quick brown fox jumps over the lazy dog.</h6> <br>
</body>
```



Note that the `h1` tag is only used once, as the main heading of the page. `h2` to `h6`, however, can be used as often as desired, but they should always be used in order, as they were intended. For example, an `h4` should be a sub-heading of an `h3`, which should be a sub-heading of an `h2`.

6.0 Lists:

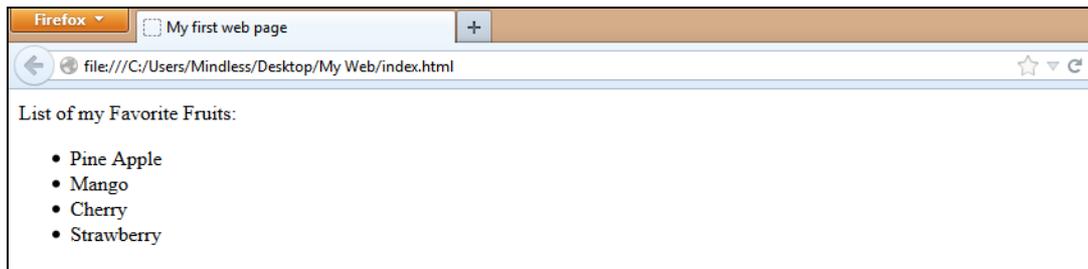
We all know there are two types of list which are Ordered List and Un-Ordered List.

The `ul` tag is used to define unordered lists and the `ol` tag is used to define ordered lists. Inside the lists, the `li` tag is used to define each list item.

Lets Start with the Ordered List:

```
<!DOCTYPE html>
<html>
<head>
  <title>My first web page</title>
</head>
<body>
List of my Favorite Fruits: <br>
<ol>
  <li>Pine Apple</li>
  <li>Mango</li>
  <li>Cherry</li>
  <li>Strawberry</li>
</ol>
</body>
</html>
```

If you look at this in your browser, you will see an Ordered list. Simply change the `ol` tags to `ul` and you will see that the list will become Un-Ordered or Bulleted.



7.0 Links:

An **anchor** tag (`<a>`) is used to define a link, but you also need to add something to the anchor tag - the **destination** of the link. Here is a Syntax of Hyper link tag:

```
<a href="http://google.com"> Go to Google's Website </a>
```

HREF: Stands for Hyper Reference

Actually, **href** is a attribute of Anchor tag and `http://google.com` is a value of this attribute. Next, "**Go to Google's Website**" is a Hyperlink text which will be Clickable to the user. And at last `` is a closing tag of Anchor.

Target Attribute:

This is another attribute of Anchor tag. By this you can define the target to the link about to open in same window or in new window.

Here are its common four values:

1. **`_self`**

The `target="_self"` attribute causes the "target" of the hyperlink to open in the current frame. This is the behavior that is used if the target attribute was not used at all.

2. **`_parent`**

The `target="_parent"` attribute causes the "target" of the hyperlink to display in the entire area of the current frameset.

3. **`_blank`**

The `target="_blank"` attribute causes the "target" of the hyperlink to open in a new, usually smaller, window.

4. **`_top`**

The `target="_top"` attribute causes the "target" of the hyperlink to display at the top level of all currently defined framesets.

Note: Anchor tag works as a `_self` function by default if we don't want Target Attribute.

Example Anchor tag with `_blank` value:

```
<a target="_blank" href="http://google.com"> Go to Google's Website </a>
```

Place the above code in Body Tag and take look in browser.

8.0 Images:

The `img` tag is used to put an image in an HTML document and it looks like this:

```

```

The `src` attribute tells the browser where to find the image. Like the `a` tag, this can be absolute, as the above example demonstrates, but is usually relative. For example, if you create your own image and save it as "mindless-photo.jpg" in a directory called "images" then the code would be ``

The `width` and `height` attributes are necessary because if they are excluded, the browser will tend to calculate the size as the image loads, instead of when the page loads, which means that the layout of the document may jump around while the page is loading.

The `alt` attribute is the **alternative description**. This is an accessibility consideration, providing meaningful information for users who are unable to see the image (if they are visually impaired, for example).

Note that, like the `br` tag, because the `img` element does not enclose any content, no closing tag is required.

Lets do it Practically... Use the following code. Save Editor! Refresh Browser!

```
<!DOCTYPE html>
<html>
<head>
  <title>My first web page</title>
</head>
<body>
```

List of my Favorite Fruits:


```
<ol>
```

```
  <li>Pine Apple</li>
```

```
  <li>Mango</li>
```

```
  <li>Cherry</li>
```

```
  <li>Strawberry</li>
```

```
</ol>
```

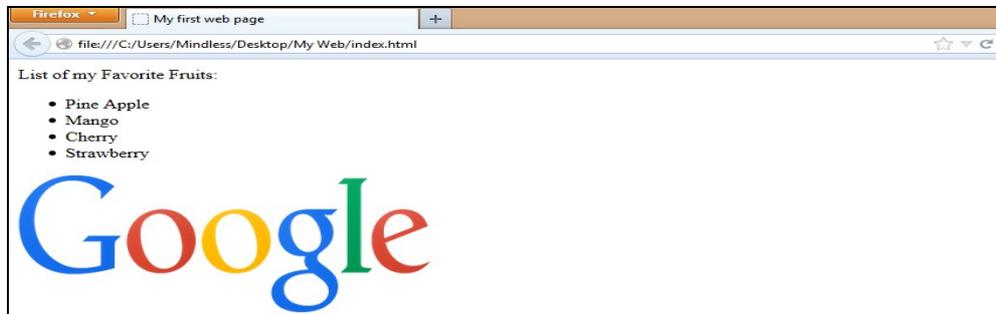
```

```

```
</body>
```

```
</html>
```

Here is... how it will look in browser:



9.0 Tables:

There are a many tags used in tables, and to fully get to grips with how they work is probably the most difficult area of this HTML learning.

Write the following code into the body of your document and then we will go through what each tag is doing:

```
<table border="1">
```

```
  <tr>
```

```
    <td>Row 1, cell 1</td>
```

```
    <td>Row 1, cell 2</td>
```

```
    <td>Row 1, cell 3</td>
```

```
  </tr>
```

```
<tr>
  <td>Row 2, cell 1</td>
  <td>Row 2, cell 2</td>
  <td>Row 2, cell 3</td>
</tr>
</table>
```

The **table** element defines the table.

The **border** attribute defines the border of table. And the value **1** define the thickness or size of the border.

The **tr** element defines a table **row**.

The **td** element defines a **data cell**. These must be enclosed in **tr** tags, as shown in the code.

If you imagine a 2x3 table, which is 6 cells, there should be 2 **tr** elements to define the rows and three **td** elements within each of the rows, making a total of 6 **td** elements. If you want to put new row or column then simply you have to put **tr** for Row and **td** for Column.

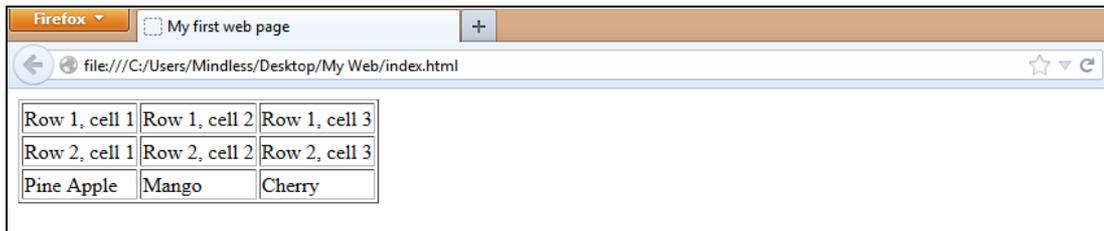
Before getting confused, view the shown preview:



Well Now If I want to add one more ROW with the names of fruits then the code will:

```
<table border="1">
  <tr>
    <td>Row 1, cell 1</td>
    <td>Row 1, cell 2</td>
    <td>Row 1, cell 3</td>
  </tr>
  <tr>
    <td>Row 2, cell 1</td>
    <td>Row 2, cell 2</td>
    <td>Row 2, cell 3</td>
```

```
</tr>
<tr>
  <td>Pine Apple</td>
  <td>Mango</td>
  <td>Cherry</td>
</tr>
</table>
```



Cheers! Its Done :) Well... you can also make any cell bold, italics or underline and also you can put Anchor and Image tags between **<td>** and **</td>**.

10.0 Forms:

Well... Its an interesting part of HTML, Forms are required when you want to collect some data from the site visitor. For example registration information: name, email address, credit card, etc.

Form elements are like text fields, textarea fields, drop-down menus, radio buttons, checkboxes, etc. which are used to take information from the user.

Most frequently used form attributes are:

- **name:** This is the name of the form.
- **action:** Here you will specify any script URL which will receive uploaded data.
- **method:** Here you will specify method to be used to upload data. It can take various values but most frequently used are GET and POST.
- **target:** It specifies the target page where the result of the script will be displayed. It takes values like `_blank`, `_self`, `_parent` etc.

There are different types of form controls that you can use to collect data from a visitor to your site.

- Text input controls
- Buttons
- Checkboxes and radio buttons
- Select boxes
- File select boxes
- Hidden controls
- Submit and reset button

HTML Forms - Text Input Controls:

There are actually three types of text input used on forms:

- **Single-line text input controls:** Used for items that require only one line of user input, such as search boxes or names. They are created using the `<input>` element.
- **Password input controls:** Single-line text input that mask the characters a user enters.
- **Multi-line text input controls:** Used when the user is required to give details that may be longer than a single sentence. Multi-line input controls are created with the `<textarea>` element.

- Single-line text input controls:

Single-line text input controls are created using an `<input>` element whose type attribute has a value of text.

Here is a basic example of a single-line text input used to take first name and last name:

```
<form>
```

First name:

```
<input type="text" name="first_name" /> <br>
```

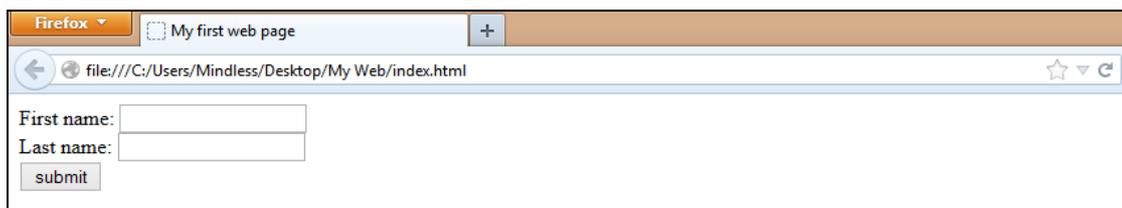
Last name:

```
<input type="text" name="last_name" /> <br>
```

```
<input type="submit" value="submit" />
```

```
</form>
```

Here is the Preview in browser:



Lets discuss about attributes of Input Tags....

- **type:** Indicates the type of input control you want to create. This element is also used to create other form controls such as radio buttons and checkboxes.
- **name:** Used to give the name part of the name/value pair that is sent to the server, representing each form control and the value the user entered.
- **value:** Provides an initial value for the text input control that the user will see when the form loads.
- **size:** Allows you to specify the width of the text-input control in terms of characters.
- **maxlength:** Allows you to specify the maximum number of characters a user can enter into the text box.

- Password input controls:

This is also a form of single-line text input controls are created using an `<input>` element whose type attribute has a value of password.

Here is a basic example of a single-line password input used to take user password:

```
<form>
```

```
Login :
```

```
<input type="text" name="login" /> <br>
```

```
Password:
```

```
<input type="password" name="password" />
```

```
<br>
```

```
<input type="submit" value="submit" />
```

```
</form>
```

Result will be in Fig-1:

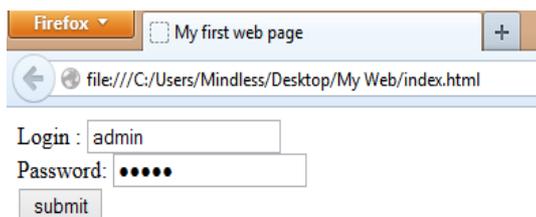


Fig-1

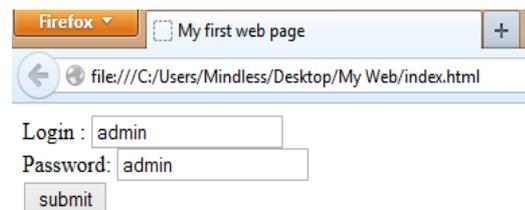


Fig-2

Note: If you want to show your input data in Password field then the above highlighted input tag will replace with the following code and results will be in **Fig-2**:

```
<input type="text" name="password" />
```

- Multiple-Line Text Input Controls:

If you want to allow a visitor to your site to enter more than one line of text, you should create a multiple-line text input control using the `<textarea>` element.

Here is a basic example of a multi-line text input used to take item description:

```
<form>
```

```
Description : <br>
```

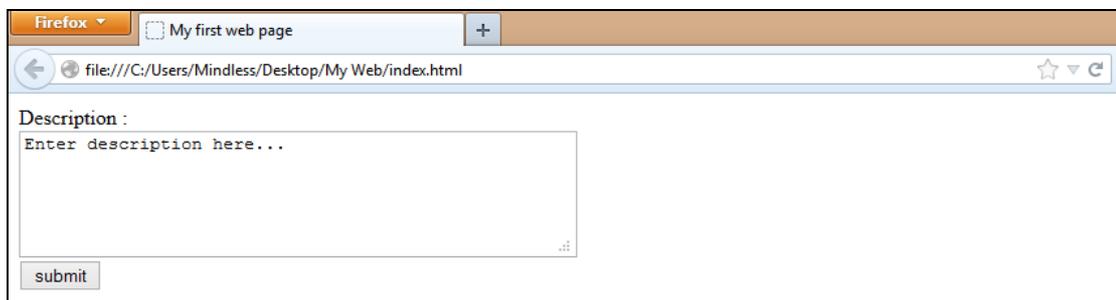
```
<textarea rows="5" cols="50" name="description">
```

```
Enter description here...
```

```
</textarea> <br>
```

```
<input type="submit" value="submit" />
```

```
</form>
```



Following is the detail of above used attributes for `<textarea>` tag:

- **name:** The name of the control. This is used in the name/value pair that is sent to the server.
- **rows:** Indicates the number of rows of text area box.
- **cols:** Indicates the number of columns of text area box.

HTML Forms - Creating Button:

There are various ways in HTML to create clickable buttons. You can create clickable button using `<input>` tag.

When you use the `<input>` element to create a button, the type of button you create is specified using the type attribute. The type attribute can take the following values:

- **submit:** This creates a button that automatically submits a form.
- **reset:** This creates a button that automatically resets form controls to their initial values.

```
<form>
```

```
<input type="submit" name="Submit" value="Submit" />
```

```
<br /><br>
```

```
<input type="reset" value="Reset" />
```

```
</form>
```

You can use an image to create a button. Here is the Code:

```
<form>
```

```
<input type="image" name="imagebutton" src="URL" />
```

```
</form>
```

Here **src** attribute specifies a location of the image on your web server.

HTML Forms - Checkboxes Control:

Checkboxes are used when more than one option is required to be selected. They are created using `<input>` tag as shown below.

Here is example HTML code for a form with two checkboxes:

```
<form>
```

Which is your favorite Subject?

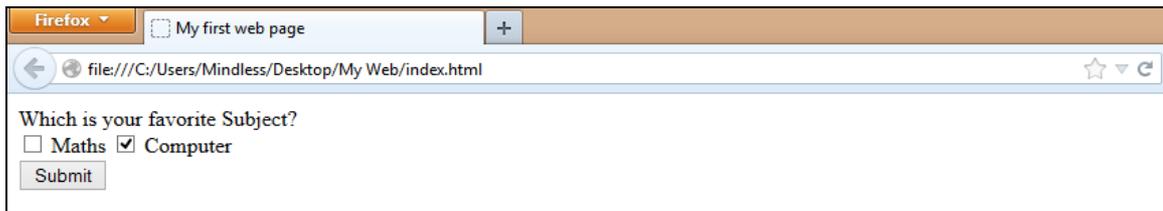
<input type="checkbox" name="maths" value="on"> Maths

<input type="checkbox" name="computer" value="on"> Computer

<input type="submit" value="Submit" />

</form>

Here is the Preview:



You can see in preview that I have made the selection. Remember one thing that, in Checkboxes a user can choose more than one options.

Following is the list of important checkbox attributes:

- **type:** Indicates that you want to create a checkbox.
- **name:** Name of the control.
- **value:** The value that will be used if the checkbox is selected. More than one checkbox should share the same name only if you want to allow users to select several items from the same list.
- **checked:** Indicates that when the page loads, the checkbox should be selected.

HTML Forms - Radio box Control:

Radio Buttons are used when only one option is required to be selected. They are created using <input> tag as shown below:

Here is example HTML code for a form with two radio button:

<form>

Which is your favorite Subject?


```
<input type="radio" name="subject" value="maths" /> Maths
```

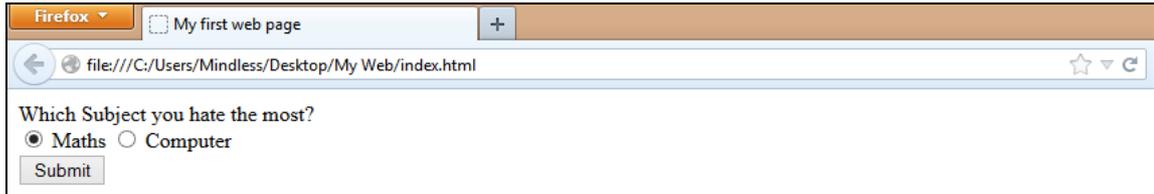
```
<input type="radio" name="subject" value="computer" /> Computer
```

```
<br>
```

```
<input type="submit" value="Submit" />
```

```
</form>
```

Here is the Preview:



You can see in preview that I have made the selection. Here a user can just choose one option from the given

Following is the list of important radio box attributes:

- **type:** Indicates that you want to create a radio box.
- **name:** Name of the control.
- **value:** Used to indicate the value that will be sent to the server if this option is selected.
- **checked:** Indicates that this option should be selected by default when the page loads.

HTML Forms - Select box Control:

Drop Down Box is used when we have many options available to be selected but only one or two will be selected..

Here is example HTML code for a form with one drop down box:

```
<form>
```

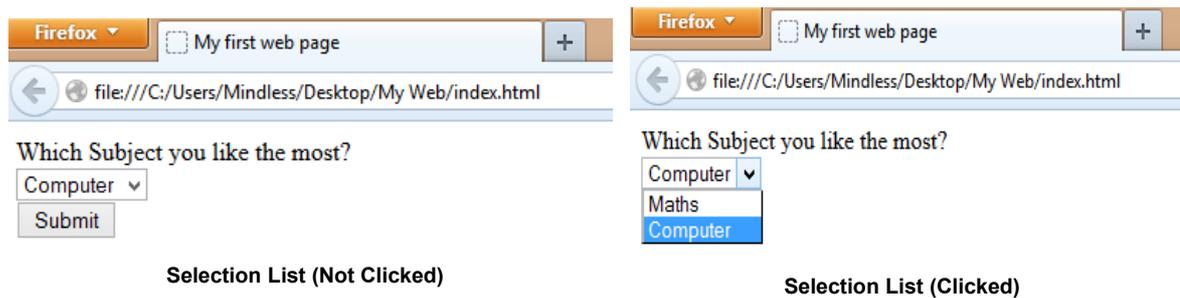
```
Which Subject you like the most? <br>
```

```

<select name="dropdown">
<option value="Maths" selected>Maths</option>
<option value="Computer">Computer</option>
</select> <br>
<input type="submit" value="Submit" />
</form>

```

Here is the Preview:



Following is the list of important attributes of <select>:

- **name:** This is the name for the control.
- **size:** This can be used to present a scrolling list box.
- **multiple:** If set to "multiple" then allows a user to select multiple items from the menu.

Following is the list of important attributes of <option>:

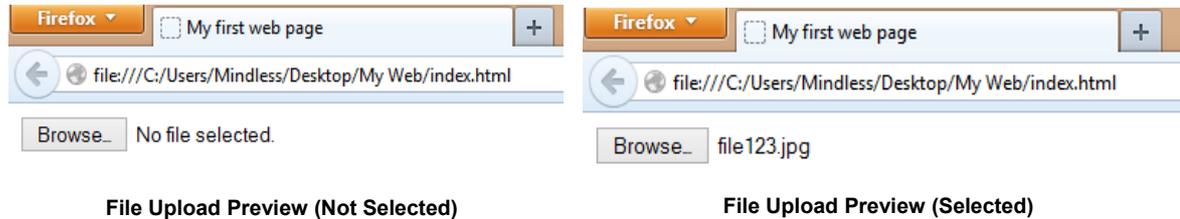
- **value:** The value that is sent to the server if this option is selected.
- **selected:** Specifies that this option should be the initially selected value when the page loads.
- **label:** An alternative way of labeling options.

HTML Forms - File Select Boxes:

If you want to allow a user to upload a file to your web site from his computer, you will need to use a file upload box, also known as a file select box. This is also created using the <input> element.

Here is example HTML code for a form with one file select box:

```
<form name="fileupload" enctype="multipart/form-data">  
<input type="file" name="fileupload" accept="image/*" />  
</form>
```



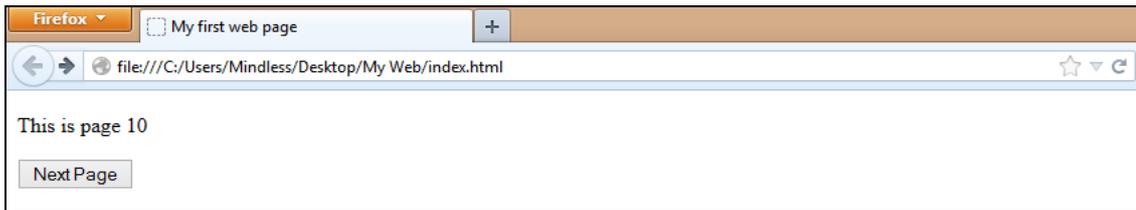
HTML Forms - Hidden Controls:

If you will want to pass information between pages without the user seeing it. Hidden form controls remain part of any form, but the user cannot see them in the Web browser. They should not be used for any sensitive information you do not want the user to see because the user could see this data if she looked in the source of the page.

Following hidden form is being used to keep current page number. When a user will click next page then the value of hidden form will be sent to the back-end application and it will decide which page has be displayed next.

```
<form>  
<p>This is page 10</p>  
<input type="hidden" name="pgaenumber" value="10" />  
<input type="submit" value="Next Page" />  
</form>
```

Here is the Preview:



Alright, Lets make a General Query Form... *Here is the Code:*

```
<form action="contactus.php" method="post">
  <p>Name:</p>
  <p><input type="text" name="name" value="Your name"></p>
  <p>Subject of Query:</p>
  <p><input type="checkbox" name="maths" value="on"> Sales </p>
  <p><input type="checkbox" name="computer" value="on"> Support </p>
  <p>Comments: </p>
  <p><textarea name="comments" rows="5" cols="20">Your comments</textarea></p>
  <p>Are you:</p>
  <p><input type="radio" name="areyou" value="male"> Male</p>
  <p><input type="radio" name="areyou" value="female"> Female</p>
  <p><input type="submit" value="Submit Query"></p>
</form>
```

The image shows a screenshot of a web browser window. The browser is Firefox, and the page title is "My first web page". The address bar shows the file path: file:///C:/Users/Mindless/Desktop/My Web/index.html. The form contains the following elements:

- Name:** A text input field with the placeholder text "Your name".
- Subject of Query:** Two radio button options: "Sales" and "Support".
- Comments:** A text area with the placeholder text "Your comments".
- Are you:** Two radio button options: "Male" and "Female".
- Submit Query:** A button at the bottom of the form.

11.0 Putting it all Together:

Lets do a Practice now. Type the Following Code in Editor, Save the file having .html extension at the end of file name and take the file to the browser.

```
<!DOCTYPE html>

<html>

<head>

  <title>My first web page</title>

  <!-- Web Creation Beginners Edition by AK -->

</head>

<body>

  <!-- Web Creation Beginners Edition by AK -->

<h1>My first web page</h1>

<h2>What this is</h2>

<p>A simple page put together using HTML. <em>I said a simple page put together using HTML.</em> A simple page put together using HTML. A simple page put together using HTML.</p>

<h2>Why this is</h2>

<ul>

  <li>To learn HTML</li>

  <li>

    To show off

  </li>

  <ol>

    <li>To my family</li>

    <li>To my friends</li>

    <li>To Mr. AK</li>

  </ol>

</ul>
```

```
<li>To the Peoples on the Internet</li>

</ol>

</li>

<li>Because I have fallen in love with my computer and want to give her some HTML loving. Yuppiii</li>

</ul>

<h2>From where I can get the Domain and Hosting at low Price?</h2>

<p><a target="_blank" href="http://www.mrmsolution.com"></a></p>

<h3>Some random table</h3>

<table border="1">

<tr>

<td>Row 1, cell 1</td>

<td>Row 1, cell 2</td>

<td>Row 1, cell 3</td>

</tr>

<tr>

<td>Row 2, cell 1</td>

<td>Row 2, cell 2</td>

<td>Row 2, cell 3</td>

</tr>

<tr>

<td>Row 3, cell 1</td>

<td>Row 3, cell 2</td>

<td>Row 3, cell 3</td>
```

```
</tr>

<tr>

  <td>Row 4, cell 1</td>

  <td>Row 4, cell 2</td>

  <td>Row 4, cell 3</td>

</tr>

</table>

<h3>Some random form</h3>

<p><strong>Note:</strong> It looks the part, but won't do a damned thing.</p>

<form action="contactus.php" method="post">

  <p>Name:</p>

  <p><input type="text" name="name" value="Your name"></p>

  <p>Subject of Query:</p>

  <p><input type="checkbox" name="maths" value="on"> Sales </p>

  <p><input type="checkbox" name="computer" value="on"> Support </p>

  <p>Comments: </p>

  <p><textarea name="comments" rows="5" cols="20">Your comments</textarea></p>

  <p>Are you:</p>

  <p><input type="radio" name="areyou" value="male"> Male</p>

  <p><input type="radio" name="areyou" value="female"> Female</p>

  <p><input type="submit" value="Submit Query"></p>

</form>

</body>

</html>
```



My first web page

What this is

A simple page put together using HTML. *I said a simple page put together using HTML.* A simple page put together using HTML. A simple page put together using HTML.

Why this is

- To learn HTML
- To show off
 1. To my family
 2. To my friends
 3. To Mr. AK
 4. To the Peoples on the Internet
- Because I have fallen in love with my computer and want to give her some HTML loving. Yupp!!!

From where I can get the Domain and Hosting at low Price?



Some random table

Row 1, cell 1	Row 1, cell 2	Row 1, cell 3
Row 2, cell 1	Row 2, cell 2	Row 2, cell 3
Row 3, cell 1	Row 3, cell 2	Row 3, cell 3

Some random form

Note: It looks the part, but won't do a damned thing.

Name:

Subject of Query:

- Sales
- Support

Comments:

Your comments

Are you:

- Male
- Female

Intro and touch to HTML5

HTML5 is a markup language, has been come into existence around January 2008. The two measure organization is involving in developing of HTML5 since its initiating time. One is W3C (World Wide Web Consortium) and another one is WHATWG (Web Hypertext Application Technology Working Group).

According to these organizations, they have been working on the HTML5 since initial time. So HTML5 language is still under development. There is more about to come yet in HTML5.

During the development of HTML5, It was announced that the HTML5 will reach the W3C recommendation till at the end of 2010. But the last call didn't matched till the target date. Now according to W3C the HTML5 will reach its full recommendation last by 2014

HTML5 is the newest version of Hyper Text Markup Language. The first web browser introduced in 1993 and name was MOSAIC. The development of MOSAIC was at the NCSA (National Center of Supercomputing Applications). Later it was discontinued to development on 7th of January 1997. Still the people were using the nonstandard version of HTML. The standard version came into existence in 1995, when HTML 2.0 was announced. Later after two years HTML 3.0 and after two years HTML 4.01 was announced. And still we are using the milestone of HTML 4.01. **The first Draft of HTML5 Was announced in January 2008.** And amazingly HTML5 has a broad browser support. Though the HTML5 is still under developing phase. And a lot of organizations is working and planning on the development of HTML5. **We can't expect the HTML5 may be the future of Web Designing, but we can say that this is the present of Web designing.** Before development of HTML5, we were in compulsion to work on Photoshop and Flash application, but with the development of HTML5, these affords has been reduced. Many more long script code can be done with a simple tagging. As we can use <details> and <summary> tag for show and hide function of java Script. We need not to put a long affords to code this thing. Apart from this features we can use the 3D image with <canvas>, the special designed paragraph with <article> and many more.

In this chapter we are going to discuss the following Elements which has been updated by W3C in HTML5. Which makes HTML5 more efficient markup Language. The Internet has changed since last development of HTML 4.01, So there are certain changes has been made in browser to use it more correctly. Few OLD ELEMENTS has been removed, where few NEW ELEMENTS has been updated in HTML5.

Elements	Description
<details>	Defines additional details that the user can view or hide
<wbr>	Defines a possible line-break
<mark>	Defines marked/highlighted text
<meter>	Defines a scalar measurement within a known range (a gauge)
<progress>	Represents the progress of a task
<video>	Defines a video or movie
<audio>	Defines sound content
<datalist>	Specifies a list of pre-defined options for input controls
<output>	Defines the result of a calculation

1- DETAILS

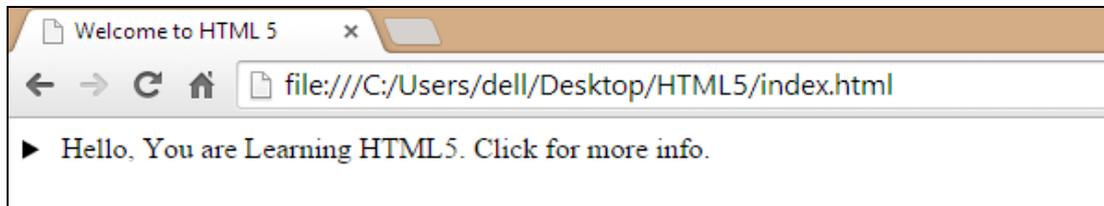
<details>. . . </details>

DETAILS Element is used to invoke the show and hide function of HTML5. Before the development of HTML5 we were using the JavaScript for show and hide function. But now it is too easy to use this function with this DETAILS and SUMMARY Tag of HTML5.

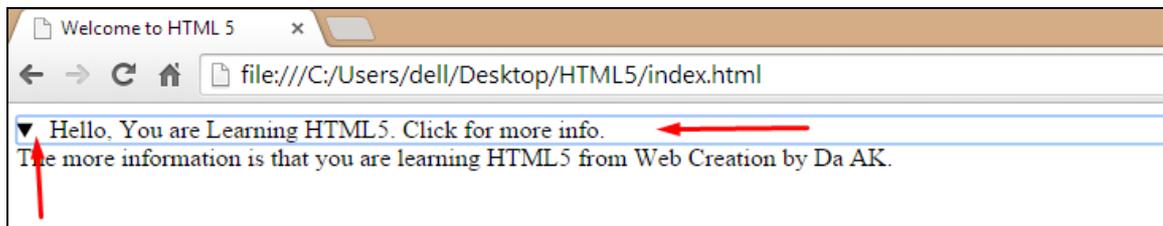
Just Simple Create a simple .html file and put the code like below:

```
<html>
<head>
<title>Welcome to HTML 5</title>
</head>
<body>
<details>
<summary>
Hello, You are Learning HTML5. Click for more info.
</summary>
The more information is that you are learning HTML5 from Web Creation by Da AK.
</details>
</body>
</html>
```

Now lets check the result in latest updated browser....



Now Simply click on the line or arrow sign to see the effect of <Details> Element as in below preview:



2- WBR

<wbr> . . . </wbr>

The WBR Element is used to change the default behavior of browser of line breaking. If the sentence is too long than the container, will be broken for proper displaying. If you don't want it to be happened like that, can use the WBR Element. This can be more useful for email id writing, and another long sentences.

```
<body>
```

```
<p>
```

```
This is my email id : <wbr> contact@ahtashamkhan.com </wbr>
```

```
</p>
```

```
</body>
```

3- MARK

<mark>. . . </mark>

The MARK Element is basically used for showing a marked text background. The MARK Element typically highlight the text with another background color, which attracts the reader and focus the particular text for the reference using.

Lets give it a try... type the following code between your <body> and </body> tags of .html file...1

<mark>Failure is a Word Unknown to me</mark> because I'm a <mark> Pakistani </mark>

Just put up this code and have a look at your browser... You will see that the words between <mark> tags are highlighted with Yellow color. But here is a question that is <mark> tag is limited to a yellow color? No! you can use CSS you define any color you stylize it. :)

Lets try it... I'm going to highlight word "Pakistani" with Orange color using with Internal Style Sheet.

<mark>Failure is a Word Unknown to me</mark> because I'm a <mark style="background-color:orange;"> Pakistani </mark>

With this way you can even change the color of text also and do much more changes by using CSS. Now its your turn to give it a try to this Element.

4- METER

<meter>. . . </meter>

The METER Element is basically used for scalar measurement for known range or known a fractional value. This can be used for disk usage, relevance query status results and etc. The METER Element can't be used if we don't have the known range. There are six attributes allowed in METER Element: value, min, max, high, low and optimum.

```
<body>

<meter value="4" min="0" max="10">4 out of 10</meter>

</br> </br>

<meter value="0.8">80%</meter>

</body>
```



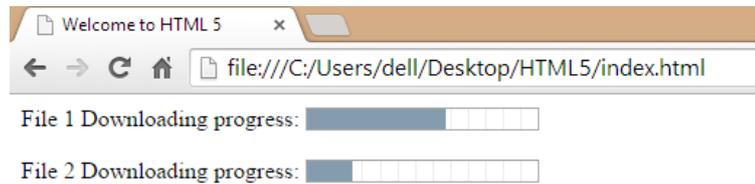
5- PROGRESS

`<progress> . . . </progress>`

The PROGRESS Element is used to show the completion or progress of a specific task. We often see that on the website while downloading some text or video and even on uploading some contents on Internet, a progress bar comes before us and displays its current progress or completion of specific task. Before the development of HTML5, it was done with some hard code of JavaScript and jquery. But now it is too easy to use with new PROGRESS Element of HTML5.

File 1 Downloading progress: `<progress value="60" max="100"></progress>`

File 2 Downloading progress: `<progress value="20" max="100"></progress>`



6- VIDEO

<video> . . . </video>

Now you simply can add video to your website and your visitors would not required any third party flash player plugins etc to play those videos etc like on many site e.g: Youtube, Dailymotion etc...

Lets comeback to the point and start adding Video. First of all you need to put the video file in your root folder.

What is Root Folder?

I have already defined in starter that the main folder of your website where all the files of your website are stored is called root folder or directory. So if you have not created yet then let create with me at desktop.

Next Step is to copy and paste the video or movie into root folder from any where. Lets suppose I have two files in my root directory:

First File: index.html

Second File: JinnahSpeech.mp4

Now simply put the following code between <body> and </body> tags.

```
<video width="500" height="375" controls>
```

```
<source src="JinnahSpeech.mp4" type="video/mp4" />
```

```
</video>
```

Lets Understand the Code now... you should be understandable with the width and height attribute used in <video> tag that is used for Video Player's dimension. But the next one "Control" is used to display the video control button like play, pause, volume and Full Screen etc... Next the "Source" is used for Video file and type is used for assigning the type of file type to element and that all.

If you want **AUTOPLAY** the video on browser load then just simply put the "autoplay" next to the "controls" like below:

```
<video width="500" height="375" controls autoplay>
```

One more thing... May be your user or visitor is using old browser and that does not support HTML5 then he/she will not be able to view your video. Then you must leave an **Automatic Message** for them. What? Yes... <video> element will check is browser is updated or not if updated then it will show the video if not then it will show your user the message by you.

Here is the simple way...

```
<video width="500" height="375" controls>
```

```
<source src="JinnahSpeech.mp4" type="video/mp4" />
```

Your browser does not support the Video File. Please update your Browser's Version.

```
</video>
```

7- AUDIO

<audio> </audio>

With the development of HTML5, AUDIO Element has been introduced for playing the audio file in the browser with full user control support. Yet, before the development of HTML5 AUDIO Element, we were unable to play a audio file without using the third party browsers plug-in as flash player or quick time. Now the AUDIO Element can be used instead of installing a browser plug-in. The AUIDO Element contains an

extra child element is called SOURCE, which is used to call the exact media file which we want to be played in the browser. The AUDIO Element can also contains it's properties for controlling the AUDIO File.

The coding of <audio> and <video> tags are almost similar.... Here is the code of <audio> element.

```
<audio controls>
<source src="Place your audio file here with full path" type="audio/mp3"/>
</audio>
```

For Example Now I have two files in my root folder one is index.html and another is audio file named "no-promises.mp3"

```
<audio controls>
<source src="no-promises.mp3" type="audio/mp3"/>
</audio>
```

If you want **AUTOPLAY** the audio on browser load then just simply put the "autoplay" next to the "controls" like below:

```
<audio controls autoplay>
```

One more thing... May be your user or visitor is using old browser and that does not support HTML5 then he/she will not be able to listen your audio. Then you must leave an **Automatic Message** for them. What? Yes... <video> element will check is browser is updated or not if updated then it will start the audio if not then it will show your user the message by you.

Here is the simple way...

```
<audio controls>
<source src="no-promises.mp3" type="audio/mp3"/>
Your browser does not support the Audio File. Please update your Browser's Version.
</audio>
```

8- DATALIST

<datalist> </datalist>

DATALIST Element is basically use for auto completion of the form. The complete list is put in the option box, and when the user double click the input field the option is dragged down. This is best feature if user doesn't know what to fill in the input box.

```
<body>

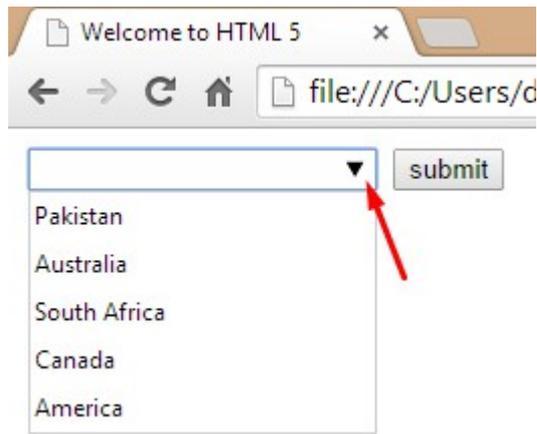
  <input list="country">

  <datalist id="country">
  <option value="Pakistan">
  <option value="Australia">
  <option value="South Africa">
  <option value="Canada">
  <option value="America">
  </datalist>

  <input type="submit" value="submit"/>

</body>
```

Here is a Preview in browser which is describing that when user click will have no idea what have to write in the box then by click on the arrow a list will be open and he/she will be able get the hint. **Please keep in mind that this is not a drop down selection list method. This purpose can only be use for giving user a hint only.**



9- OUTPUT

<output> . . . </output>

The OUTPUT Element is used for resulting a calculation. The OUTPUT Element is one of the best feature of Form Elements, which allows user to make calculation on front end without involving much affords. In these scenarios a lots of website are features with calculation systems as loan payment, inventory report, taxation and many more. There were no such way at front end and with HTML to use this facility. But With the development of HTML5 now we can use these calculation easily with OUTPUT Element of HTML5.

```
<body>
<form onsubmit="return false" oninput="document.getElementById('o').
    innerHTML = parseFloat(document.getElementById('a').value) +
    parseFloat(document.getElementById('b').value) ">
<input name="a" id="a" type="number" step="any"> +
<input name="b" id="b" type="number" step="any"> =
    <output name="o" id="o" for="a b"></output>
</form>
</body>
</html>
```



Here is my "SUM" Calculator ready for use in my browser

Part 2 - CSS

Wooopp!! Now the time comes for CSS, the good thing is that its more interested than HTML. Well... CSS is not limited today, it is getting more widely with more popularity in usage. Almost there are 98% websites are using CSS. It saves a lot of work time and this is the only reason of its popularity.

What is CSS?

CSS, or **Cascading Styles Sheets**, is a way to style and present HTML. Whereas the HTML is the **meaning or content**, the style sheet is the **presentation** of that document.

Here you are going to learn in CSS:

- **CSS Syntax** - How to write CSS code
- **Applying CSS** - The different ways you can apply CSS to HTML.
- **Selectors, Properties, and Values** - The bits that make up CSS.
- **ID and Classes** - How to save time by using ID and Classes
- **Text** - How to manipulate the size and shape of text.
- **Margins and Padding** - How to space things out.
- **Borders** - Erm. Borders. Things that go around things.

CSS Syntax:

Its not hard or confusing, it only contains 3 Parts.

```
selector { property: value }
```

selector: Its HTML element that you want to style.

property: It is actual property title

value: Its a style that you want to apply to that property.

Applying CSS:

Well there are three type of CSS Styling methods which are:

1. Internal Style Sheet
2. External Style Sheet
3. Inline Style Sheet

1- Internal Style Sheet:

Comment in CSS

Comments are used to explain your code, and may help you when you edit the source code at a later date. Comments are ignored by browsers.

A CSS comment starts with `/*` and ends with `*/`. Comments can also span multiple lines.

Example:

```
/*This is a single lines comment*/
```

```
/*This is a multiple  
lines comment*/
```

Lets discuss about Internal Style Sheet firstly. In this styling method you will have to place the CSS code in the <head> </head> section of each HTML file in which you want to apply CSS style.

Here is the Code example of this style:

```
<head>
<title><title>
<style type="text/css">
CSS Content Goes Here
</style>
</head>
<body>
```

2- External Style Sheet:

This styling method of CSS is very Popular because it saves a lot of time. External CSS file will be created with any editor like Notepad++. The file name should contact the extension **.css**.

For example if I have a website having 5 HTML pages and I want to give same styling to all of them then If I use Internal Style Sheet then I'll have to put CSS code in each HTML file and after some time If i decide to change the styling then What? Surely I'll have to edit CSS code in each HTML file. But here **External Style Sheet** will make our life more easier, I'll simply create a single CSS file and then just put its link tag in each HTML file. After all at any time If I want to change my styling then What? Definitely... I'll just edit a single CSS file, and this change will take effect in each HTML file automatically. This method is very useful if your website contains large no. of HTML files.

Here is the Code example which we will put in <head> </head> section of HTML files:

```
<link rel="stylesheet" type="text/css" href="style.css" />
```

3- Inline Style Sheet:

An inline style loses many of the advantages of style sheets by mixing content with presentation. Use this method sparingly!

To use inline styles you use the style attribute in the relevant tag. The style attribute can contain any CSS property. The example shows how to change the color and the left margin of a paragraph:

```
<p style="color:sienna;margin-left:20px;">This is a paragraph.</p>
```

Selectors, Properties, and Values:

We have already discussed this. Lets move to its Practice now.

For each selector there are “**properties**” inside **curly brackets**, which simply take the form of words such as **color**, **font-weight** or **background-color**.

A **value** is given to the property following a **colon** (NOT an “equals” sign) and **semi-colons** separate the properties.

```
body {  
  font-size: 14px;  
  color: navy;  
}
```

I'm going to do it Practically by using External Style Sheet Method:

1st Step:

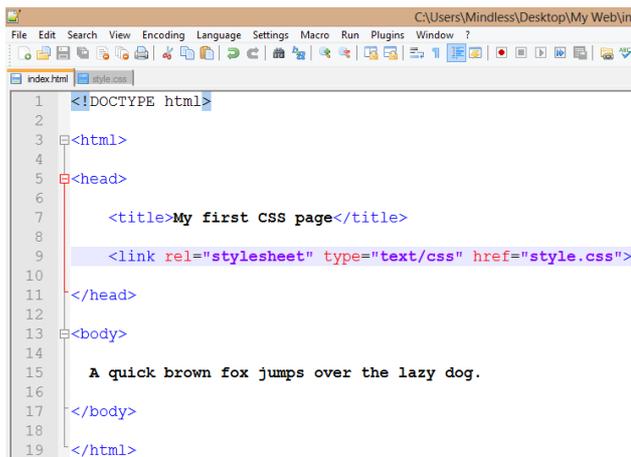
Create two files one for HTML and second for CSS like index.html and style.css

2nd Step:

Write the above CSS code in CSS file and type any line in body area of HTML file. And put the following External Style Sheet code in the head section of HTML file.

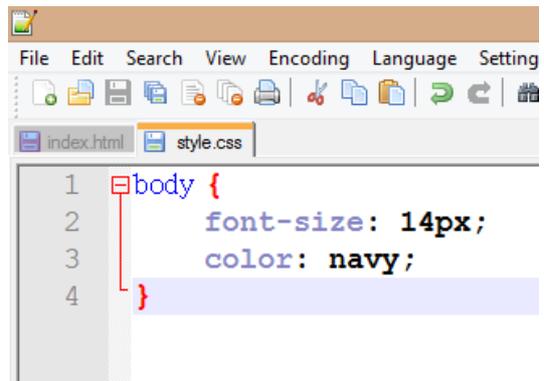
```
<link rel="stylesheet" type="text/css" href="style.css">
```

Here is a Preview of my both files:



```
1 <!DOCTYPE html>
2
3 <html>
4
5 <head>
6
7     <title>My first CSS page</title>
8
9     <link rel="stylesheet" type="text/css" href="style.css">
10
11 </head>
12
13 <body>
14
15     A quick brown fox jumps over the lazy dog.
16
17 </body>
18
19 </html>
```

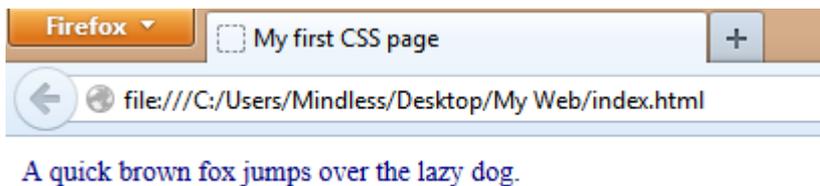
HTML File



```
1 body {
2     font-size: 14px;
3     color: navy;
4 }
```

CSS File

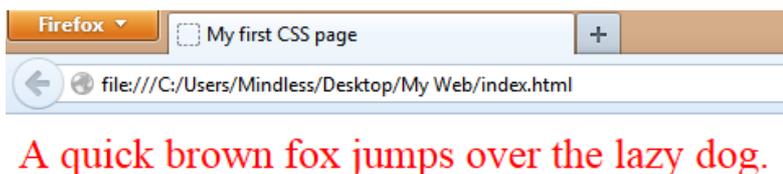
Here is the result in browser:



Now I'm going to edit CSS code only with the following properties:

```
font-size: 26px;
color: red;
```

Here is the result in browser:



Now I'm sure you simply can judge that changing in CSS file is reflecting the style of HTML file. You know how? Just with the one line link code of External Style which is placed in head section of HTML file. This link code can also be apply in any html file and it will work like a charm. :)

ID and Classes

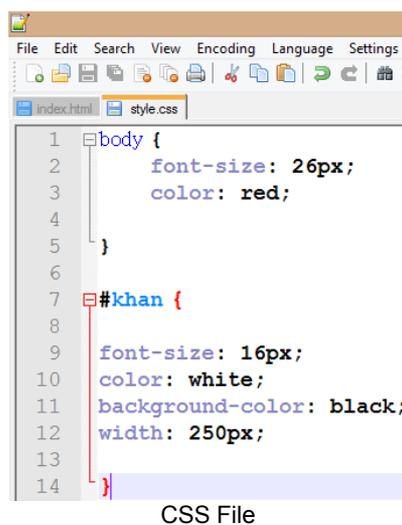
CSS ID:

IDs are similar to classes, except once a specific id has been declared **it cannot be used again within the same HTML file**. ID is represented by (#) sign.

Lets take an Example to show you how it works:

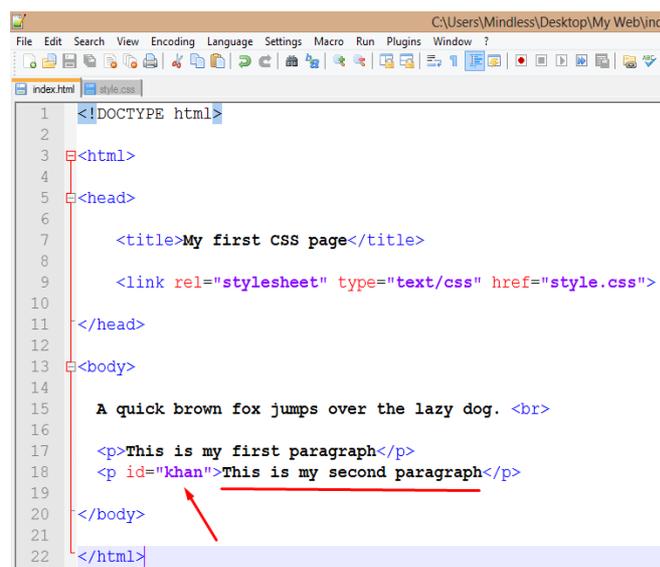
Suppose, I have some text and some paragraphs in my HTML file. As you remember the last Practice when we change the code in CSS it effects the whole HTML file. But I just want to style one specific Paragraph not the whole page. Lets do it:

I'll create one ID (#khan) in my CSS file as show in Figure:



```
1 body {
2     font-size: 26px;
3     color: red;
4 }
5
6
7 #khan {
8
9     font-size: 16px;
10    color: white;
11    background-color: black;
12    width: 250px;
13
14 }
```

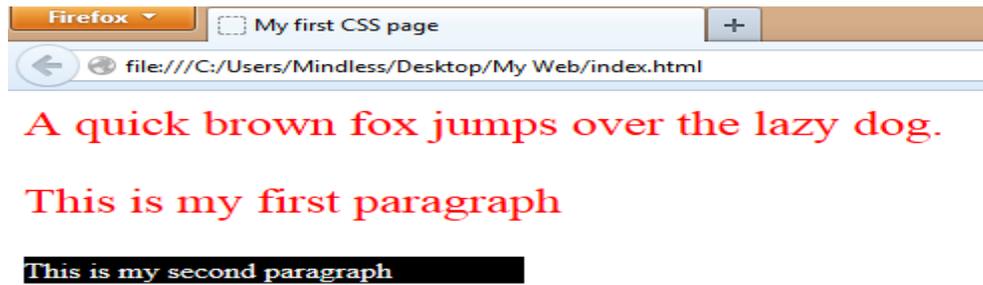
CSS File



```
1 <!DOCTYPE html>
2
3 <html>
4
5 <head>
6
7     <title>My first CSS page</title>
8
9     <link rel="stylesheet" type="text/css" href="style.css">
10
11 </head>
12
13 <body>
14
15     A quick brown fox jumps over the lazy dog. <br>
16
17     <p>This is my first paragraph</p>
18     <p id="khan">This is my second paragraph</p>
19
20 </body>
21
22 </html>
```

HTML File

Here is the result in browser:



CSS Class:

The class selector allows you to style items within the same HTML element differently. You can use the same class selector again and again within an HTML file. Class is represented by dot (.) sign.

Lets do it practically, I'll create one Class (.container) in my CSS file as show in Figure:

```

1  body {
2      font-size: 26px;
3      color: red;
4  }
5
6
7  .container {
8
9      font-size: 16px;
10     color: white;
11     background-color: black;
12     width: 250px;
13
14 }

```

CSS File

```

1  <!DOCTYPE html>
2
3  <html>
4
5  <head>
6
7      <title>My first CSS page</title>
8
9      <link rel="stylesheet" type="text/css" href="style.css">
10
11 </head>
12
13 <body>
14
15     A quick brown fox jumps over the lazy dog. <br>
16
17     <p class="container">This is my first paragraph</p>
18     <p class="container">This is my second paragraph</p>
19
20 </body>
21
22 </html>

```

HTML File

Here is the Preview in Browser:



A quick brown fox jumps over the lazy dog.

This is my first paragraph

This is my second paragraph

Some Important Rules & Instructions for ID and Class:

1. Do not use number in ID or Class
2. ID and Class are case sensitive (e.g: myID and MyID both are two different ID's.)
3. ID's are Unique (Each element can have only one ID and Each page can have only one element with that ID)
4. Classes are not Unique (You can use the same class on multiple elements and You can use multiple classes on the same element.)

Text in CSS:

1- font-family:

This is the font itself, such as Times New Roman, Arial, or Verdana.

Syntax:

```
font-family: arial;
```

Note: You should specify more than one fonts. Because if the browser will fail to find out one specific font in user's computer then it will effect the page's display.

```
font-family: arial, helvetica, serif;
```

So, It will look for the Arial font first and, if the browser can't find it, it will search for Helvetica, and then a common serif font.

2- font-size:

The size of the font. Be careful with this - text such as headings should not just be an HTML paragraph (p) in a large font - you should still use headings (h1, h2 etc.) even though, in practice, you could make the font-size of a paragraph larger than that of a heading (not recommended for sensible people).

Syntax:

```
font-size: 12px;
```

OR

```
font-size: h1;
```

3- font-weight:

This states whether the text is bold or not. Most commonly this is used as `font-weight: bold` or `font-weight: normal` but other values are `bolder`, `lighter`, `100`, `200`, `300`, `400` (same as `normal`), `500`, `600`, `700` (same as `bold`), `800` or `900`.

Syntax:

```
font-weight: bold;
```

4- font-style:

This states whether the text is italic or not. It can be `font-style: italic` or `font-style: normal`.

5- text-decoration:

This states whether the text has got a line running under, over, or through it.

- `text-decoration: underline`, does what you would expect.
- `text-decoration: overline` places a line above the text.
- `text-decoration: line-through` puts a line through the text ("strike-through").

This property is usually used to decorate links and you can specify no underline with `text-decoration: none`.

6- text-transform:

This will change the case of the text.

`text-transform: capitalize` turns the first letter of every word into uppercase.

`text-transform: uppercase` turns everything into uppercase.

`text-transform: lowercase` turns everything into lowercase.

`text-transform: none` I'll leave for you to work out.

So, a few of these things used together might look like this:

```
body {  
    font-family: arial, helvetica, sans-serif;  
    font-size: 14px;  
}
```

```
h1 {  
    font-size: 2em;  
}  
h2 {  
    font-size: 1.5em;  
}  
a {  
    text-decoration: none;  
}  
strong {  
    font-style: italic;  
    text-transform: uppercase;  
}
```

7- Text Spacing:

Before we move on from this introduction to styling text, a quick look at how to space out the text on a page:

The [letter-spacing](#) and [word-spacing](#) properties are for spacing between letters or words. The value can be a length or **normal**.

The [line-height](#) property sets the height of the lines in an element, such as a paragraph, without adjusting the size of the font. It can be a number (which specifies a multiple of the font size, so “2” will be two times the font size, for example), a length, a percentage, or **normal**.

The [text-align](#) property will align the text inside an element to left, right, center, or justify.

The [text-indent](#) property will indent the first line of a paragraph, for example, to a given length or percentage. This is a style traditionally used in print, but rarely in digital media such as the web.

```

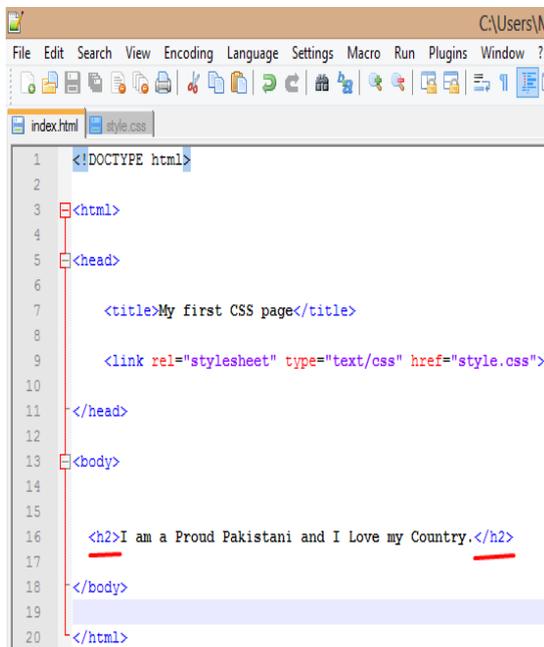
p {
    letter-spacing: 0.5em;
    word-spacing: 2em;
    line-height: 1.5;
    text-align: center;
}

```

Margins and Padding:

Margin and **Padding** are the two most commonly used properties for spacing-out elements. A margin is the space **outside** something, whereas padding is the space **inside** something.

Confused? Don't be, lets start battle with Margins and Padding.... I'm going to take one HTML and CSS file with these code:

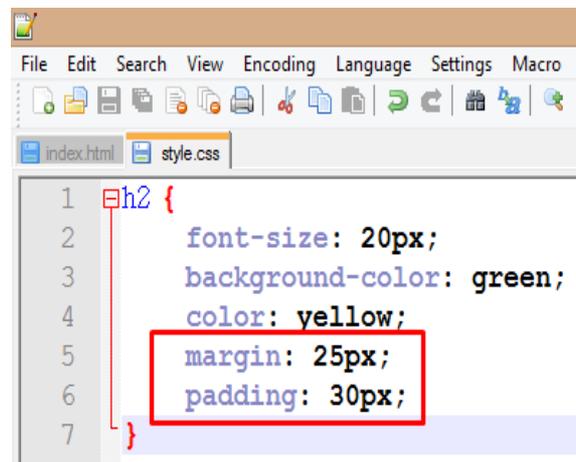


```

1 <!DOCTYPE html>
2
3 <html>
4
5 <head>
6
7     <title>My first CSS page</title>
8
9     <link rel="stylesheet" type="text/css" href="style.css">
10
11 </head>
12
13 <body>
14
15
16     <h2>I am a Proud Pakistani and I Love my Country.</h2>
17
18 </body>
19
20 </html>

```

HTML File



```

1 h2 {
2     font-size: 20px;
3     background-color: green;
4     color: yellow;
5     margin: 25px;
6     padding: 30px;
7 }

```

CSS File

Here I'm using **Margins** same as we use in Documents Writing Software like MS Word. And Have you noticed that here I have also place the background-color... Yes... We can say the **Padding** is the boundary of Text written in HTML and we are using background-color as a boundary. *Lets have a look in*

browser:



In this preview you can simply judge the effects of Padding and Margins. For your better Practice, do it practically with some other values of Padding and Margins.

Borders in CSS:

Borders can be applied in many HTML elements within Body tag only. Here are some Properties of Borders which will be used in CSS:

border-style:

(**values:** dotted, dashed, solid, double, groove, ridge, outset and inset).

border-width:

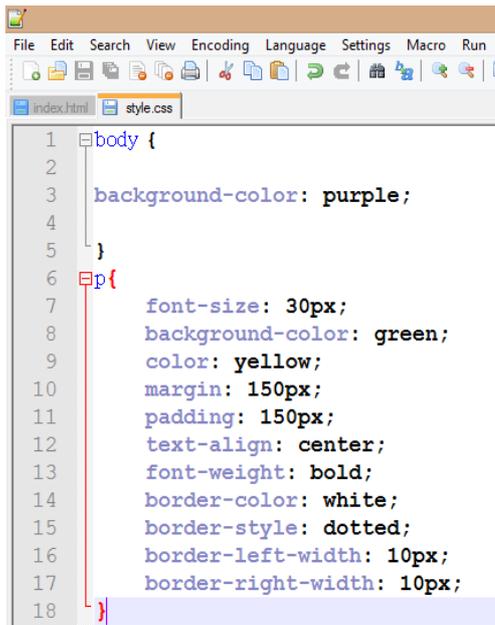
(**Properties:** border-top-width, border-bottom-width, border-left-width, border-right-width).

(**Values:** Its value will be placed in pixels to set the width of the border).

border-color:

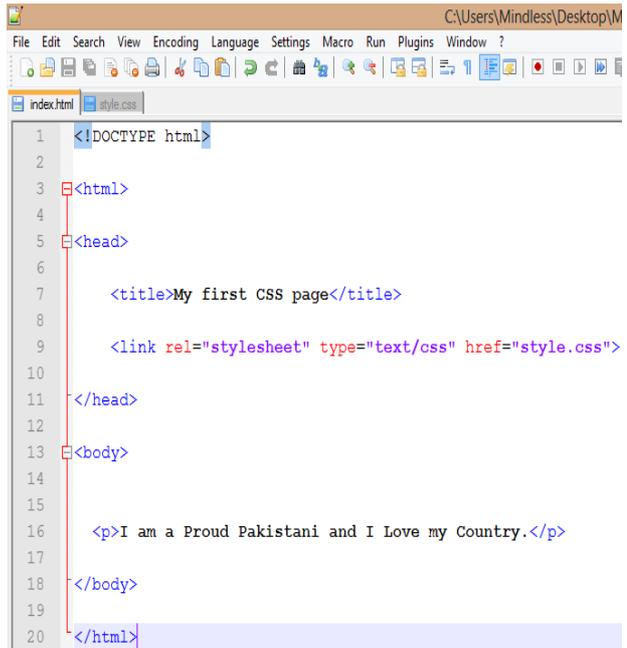
(**Values:** We can put the **Names** of common colors as values but **RGB** (Red Green Blue) values and **Hex Color** codes can also be used).

Lets make a Stylish Page by using Margins, Padding and Borders...



```
1 body {
2
3   background-color: purple;
4
5 }
6 p{
7   font-size: 30px;
8   background-color: green;
9   color: yellow;
10  margin: 150px;
11  padding: 150px;
12  text-align: center;
13  font-weight: bold;
14  border-color: white;
15  border-style: dotted;
16  border-left-width: 10px;
17  border-right-width: 10px;
18 }
```

CSS File



```
1 <!DOCTYPE html>
2
3 <html>
4
5 <head>
6
7   <title>My first CSS page</title>
8
9   <link rel="stylesheet" type="text/css" href="style.css">
10
11 </head>
12
13 <body>
14
15
16 <p>I am a Proud Pakistani and I Love my Country.</p>
17
18 </body>
19
20 </html>
```

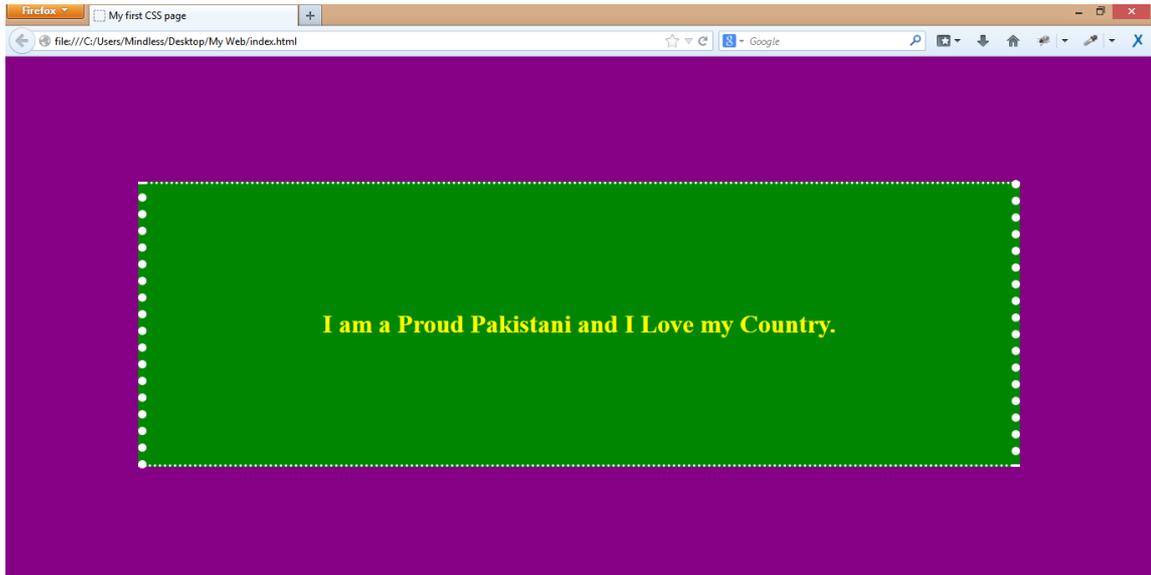
HTML File

What's inside Code?

I have declared a Paragraph in HTML and Styled it in CSS file. The Body's background-color is Purple.

Write the above codes in your HTML and CSS files and check the result in browser.

Here is a result in Browser:



Basic Touch to CSS3

CSS3 is the latest version of the CSS specification. The term "CSS3" is not just a reference to the new features in CSS, but the third level in the progress of the CSS specification. CSS3 contains just about everything that's included in CSS2.1 (the previous version of the specification). It also adds new features to help developers solve a number of problems without the need for non-semantic markup, complex scripting, or extra images.

CSS3 Borders

A CSS3 Border is such an affords of style sheet which reduces the human efforts of Photoshop and other graphical applications. An individual can create the rounded borders, border shadow, imaged based border and etc with the help of CSS3 Border.

Basically We use three features to create the border:

√ **Border-radius**

√ **Box-shadow**

Border-radius is a such properties of CSS3 by which we can create the rounded corners.

Box-shadow is a such properties of CSS3 by which we can create the shadow of border.

Lets be Practical with the Border-radius Element of CSS3:

Border Radius

I'm going to use Internal Style Sheet. So, I just created a new folder on my desktop and I have just one file in this folder now called index.html

Lets move forward by creating a simple HTML structure in your index.html file firstly. How? Simple Use the simple following Code:

```
<html>
  <head>
    <style>
    </style>
  </head>
```

```
<body>

</body> </html>
```

Now we have to put the Border-radius Element rule in CSS area... Do you remember the CSS area of above code? Yes this is between **<style>** and **</style>**.

Lets create one ID in CSS area for defining Border-radius rule. And we will use this in our HTML area to apply. Its hear to be hard but being a practically much more easier than eating a mango... haha Believe me :)

Put the Following code between **<style>** and **</style>** tags of your index.html file.

```
<style>

#border_radius {

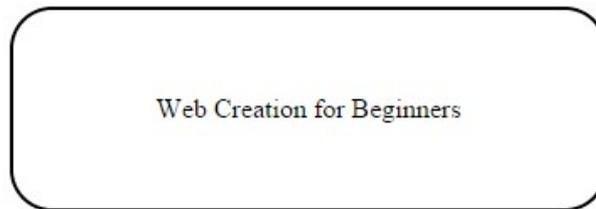
font-size: 16px;
text-align: center;
margin: 150px auto;
padding: 50px;
width: 250px;
border: 2px;
border-style: solid;
border-radius:25px;
}

</style>
```

Now move forward to your body area and create a one Paragraph and apply above ID (#border_radius) to it. Put the following code between **<body>** and **</body>** tags.

```
<body>
|
| <p id="border_radius"> Web Creation for Beginners </p>
|
</body>
```

Here is the result in Browser:



You can see the borders are effected with the Border-radius element of CSS3.

Box Shadow:

Same method is here like Border-radius. Create another ID and apply in your paragraph or division.

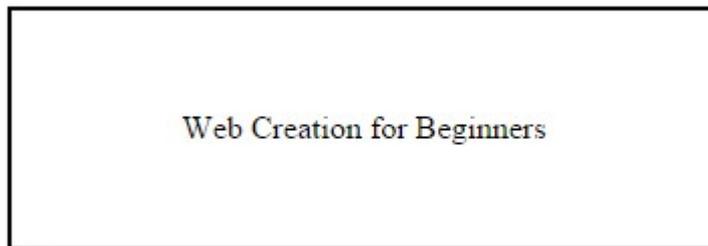
Put the code <style> and </style> tags of your index.html file.

```
<style>
|
| #box_shadow {
|
| font-size: 16px;
| text-align: center;
| margin: 150px auto;
| padding: 50px;
| width: 250px;
| border: 2px;
| border-style: solid;
| box-shadow: 15px 15px 15px black; ←
| }
|
</style>
```

Now put the following code between <body> and </body> tags.

```
<body>  
<p id="box_shadow"> Web Creation for Beginners </p>  
</body>
```

Here is the result in Browser:



You can see the shadow of the box here which has been easily created with a single rule of CSS3.

CSS3 Text Effects

A CSS3 Text Effect is a such term which is used to implement some extra features on normal text. CSS3 Text Effect is used to extend the text features as viewing and layout purpose.

Their are mainly two properties of CSS3 Text Effects, which has been de- scribed as follows:

1. **Text Shadow**
2. **Text Wrap**

Where text-shadow is used to create the shadow around the text, We can change the shadow color also. And word-wrap is used to break the continued text in another line. It means whenever we get difficulty to break the line of sentence we can generally use this css3 text-wrap properties.

Here I'm going to show you the effect of Text Shadow and difference between Wrapped Words and Un-Wrapped Words.

Lets Create three ID's named #text_shadow , #word_wrap and #no_wrap

```
<style>
  #text_shadow { ←
    text-shadow: 20px 20px 10px #6AAFCF;
  }
  #word_wrap { ←
    word-wrap:break-word;
    width:150px;
    border:1px solid #ff0000;
  }
  #no_wrap { ←
    width:150px;
    border:1px solid #ff0000;
  }
</style>
```

and here is your HTML code between <body> and </body> tags.

```
<body>
<div id="text_shadow"><h1>Text Shadow</h1></div>
<div id="word_wrap">you can't break the line hereeeeeeeeeeeeeeeeeeeee.</div>
</br> </br>
<div id="no_wrap">Now lines crossed hereeeeeeeeeeeeeeeeeeeee.</div>
</body>
```

Here is the Result of Text Shadow

Text Shadow

Here is a Result of Word Wrap

you can't break the line
hereeeeeeeeeeeeeeeeeee
ee.

Without using word-wrap text will go like this.

Now lines crossed
hereeeeeeeeeeeeeeeeeee.

These are not limited. CSS3 has a lot more text effects and increasing day by day. Visit <http://ahtashamkhan.com> for some more CSS Text Effects and tricks related to CSS3.

Lets move to the last Element of CSS3 that is going to discuss in the Edition of this book.

Transform in CSS3

The transform property applies a 2D or 3D transformation to an element. This property allows you to rotate, scale, move, skew, etc., elements.

We are going to discuss only **Rotate** property of Transform here... In simple words if you want to rotate your paragraph or divisions then your can use this CSS rule freely.

Lets do some code like this in your html file.

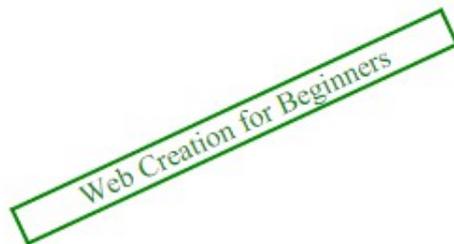
```

<style>
  #mypara {

    color: green;
    border: 2px;
    border-style: solid;
    width: 250px;
    margin: 150px auto;
    text-align: center;
    transform: rotate(-25deg);
    -webkit-transform: rotate(-25deg);
  }
</style>

```

Here is the Result in Browser:



CSS3 and Browser Compatibility Snippets

-webkit-

is used to make Compatible old versions of Google Chrome and Safari.

-moz-

is used to make Compatible old versions of Mozilla Firefox only.

-o- (This is small o not a Zero.)

is used to make Compatible old versions of Opera only.

-ms-

is used to make Compatible old versions of Internet Explorer only.

some codes

are used to make element and old browser compatible like to use

sound devices in

windows we should install sound driver first. So, -webkit- is used for Google Chrome, and Safari.

Always Remember:

- Coding needs Practice.
- Always Comment your Code.
- Give Full attention while Coding.

Great! We have completed HTML and CSS Chapter. Now its time to learn making web pages in a Software without using Code actually. In the next Chapter I'm going to use Dreamweaver CS5.

Skills Need for the Next Chapter?

- You should know the Domain & Hosting and How they works.
- You should remember HTML and CSS tags before start learning next Chapter.

=====

Chapter - 4

Dreamweaver CS5

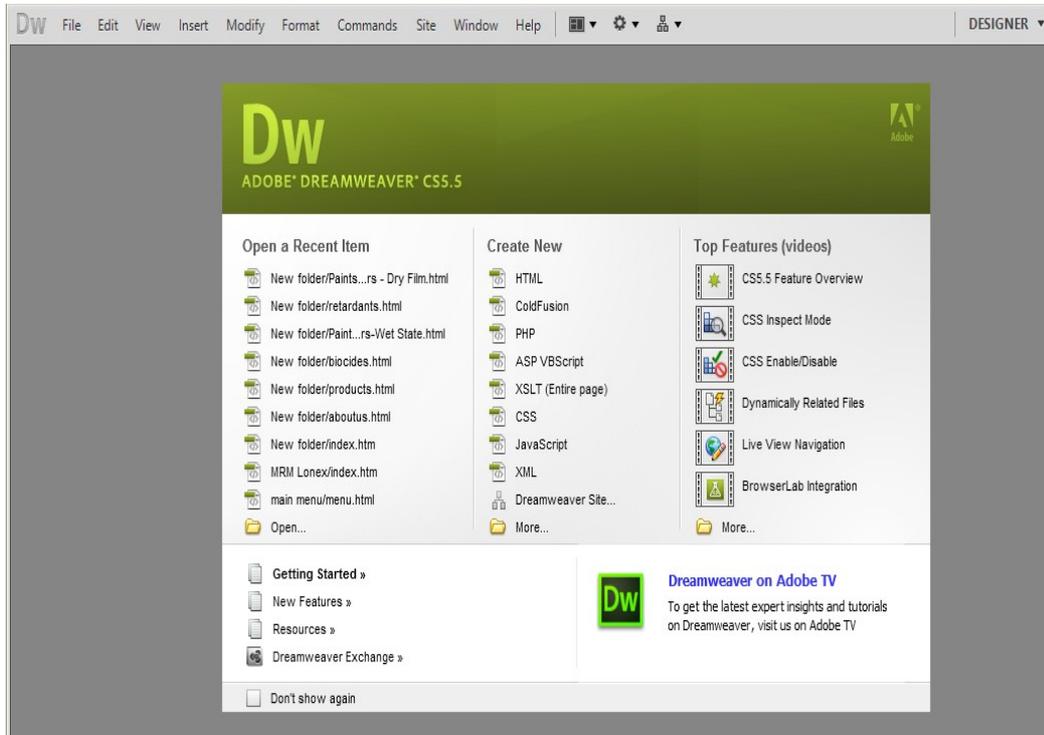
In this Chapter, you are going to learn:

1. **Making Simple pages and links.**
Introduction to Dreamweaver and how it works. Making simple pages.
2. **Structure, images, and text.**
Putting media together to make a usable website.
3. **Spry Menu Bar, Tabbed Panels and Accordions**
How to make menu bar, tabs and accordions in DW?
4. **Creating Page Layouts**
Using div and Internal Style Sheets
5. **Ending Touches**
Heading and Footer, Meta Tags

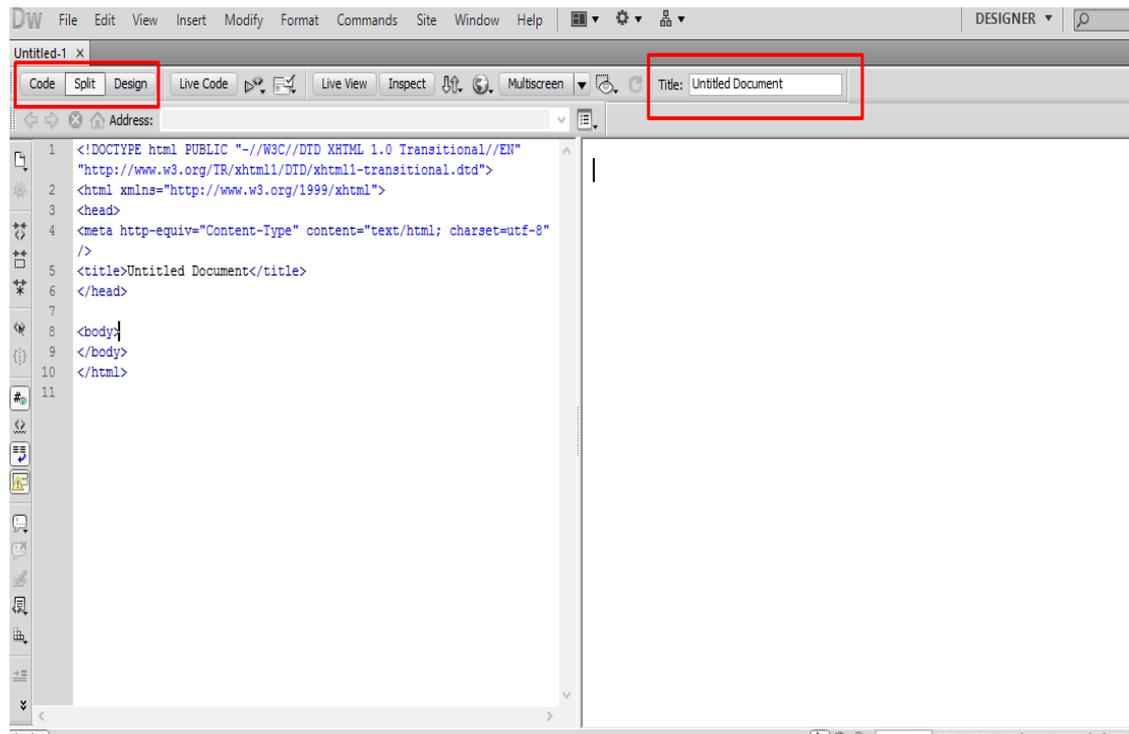
1- Making Simple pages and links:

In this tutorial you will be making a very simple website, and I will have you display the code on the page just to get used to it. You don't ever really need to know what all of it means, but eventually you will have to deal with it on some level.

Here I'm going to use Dreamweaver (version is CS5.5). Don't be confused If you have earlier or later version....
 Lets Start... Open Dreamweaver and click on **HTML** in **Create New** section.



So, here I'm going to create a HTML file so, just Pick **HTML** from the list of Create New.... Next We will see the following Preview:



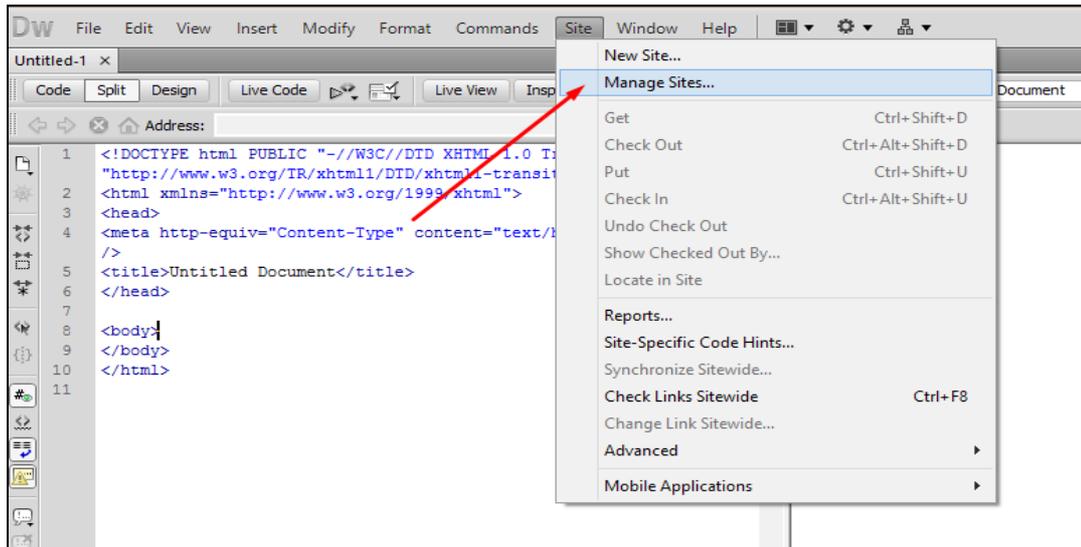
Before moving forward just keep in mind that Dreamweaver has 3 Work Spaces:

1. **Code** (Used, if you want to work in Coding)
2. **Design** (Used, if you don't know coding or just want to work in Graphics Mode)
3. **Split** (Used, if you want to work in code or design but want to see result on both work space at same time)

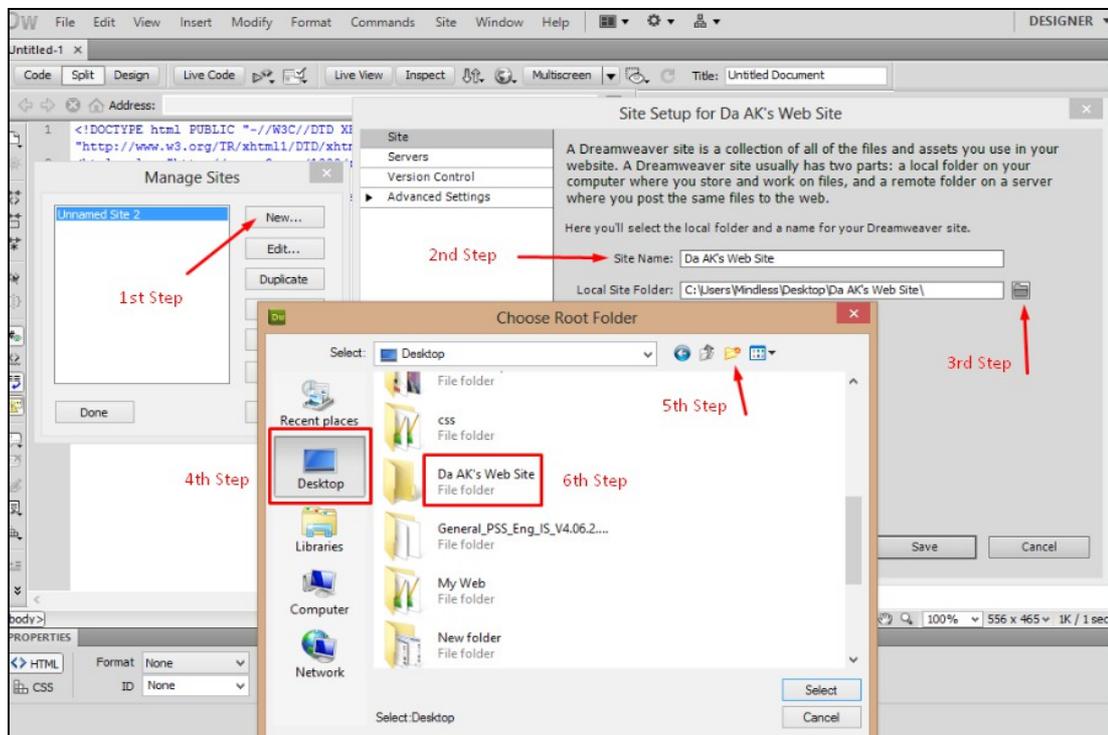
In the above preview you can see my two highlighted areas, On left side we can switch to any desire Work Space and on right side you can put your Web Page's Title.

Lets move forward by choosing "Split" Work Space.... Well, before getting started, we have to give a location to our web page where it will save the data.

Now keep following the Steps.... Go to **Site > Manage Sites...**



Next Create a New folder and give any name by following the mentioned steps below in a sequence.



Then Select the Newly Created folder and Save it. Next, before start typing on work space press CTRL+S and give file a name to "index.html" and save it as shown in **Figure A**. Now check at right side panel you will be able to see the saved file name and the root folder "Da AK's Web Site" as shown in

Figure B.

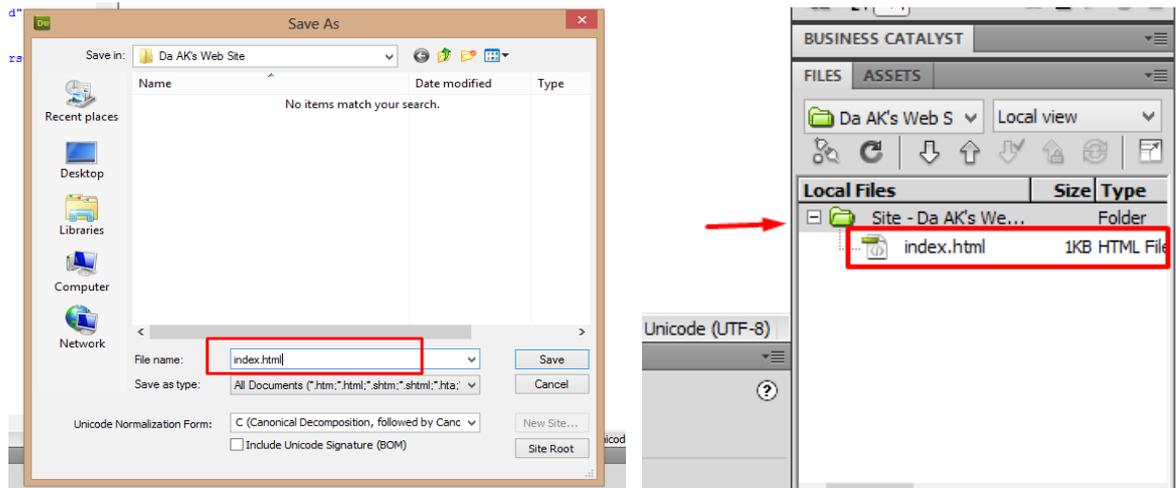
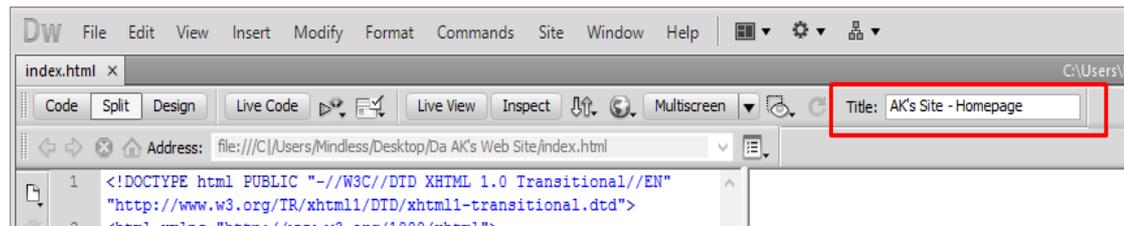


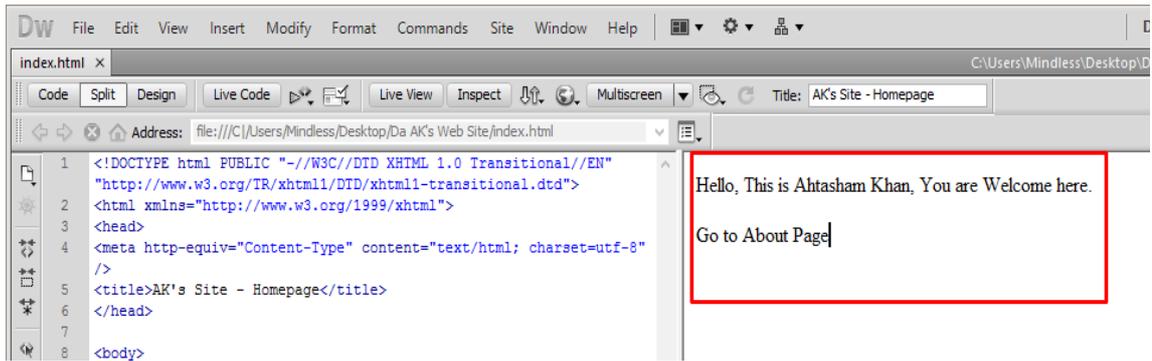
Figure A

Figure B

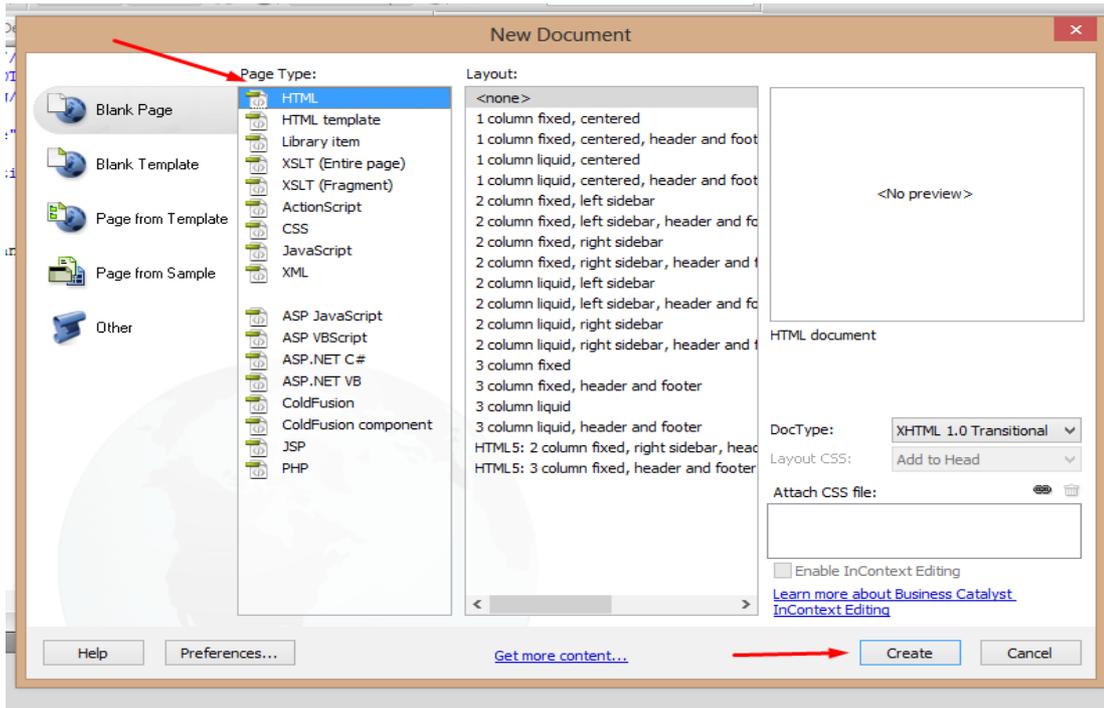
Here we go, lets Give a title to your webpage if you have not given yet.



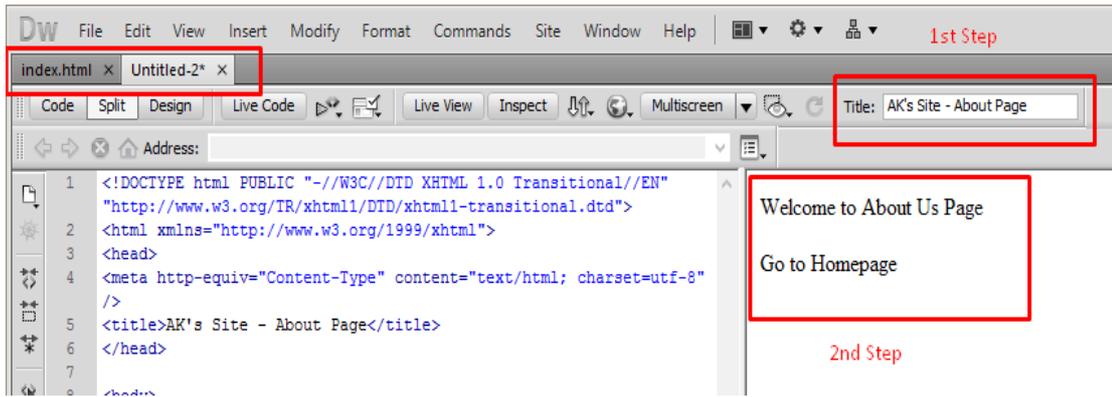
Next in Design Work Space, type something shown below and after it don't forget to press **CTRL+S** (Make this a Habit).



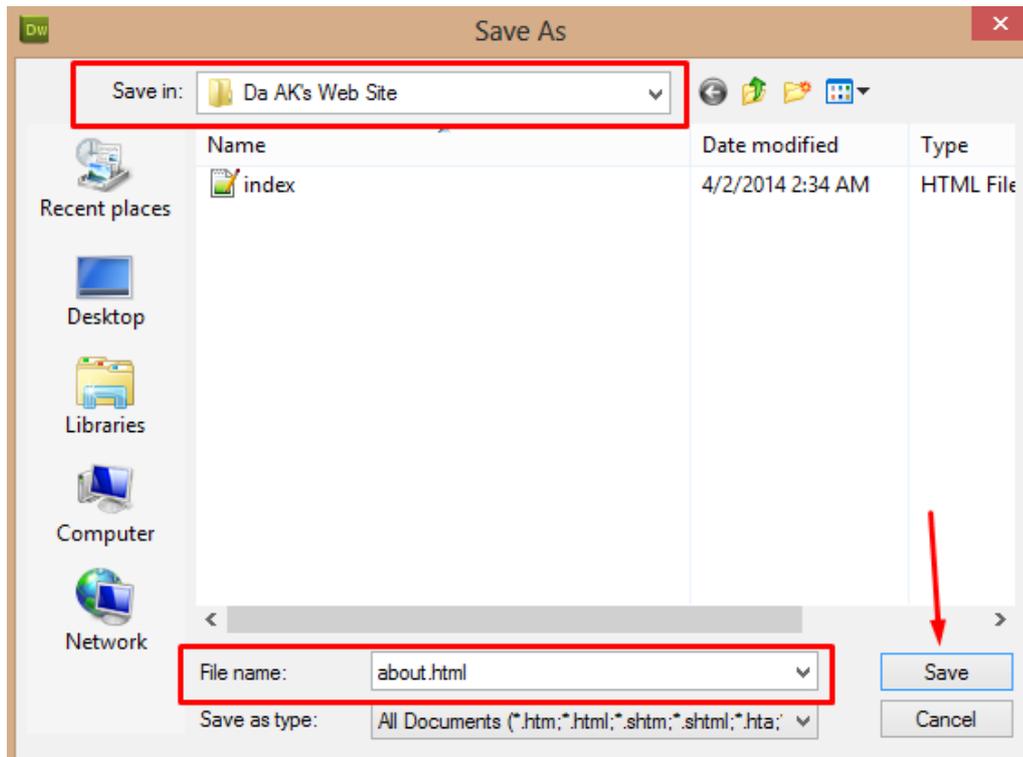
Alright, now Press **CTRL+N** or Go to **File > New** (Choose **HTML** and click on **Create**).



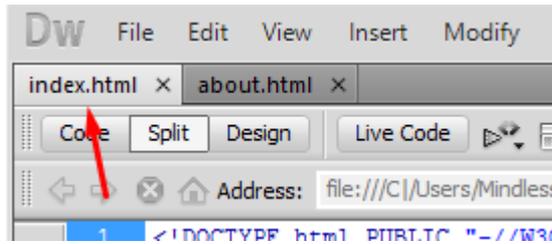
Alright, Now give 2nd page a Title as show in **1st Step** then type something as shown in **2nd Step**.



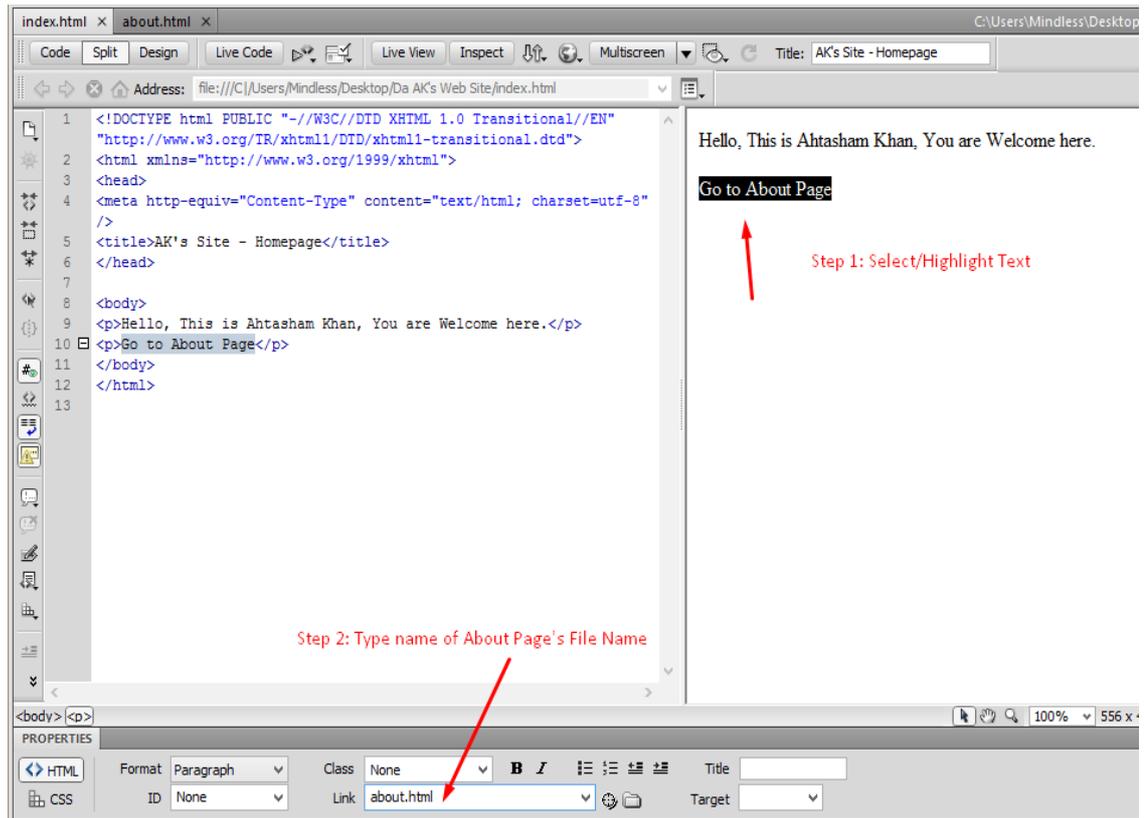
Now Save 2nd file by simply pressing **CTRL+S** and give a file name "about.html" and save it.



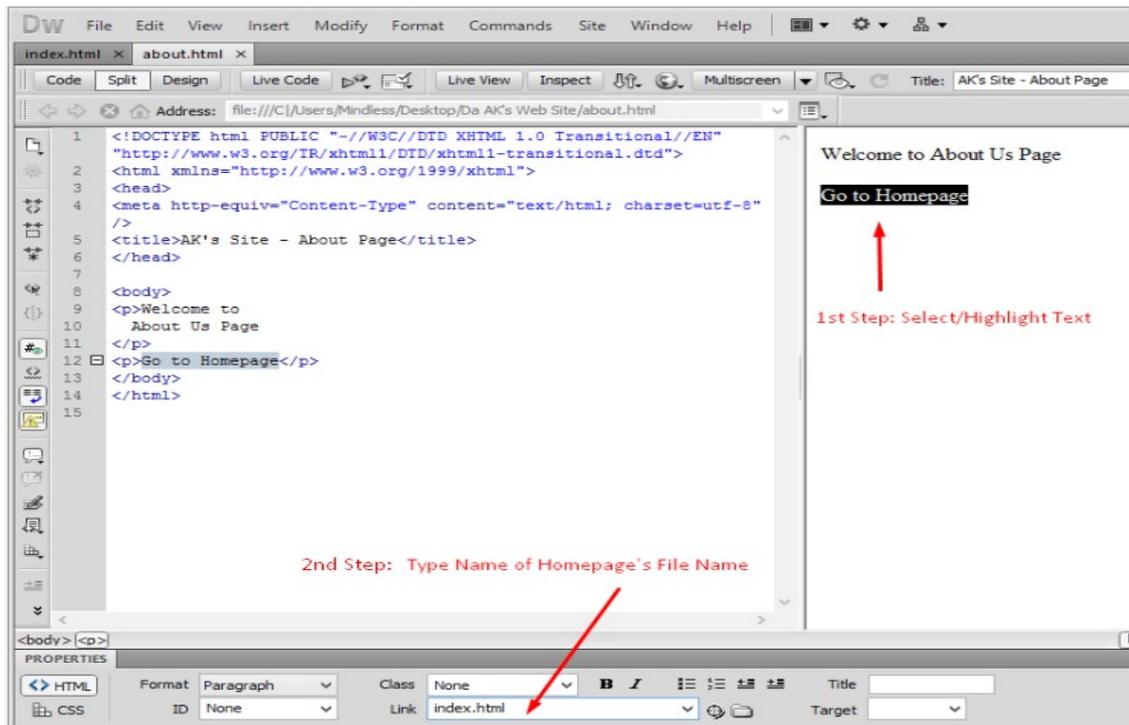
Now, Lets make Hyperlink to connect both pages to each other. Firstly I'm going to make hyperlink on index.html (Home Page)



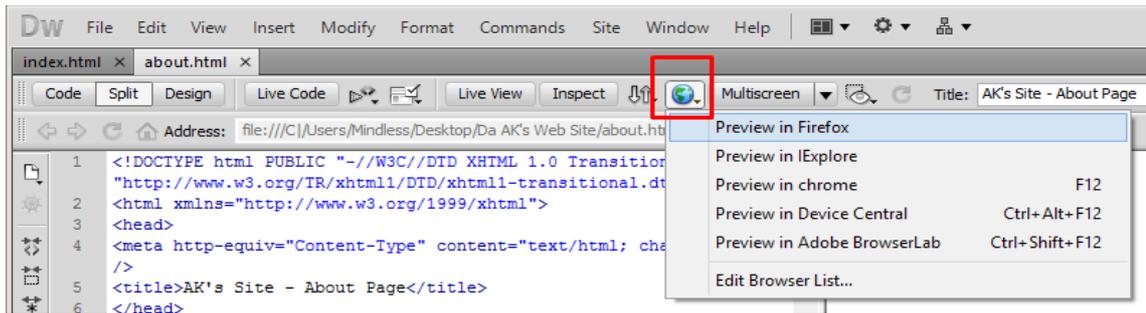
Follow the steps as shown in the following figure. After completing 2nd Step Go to **File > Save** (or Simply press **CTRL+S**).



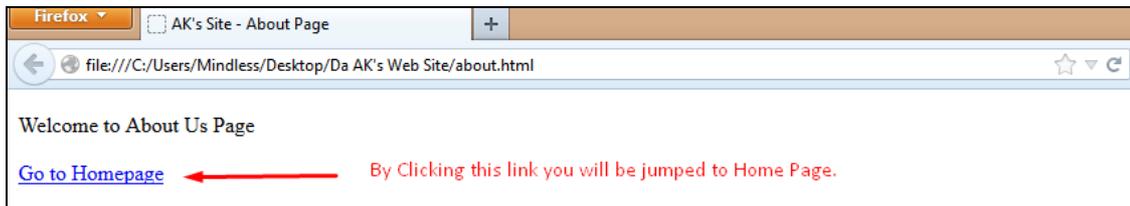
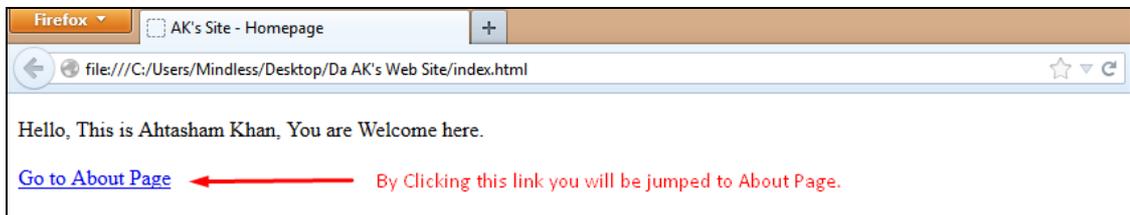
Now same as it is, Select the about.html file and follow given steps. After all, Save the file.



Alright Great! Now lets check the result in browser. To do it, Click on Debug icon as shown below and choose the browser you installed.



Here in browser preview, click on Hyperlinks of both pages. Have you noticed something? Yes both pages are linked to each other, now we can go to any page by just clicking on its navigation or hyperlink.



What you have just done in this section is make your first website. Here is how to prove that: Quit Dreamweaver, open the folder that you made, and open one of the two files in a web browser.

You could take this folder and save it to another drive, open it on another computer, or email it to someone. Well.... after completing a complete site in Dreamweaver, In next Chapter we will even upload it to a web server, and the whole world could see our creation. As long as the files stay in the same places in web server, it will work fine.

2- Structure, images, and text:

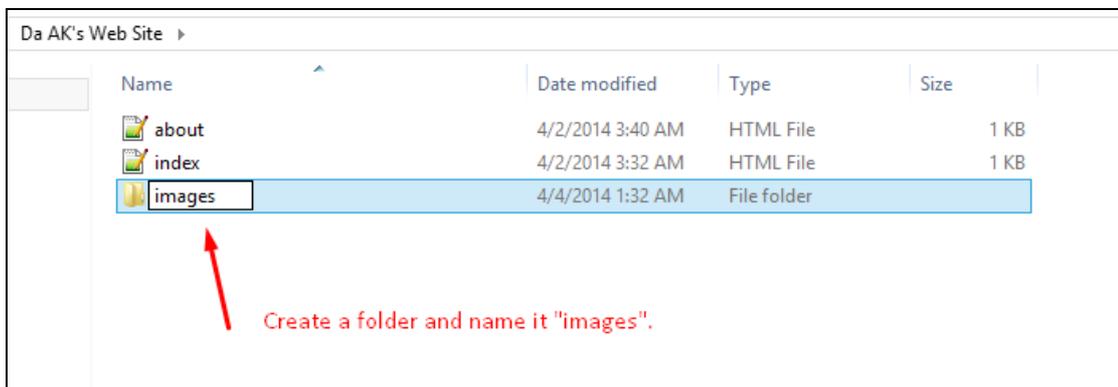
In the last section you learned how to make a web site, and if you just want words and don't care how it looks, you learned pretty much all you need to know.

In this section, we will be making a web page and adding photographs and text formatting. More information choices, nicer to read.

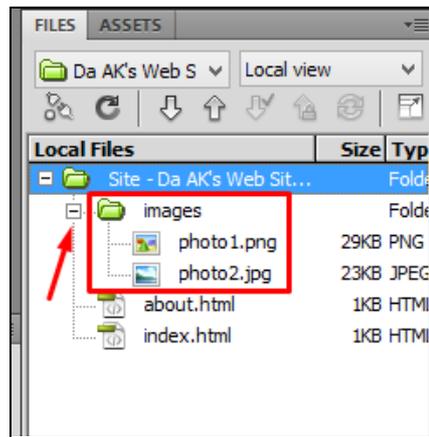
Before you start, take any two photos from your computer or download from internet... Its yours choice. Next... Create a new folder named "images" in your Website's Root Folder.

Q: What is Root Folder?

A: The folder in which the files of your websites are located. Just like we created the root folder at desktop called " **Da AK's Web Site**".



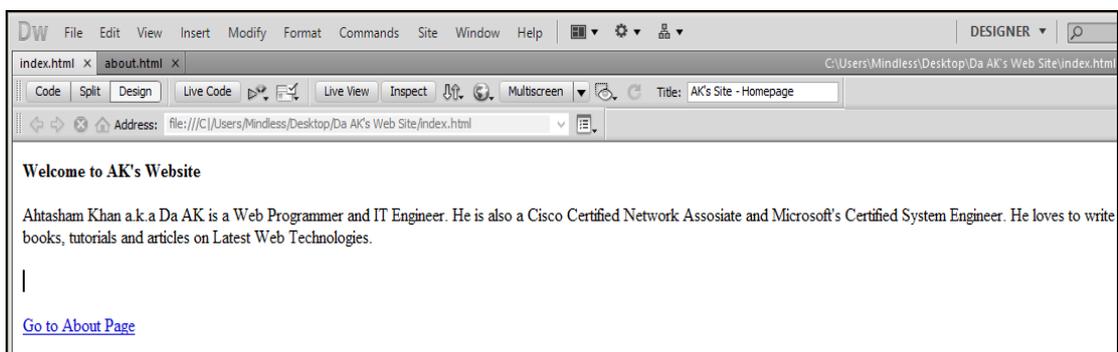
Now copy those two photos in **images** folder. Then in Dreamweaver, look at the Files Panel – the images folder you made should be in there and look something like the example shown. Click on the little plus (+) icon to show the contents of your images folder.



Now, double click on index.html file in Files Panel. Now we are going to work in **Design Work Space**. So switch to Design layout.

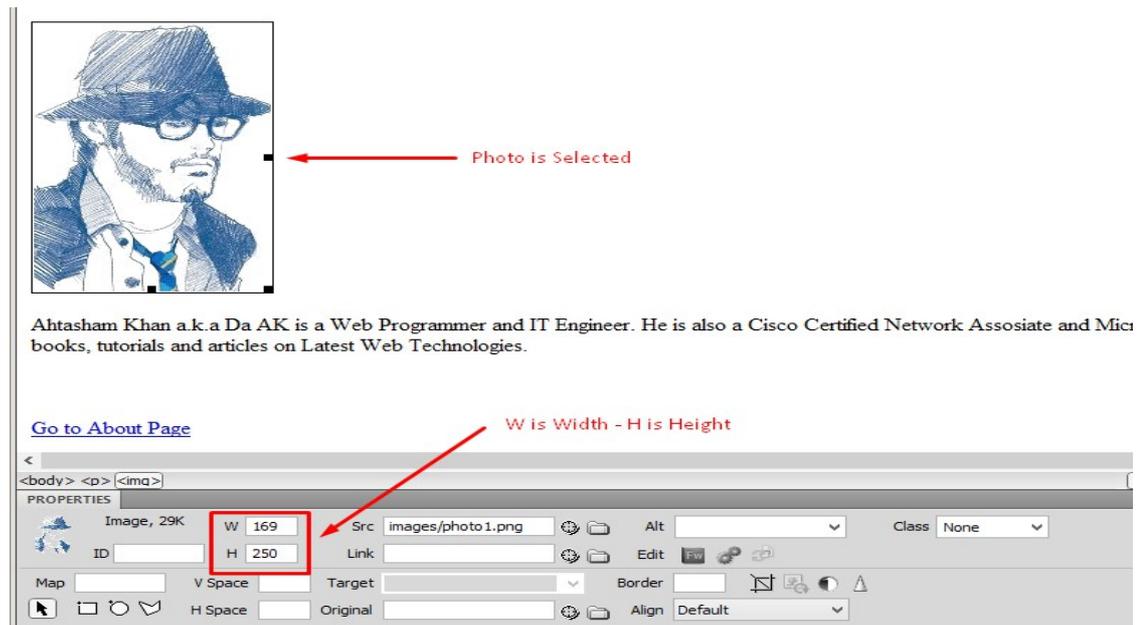


Just like in a word processing program, Make a very short paragraph like:



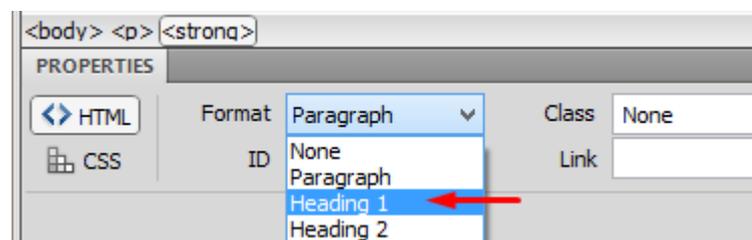
Next is, Add an image (photograph) now. With your cursor (insertion bar) at the end of the first line, hit return (Enter button) to make more space between your paragraphs. Then, In the **Main Menu** Go to **Insert > Image** and choose a photo- graph from the ones in your image folder. It will ask if you want an alternate text for the image. For now we can click through this box (just hit OK).

Then if you want to adjust photo's resolution then simply left click on photo just one time and look into Properties Panel as show below and give values.



The screenshot shows a web editor interface. At the top, there is a blue-tinted image of a man wearing a hat and glasses. A red arrow points to the image with the text "Photo is Selected". Below the image is a paragraph of text: "Ahtasham Khan a.k.a Da AK is a Web Programmer and IT Engineer. He is also a Cisco Certified Network Associate and Mic books, tutorials and articles on Latest Web Technologies." Below the text is a blue link that says "Go to About Page". At the bottom, the Properties Panel is open, showing the properties for an image element. The "W" (Width) is set to 169 and the "H" (Height) is set to 250. A red arrow points to these values with the text "W is Width - H is Height".

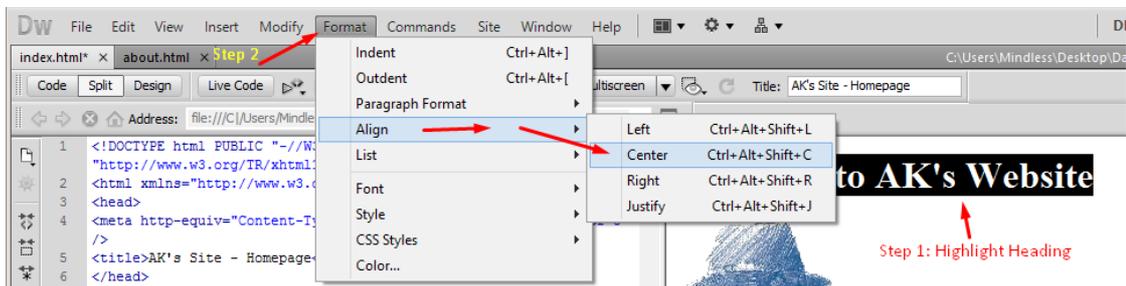
Now just after the paragraph ends, hit Enter key to get some space for inserting second photo. Next before ending of this section we should make some layout formatting. So, highlight the first line and in Properties Panel choose **Format** to Heading 1.



What this does is put a tag around your words which tells your browser to make the type bigger in a pre-defined way (h1). Go to Split View and check it out in the source code. If you still have the paragraph highlighted Dream- weaver will also highlight it in the source code.



Now Lets Centralized the Heading with the following steps:



Now if you look at source code, Dreamweaver will the change the code as:

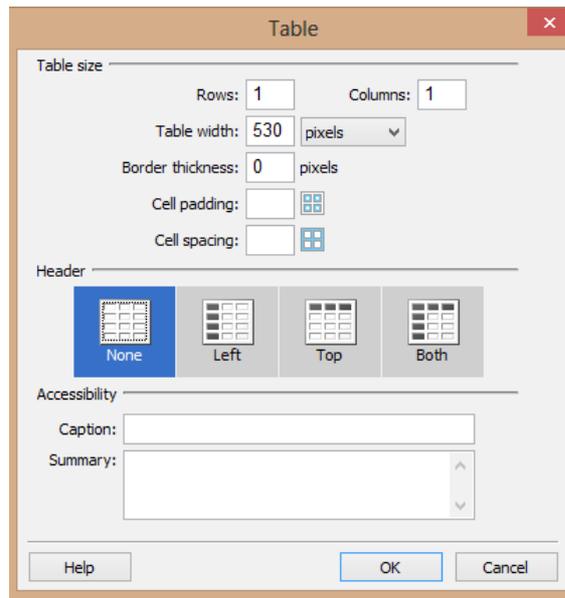
```
<h1 align="center">Welcome to AK's Website</h1>
```

3- Spry Menu Bar, Tabbed Panels and Accordions:

Spry Menu Bar

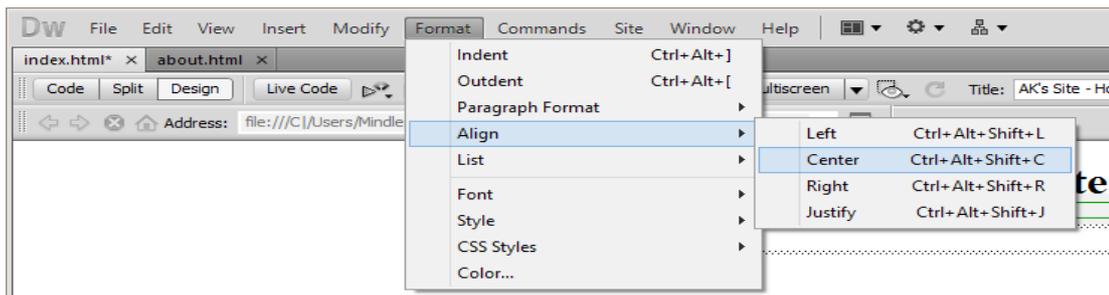
Firstly We need to create a table just after the heading. Follow the steps:

Step 1: Go to **Insert > Table** (Give the values as shown and then Press OK).

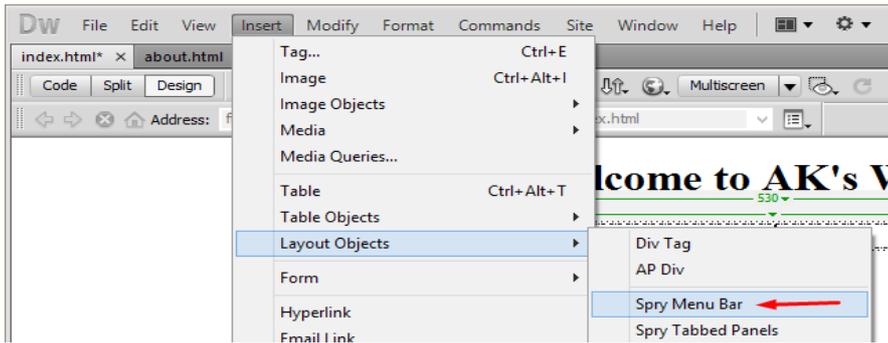


Step 2: Select the table and in Properties Panel give **Align** value to Center. (with this, table will be centralized).

Step 3: Next, left click in table's cell and Go to **Format > Align > Center**

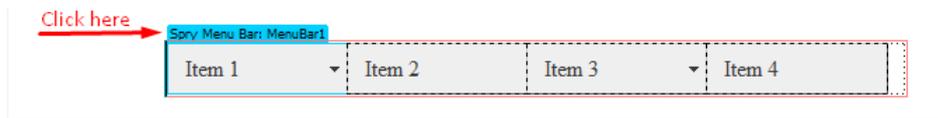


Step 4: Go to Insert > Layout Objects > Spry Menu Bar

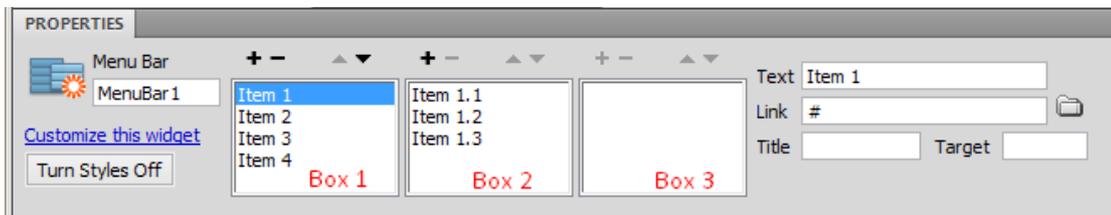


Step 5: Select Horizontal and Press OK

Step 6: Select the Menu bar by click its title as shown



Step 7: Lets edit the menu items. Just see the Properties Panel, it will look like this:



Box 1 Contains Main Menu Items

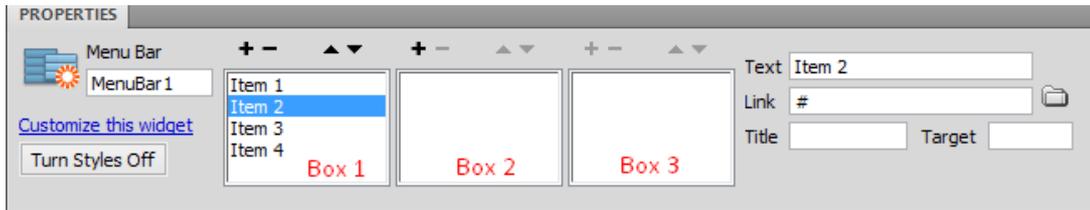
Box 2 Contains Sub Items of Main Menu Items

Box 3 Contains More Sub Items of Box 2

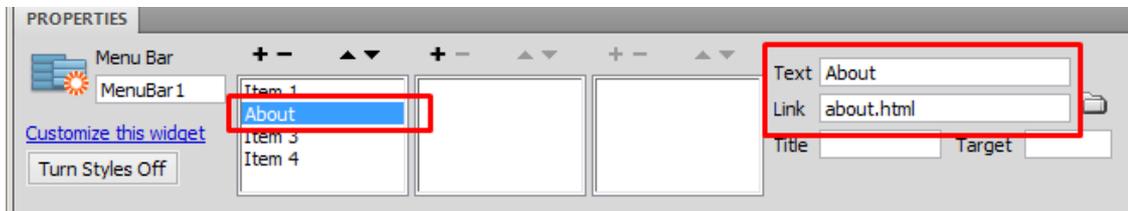
Keep in Mind

If an item having drop down list of sub items then its Hyperlink will be (#). e.g: If a menu <Clothes> contains sub items <Men>, <Women> then the Hyperlink of Clothes will be book (#) sign

In the above preview, **Item 1** is selected already in Box 1 and its Sub Items are showing in Box 2. (If any Item does not contains sub items then on its selection the Box 2 will show as empty as like below.)



We can add or delete items with the small + and - icons above the boxes. These items can also be moved up and down by Up and Down Arrow icons. And to edit any menu item, select it firstly and then at right side of Properties Panel, put the values like:



So, I have added and removed some menu items and also gave the hyperlinks to Home and About page because I have already created two pages named index.html (Home Page) and about.html (About Page).



Its Your Turn Now

Now, create 4 more pages and give names as:

shared.html
reseller.html
domain.html
development.html

At the end, write some text or paragraph in each page.

Now give hyperlinks to each menu item as:

Home >> index.html
About >> about.html
Services >> #
Hosting >> #
Shared >> shared.html
Reseller >> reseller.html
Domain >> domain.html
Development >> development.html

Keep in Mind

If an item having drop down list of sub items then its Hyperlink will be (#). e.g: If a menu <Clothes> contains sub items <Men>, <Women> then the Hyperlink of Clothes will be hash (#) sign.

Now its time to put our menu bar in each page. To do this, simply select the menu bar in index.html and press **CTRL+C** to copy and go to each page and click on the page area where you want to show your menu bar and press **CTRL+V** to paste it.

After completing the mission, Open any html file in browser and use menu bar to navigate to any page smoothly...

Cheers :-)

Tabbed Panels

Tabbed menus, or tabbed panels, allow you to create multiple sections on the same Web page. The user clicks labeled tabs to display the sections. In Dreamweaver CS5.5 a leading Web design application, you can easily create tabbed panels with the program's built-in Spry Tabbed Panels widget.

Alright, I want to put some information regarding me on about page of my website. So, I'm going to make tabbed panels on About Page (about.html).

Q: If I want to put info about me on page then why Tabbed Panels?

A: Because info like Education, Hobbies, Skills, Contact info etc will take much space, that's why I'm using tabbed panels to shrink the info in tabs and also to give it a funky look ;-)

Lets Start...

Step 1: Open about.html file in Dreamweaver if you have not opened already and Click in the page where you want to place the tabbed panels

Step 2: Click the "Insert" menu, choose "Spry," and then select "Spry Tabbed Menu" from the fly out menu. Dreamweaver will insert the tabbed panels into the document. Now before moving forward save the file and look into the browser.

Step 3: Click on the name of Tabbed Panel as shown:



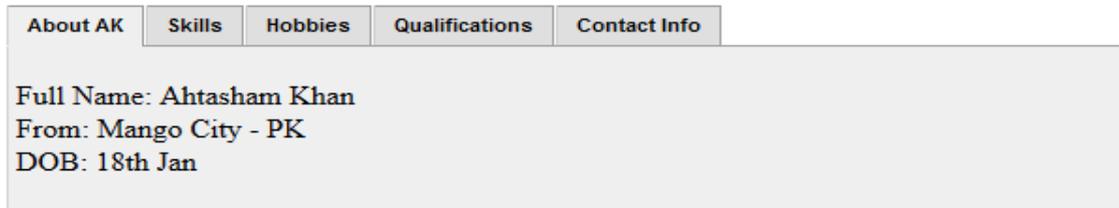
Step 4: By default, there are two panels. You can add additional panels by clicking the "Add Panel" button, the plus sign, in the Properties panel as shown below: Add additional panels as desired.



Step 5: Select the first tabbed panel label text ("Tab 1") and type the desired panel label text.

Step 6: Repeat Step 5 for each panel label.

Step 7: Select the panel content text ("Content 1") and then type the desired panel content text. You can also insert images, texts etc into your panels. Have a look how I have settled it. Well... Have you completed like me? If yes then look results into the browser.



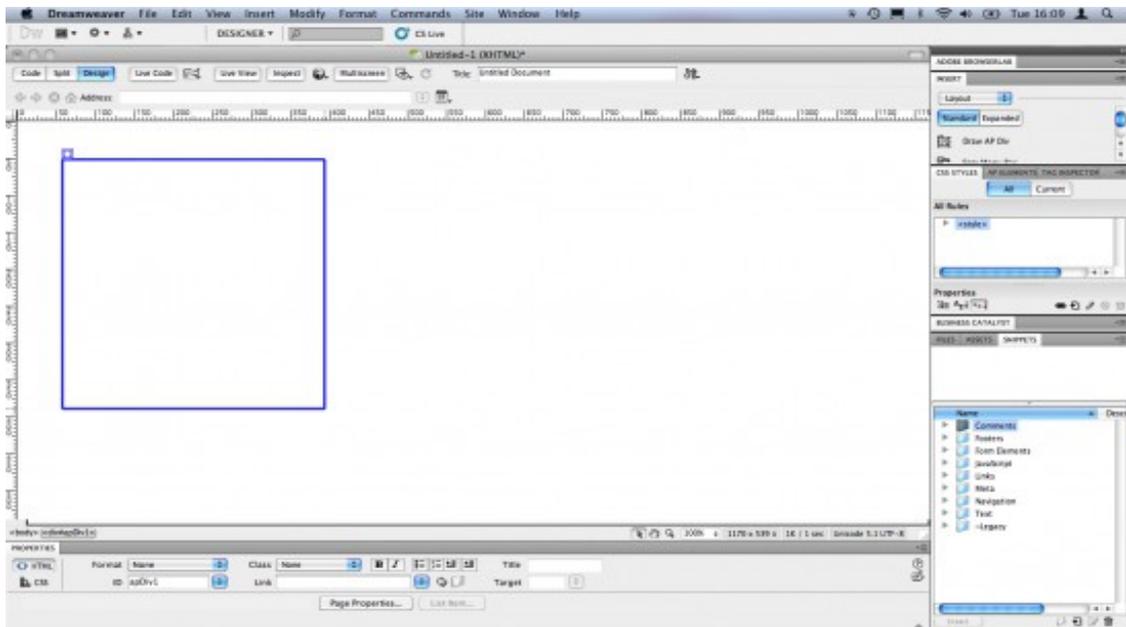
Accordions

Spry Accordions are a delightful way in which to deliver large amounts of information in a confined space. They are also a lot of fun for users if you use them in a clever way. Here, I'm going to show you how to add a Spry Accordion to your web page.

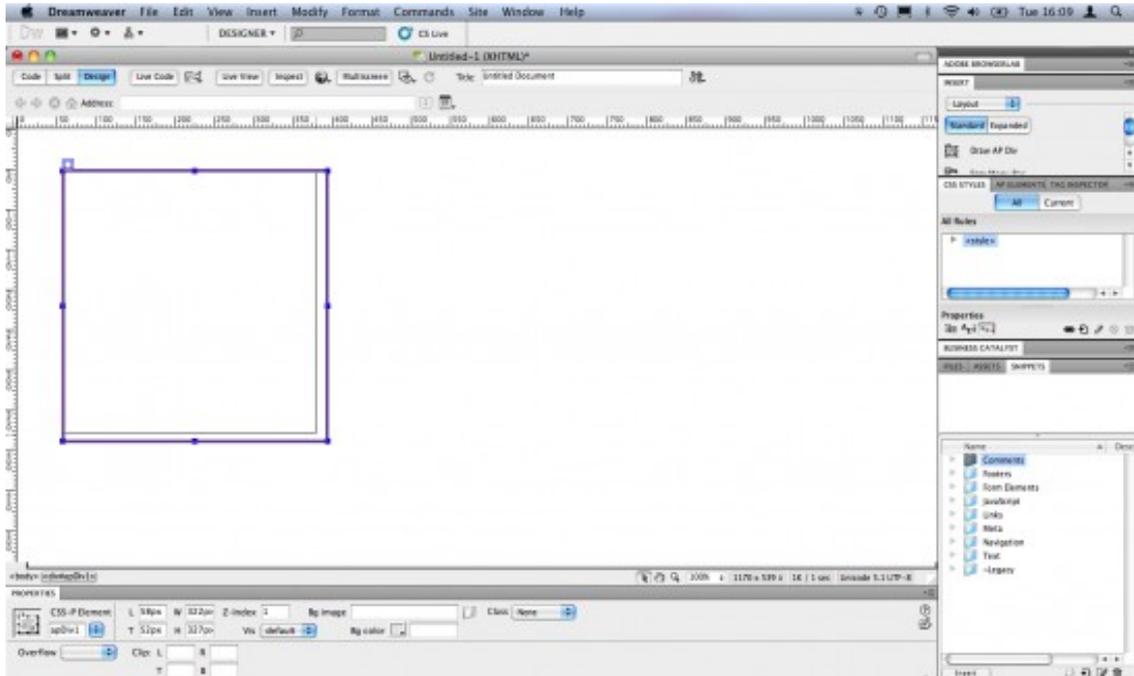
Step 1: Open Home Page (index.html) file in Dreamweaver and left click on any area of the page where you want to add accordion.

Step 2: I like to control the position of a Spry by placing it inside an AP DIV. To create an AP Div go to the **Insert Panel** and choose **Layout Objects > Draw AP Div**.

It will look like this:

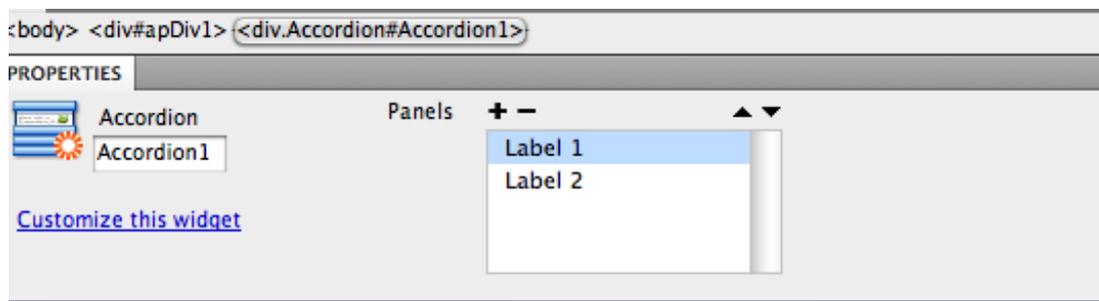


Step 3: To Move the AP, grab the small white handle at its top left and drag its interposition to your page.

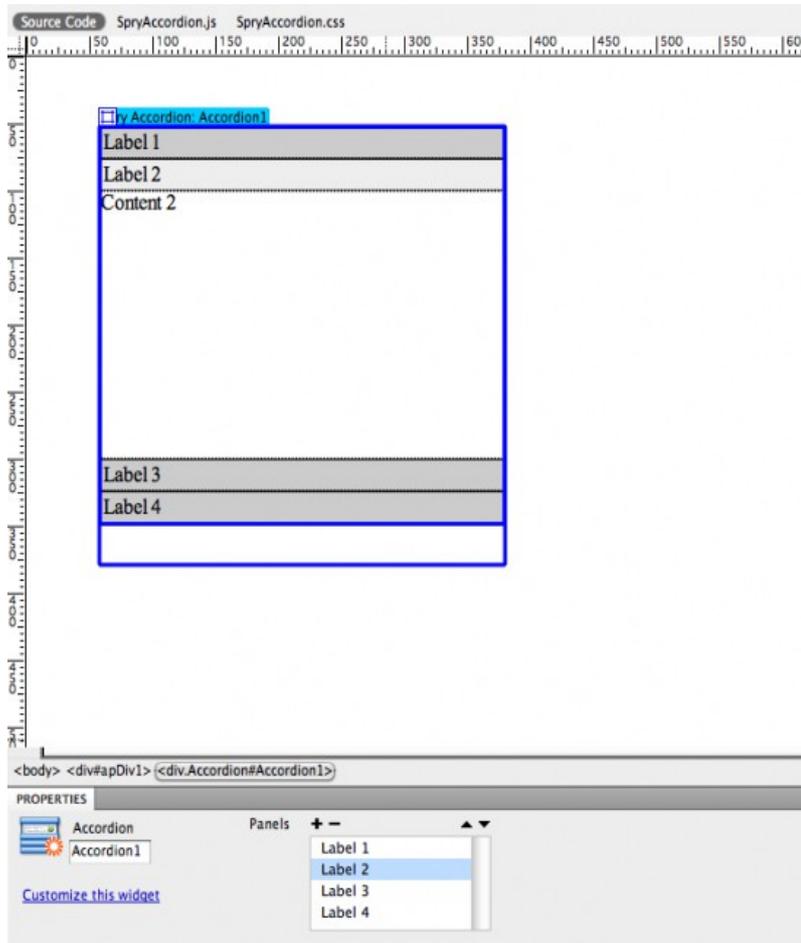


To resize the AP Div you could grab one of its blue anchor points and drag to the desired size.

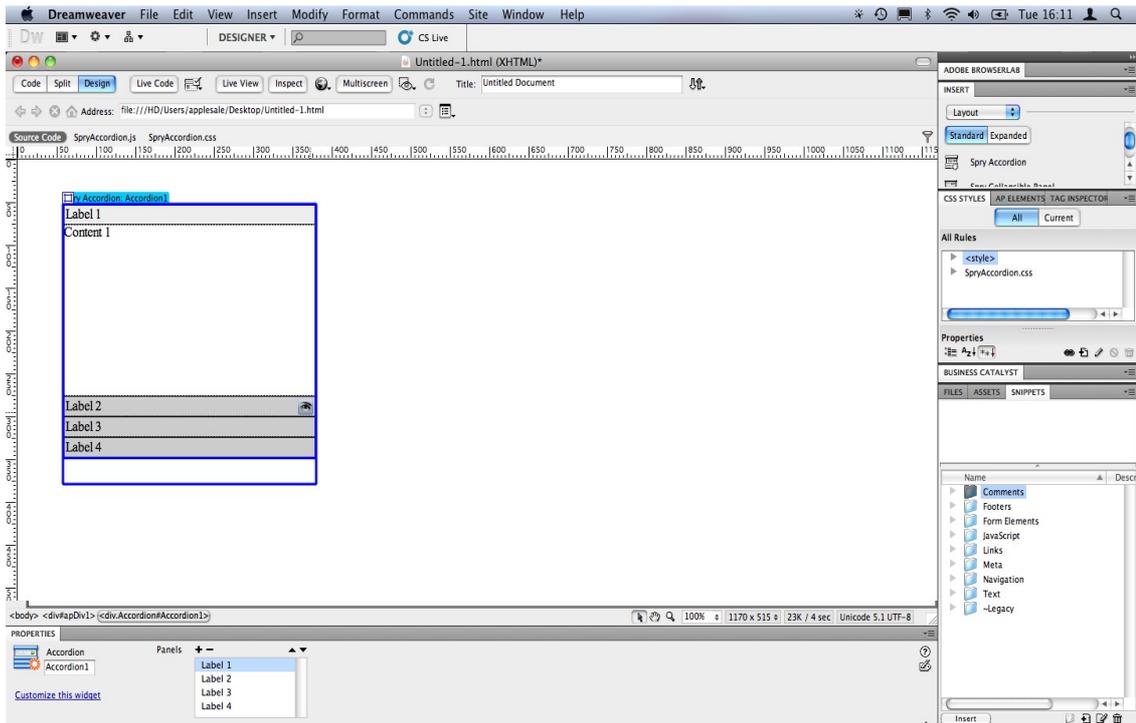
Step 4: With the Spry Accordion selected (which you can do by clicking on the Cyan-colored Spry Accordion label). Use the Properties Panel to add more labels.



Use the + button to add 2 more Panels so you see this:

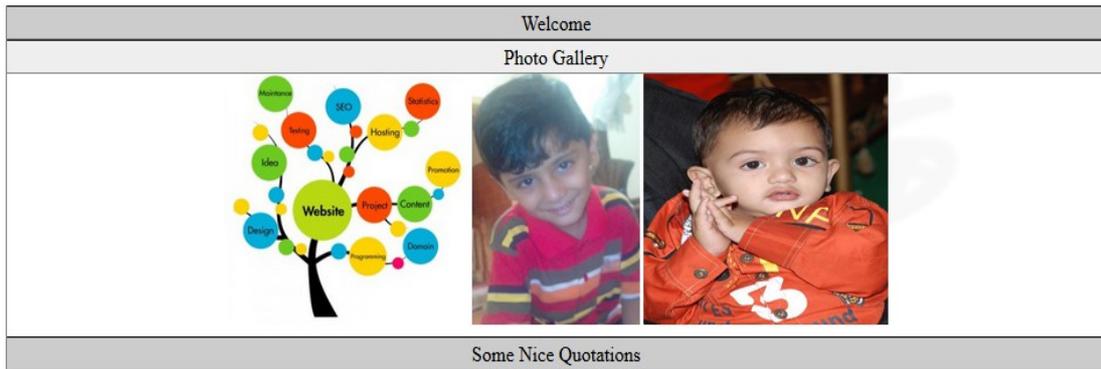


Step 5: When you hover the cursor over each Label Tab on the Spry Accordion, a little eye symbol will appear. Clicking on this symbol will open the contents of that particular Tab enabling you to edit it.



Highlighting the text of the Label allows you to change the label's name. Highlighting the text "Contents" allows you to edit the text contained inside the Spry.

Alright... I have added 3 tabs with contents. Here is how my accordion is looking in browser:

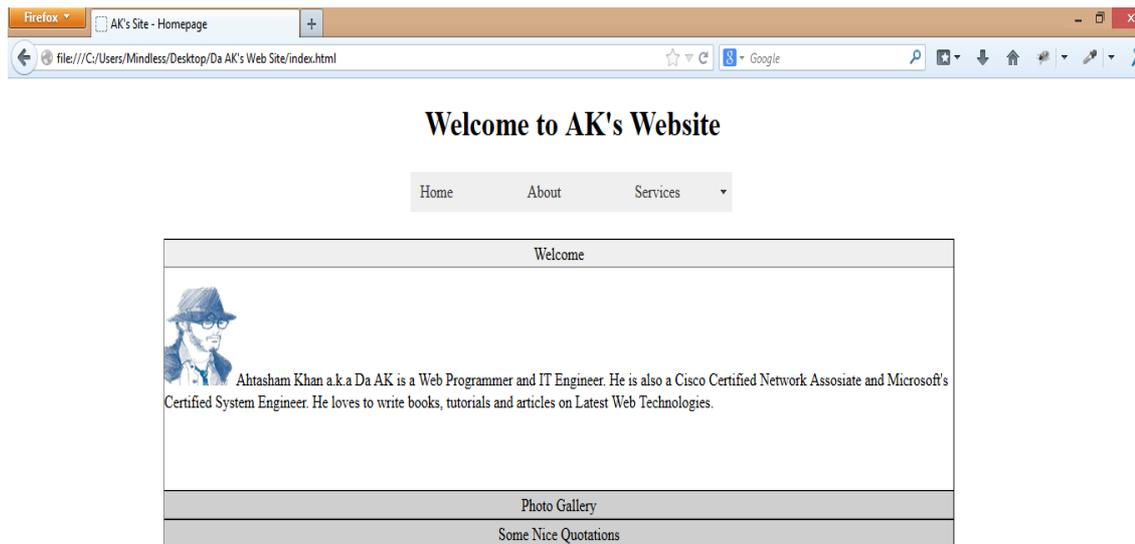


In this Accordion's Preview 2nd Tab "Photo Gallery" is opened.

Q: How the alignment of labels of tabs is center?

A: Just select or highlight the label text and Go to **Format > Align > Center**

Alright, here is the whole Home Page's preview in browser:



Creating Page Layouts

Well the creating of page layouts is really much simple if you have already done great practice of HTML and CSS Chapters. You can give a name "Sketch" to a Page Layout too... Well just follow up these step and we will make the great page layout...

Step 1: Make new folder at desktop and Create a index.html file inside it.

Step 2: In the file, first of all... I'm going to create division for My Page's Header area. For it, I'm going to create an ID named #header and then I'll apply them into division.

```
<html>
<head>
<title>Web Creation by Da AK </title>
<style>
#header {
width: 960px;
height: 100px;
font-size: 36px;
background-color: orange;
}
</style>
<body>
<div id="header"> Web Creation for Beginners </div>
</body>
</html>
```

Now lets move forward to next Step and create a Menu Bar.

Step 3: Make an ID named #menu and apply to division.

```
<html>
<head>
<title>Web Creation by Da AK </title>
<style>
#header {
width: 960px;
height: 100px;
font-size: 36px;
background-color: orange;
}

#menu {
width: 960px;
height: 30px;
background-color: grey;
color: white;
}

</style>
<body>
<div id="header"> Web Creation for Beginners </div>

<div id="menu"> Home -- About -- Services -- Contact </div>

</body>
</html>
```

Step 4: Lets make 4 Content boxes. But this time we will use CLASS instead of ID. Because we are going to make 4 box then for sure we have to create 4 divisions having same CLASS. The CLASS named .contentbox

```

.contentbox {
width: 200px;
height: 200px;
background-color: orange;
float: left;
margin-left: 30px;
margin-top: 10px;
margin-bottom: 10px;
}
</style>
<body>
<div id="master">
<div id="header"> Web Creation for Beginners </div>
<div id="menu"> Home -- About -- Services -- Contact </div>
<div class="contentbox"> Box No.1 </div>
<div class="contentbox"> Box No.2 </div>
<div class="contentbox"> Box No.3 </div>
<div class="contentbox"> Box No.4 </div>

```

Step 5: Now Lets Create a page footer with ID named #footer.

```

#footer {
width: 960px;
height:20px;
background-color: grey;
color: white;
clear: both;
}
</style>
<body>
<div id="header"> Web Creation for Beginners </div>
<div id="menu"> Home -- About -- Services -- Contact </div>
<div class="contentbox"> Box No.1 </div>
<div class="contentbox"> Box No.2 </div>
<div class="contentbox"> Box No.3 </div>
<div class="contentbox"> Box No.4 </div>
<div id="footer"> Copyright Da AK - Web Creation for Beginners Edition </div>

```

Wait here.... before checking the whole result in browser we must have to set the alignment of our whole page to middle or center. To do so, we have to Create a Master division which will control the whole page's layout. Lets be Practical now....

Create an ID named #master after the <style> tag in your file. and put the following code like this:

```
#master {  
  
width: 960px;  
margin: 0 auto;  
  
}
```

So, have you created the ID in Style tag? now apply into HTML too... Simply put the <div id="master"> code after <body> tag and then put </div> just before </body> tag. Means your all above whole content now will be between <div id="master"> and </div> tags.

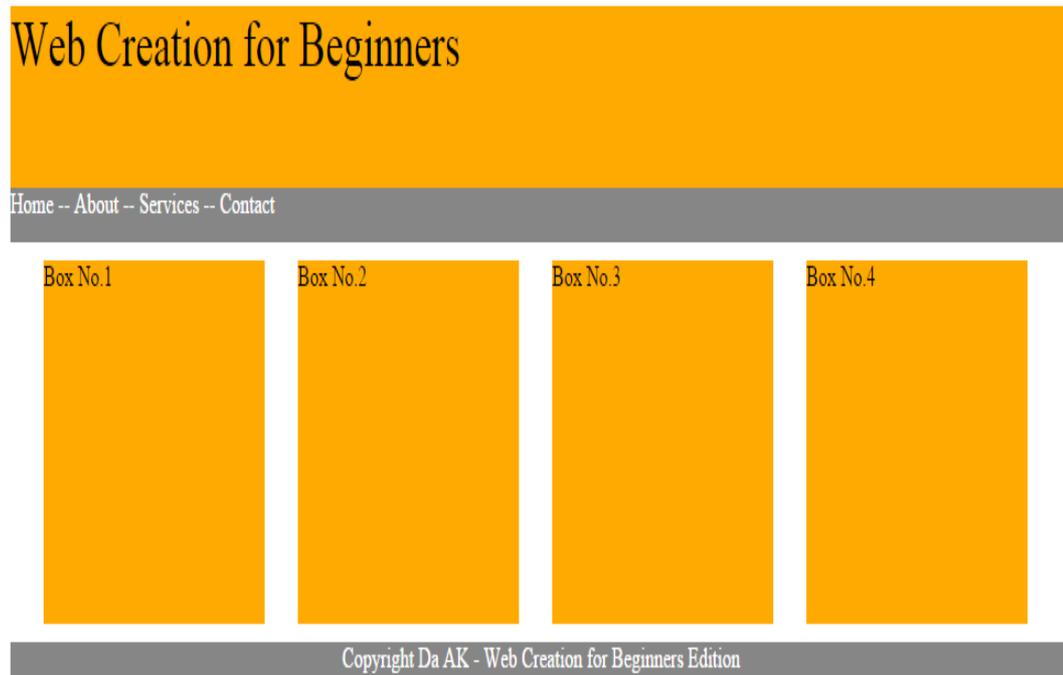
Here is the #master ID just after <style> tag.

```
<html>  
<head>  
<title>Web Creation by Da AK </title>  
<style>  
#master {  
width: 960px;  
margin: 0 auto;  
}
```

Here is the implementation of #master ID in division. You can see the whole body code here....

```
<body>
<div id="master"> ←
<div id="header"> Web Creation for Beginners </div>
<div id="menu"> Home -- About -- Services -- Contact </div>
<div class="contentbox"> Box No.1 </div>
<div class="contentbox"> Box No.2 </div>
<div class="contentbox"> Box No.3 </div>
<div class="contentbox"> Box No.4 </div>
<div id="footer"> Copyright Da AK - Web Creation for Beginners Edition </div>
</div> ←
</body>
```

Here is the Full Preview of Our Page Layout



Ending Touches

Header: The header is a top area in a body of web page. Mostly websites used header to show Logo and quick contact details.

Footer: This area contains the Copyright information of a website and you may also use it to put extra hyperlinks. Lets do it by adding copyright info in Home Page...

Where the accordion ending, make a new paragraph with center alignment and put like " Copyright © 2014 | All Rights Reserved "

Meta Tags

Meta Description: It is commonly used on search engine result pages (SERPs) to display preview snippets for a given page. We have to put this between <head> and </head> tags in HTML. Here is Code Sample:

```
<head>
<meta name="description" content=" Cheap Domains in Pakistan, Cheap Reseller
Hosting in Pakistan, Cheap Shared Hosting in Pakistan.
</head>
```



Meta Keywords: The words which we used to search on different search engines as per our requirements. For example, if I want cheap reseller hosting than not definitely but probably I'll search with the keywords "cheap reseller hosting" in Google or any other search engine as you like. We have to put this between <head> and </head> tags in HTML.

Code Sample:

```
<head>
<meta name="keywords" content=" cheap reseller hosting, cheap domain
names, web hosting">
</head>
```

Here is the result of Google.com.pk for our keyword:

MRM Solution™ | Cheap Domains, Shared and Reseller Ho...

www.mrmsolution.com/ ▼

Cheap Domains in Pakistan, Cheap Reseller Hosting in Pakistan, Cheap Shared Hosting in Pakistan.

Keyword is bold

Great! We have completed Dreamweaver (Basics) Chapter. Remember, there are many cool features and widgets in Dreamweaver. So, this is not the end, I hope with this Chapter you will be able to create a simple website in DW. By the way, you know Practice makes man perfect. ;-)

=====

Chapter - 5

Basic Touch to cPanel

Before getting started with cPanel, we should know the propagation of Domain & Hosting.

Why .com Domain?

The reason is very simple and that is... its most popular domain extension.

Why Linux Web Hosting?

If you are not going to use ASP or ASP.NET then Go for Linux web hosting because its more secure, cheaper and most popular web hosting as comparing with windows web hosting.

How to buy domain and web hosting?

Before buying web hosting you should check the files size of your website because at maximum hosting companies the prices depends upon the hosting web space or storage size.

If you are confused that where to buy domain and hosting then I can prefer you to "**MRM Solution**" (<http://www.mrmsolution.com>).

=====

You can choose any domain and hosting provider company on the internet as well.

After setting up your hosting account from your hosting provider, they will send you the control panel link along with login details (Username & Password). There you must have to point your web hosting with your domain name, for that your hosting provider will also send minimum two NS (NameServers) records with IP Addresses. For example:

ns1.example.com (192.168.1.1)
ns2.example.com (192.168.1.2)

Next you have to set those NameServers and IP Addresses to your domain name in your domain control panel provided by your domain registrar or provider.

The updating of domain NS given from web hosting will synchronize both domain and hosting. This process will live the domain around the globe.

For any help, you can ping your domain and hosting provider to ask for more guidance.

=====

Okay suppose, I have registered a domain name **ahtashamkhan.com** and if my web hosting NS are **ns1.mrmsolution.com** and **ns2.mrmsolution.com** then I will set these NS on my domain control panel

provided by my domain registrar.

=====

How to check if the domain and web hosting are propagated to each other with proper settings or not?

It sounds tricky as eating Mango but its much easy to point out the settings. For this, you just have to visit <http://www.intodns.com> and enter the domain name in box as shown below:



Well, before going to start learning cPanel, lets have a look at Ports and its numbers for specific systems.

What is Port?

Any server machine makes its services available to the Internet using numbered ports, one for each service that is available on the server. For example, if a server machine is running a Web server and an FTP server, the Web server would typically be available on port 80, and the FTP server would be available on port 21. Clients connect to a service at a specific IP address and on a specific port.

Here I'm going to share with you some useful port of different services/systems.

<u>cPanel Ports</u>		<u>Email Ports</u>		<u>Web Ports</u>	
cPanel	2082	POP3	110	HTTP	80
cPanel - SSL	2083	POP3 - SSL	995	SSL	443
WHM	2086	SMTP	25	FTP	21
WHM - SSL	2087	SMTP - SSL	465	Webdisk	2077
Webmail	2095	IMAP	143	MySQL	3306
Webmail - SSL	2096	IMAP - SSL	993	SSH	22

<p>For FREE Domain: http://www.dot.tk http://freenom.com</p>	<p>For FREE Hosting: http://www.freehosting.com http://www.1freehosting.com http://www.000webhost.com</p>
--	--

Alright, lets suppose I have a domain name **ahtashamkhan.com** and I have bought web hosting with control panel "cPanel". Here is a question...

Q: How I'll access the cPanel of my Website/Hosting?

A: There are two links by which you can access your cPanel.

- <http://www.sitename.com/cpanel>
- <http://www.sitename.com:2082>

So, here I'm going to put the address <http://www.ahtashamkhan.com/cpanel> in my browser.



Preview of cPanel Authorization Page

When you purchase cPanel hosting then you will definitely get login details including Username and Password.

Who will give me cPanel login details? Will web hosting company provides me?

Obviously, cPanel is a hosting control panel, the login details will be sent to you by the company from which you will buy web hosting.

Alright, next by typing your username and password you will see the screen looks like:

The Account Information section is located on the down left part of the cPanel main page. There you can find important information about your hosting account.

Here we will discuss the major features of cPanel. So firstly, lets talk about **Mail** Section.

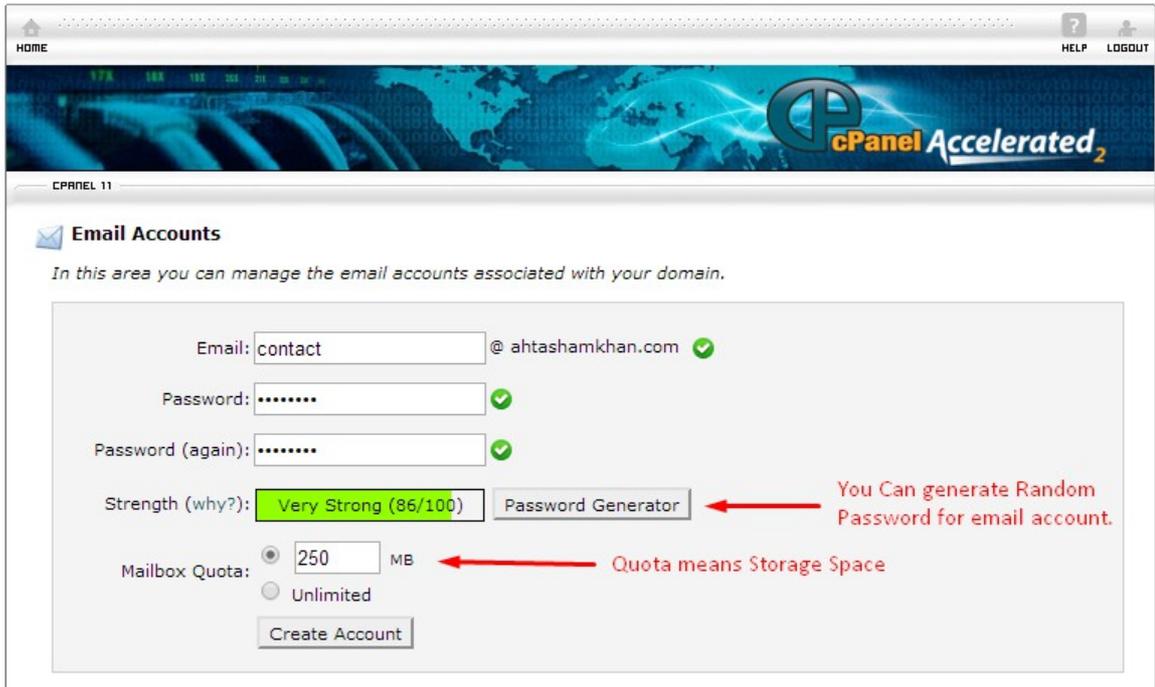
The Mail area functions allow a user to do many different tasks with email accounts. This includes creating email accounts, removing accounts, forwarding email, etc. Alright, lets start learning Email Manager features.

5.1: Mail Section



- **Email Accounts** - allows you to create e-mail accounts, define passwords and quotas for them. You can separately manage the e-mail accounts for a chosen domain.
- **WebMail** - cPanel webmail allows you to access the webmail programs (Horde, Squirrelmail and RoundCube) included in cPanel. You can read your emails through a web browser.
- **SpamAssassin** - is an automated email filtering system that attempts to identify spam messages based on the content of the email's headers and body.
- **Forwarders** - using e-mail forwarders will allow you to send copies of all your messages from one e-mail account to another. You can also send the messages from all the accounts with one domain to the corresponding ones with another domain.
- **Auto Responders** - setting auto responder emails.
- **Default Address** - this feature will "catch" all the mails that are sent to an invalid email address for your domain.
- **User Level Filtering** - here you can manage filters for each user. Each user's filter is processed after the main account filters.
- **Account Level Filtering** - allows you to manage the filters for the main account. There you can also test the existing filters.
- **Import Addresses/Forwarders** - allows you to import e-mail addresses or forwarders from Excel spreadsheet files (.xls) or comma-separated values sheet files (.csv).
- **MX Entry** - you can change the MX records for your domain and define on which server to deliver the messages.
- **Email Authentication** - this tool allows to include additional details in the messages' headers so they can be automatically recognized by the recipients as legitimate e-mails. Such techniques are the DKIM and SPF records.

Well alright, let me create my domain's email account like `contact@ahtashamkhan.com`. Simply we have to click on **Email Accounts**. Then you will the next page like this one:



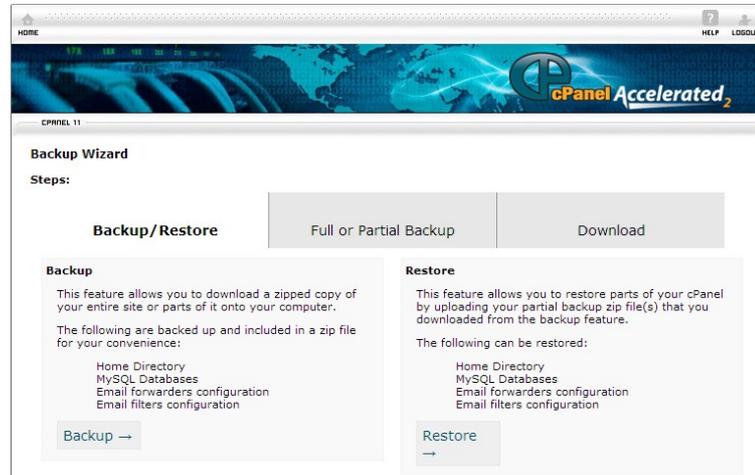
Here in the Email field you can put the username of your email address. For example if I want the email like `info@ahtashamkhan.com` then I'll have to put the username "info" only in the field box. After putting all the info just simple press **Create Account** button.

5.2: Files Section



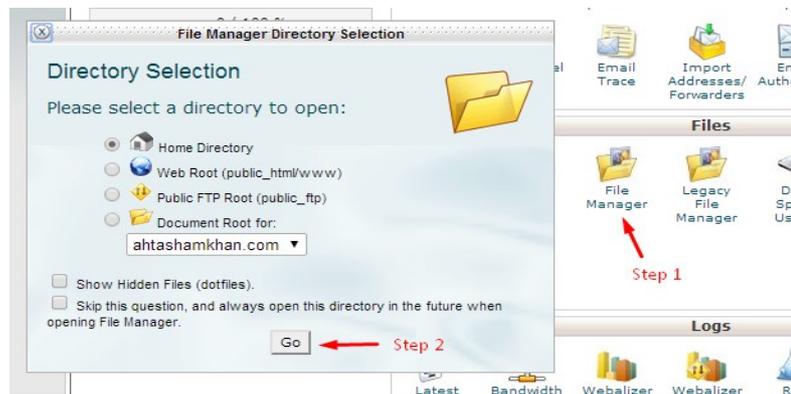
Backups - This functionality allows you to download to your local computer an archive copy of either you entire site (your home directory, databases, email forwarders configuration, email filters configuration) or each one of the previously mentioned parts of your site separately.

Backup Wizard - This wizard allows you to easily create or restore a backup of your web site. The above features and rules are valid for this option as well.

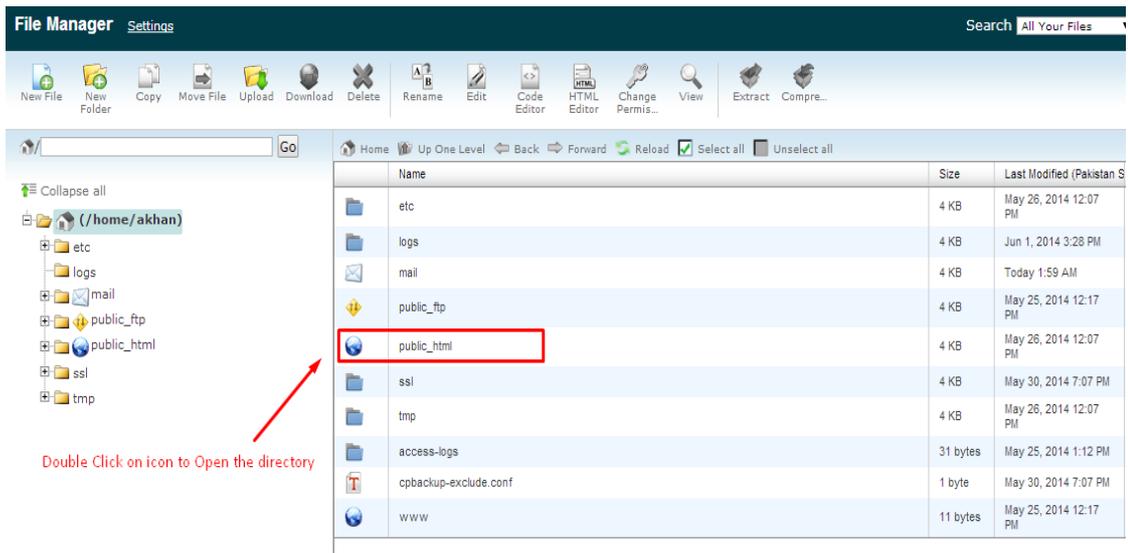


File Manager - Allows you to manage your site through HTTP rather than an FTP tool or another third-party application. You can upload, create or delete files, organize files in folders, change file permissions, create and extract archives. While not as sophisticated as most FTP tools, File Manager gives you all the basic functionality necessary to manage your site.

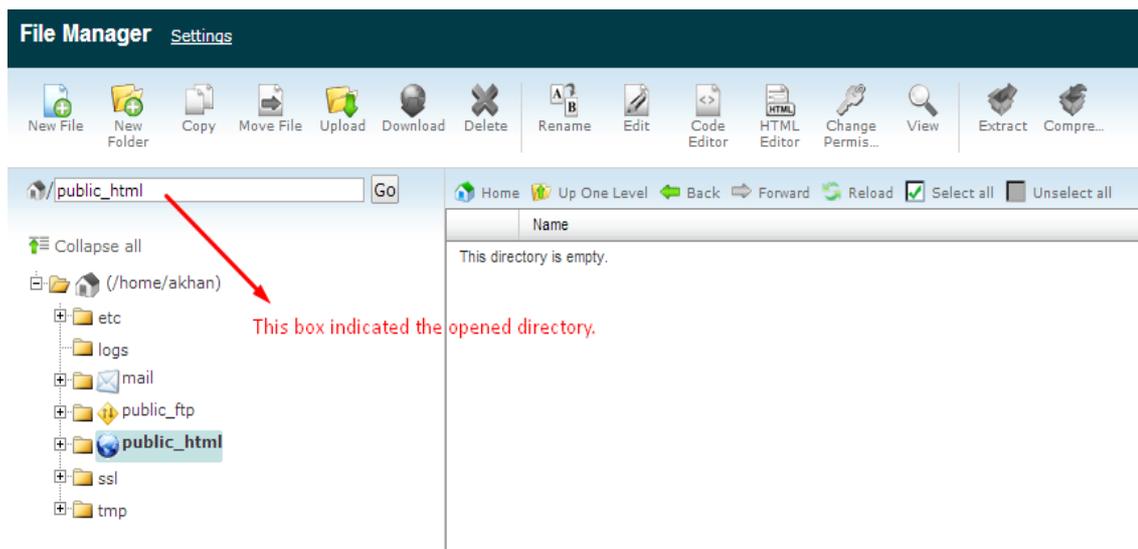
Alright, lets start learning the basic tools of File Manager.... Click on File Manager and press the **GO** button on popup window.

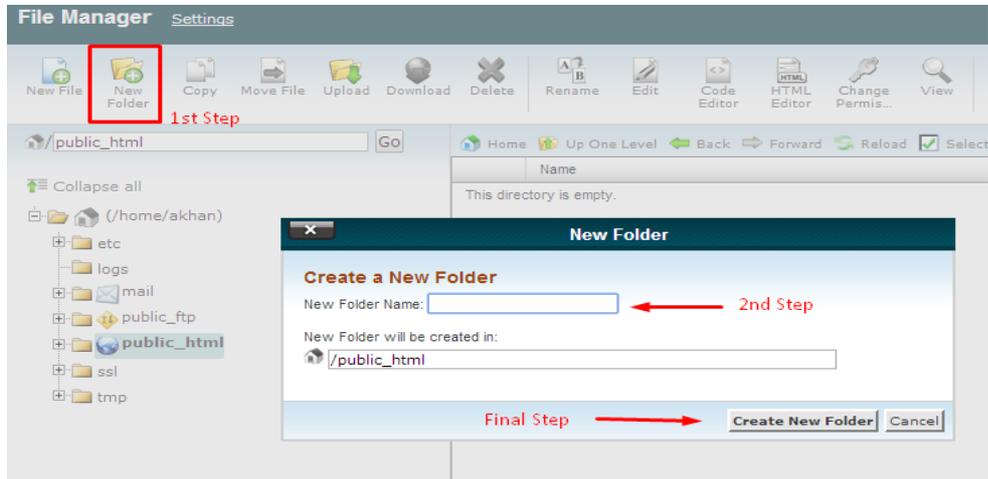


Next, you will see the page something like below preview. At here, double click the public_html folder/directory to published files.



Remember on thing that just the folder/directory "public_html" will contain the published files of a website. In simple words, if you want to publish a single web page or couple of pages then you must have to place all of them in "public_html" directory.



(a) Creating a new folder

Folders are a very useful way of adding an organization and a structure to your account. They make the maintenance of the site much easier. You can easily list the files in every folder. Most web sites include at least an /image folder to keep all the image files separately.

(b) Uploading files in File Manager

You can start uploading files through File Manager by clicking on the Upload icon.



Mode	User	Group	World
Read	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Write	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Execute	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Permission	<input type="text" value="6"/>	<input type="text" value="4"/>	<input type="text" value="4"/>

How to upload files in File Manager:

- STEP 1** Navigate to the folder where you want to upload your files.
- STEP 2** Click on the Upload icon.
- STEP 3** Click on the Browse button next to one of the top fields.
- STEP 4** Search for and double-click on the first file to upload. The upload will start automatically.
- STEP 5** Repeat the above steps for each file you want to upload.
- STEP 6** : Click on the Overwrite existing files check box if you want to overwrite existing files with the same name.

You can download files from the server to your personal computer through the Download option.

You can copy and move files between the account's folders through the Copy and Move File functionalities. You can Rename and Delete the existing files through the corresponding options.

(c) Creating a new file

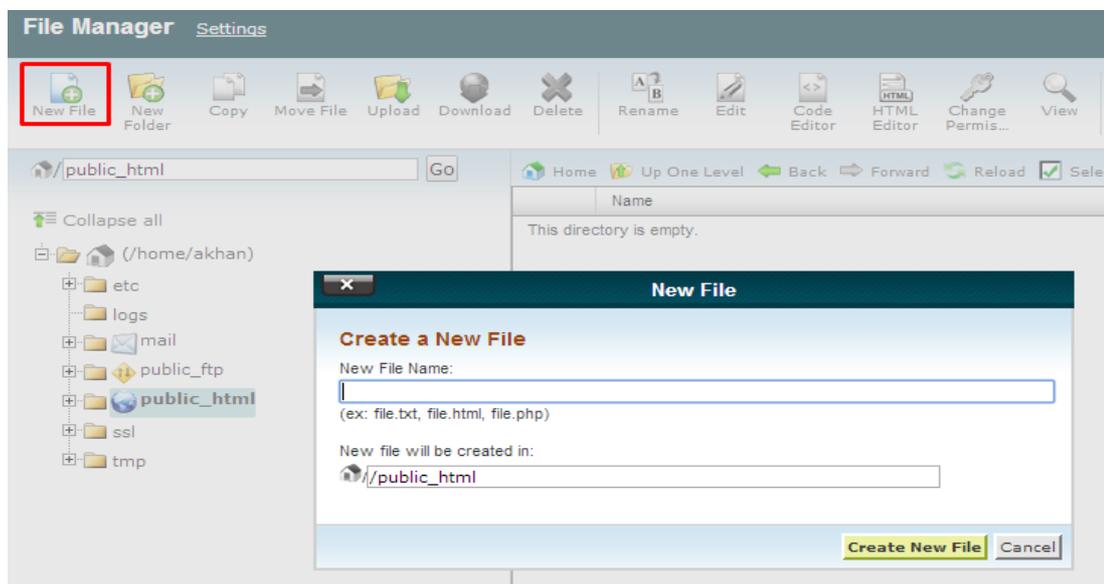
For small files it can be easier to create them online rather than on your home computer.

To create a new file please follow the steps listed below:

Step 1: Click on the New File link.

Step 2: Enter the name of the file to be created. Please mind to add the correct extension. For example if you create a Perl file, the extension will be .pl.

Step 3: Pick the destination where the file should be saved and click on the Create New File button. The file is created.



(d) Editing a file

Editing an existing file through the File Manager allows you to make immediate changes to your web site without having to upload a new version of the file. This is useful for small changes but would be inefficient for large alterations. To edit a file please follow the steps below:

Step 1: Navigate to the folder where the file is located.

Step 2: Click on the name of the file.

Step 3: Click on the Edit link in the top menu of your window. This will open a new window with the content of the file displayed.

Step 4: Alter the text of the file.

Step 5: Click on the Save Changes button when you are ready. The file is saved and the changes will take effect from now on.

You can use more sophisticated editors as the Code Editor and the HTML Editor. You can also click on the View link in the File Manager main menu. The file will be opened for reading and you will not be able to edit it.

(e) Extracting/Compressing a file

You can extract archive files using the Extract function.

You can also create your own archives. Select the files and folders which you want to include in the archive, click Compress and then Compress File(s).

(f) Changing file/folder Permissions

All files on UNIX (including Linux and other UNIX variants) machines have access permissions. In this way the operating system knows how to deal with requests to access the files. There are three types of access:

- Read - Denoted as r, files with read access can be displayed to the user.
- Write - Denoted as w, files with write access can be modified by the user.
- Execute - Denoted as x, files with execute access can be executed as programs by the user.

Access types are set for three types of user group:

- User - The owner of the file.
- Group - Other files which are in the same folder or group.
- World - Everyone else.

The web server needs to be able to read your web pages in order to be able to display them in a browser. The following permissions need to be set in order for your web site to function properly.

- All HTML files and images need to be readable by others. The value for this is 644 (readable by User, Group and World, and writable by User). It is set automatically when you upload files. The following table shows these permission settings:

	User	Group	World
Read	Set	Set	Set
Write	Set	-	-
Execute	-	-	-
Permissions	6	4	4

- All folders need to be executable by others. The value for this is 755 (readable by User, Group and World, writable by User, executable by User, Group and World). It is set automatically when you create a folder. The following table shows these permission settings:

	User	Group	World
Read	Set	Set	Set
Write	Set	-	-
Execute	Set	Set	Set
Permissions	7	5	5

- All CGI files (all files in the cgi-bin folder) need to be executable by other. The value for this is 755 (readable by User, Group, and World, writable by User, executable by User, Group, and World). It is not set automatically when you upload files. You need to change file permissions manually. The following table shows these permission settings:

	User	Group	World
Read	Set	Set	Set
Write	Set	-	-
Execute	Set	Set	Set
Permissions	7	5	5

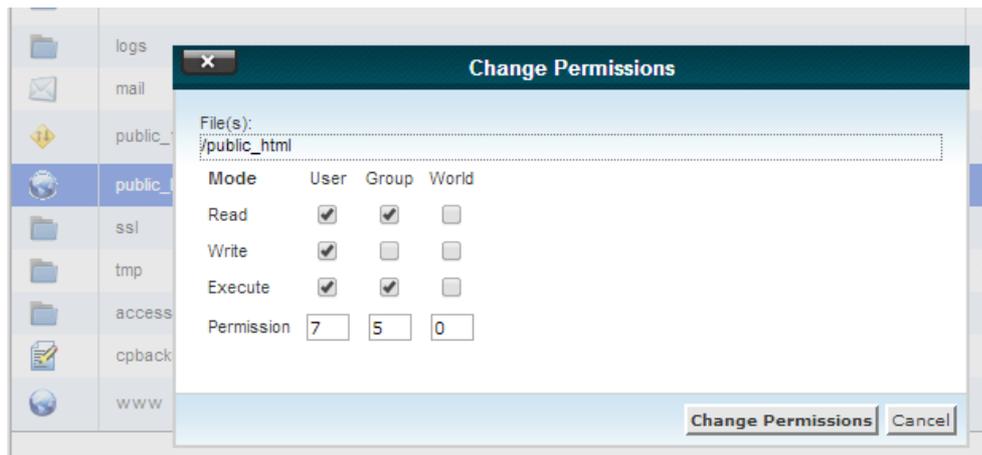
Step 1: Open your File Manager and navigate to the file or folder that you need to change.

Step 2: Click on the name of the file or folder.

Step 3: Click on the Change Permissions link in the top menu of the File Manager page.

Step 4: Click on as many check boxes as you require to create the right permission. The permission numbers underneath the check boxes will update automatically.

Step 5: Click on the Change Permissions button when you are ready. The new permission level is saved and the display updated to show the modified file.



Remember, The numerical permission values underneath the check boxes update automatically as you add and remove permissions.

FTP Manager

FTP (File Transfer Protocol) is a fast and convenient way to transfer files over the Internet. That is why many webmasters use FTP for uploading their websites files on their hosting accounts.

*We can use any different Client Software to use transfer our files like **FileZilla**, **CuteFTP**, **SmartFTP** etc. I always recommend **FileZilla** because of its speed and powerful features. Alright, lets start with **FileZilla***

Here we are going to discuss that how to use FileZilla to upload a website. FileZilla is a powerful and free software for transferring files over the Internet.

FTP Sessions

You can use this function to see who is currently logged in your site through FTP. This is helpful for controlling the access to your files and the FTP activity.



The image shows a screenshot of the cPanel 'FTP Session Control' page. The page has a header with 'HOME', 'HELP', and 'LOGOUT' links. Below the header is a banner for 'cPanel Accelerated 2'. The main content area is titled 'FTP Session Control' and includes a description: 'You can use this function to see who is currently logged into your site through FTP. You can also terminate any FTP connections to your site that you feel should not be open. This can be very useful in preventing users from accessing your files without your permission.' Below the description is a 'Current Sessions' section with a 'Reload' button and a table of active sessions.

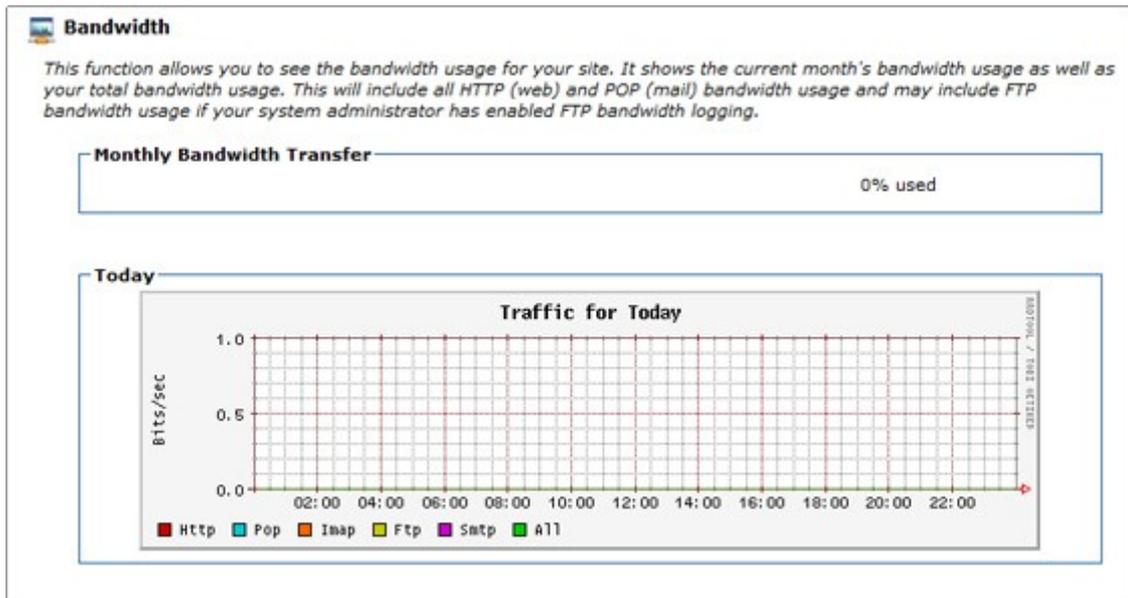
USER	LOGGED IN FROM	LOGIN TIME	STATUS	DISCONNECT	PROCESS ID
akhan	182.186.●●	Sun Jun 8 18:41:49 2014	IDLE	⊗	200309

At the bottom of the page, there is a navigation bar with links for Home, Trademarks, Help, Documentation, Contact, and Logout.

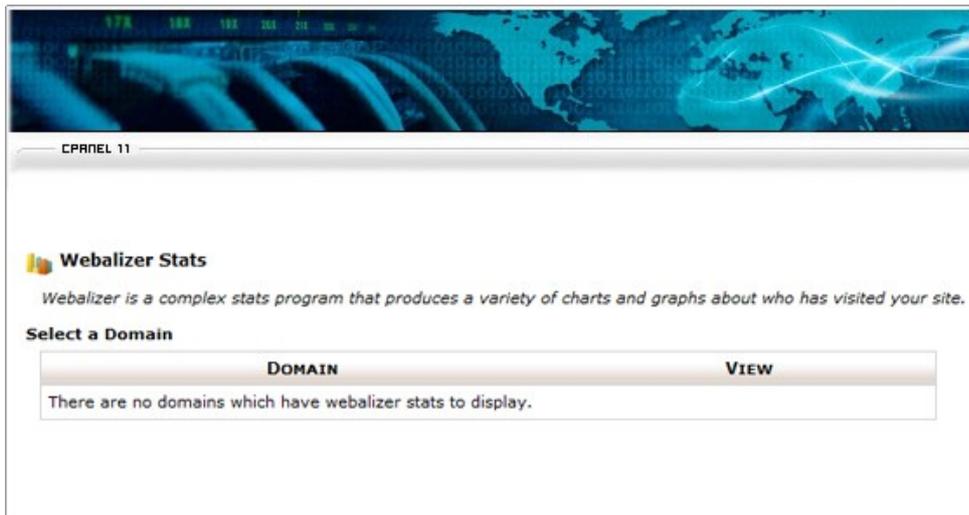
5.3: Logs Section



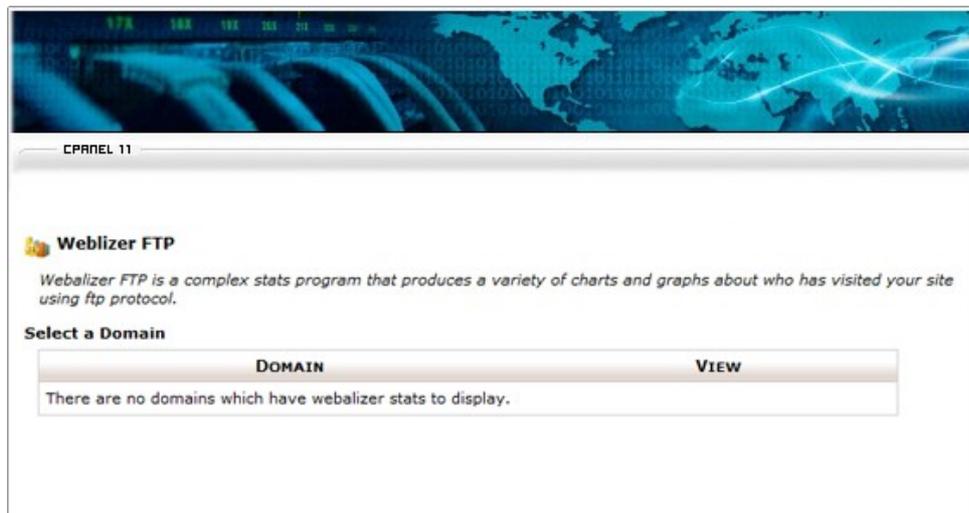
Bandwidth - here you can check the bandwidth usage of your account.



Webalizer - this is a complex statistics program which visualizes the visits to the web site in graphics and charts.



Webalizer FTP - this is a complex statistics program which visualizes the visits to your account through the FTP protocol in graphics and charts.



Raw Access Logs - this tool provides you with the access log data in the way it was stored on the server, without any further modifications.

Raw Access Log

Raw Access Logs allow you to see who has visited your website without displaying graphs, charts or other graphics. You can use the Raw Access Logs menu to download a zipped version of the server's access log for your site. This can be very useful when you want to quickly be able to see who is visiting your site.

Configure Logs:

- Archive logs in your home directory at the end of each stats run [every 24 hour(s)~]
- Remove the previous month's archived logs from your home directory at the end of each month.

Download Current Raw Access Logs

Please click the domain corresponding to the raw access log you wish to download:

DOMAIN	LAST UPDATE	DISK USAGE	LINKED DOMAINS
ahtashamkhan.com	Sat Jul 5 04:07:57 2014	344 bytes	

Analog Stats - this tool provides you with a list of all the people who have visited your web site for a specific month.

Analog Stats

Analog produces a simple summary of all the people who have visited your site. It is fast and provides great lightweight statistics. Analog shows the people who have accessed your site during a specific month. It provides limited content but can be helpful to see where your main users are from.

Select a Domain

DOMAIN	VIEW
ahtashamkhan.com	

Home | Trademarks | Help | Documentation | Contact | Logout

Error log - logs all errors generated by your web site. This tool allows you to determine if there is a problem with your web site pages and scripts.

Awstats - the most comprehensive visual statistics tool in cPanel. Lists the visits to your web site with many details



5.4: Domains Section



Through the Domains section you can manage your subdomains, addon domains and parked domains. You can also set redirects for your URLs. Additionally, you can purchase a domain name transfer and a domain ID protection. You can register a new domain, change the primary domain name for your account and manage the DNS configuration of your domains.

Subdomains: Through this feature you can add subdomains for your main domain or website. Below are some examples...

music.ahtashamkhan.com



Subdomain

videos.ahtashamkhan.com



Subdomain

Addon domains - Through this feature you can add addon domains to your account. Means you can host more than one domain to your same hosting.

Parked domains - Using this feature you can add parked domains to your account. All the parked domains will show the content of your main domain.

Redirects - Using this tool you can set a Temporary or a Permanent redirect for your web site to a separate one or from one file to another. You can also set a wild card redirect for all the files under a directory.

Advanced DNS Zone Editor - This tool gives you advanced options when editing your DNS zone.

Simple DNS Zone Editor - A simpler but efficient tool to manage your DNS zone.

5.5: Databases Section



The Databases section allows you to create MySQL and PostgreSQL databases and users, to modify databases and access to them. SQL stands for Structured Query Language. SQL is an international standard in querying and retrieving information from databases. PostgreSQL is an object-relational database management system. MySQL is essentially an SQL server - it responds to requests for information that are written in SQL. You can communicate with MySQL using a wide variety of programming languages (PHP being one of the most common). MySQL is Open Source software and free for use.

5.6: Security Section



The Security section in cPanel includes: Password Protect Directories, IP Deny Manager, HotLink Protection, Leech Protect. cPanel security tools allow the webmasters to protect different parts of their web sites from unauthorized access.

Password Protect Directories - You can limit the access to certain resources of your website by password protecting the directories in which they are stored.

IP Deny Manager - Allows you to prevent an IP address, a domain name or a range of IP addresses from accessing your web site.

HotLink Protection - Prevents other websites from directly linking to files on your website.

Leech Protect - Leech Protect allows you to prevent your users from giving out or publicly posting their password to a restricted area of your site. This feature will redirect (and suspend if selected) accounts which have been compromised to a url of your choice.

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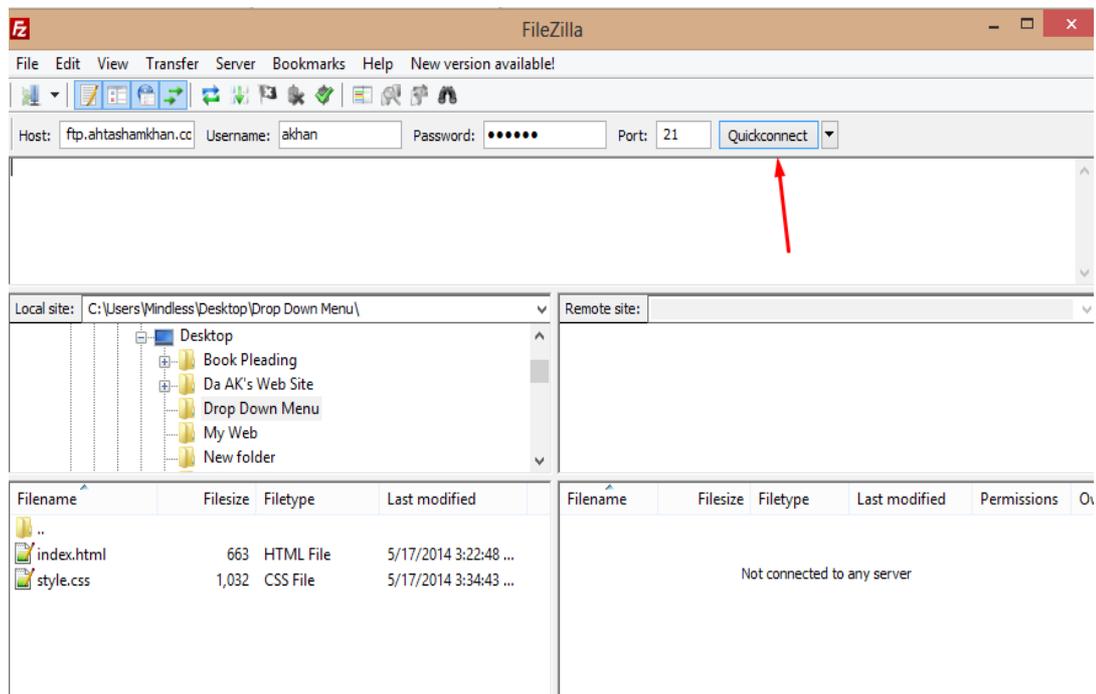
Chapter - 6

FileZilla and its Functions

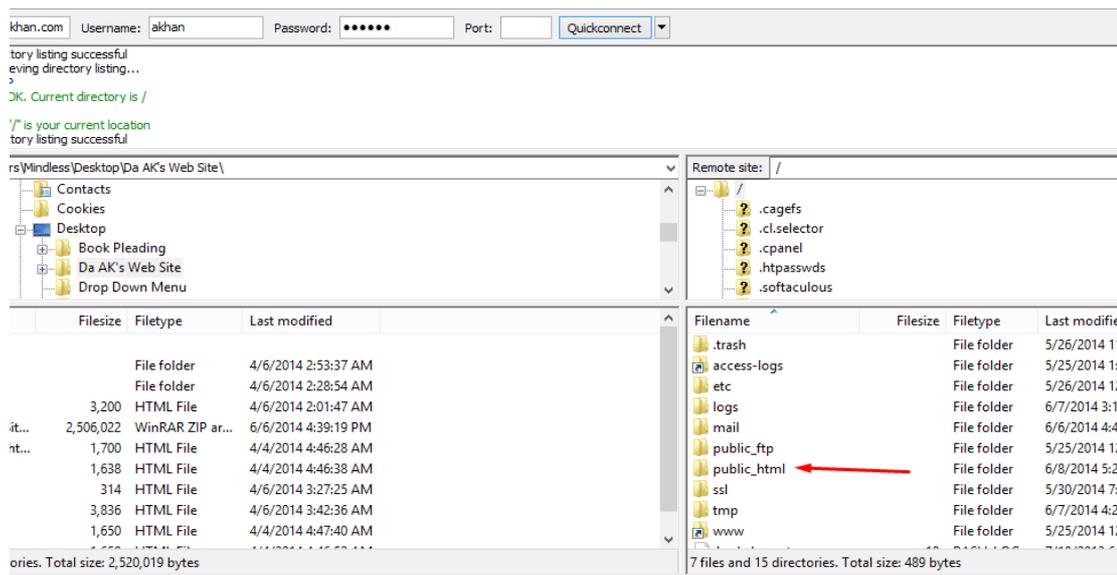
FileZilla is a very popular FTP client and is used by webmasters from all over the world. Here you can download it at <http://www.filezilla-project.org>

How to use FileZilla FTP client

Once you have the FileZilla client downloaded and activated on your computer, enter the domain name in the address field (you can also use the server's IP address). The username and the password you need to type in are the same as the ones you use to log in to your cPanel. The FTP port is 21 and is filled in automatically.



Click Quickconnect and the file listing will appear. Find the public_html directory and double click on it.



Features of FileZilla

One of the main FileZilla advantages is that the application is very user friendly and you can easily upload, download and manage files and folders. The software provides security solutions which encrypt and protect your data during the connection to the server.

Main features of FileZilla are:

- User friendly interface and easy to use
- Supports FTP, FTP over SSL/TLS (FTPS and FTPES) and SSH File Transfer Protocol (SFTP)
- Available for Windows, Linux, BSD, Mac OS X and more
- Multi languages support
- Supports resume and transfer of large files
- Site Manager and transfer queue
- Drag & drop support
- Adjustable transfer speed limits
- Filename filters
- Directory comparison
- Network configuration wizard
- Remote file editing

- Keep-alive option
- Logging to file
- Synchronized directory browsing
- Remote file search

Managing Files via FileZilla

Well I have created a simple html page with some External CSS. So there are two files and Now I want to upload it on my web hosting, So follow the Steps:

Note: *If you have not created one html page with one css file then make right now before moving forward.*

We will start with the FTP connection establishment.

Open your FileZilla installation and enter the following details:

Hostname - enter your domain name or the name of the hosting server where your account resides

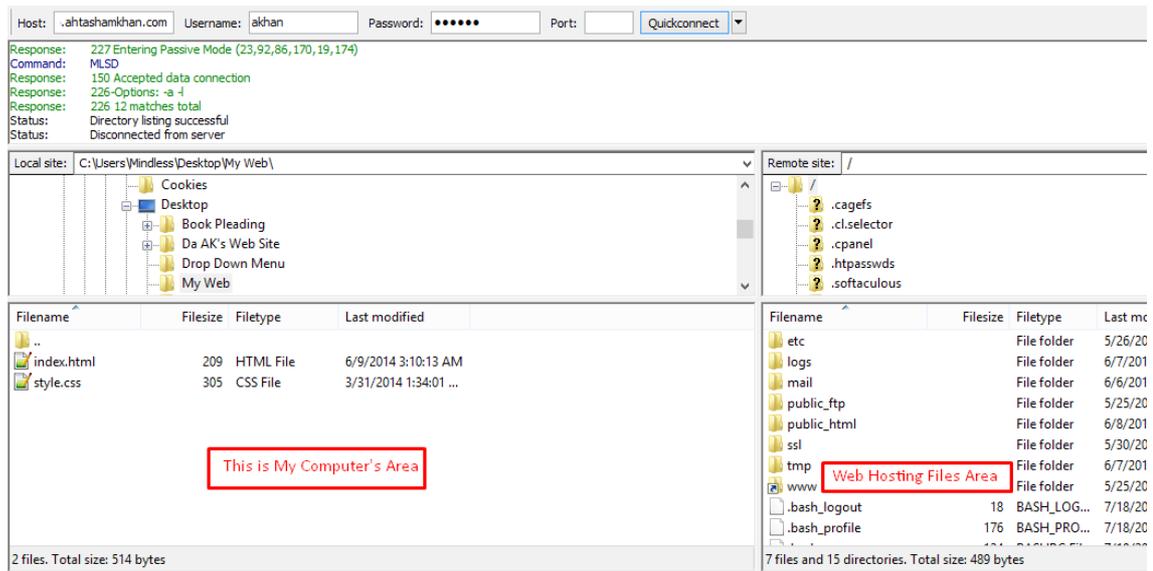
Username - enter the FTP username (you can use your cPanel username or the one of a new FTP account)

Password - enter the corresponding FTP password

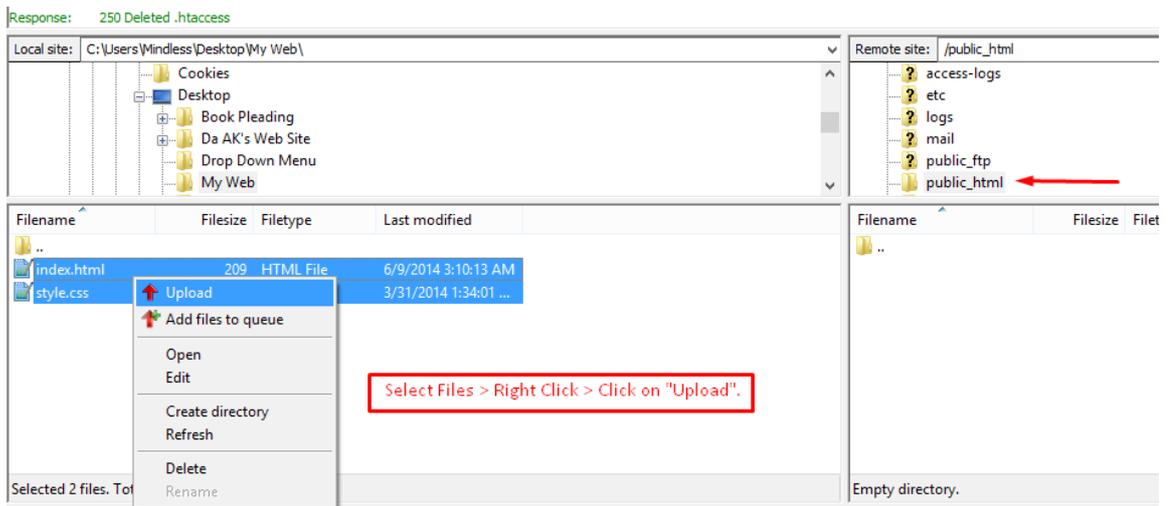
Port - enter the FTP port (by default it is 21)

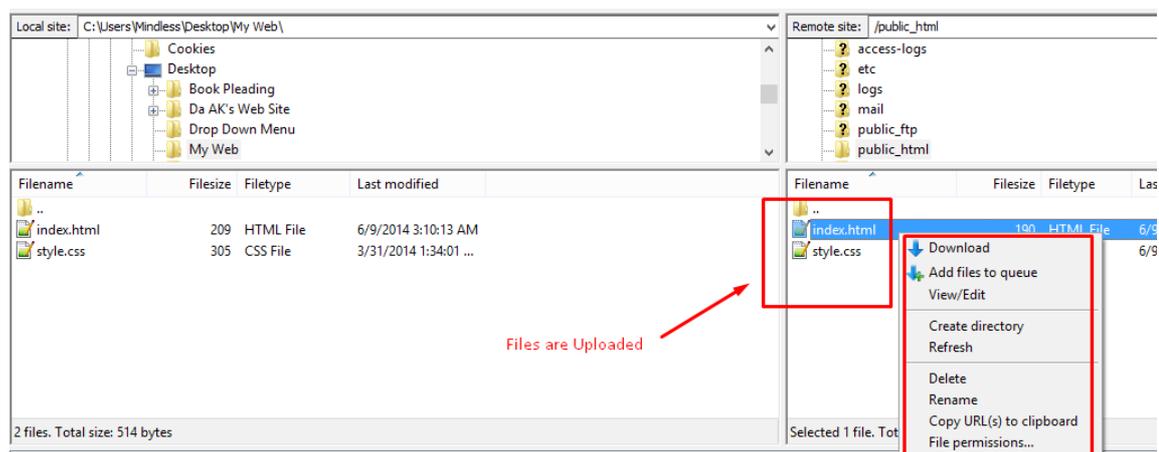
Click on the Quickconnect button the establish the FTP connection.

Once the FTP connection is opened you will see the listing of the remote server's files and folders are right side area.



Remember that you must have to insert or upload your files in public_html directory only to publish it. Alright, lets open the public_html directory and upload files from left side to right side (Computer to Web Hosting).





The other actions which you can perform on the files and folders are:

Download - this option allows you to download files and folders from the remote server to your local computer;

Add files to queue - allows to schedule a later transfer of the files;

Create Directory - allows you to create a new folder under your current location;

Delete - using it you can delete files and folders;

Rename - you can rename files and folders;

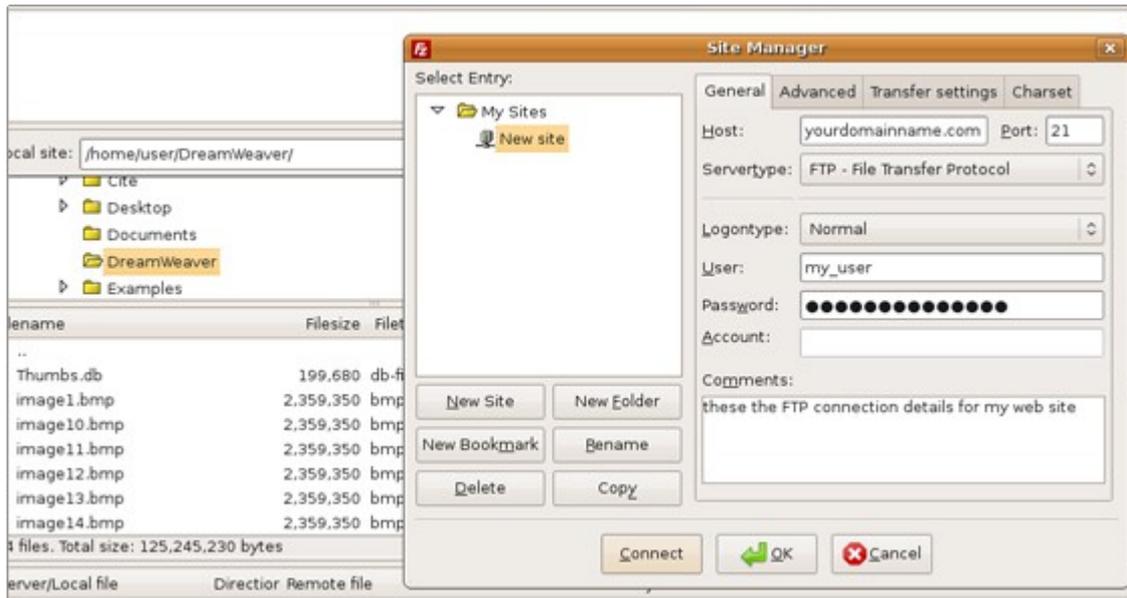
File Permissions - allows you to change the file permissions of files and folders; You can alter the owner, the group and the public permissions. You can define whether the files are readable, writable and executable.

FileZilla Functions

FileZilla has various options which ease its usage and expand its functionality.

Site Manager:

The first one is called Site Manager. It can be found under the File menu. Using it you can store the connection details for a new web site. In this way you will not need to enter them every time when the program is started.



You can pick the preferred server type protocol. For a FTP connection it should be set to FTP - File Transfer Protocol. If you want to establish a secure FTP connection over SSH pick SFTP (SSH File Transfer Protocol).

The other two options are FTPS (FTP over implicit TLS(Transport Layer Security)/SSL(Security Sockets Layer)) and FTPES (FTP over explicit TLS/SSL). The FTPS option directly establishes the security connection, while the FTPES option allows the client to request the security connection from the FTP server.

Anonymous - you can log in as an anonymous user without entering the password.

Ask for Password - the mechanism is the same as for the Normal option, but the password is not stored in the system. You are prompted for the password when you initiate an FTP session.

Interactive - it works in the same way as the above option, but it asks for the password for every connection. For example if you set several simultaneous connections in order to transfer your files you will be prompted for the password for each one of them.

Account - you can create an FTP account through your cPanel->FTP accounts and enter the corresponding FTP details in your FileZilla Site Manager area. Name the account per your preferences.

The connection will be established by clicking on the Connect button.

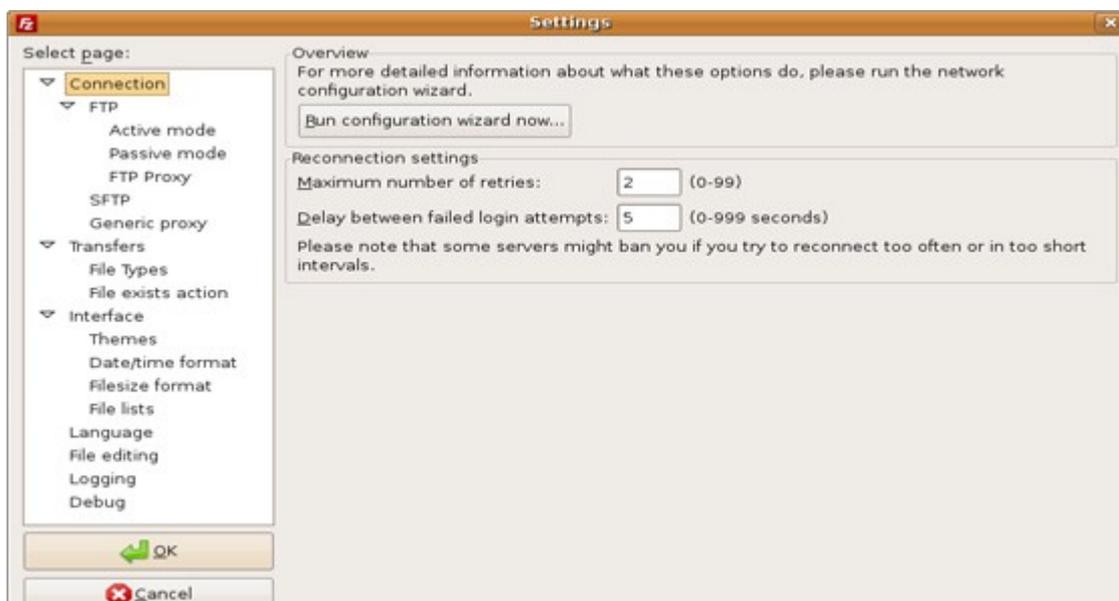
You can Rename, Delete and Copy the new site connection. You can set a new folder in the directory tree and add a new bookmark for the web site connection.

The Advanced section of the Site Manager allows you to define the server type (for example Unix). The best solution is to leave the software to detect automatically the server type (the Default option). Additionally, you can select the default local and remote directories for the FTP connection and adjust the server time zone offset.

In the Transfer Settings section you can switch between the active and the passive FTP modes and increase the number of the simultaneous connections.

Settings:

Another important function is called Settings.



It is divided in different sections.

In the Connection section you can adjust the maximum number of retries if a connection fails and the seconds between them. Also, you can run the firewall and the router Configuration wizard. It will help you to configure the settings of a firewall or a router in order to make sure that the FTP connection will not be interrupted by them.

In the FTP subsection you can adjust the Active and the Passive modes, set the FTP Proxy details, add the SSH private key file in the SFTP area and enter the Generic proxy details.

In the Transfers section you can set the maximum number of simultaneous transfers and limit the number of the concurrent downloads and uploads. Also, you can limit the upload and the download speed. Additionally, you can set the timeout which defines the period that FileZilla will wait in case the data can not be sent or received before it drops the connection.

In the File Types subsection you can define the default files' transfer type (ASCII or Binary). You can select the extensions of the files which will be treated as ASCII.

The File exists action subsection allows you to define the action which will be performed if the corresponding target file already exists. Among the possible choices are: Ask for action, Overwrite, Resume, Rename, Skip and others.

In the Interface section you can pick the preferred theme and layout, define the visual position of the logs, modify the date/time and the filesize formats. Also, in the File lists subsection you set the sorting order, set the threshold for the timestamp based comparison and define the double-click actions for files and directories.

Through the Language section you can pick the default language for the software.

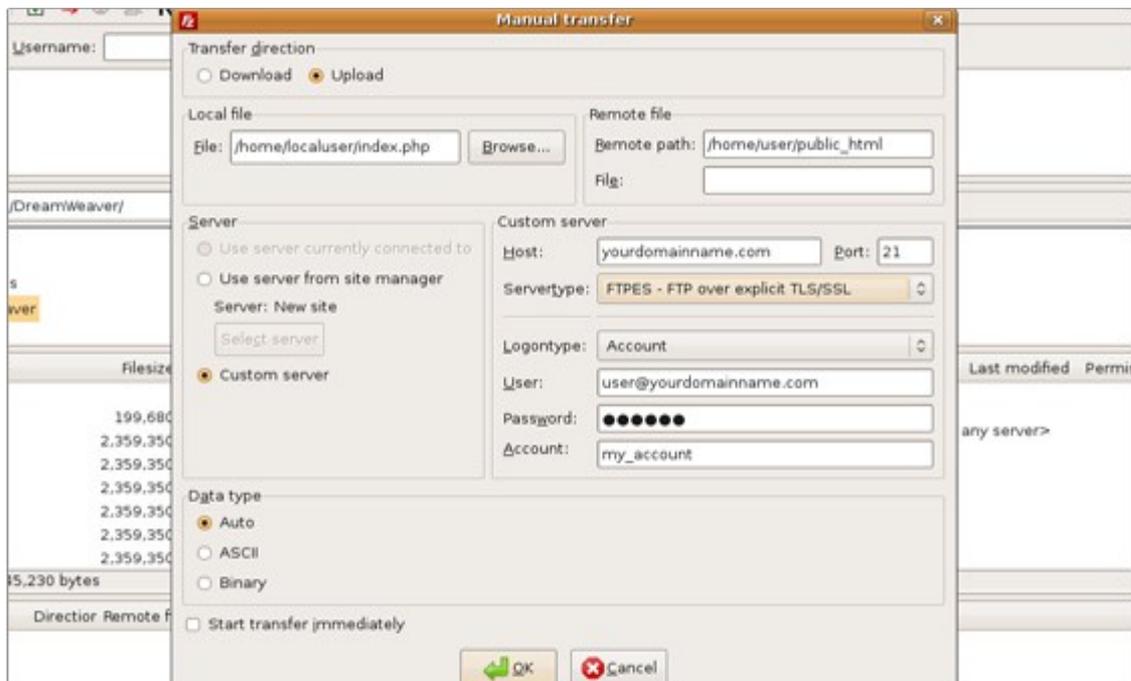
In the File Editing section you can define the default file editor.

The Logging section allows you to set a log for the software.

In the Debug section you can define the level of debugging. All the corresponding messages will be stored in the log file which will allow you easily to determine and resolve problems which may occur during the FileZilla usage.

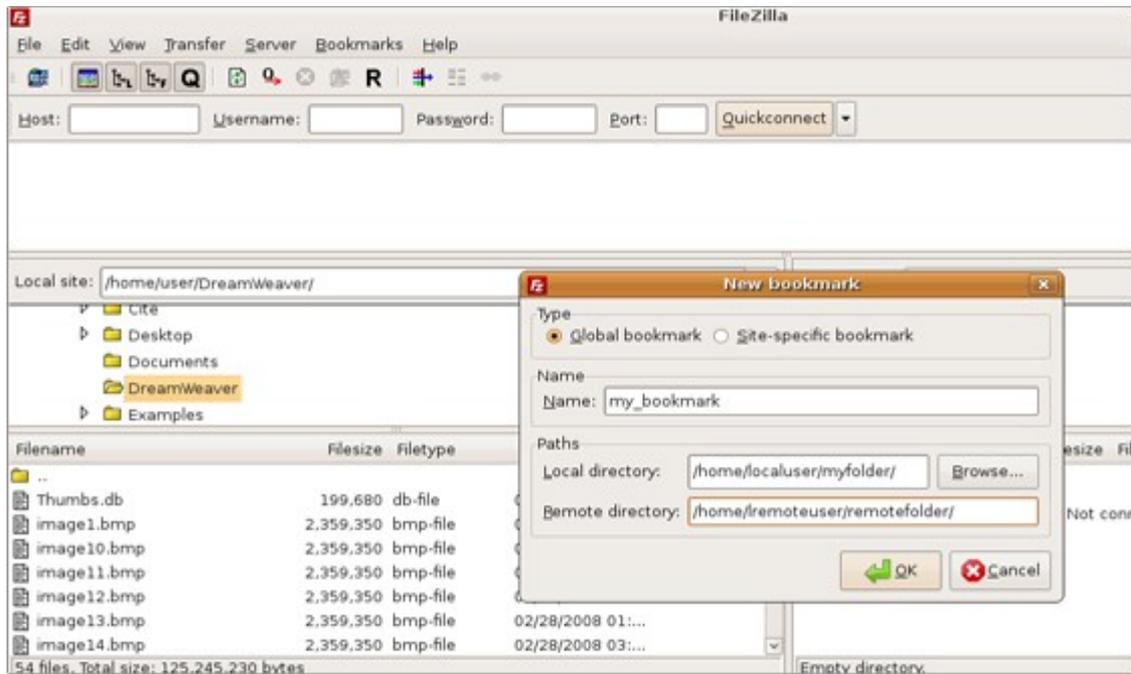
Manual Transfer

Under certain circumstances you may need to transfer a single file using the manual transfer functionality.



Bookmarks

If you need to access the files in different folders under your account the Bookmark functionality will ease your efforts. Click on the Bookmarks menu and pick the Add bookmark option.



There you can define whether the bookmark will be valid globally or just for a specific web site.

Next, enter the name of the bookmark.

At the end specify the paths for the local and the remote directories. In this way after the FTP connection is established you can use the bookmark to open the folders instead searching for them in the folder tree. It is useful if you need to upload files to many different folders. Just set different bookmarks and switch between them through the Bookmarks menu.

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Chapter - 7

Google Web Master Tools & Analytics

Google Webmaster is a tool that assists you in managing Google's indexing of your site, and improving the traffic to your website. This is an advanced Chapter for those who would like to make use of this option. I have made it possible for you to take advantage of Google Webmaster's website optimization tools. The Chapter will give you step-by-step instructions on how to verify your site and submit a Sitemap to Google Webmaster.

Here is a simple definition of GWT....

What is Google Webmaster Tools?

Google Webmaster Tools (GWT) is a free and easy way for webmasters to view their own website the way that Google sees it. GWT is a free tool that can be used for websites of all sizes, and features information such as:

- Which of your pages are included in Google's Index
- Any errors encountered while crawling your site
- Search queries that list your site as a result
- Which sites link to yours

This Chapter covers how to set up GWT in 6 easy steps, from creating an account to adding and deleting users, creating and submitting Sitemap.

Step 1 – Google Account

To set up Google Webmaster Tools you will need to register for a Google account. If you have access to any of their other products such as Analytics, Gmail or Google Places then you will already have an account.

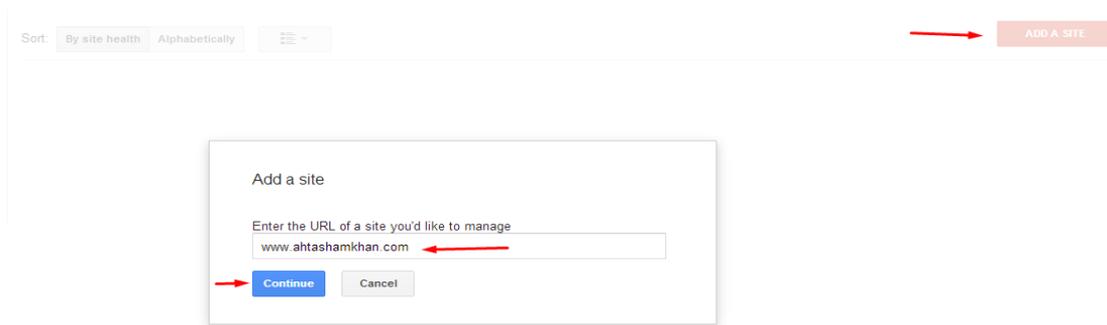
Step 2 – Register for Google Webmaster Tools

If you don't have an account, you can associate your work email address with a Google account to take advantage of their products. Simply go to <https://accounts.google.com/SignUp> and make an account first. Well after signing Up... Simply go to <http://google.com/webmasters> and Sign-In.

Step 3 – Add Website URL

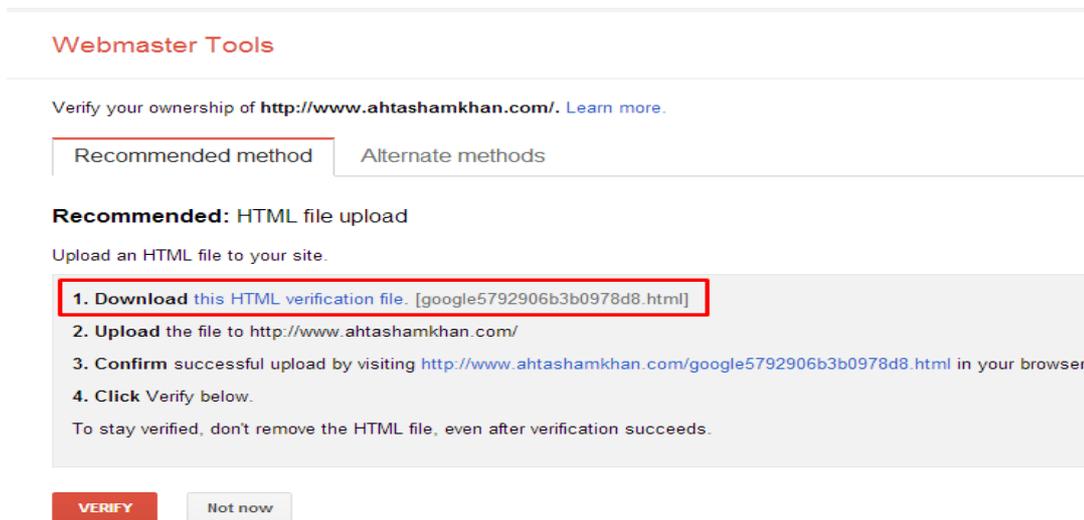
Once signed in, you'll be able to add your website address by clicking on the "Add a Site" button, typing the address and clicking "Continue". When entering your domain, you can either add the top level domain

(www.example.com) or you are able to add folders if you would like to target a specific area of the site. This is particularly useful if your site is split into regions or country codes and to target different international markets



Step 4 – Verify Website

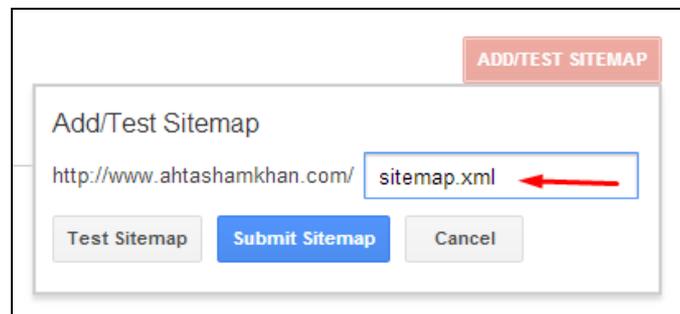
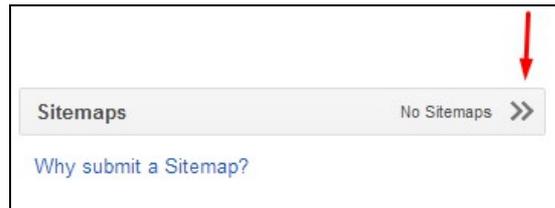
GWT provides you with four different methods of validating your website, including uploading an HTML to the root server, adding a meta tag to the homepage, linking to Google Analytics and using DNS. Choose the one that is most suitable to your needs. I recommend the HTML file uploading way is easiest and speedy.



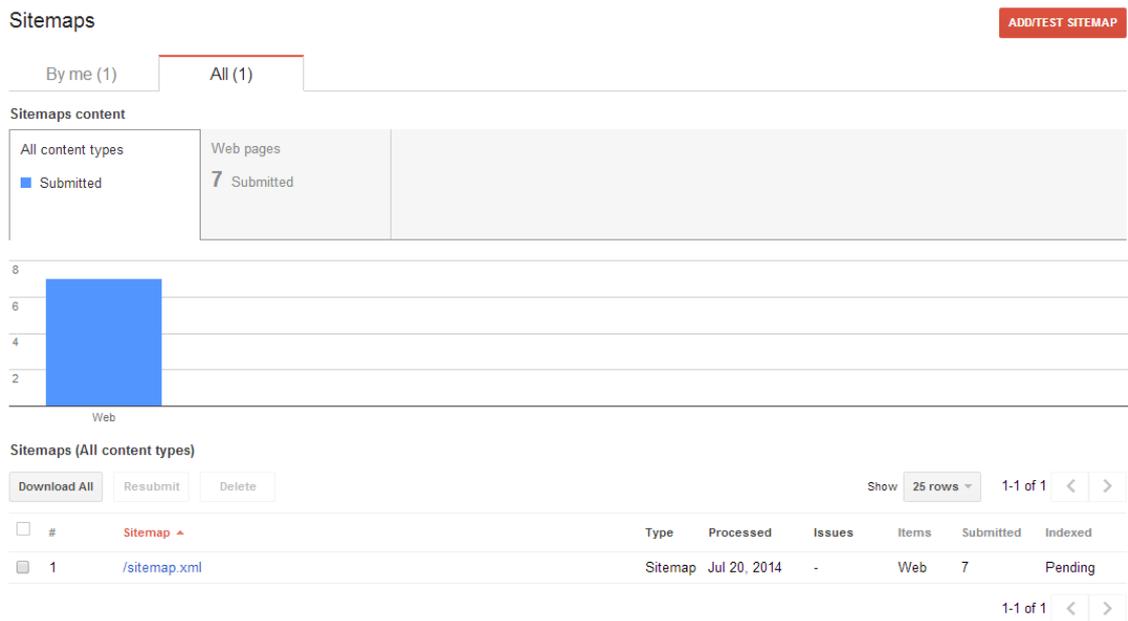
Just download this html file and upload to your site's main directory usually called public_html. Once you uploaded then return to GWT and click on Verify button.

Step 5 – Submit a Sitemap to GWT

After site verification, its time to submit a sitemap in XML format (important). Firstly you need to create a sitemap before submitting. There is an online tool I ever recommend for small websites to generate sitemap for their sites. Simply go to <http://www.xml-sitemaps.com> and fill up the short form and generate a sitemap. Download the sitemap and it will be ready to use on. Next is to upload this sitemap.xml file to the main directory of your website. i.e: Sitemap should be addressed like **http://yoursite.com/sitemap.xml** . Now the last step to submit a sitemap to GWT. To do this, click on site name at GWT Dashboard page. Now follow the next steps as shown in figures below.

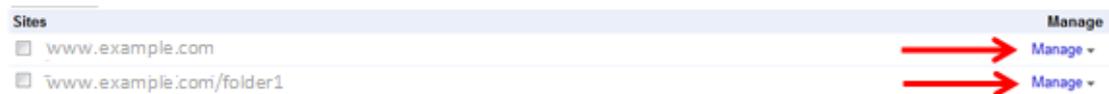


Alright, here is the statistics view of the sitemap that I have submitted.



Step 6 – Manage Users

GWT allows the administrator of the account to provide access to multiple users by adding them to the Verification Details via the “*Manage*” link as you log in to the tool.



Once you have clicked the “*Manage*” link, you will be directed through to the Verification Details page, where you will be allowed to add/edit/delete the users who have access to the data via their own Google account.

To add a new user, click the “Add an owner” button and enter their email address. This will only work for users who have a registered Google Account, so if they do not currently have one please refer them to step 1.

Verified owners	
Email address	Action
daniel@example.com - you	 Unverify
daniel@testdomain.com	 Unverify
daniel@testdomain.com	 Unverify

[Add an owner...](#)

If you would like to remove any users who have been previously added then just click the “Unverify” link.

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Google Analytics

You may have an awesome website, but if you're not sure where your customers are coming from, what parts of your site they find most useful, and how often they're coming back you've got a lot of opportunity. This is where Google Analytics comes in. According to web technology survey company, **W3Techs**, Google Analytics is the single most popular website analysis tool with 53.3% of websites using it to track information. It's little wonder why business owners love this powerful tool – It's simple to implement, but offers vital information that can help improve your bottom line.



Initial Setup

Getting started is as easy as visiting <http://google.com/analytics> and signing up for a free account, or if you already have an account, simply log in.

Once you're logged in to your Google Analytics account, look for a small house icon in the top orange bar on the left side. Click on this to ensure you're on the home page. This page will show which websites you're already tracking.

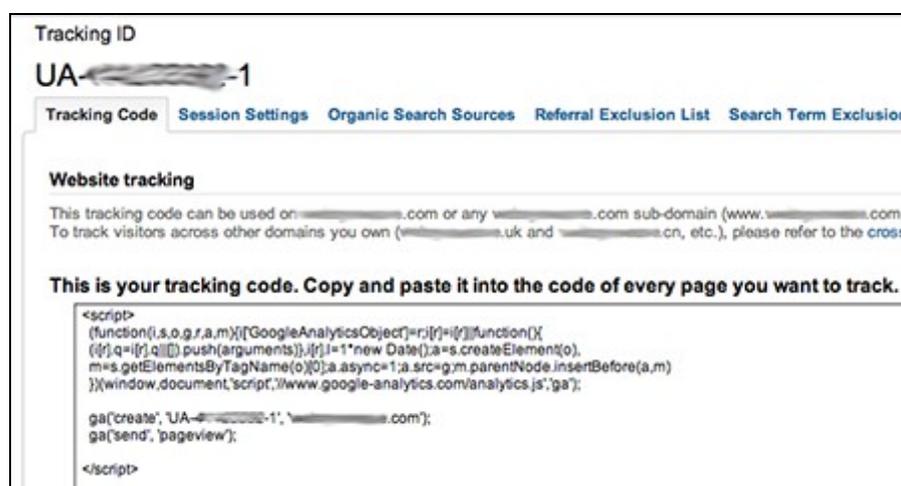


If your site isn't listed, or you're brand new to analytics, you'll need to add your website to your account. To do this:

- Click on the word "Admin" to the right side of the orange bar across the top of the page. This will take you to your "Account Administration" page.
- Click on the gray button labeled "+ New Account."

- A question will pop up that says, “What would you like to track?” Choose “Web Site.”
- Choose either “Universal” or “Classic” Analytics. Universal is still in Beta, but promises to offer even more tracking options and future upgrades. It’s up to you which option you choose, and you can always change it later.
- Fill in the blanks with your website name, URL, industry category and time zone. You’ll also need to give this specific website an account name and check the boxes next to parties you want to allow access to your statistics, such as other Google products (AdSense, for example).
- Click on “Get Tracking ID.” You’ll be asked to accept Google’s Terms of Service (TOS) to continue. Choose accept to move on or decline to stop the process.

If you choose to accept Google’s TOS, you’ll be taken to a page with the tracking code. This code is what you’ll add to the source code on your website, so select all the text inside the box and copy it. You can then save it to a text file for later use or plug it into your source code as described below.



When you create your account your tracking code is provided for you.

To find the tracking code for a website you’ve already set up at Google **Analytics**, click on the “Admin” button, the name of the website you want to track, and then click on the tab that says “Tracking Info.” This will take you to the page with the code you need to copy and paste into your website’s source code.

Adding the Tracking Code to Your Website

Open your website and navigate to the source code on the index page. Most sites share this information, but you may need to place the code on multiple pages if not. There are several ways you might access your source code:

- **HTML Editor** – This type of program will show you the webpage in a WYSIWYG environment, so you'll have to search for a button that says "code" or "source" and switch to that view before you can add the code. The code will start with something like `<html>`.
- **FTP** – If you know HTML, then you may be the do-it-yourself type who likes to code your webpages and upload them with an FTP tool like CuteFTP or Filezilla. Download the file for the webpage you wish to track and open it in Notepad or other word processing software.

If you don't have access to your source code, you may need to ask your website provider to alter it for you.

Once you're in the source code, you need to place the tracking code inside the **header**. To do this, you must put the code between `<head>` and `</head>`. Be sure to place it on a line of its own and not in the middle of other code. HTML code will always close with `</command>`. So, look for the `</>` inside the header and place your code there. Save the file and re-upload.

You'll want to verify that Google is actually tracking your data. It can take up to 24 hours for the information to appear, so in the meantime, get everything set up with your Analytics and explore.

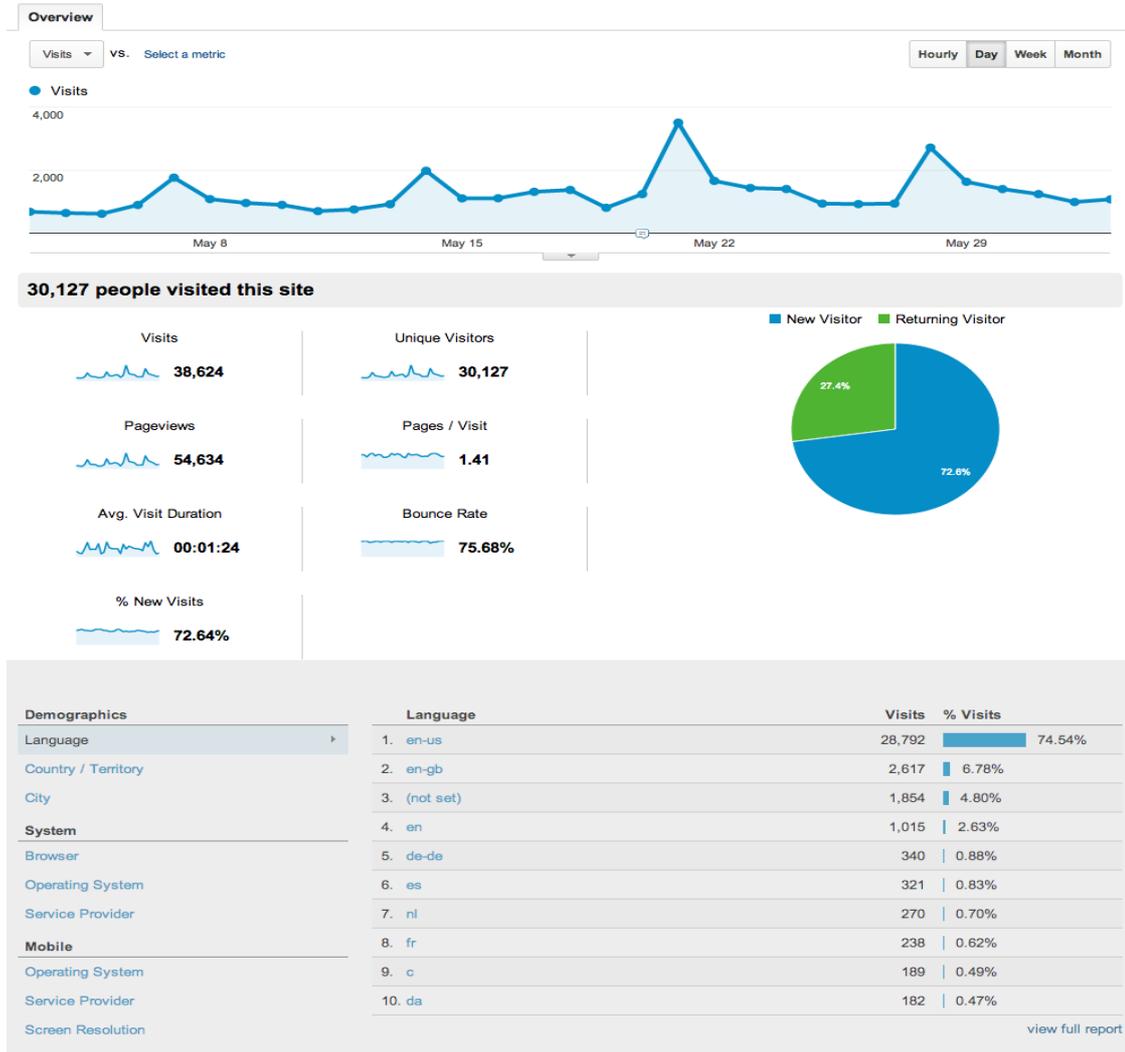
Getting to Know the Dashboard

The Google Analytics dashboard is a hub of information that can either take your business's website to the next level, or help you see where it needs improvement.

From the home page, click on the account you'd like to analyze. You'll see graphs, percentages and pie charts for information such as:

- Number of visitors
- Percentage visiting the first time versus return visitors
- How long the average visitor stayed on your page
- What country/language most visitors are from/speak
- Conversions
- Content

- Site speed
- Traffic



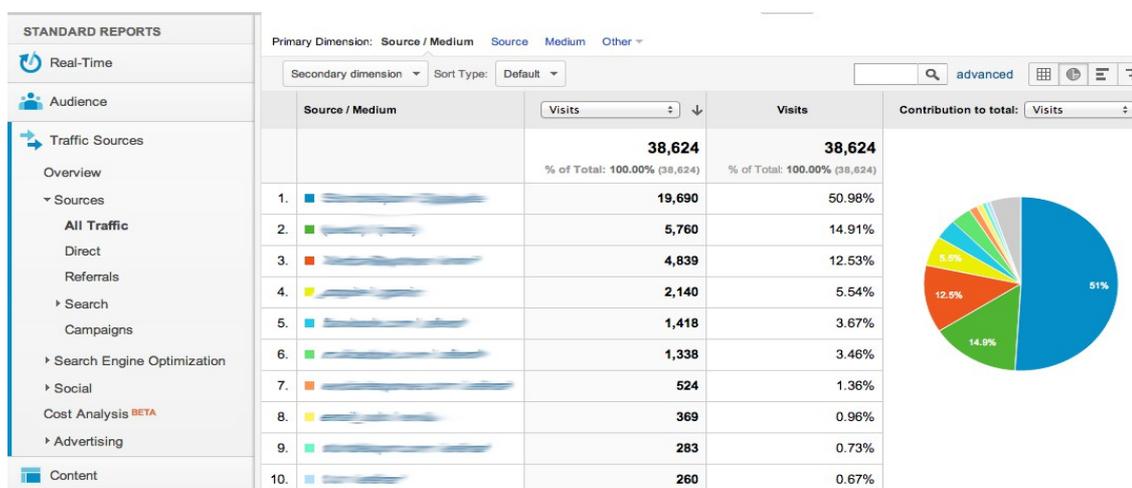
If you have AdSense or other programs set up, you can also track them from this page. The page will default to the last 30 days, but you can use the buttons in the top left corner to narrow it down by month, week, day and even by the hour.

If you wish to compare dates or want to look at more than a single month time range, click on the box in the upper right corner displaying the current date range. You'll be offered the option for a custom range - plug in your desired dates. Click on the "compare" box and choose a second range of dates to compare two different date ranges.

Most Useful Reports

Google Analytics offers dozens of reports. In addition, these reports can be customized in various ways to make your experience truly unique. Each of the report styles are valuable in their own way, but these are some that will benefit nearly any website:

- **Visitors Overview** – The visitors overview offers information about the type of people visiting your website. You’ll discover how many people are visiting your page, and if you delve deeper, what time of day they’re visiting, the general geographic area they’re from, and what browser or even what size monitor each visitor is using.
- **Traffic Sources** – This report gives you a pie chart showing where the majority of your traffic comes from. You’ll discover if most are coming from search engines or being referred from other sites, or even visiting different pages within your own site. If your search engine traffic is lacking, then some search engine optimization adjustments may be in order.



- **Landing Pages** – This report tells you where visitors are entering your site. If visitors mainly enter from the index page, then they’re either finding your site through a search engine or may have your site bookmarked. However, if one particular page gets a lot of traffic, this tells you that this topic is popular and you may want to offer more about it. You can also use landing pages to track ad campaigns. If you place an ad in a newsletter, use a unique landing page to see how many visitors clicked on the link within the newsletter to visit your page.
- **Keywords** – This report shows you what keyword terms visitors searched for on a search engine, such as Google or Bing, before visiting on your site. You can use the keywords report to identify the most popular topics on your site and also to search for holes in your content that need to be filled. The report also shows how long the visitor stayed (on average) on a particular page after searching for a keyword. So, if you have a page containing the keyword, “kitchen widget” and

the visitor lands and stays on the page only for .02 seconds, you know you're not meeting the information needs of the visitor who landed on that page. You'll then want to make adjustments to that page to increase a visitor's stay. Also of note is that according to Google, "that when SSL search is employed (e.g., if the user is signed in to a Google account, or using the Firefox search bar), Keyword will have the value *(not provided)*."

- **Conversions** – Driving traffic to your website is important, but if those visitors don't convert into potential customers, the traffic may not be reaching its potential. This report allows you to track information such as how many visitors signed up for your newsletter, or clicked on your shopping page. The best way to track very specific conversions, such as visitors who share your site on social media, is to set up some goals within Google Analytics.

What is (Not Provided)?

In October of 2011, in an effort to protect the privacy of their users, Google made the decision to change the way they treat outbound clicks from any of their websites (this includes: Gmail, Google Plus, Google Maps, YouTube, etc.)

If a user is logged in, when searching, their search is conducted over SSL (secure socket layer), obscuring any and all referral data related to that search.

When a user visits your site, Google Analytics places a (Not Provided) in your referrer and keyword reports where that data is hidden.

How to Set Up Goals

To track conversions or other customized elements of your website, set up goals in Google Analytics. Goals are an easy way to measure how well your site is meeting your objectives.

You can set up individual goals to track actions such as purchases, RSVPs for an event, social media page shares or even if someone stays on a certain page for a set amount of time. To set up specific goals, you'll want to do the following:

Account list > > > All Web Site Data ▾

Profile: All Web Site Data (Web)
Property ID: UA-1-1

Assets Users **Goals** Filters Profile Settings

Goals >
Goals (set 1): Goal 1

General Information

Goal Name

Active Inactive

Goal Type URL Destination
 Visit Duration
 Page/Visit
 Event

Goal Details

Visits with	Condition	Number of Pages Visited
Pages Visited	Greater than ▾	<input type="text"/>

Goal Value optional

Save Cancel

- Click on the “Admin” button
- Click on the account name you want to track
- Click on the property name
- Click on the profile name
- Click on the tab labeled “Goals”
- Click on “+ Goal”
- Choose from options: URL Destination, Visit Duration, Page/Visit or Event
- You can add additional values, if desired, but this is an advanced option
- Click “Save”

You’re limited to no more than 20 goals per profile.

Once you have your goals set up, you can analyze these conversion rates in the Goal Reports. Goal conversions can also be found in other reports, including the *Visitor Report*, *Traffic Reports*, *Site Search Reports*, and the *Events Reports*.

Use It and Keep Learning

These are just a few of the basics of using Google Analytics. You'll discover even more options the more often you use Google Analytics and/or decide to integrate it with Google AdSense. With the new Beta version called "Universal," Google is certain to add even more features in the future. Don't be afraid to think outside the box and discover new ways to use the reports. You'll see your site visitors convert into customers in no time!

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Chapter - 8

Responsive Web Designs with Media Queries

Everyone's talking about responsive web design. But does everyone understand what it's for? I'm not sure. Many web designers and developers seem to me to have misunderstood the problem it's trying to solve. Put simply, it's not about making sites for mobile devices, it's about adapting layouts to viewport sizes. Over the next few pages, I'll look at the principles behind responsive web design in detail, so we're sure understand the concepts correctly. Once we've got that out of the way, I'll walk you through building a website that scales perfectly on both large and small screens.

Introduction to Media Queries:

Media Queries is a CSS3 module allowing content rendering to adapt to conditions such as screen resolution (e.g. smartphone screen vs. computer screen). It became a W3C recommended standard in June 2012 and is a cornerstone technology of Responsive web design. CSS Media Queries are a feature in CSS3 which allows you to specify when certain CSS rules should be applied. This allows you to apply a special CSS for mobile, or adjust a layout for print.

Media queries are an excellent way to deliver different styles to different devices, providing the best experience for each type of user.

The Mobile World

Responsive web design has mainly become a hot topic because more and more people are using mobile devices such as iPhones, iPads, and Blackberry's to access the internet. So it's becoming increasingly important to understand that a website should not be specifically about either the desktop or the mobile device, but about building in such a way that its layout adapts to varying viewport sizes. If you think about the new inventions we will inevitably see in the future, then an adaptive layout that can automatically respond to the users' preference becomes an indispensable and highly valuable commodity.

One of the main reasons **Media Queries** have become more popular is the fact that websites are unusable on devices they weren't considered for during design and build phases. They become fiddly to navigate around – or maybe the fixed width is wider than the user's viewport, making it difficult to zoom in, pan, zoom out and find what they are looking for.

Frustrating? For sure. But more frustrating as a developer is that these websites should have been built in such a fashion that they scale down to fit any viewport size.

Many sites using media queries strip out information, hiding certain aspects of the site that they deem less important. So the user with a smaller device gets an easier to use website, but with stripped-down content. But why should I, on a mobile device, not get the same benefits from a website as a desktop user?

With the help of media queries we can completely customize the layout of our website dependent on screen size. Which is great, but do we really need to supply several adaptations of our site?

And why should we settle for a site that's so badly designed or built that it can't scale gracefully?

User Frustration

Some people believe that it's okay to cut features and eliminate content they believe is non-essential to the user. But how can you be sure that the information you are cutting or pushing to a secondary page is not the content that is most important to me? You can't. **Alright lets move to the Media Queries Syntax now...**

Syntax:

You can use Media Queries with Internal and External Methods.

1. Internal Media Query Syntax:

```
@media screen and (max-width: 900px) {  
  
  {  
  
    /* styles for screens smaller than 900px here */  
  
  }  
  
}
```

You are required to put this syntax between <style> and </style> tags of your HTML file because don't forget that its Internal Media Query method. Here the **max-width** means, this query will only work when site screen will be detected the size of maximum 900px. Confuse? Don't be... I'm going to explain more clearly in next few pages... :)

2. External Media Query Syntax:

```
<link href="style.css" rel="stylesheet" media="only screen and (max-width:900px)">
```

You need to put this tag between <head> and </head> section of your HTML file. And in this tag the style.css file is that file where your Media Queries should be coded.

You now know media query syntax YAY! Its Great... But media queries don't actually DO anything. It's the CSS INSIDE that changes the appearance.

Now lets start moving onto practical... I'm going to perform with step by step.

Step 1: Create a new folder on desktop or anywhere you like and name it of your choice.

Step 2: Now create an index.html file inside your folder and open in any editor like notepad or notepad++

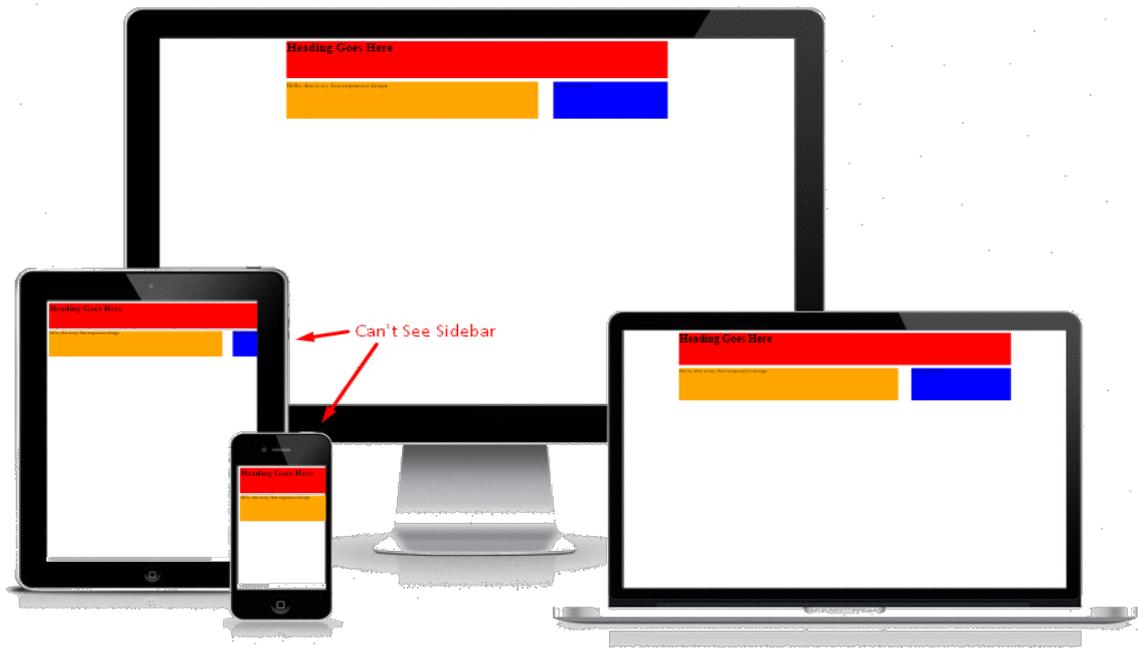
Step 3: We are creating one header at top, one content box at left side and one sidebar at right side. So, the HTML and CSS codes should be like this:

```
<html>
<head>
<title> Welcome to Site </title>
<style>
#pagewrap {
width: 960px;
margin: 0 auto;
}
  #header {
width: 100%;
height: 100px;
background-color: red;
margin-left: auto;
margin-right: auto;
margin-bottom: 10px;
}
    #content {
width: 66%;
height: 100px;
background-color: orange;
float: left;
}
    #rsidebar {
width: 30%;
height: 100px;
background-color: blue;
float: right;
}
</style>
```

```
</head>
<body>
<div id="pagewrap">
  <div id="header"> <h1> Heading Goes Here </h1> </div>
<div id="content">Hello, this is my first responsive design.</div>
<div id="rsidebar">Text goes here </div>
</div>
</body>

</html>
```

Here is its preview on all devices before making it Responsive:



Have you noticed that you can't see sidebar in mobile and tablet preview. So It means your design it not responsive.

To check your design open it in Mozilla Firefox and Press **CTRL+SHIFT+M** and then Select the resolution. If you want to check online then I can recommend <http://ami.responsivedesign.is>

Lets use Media Queries to make this design responsive at available for all type of devices. Its not a confusing time, we just have to put some codes between `<style>` and `</style>` tags.

First of all we are setting up our design for screen those fits to 959px and low. For this we will use the following Media Query:

```
@media screen and (max-width: 959px) {  
  #pagewrap {  
    width: 100%;  
  }  
  #header {  
    width: 100%;  
  }  
  #content {  
    width: 55%;  
  }  
  #rsidebar {  
    width: 40%;  
  }  
}
```

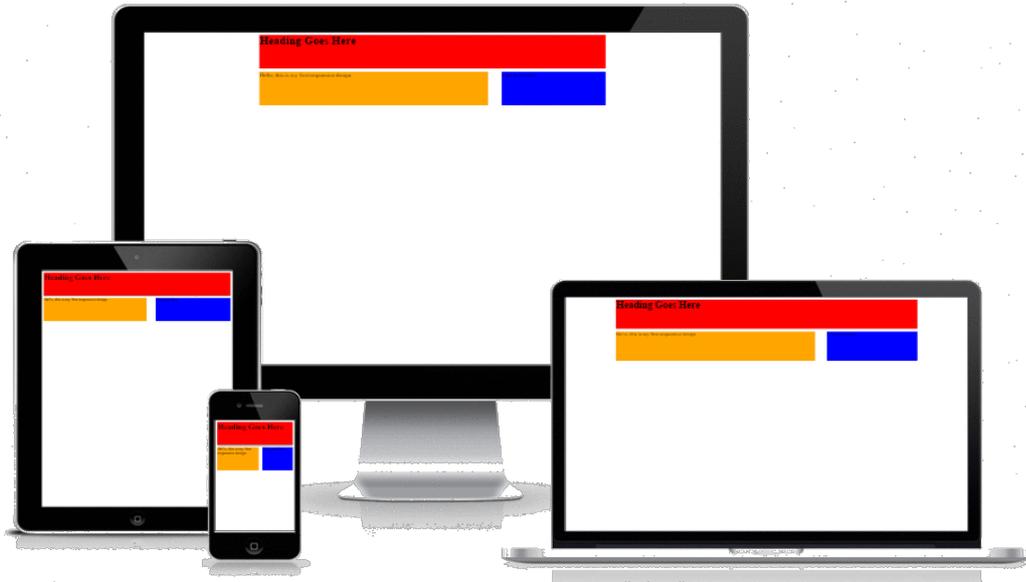
My pagewrap value is 960px before media query. So, here I have to minus one value.
e.g: If you have 980px pagewrap then media query max-width will be 979px

This rule will adjust the header's width on screens which resolution will be smaller and equal to 959px

That's it! Now you can simple check your design.

How to Check Responsiveness?

Its really simple... Open your page in Mozilla FireFox and Press **CTRL+SHIFT+M**



Here you can see design in different screens like mobile, tablet, small and wide screen PC.

Exercises for Complete Grip

Exercise No. 1:

HTML MCQ's (Solved)

1- Choose the correct HTML tag for the largest heading

- <h1> <heading> <h6> <head>

2- What is the preferred way for adding a background color in HTML using Inline CSS?

- <background>yellow</background> <body background="yellow">
- <body style="background-color:yellow;">

3- What is the correct HTML for creating a hyperlink?

- Google
- Google
- Google
- <a>http://www.google.com

4- How can you open a link in a new tab/browser window?

- a href="url" target="_blank">

5- Which of these tags are all <table> tags?

- <table><tr><tt> <table><head><tfoot> <table><tr><td>
- <thead><body><tr>

6- How can you make a numbered list?

- <nl> <list>

7- What is the correct HTML for inserting an image?

- image.gif
-
- <image src="image.gif">

8- All HTML tags are enclosed in what ?

- < >
- <?html and html?>
- # and #
- <!-- and -->

9- What is the correct HTML for referring to an external style sheet?

- <link rel="stylesheet" type="text/css" href="mystyle.css">
- <stylesheet>mystyle.css</stylesheet>
- <style src="mystyle.css">

10- Choose the correct HTML to left-align the content inside a tablecell

- <td valign="left">
- <td align="left">
- <tdleft>
- <td leftalign>

11- What does HTML stand for

- Hyperlinks and Text Markup Language
- Home Tool Markup Language
- Hyper Text Markup Language

12- How do I add scrolling text to my page?

- <scroll>
- <marquee>
- <curler>

13- Is width="100" and width="100%" the same?

- Yes
- No

14- How can we resize the image in HTML?

- Using height and width
- Using size attribute

15- How can you create an e-mail link?

- <mail href="a@b">
- <mail>a@b</mail>
-
-

16- What is the correct HTML for inserting a background image?

-
- <body background="background.gif">
- <background img="background.gif">

Exercise No. 2:**CSS Short Q&A (Solved)****1- What are different ways to integrate a CSS into a Web page?**

There are three ways to integrate CSS into a Web page

- a.) Inline: HTML elements may have CSS applied to them via the STYLE attribute.
- b.) Embedded: By placing the code in a STYLE element within the HEAD element.
- c.) Linked/ Imported: Place the CSS in an external file and link it via a link element.

2- Explain external Style Sheet? How would you link to it?

- External Style Sheet can be called as a template/document/file which contains style information and can be linked with more than one HTML documents.

- Using this the entire site can be formatted and styles just by editing one file.

- The file is linked with HTML documents via the LINK element inside the HEAD element.

```
<HEAD> <LINK REL=STYLESHEET HREF="style.css" TYPE="text/css"> </HEAD>
```

3- What are the advantages and disadvantages of External Style Sheets?

The advantages of External Style Sheets are:

- Using them, the styles of multiple documents can be controlled from one file.
- Classes can be created for use on multiple HTML element types in many documents.
- In complex situations, selector and grouping methods can be used to apply styles.

The disadvantages of External Style Sheets are:

- In order to import style information for each document, an extra download is needed.
- Until the external style sheet is loaded, it may not be possible to render the document.
- For small number of style definitions, it is not viable.

4- What are the advantages and disadvantages of Embedded Style Sheets?

The advantages of Embedded Style Sheets are:

- It is possible to create classes for use on multiple tag types in the document
- Under complex situations, selector and grouping methods can be used to apply styles.
- No extra download is required to import the information.

The disadvantages of Embedded Style Sheets are:

- It is not possible to control the styles for multiple documents from one file, using this method.

5- What are the advantages and disadvantages of Inline Styles?

The advantages of Inline Styles are:

- It is especially useful for small number of style definitions.
- It has the ability to override other style specification methods at the local level.

The disadvantages of Inline Styles are:

- It does not separate out the style information from content.
- The styles for many documents can not be controlled from one source.
- Selector grouping methods can not be used to handle complex situations.
- Control classes can not be created to control multiple element types within the document.

6- How to make each word in a sentence start with a capital letter via CSS?

For making the starting letter in a word to be capital,

text-transform: capitalize is used.

it will only capitalize the **first** alphabet of the word.

While text-transform:uppercase will capitalize the whole word.

Example: If I want to make Capitalize all the Letters in whole <body> and </body> tags then in CSS, I have to put the following rule:

```
body {  
  
text-transform: capitalize;  
  
}
```

7- How to display the hyperlinks without an underline?

For removing that underlining from a hyperlink, there is a easy method in CSS.

It is done by adding a simple attribute value.

```
a  
{  
text-decoration:none;  
}
```

it will remove the default underlining from the hyperlinks.

8- Is negative value allowed to be used when giving a padding property to an element? Explain

No, negative values are not allowed while using padding property. Padding in general terms means to increase the background outer area beyond its contents. If we give the padding in negative then it will make no sense because the content will overflow from its parent container. So it is not allowed because it makes no sense. You can use negative values for setting the margins.

9- How you define grouping in CSS?

Grouping means that we can combine more than one selector like group. These selector are separated with comma(.). I have given you a example how to group the selector.

Example:
h1,h2,h3,h4
{
 color: red
}

10- How you define id Selector?

Using id selector we can set the style for HTML elements. We set id selector as #. Below, I have shows you how to use id selector.

```
#green {color: yellow}
```

Where, yellow is called as value of an id attribute.

Exercise No. 3:**General Exercise****Short Questions:**

1. What is domain name? Write four extensions of TLD's
2. What is Dreamweaver? Write names of its Workspaces
3. Write the abbreviations of:
HTML CSS HTTP URL .biz
4. What are the main things required to publish a Website on the internet?
5. Is cPanel is a Windows bases Control Panel or Linux bases Control Panel?
6. What is DNS? Define in your own words.

PRACTICAL:

1. Write down CSS code for Paragraph, h1 and h2. Also embed this code in HTML via External StyleSheet method.
2. Create a page layout with DIV tags have 1 header, 1 left sidebar, one right content box and one footer.

Exercise No. 4:**General Exercise****Short Questions:**

1. Define HTML and CSS
2. Difference between http and https
3. What is domain name? Write four extensions of TLD's
4. What is Dreamweaver? Write names of its Workspaces
5. What is FTP? Write name of any FTP Client Software
6. Which are three types of CSS styling?

Long Questions:

1. Write down HTML Basic Structure with Table, Hyperlink, Image, Marquee
2. Write down CSS code for hyperlink (link, hover and visited), Paragraph and all headings. Also embed this code in HTML via External StyleSheet.
3. Write down the abbreviations of
(a) IP (b) DNS (c) TLD

PRACTICAL:

Create a Contact form with Dreamweaver and Publish it via FTP Software.

Publishing Conditions:

- Name a file index.html
- Make it a Zip File
- Publish in Sub-Domain

Exercise No. 5:

Media Queries

Short Questions:

1. What are Media Queries?
2. What is difference between min-width and max-width in media queries?
3. Can you use media queries between <body> and </body> tags?

PRACTICAL:

1. Draw a layout with the following credentials:
Header Box, Menu Bar, Left Content Box, Right Sidebar, Footer
2. Make this layout Responsive for all type of devices using Media Queries.

Important Abbreviations

Markup and Styling

1. **CSS:** *Cascading Style Sheets* — CSS is a stylesheet language used to define how a web page written HTML or XHTML should be presented and displayed in a web browser.
2. **DHTML:** *Dynamic HyperText Markup Language* — DHTML is the term used when HTML, JavaScript and CSS are used to create animated or interactive web sites.
3. **HTML:** *HyperText Markup Language* — HTML is a tag-based markup language used to create web pages. Every site on the internet uses HTML in some form.
4. **WML:** *Wireless Markup Language* — WML is an XML-based markup language for content accessed through a wireless mobile device. Similar to HTML.
5. **XHTML:** *Extensible HyperText Markup Language* — XHTML is a special type of HTML that conforms to the strict rules of XML. This allows for cleaner code and code that can be understood by a wider array of software.
6. **XML:** *Extensible Markup Language* — XML is a general purpose markup language for describing data in a structured manner.

Business Logic Programming

1. **ASP** (Microsoft): *Active Server Pages* — ASP is a server-side scripting language used to add business logic and database interactivity to dynamic websites.
2. **CGI:** *Common Gateway Interface* — CGI is a protocol that allows server applications to interact with client web browsers.
3. **JSP:** *JavaServer Pages* — JSP is a server-side scripting language used to add business logic and database interactivity to dynamic websites.
4. **PHP:** *PHP Hypertext Preprocessor/Personal Home Page* — PHP is a server-side scripting language used to add business logic and database interactivity to dynamic websites.
5. **RoR:** *Ruby on Rails* — RoR is a web application framework based on the Ruby scripting language. It has been used by several popular Web 2.0 web sites.
6. **SSI:** *Server Side Includes* — SSI is a server-side scripting language used primarily to include the contents of one file in another.

Web Services

1. **ASP:** *Application Service Provider* — An ASP is any business that provides online, Internet-delivered applications to customers.
2. **AWS:** *Amazon Web Services* — AWS are a collection of remote application services offered by Amazon.com.
3. **RSS:** *Really Simple Syndication* — RSS is an XML specification for publishing frequently updated web content to subscribers. RSS is the secret sauce behind blogging.
4. **S3:** *Amazon Simple Storage Service* — Amazon S3 is a storage solution that offers unlimited data stored for a small fee through a simple web service interface.
5. **YUI:** *Yahoo! User Interface* — The YUI library is an open-source JavaScript library for building rich interactive web applications.

Databases

1. **CRUD:** *Create, Read, Update and Delete* — CRUD are the four basic functions of any persistent storage system, most commonly a database system.
2. **DBMS:** *Database Management System* — A DB is a structured collection of data organized to allow for easy retrieval by computer programs using SQL.
3. **SQL:** *Structured Query Language* — SQL is a special programming language used to retrieve data from and modify relational database systems.

Servers and Hosting

1. **CRON:** *Command Run ON* — CRON is a scheduling program on most Unix system. It is used to schedule time-sensitive activities for software programs to perform.
2. **IIS:** *Internet Information Services* — IIS is a set of internet-based services for servers running Microsoft Windows.

3. **VPS:** *Virtual Private Server* — A VPS is a partition of a physical server that has the ability to run a separate operating system and reboot itself independently of other VPSs on the same physical server.

Protocols

1. **FTP:** *File Transfer Protocol* — FTP is a commonly used protocol for transferring files from one computer to another over a network.
2. **HTTP:** *HyperText Transfer Protocol* — HTTP is a communications protocol used for transferring data available on the Web.
3. **HTTPS:** *Secure HypterText Transfer Protocol* — HTTPS is a variation of HTTP used to specify that the data being transferred is/should be encrypted and secure.
4. **SSH:** *Secure Shell* — SSH is a network protocol that allows data to be exchanged over a secure channel between two computers.
5. **SSL:** *Secure Sockets Layer* — SSL is a cryptographic protocol used for encrypting sensitive data while being sent through the Internet.
6. **WAP:** *Wireless Application Protocol* — WAP is an international standard for accessing Internet content on a wireless mobile device.

Standards and Accessibility

1. **508:** *Section 508* — Section 508 is an amendment to the Rehabilitation act of 1973 that requires federal agencies to make their electronic and information technology accessible to people with disabilities. It is commonly used as a standard for accessible web sites.
2. **W3C:** *World Wide Web Consortium* — The W3C is the international standards organization for the Web.
3. **WAI:** *Web Accessibility Initiative* — The WAI is an initiative enacted by the W3C for improving the accessibility of web pages for people using software other than web browsers (e.g. screen readers).
4. **WCAG:** *Web Content Accessibility Guidelines* — WCAG is a series of web accessibility guidelines published by the WAI.

Client-Side Scripting

1. **AJAX:** *Asynchronous JavaScript And XML* — AJAX is a web programming technique that uses JavaScript to transparently interact with a web server, eliminating the need to reload a web page to see changes.
2. **DOM:** *Document Object Model* — DOM is a standard object model for representing HTML and XML formats as objects.
3. **JS/ECMAScript:** *JavaScript* — JavaScript is a scripting language used for client-side (web browser) web development.

Development

1. **CRAP:** *Contrast, Repetition, Alignment, Proximity* — CRAP is a design methodology applied to the design and layout of web pages.
2. **CVS:** *Concurrent Versions System* — CVS is a version control system that allows several developers to collaboratively work on a single set of code.
3. **GUI:** *Graphical User Interface* — A GUI is a computer interface that allows users to interact with the computer through graphical icons and windows, typically with the aid of a mouse.
4. **SVN:** *Subversion* — SVN is a version control system that allows several developers to collaboratively work on a single set of code.
5. **WYSIWYG:** *What You See Is What You Get* — WYSIWYG is used to describe web development applications in which the authoring environment closely resembles the final output of the program.

Graphics and Images

1. **CMYK:** *Cyan Magenta Yellow Key* — RGB is a subtractive color model used by computers to display various colors by subtracting different levels of cyan, magenta, and yellow.
2. **FLA:** *Flash Authoring File* — FLA files are the primary authoring output files of Adobe Flash
3. **GIF:** *Graphics Interchange Format* — GIF is a popular graphics format most commonly used for graphics in web sites.
4. **JPEG:** *Joint Photographic Experts Group* — JPEG is an image compression codec commonly used to encode pictures for the Web.

5. **PNG:** *Portable Network Graphics* — PNG is an image format that was developed to replace the aging GIF image format for web sites.
6. **PSD:** *PhotoShop Document* — PSD files are the primary authoring output files of Adobe Photoshop.
7. **RGB:** *Red Green Blue* — RGB is an additive color model used by computers to display various colors by combining different levels of red, green, or blue.
8. **SVG:** *Scalable Vector Graphics* — SVG is an XML markup language used to describe two dimensional vector graphics.
9. **SWF:** *Small Web Format/ShockWave Flash* — SWF is a proprietary vector graphics format used to create animations on web sites.

E-commerce

1. **AVS:** *Address Verification System* — AVS is a method of verifying the identity of a person using a credit card to make a purchase online.
2. **CSC/CVV:** *Card Security Code/Card Verification Value* — CSC is a security feature available on most major credit cards that is used to prevent credit card fraud.
3. **MID:** *Merchant ID* — A MID is a unique identifier assigned to companies selling goods and used for billing purposes.
4. **FAQ:** *Frequently Asked Questions* — FAQ lists are a common support mechanism on many web sites that provides answers to questions that are commonly asked of the company.

Search Engine Optimization

1. **CPC:** *Cost Per Click* — CPC is the amount an advertiser pays every time a user clicks on one of their advertisements in a PPC campaign.
2. **CPM:** *Cost Per 1000 Impressions* — CPM is the amount an advertiser pays for every 1000 (or, roman numeral “M”) users who view their advertisement on a web page.
3. **CTR:** *Click Through Rate/Ratio* — CTR is a measure of the amount of users who click an advertisement as compared to the number of users who see the advertisement.
4. **PPC:** *Pay Per Click* — PPC is an advertising model used on the Web in which advertisers only pay when a user actually click their advertisement.

5. **PR: PageRank** — PageRank is an algorithm used to measure the value of a particular document relative to other documents in the same set. Commonly used by search engines to rank web site popularity.
6. **SEO: Search Engine Optimization** — SEO is the process of tweaking web sites so that they are more likely to be indexed higher in search engine results.
7. **SERP: Search Engine Results Page** — SERP is the listing of web pages returned by a search engine in response to a user search

Security

1. **XSS: Cross-Site Scripting** — XSS is a common web page security vulnerability where an attacker rigs a site they do not own to run malicious code.
2. **CSRF: Cross-Site Request Forgery** — CSRF is a common web page security vulnerability where an attacker poses as an authenticated user to execute actions.

Addressing

1. **CNAME: Canonical Name** — A CNAME is an alias of one hostname to another.
2. **DNS: Domain Name System** — DNS servers as the phone book of the Internet. It translates human-readable hostnames such as solosignal.com into numeric IP addresses used by networking equipment.
3. **DTD: Document Type Definition** — DTD is a document used to describe and specify the structure and organization of an XML document.
4. **ICANN: Internet Corporation for Assigned Names and Numbers** — ICANN is a non-profit organization formed to oversee the management of domain names and IP addresses.
5. **IP: Internet Protocol** — IP is a protocol for transferring data across a packet-switched network.
6. **SLD: Second-Level Domain** — SLD is a domain directly below the TLD. For example. In “solosignal.com”, “solosignal” is the SLD and “.com” is the TLD.
7. **TLD: Top-Level Domain** — TLD is the last part of any Internet domain name. For example: .com, .net, and .org are all TLDs.
8. **URL: Uniform Resource Locator** — URLs are the addresses used to request files through the Web.

9. **WWW:** *World Wide Web* — The WWW is the network of interlinked hypertext documents available through the Internet.

Resources & Recommendations

For us, the speed, efficiency and quality of professional software makes the outlay worthwhile (mostly), but there are also plenty of resources online that provide 90% of the experience, at no cost. I'm happy to confess, we do use some of these ourselves, so if you fancy yourself as a web designer, here's what you'll need. To be a Professional in your field, always keep your KIT with you. Its my 1st Priority recommendation.

1. Gimp



Gimp stands for 'GNU Image Manipulation Program' - but don't let the name put you off, it's a free alternative to Photoshop. For the avoidance of doubt, it's not as good as Photoshop, but it is exactly £944.64 cheaper, so you can't really expect it to be quite as good. It does a fine job of letting you tinker with photographs; does a thoroughly reasonable job at basic graphic design for logos, backgrounds and the like; it's free, well documented and available for Mac and Windows.

2. Colorzilla - awful name, good website!



A very useful website that's actually two things in one. The first half is a web based CSS3 gradient generator - a pain free way to produce the code required by your browser to make fancy gradient backgrounds for websites. Just use the sliders to choose a colour, tell the page what you want the gradient to look like and the fairly complicated CSS code will appear before your eyes.

The other half of the site is a plugin for your browser that lets you 'sample' colours from web pages - doesn't sound very interesting, but it can be very useful if you want a particular colour code to use for your own site. If you want to have a look, this is the link: <http://www.colorzilla.com>.

3. Firebug - a free extension for Firefox.



Whether you start your website with a template or from scratch, at some point you're probably going to want to change the look of certain aspects of it - text color, spacing, or something else. Firebug is an extension that lets you read the code that's behind a particular element of a page - it will show you what is making something look the way it is and it'll also let you change it in real time - testing your changes without actually editing the website code.

Firebug is a very powerful piece of software that is used by web developers to troubleshoot a host of problems on websites, but as a basic tool for seeing what's going on, it's brilliant. If you use Firefox, you can download the extension here: www.getfirebug.com - the Google Chrome browser also has very similar functionality as standard.

4. Notepad++ - a free text editor with a difference.



At some point in building even a very basic website, you're going to need to edit some code (whether it's html, php or CSS) and programmes like MS Word just don't cut it. Notepad++ is a 'proper' editor, is primarily aimed at code editing and has a lot of the features of Adobe Dreamweaver, but for free. You can download it here - notepad-plus-plus.org/

Some Things Can Make you Professional

This area of this book is dedicated to all “*young*” designers that are new to this subject and would hopefully find these tips helpful. These some tips will help future designers avoid some common mistakes that they can make on their way to becoming pro’s in web design and be on the right path instead.

1. Practice makes perfect

This is a universal truth that should be taken as granted in any profession you choose. In order for you to deal with your future projects you will have to master different softwares like Photoshop for instance. There are tons of tutorials on the Internet and many other online lessons that you can see and apply them in practice. The good part about tutorials is their composition – they are often explained step by step – which will make your learning process much easier. You can get them absolutely for free if you make a research and enjoy the watching and learning process. Start with the easiest tutorials – the ones that explain the basics and then move on to more complicated stuff.

2. No Updates or New Features

Website design is not a one-time process. You cannot just design a website, place it on the internet and lay back and relax. If you want to have a powerful web presence, then designing a website is only the start of the journey. You need to feed your website with new content on regular basis in order to banish stagnation. Moreover search engines need fresh content that they can index otherwise your website will pushed down the charts of search results.

3. Patience is the secret

Be sure to remember that every time you start something new, something might go wrong or not the way you expected it to be but this shouldn’t stop you. Remember that in design quantity will turn to quality once you put your heart in it. In half a year you will be able to do everything faster and in a year you can already become a professional. All you have to do is be patient and don’t get down if something goes wrong – start again and success will definitely come back to you.

4. Don't let greed get to you

One mistake that almost all beginner designers make is – if they see some cool brushes online they immediately download them. This way your computer will soon have no remaining memory because of the huge amount of useless brushes and plug-ins. The thing is that some of the brushes and plug-ins that you so wanted to download are already incorporated in Photoshop and you just don't know about it so don't rush – download only what you really need.

5. Systemize and classify

Once you decide to download some brushes or cliparts, be sure to classify them into separate folders so that you can find them easily, otherwise you will have a messy desktop that will just get you more confused. Once you keep everything in order you won't have to lose hours in order to find what you are looking for.

6. Be a follower

Try to look at the works of as many designs as you can. This will help you get inspired and you will definitely learn a lot from other experienced designers that have already been in the same spot where you are now. If you have seen a website that you liked, try to follow the same techniques – in the end ideas will come up and you will make a totally different maybe even better website.

7. Follow but don't copy

One thing you should definitely remember is not to break any copyright rules. As I have mentioned before you can get inspired and maybe use some general elements that you can find in any web design, but other elements should totally belong to you and you cannot just copy them from other websites.

8. Analyze

If you found a website to get inspired from try to analyze how it was made – start with analyzing the background, what fonts were used, what brushes or gradients have been used in order to create a certain effect. Try to figure out the order in what everything was done for the website.

9. Look at the world through the eyes of a designer

Try to visualize everything you see and analyze it from a designer's point of view. This goes for anything – starting with TV shows to billboards to magazines and ads. You can really find something really useful by just watching some ads on TV because some of them are really good and can fill you with a dose of inspiration.

10. Get a diary

And I don't mean the kind of diary that you use for writing how your day was and your disappointments. I mean the kind of diary that you will keep for ideas and impressions. It is almost impossible to remember everything that seems to be interesting for you, so you can definitely put down your ideas in a notebook of your own. Once you get to design a website just open the notebook and you will be amazed by the large number of ideas you will get.

11. Don't blame your motivation

One of the most common issues for new designers is the thought that they have an inspirational crisis; hence they are not motivated to go on with their work and become depressed at some point – thinking if the path they chose was the right one. It will all come with experience – your inspiration will definitely get stronger once you start working and putting your soul into what you do.

12. If you want to be a designer, blend with designers

A beginner designer should always communicate with other designers if there is a chance. Never hesitate to ask your fellow designer for tips, if they are professionals they won't avoid you. Also try to visit different forums where you can find other designers from different parts of the world and talk to them – you will be love the flow of information you might get.

13. Be trendy

In order to be successful you will have to get acquainted with the latest trends in web design, otherwise you will lose the moment where Web 2.0 is already a thing of the past – and you wouldn't want that.

14. Don't be afraid of novelties

If you have seen something new that other web designer uses, don't hesitate to use it as well – just be careful to check it out first and get to know more information as it might totally not go well with the rest of your design.

15. Make it usable

Once you know how to use Photoshop and start making different stuff, don't hesitate to make it useful for your future website, otherwise your creativity might remain locked down somewhere in a folder on your computer.

16. Respect copyrights

If you want to be professional, you should definitely think about your image. You don't want to spot it with something stupid like not respecting the copyrights of the photos you use. The safest way is to buy them from stock photography websites and if you don't want to do that, just make sure to credit the authors or use photos in a way so that you will not violate any copyrights. If you are not sure about the license of a photo, you should better avoid using it.

17. Get your freebies and use them

There is plenty of free stuff you can download from the Internet. There are different customized plug-ins and brushes for Photoshop. Just make sure to choose wisely and go for it.

18. Master the theory

If you want to get a good practice, you will first have to learn the theory. There are several basic rules for design in general that you should know in order to go on and make good websites. Plus, once you get a project, you will have to talk to the client and give him different tips for a better result – thus you will have to bring serious arguments.

19. Be your own client first

One of the most common mistakes a young designer makes is the lack of a portfolio; hence when a client is asking for a portfolio in order to see your works you cannot show anything. Break this cycle and be your own client at first. Think of a project you would like to implement and then make the website for it. This way you will have a portfolio to show off and some experience as well.

20. Don't hurry the timing of your projects

Once you talk to the client, don't try to shorten the period of the finished project. You will have to sum up the days you will need for the project wisely and tell the real numbers. Add one or two days in advance, in case something goes wrong. If you manage to end the project before the deadline than this will be a really pleasant surprise for the client, otherwise I am not sure he will be really happy

21. Design all the time

Try to take care of your passion daily. Don't skip any days in between designing – because as I said – practice makes perfect. If you don't have any projects to work on, then do something on your own, learn some new Photoshop effects – this will definitely be helpful for your future projects.

22. Don't be afraid of critique

I guess this is the hardest thing to overcome when you are a struggling designer. Once you get a bad comment on your work you don't really have the motivation to go on. Once a client doesn't like your work, it either means he would like to get it for a cheaper price or he actually didn't like it. Designing has its ups and downs but this shouldn't bring you down. The important thing is avoid being lead by your emotions; otherwise you will lose your client and your work. Don't be rude but try to have a constructive discussion with the client and you will definitely come to an agreement.

23. Don't use the default settings

Try to create your own effects for your design. You can use the default settings but only for bigger objects, while for example you can use a creative effect on the typography that you use in your design. Also pay attention to the elements you use in your design – these will definitely have to be unique and default settings should be avoided.

24. Don't overestimate your skills

Once you take on a project, you have to measure your skills and use simpler but good looking design, without using elements that you have never even heard about or tried them on your own. Once you handle the simple things, you will definitely be able to pass on to more complicated design; hence you could state you are becoming more professional.

25. Enjoy your work

When you start the design of a website try to concentrate only on the result of your work. Create and be creative, use your imagination. Don't let thoughts like – “what a great designer I am!” or “how much money will I get?” and “what will I do with them?!”. Enjoy your work, after all this is what you chose so it has to bring you joy.

26. Don't think about numbers

When you start designing, you will have to skip thoughts like: how many projects will I be able to make in a week, how about a month? This will just affect your performance and at some point you might get disappointed because you miscalculated something. You will reach the time when you will simply have no time to think about numbers because of the big number of projects you will have as a professional designer.

27. Don't underestimate the details

Details definitely give the design a special look. Pay attention to details, they are really important in a composition and will make your work unique. Think about details on your typography, your background, the

logo, or menu buttons and you will see how amazing your design will look instead of the boring simple design.

28. Make your own cliparts

You can sometimes lose tons of time searching for the perfect details for your design. This is not the saddest thing, because you can lose time but in the end find nothing good for your design. Instead of that – design what you want on your own. Remember that you’ve mastered Photoshop and you can do almost anything you want there.

29. Don’t make fun of beginner designers

One feature that can be seen in beginner designers is the way they make fun of their fellows. They usually make it on forums and they are really mean about this thing. Try to be tolerant towards new designers, because you might not be too far away from them. Keep cool and just learn to be a good designer.

30. Critique your work instead

Try to avoid comparing your work to some boring and ugly designs – this will make no good for you or your experience. Dream bigger – compare your work to better designs and see what you can do to make your design better. This way, you will have a constructive critique towards yourself.

31. Be more professional about your work

When you sketch the design of the website you are going to make, don’t just make a sketch that only you could understand. The client might not get what you mean. The sketch is really important in order to show a preview for your website. Obviously you shouldn’t go for the details, but a good sketch is a must.

32. Believe in yourself

Believe that everything will end up to be OK and don’t lose faith in yourself and your powers. This is very important actually and will help you get the right motivation.

33. Don't listen to anyone no matter what

Don't follow people's advice blindly. Try to experiment and find what works best for you; it differs from person to person. What turns out to be good for someone might be totally wrong for you, even if the person has the best intentions while giving you a piece of advice.

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Knowledgebase and FAQ's

cPanel FAQ

Q: How to Login to cPanel?

A: Before you can log into cPanel, you must open your Internet browser. This will work in whatever browser you are using.

Click on your browser's address bar and enter the http address of your cPanel. The address of your cPanel would have been given to you in your welcome email from your hosting company. There are two ways to login to cPanel:

1) Using an IP Address

The only way to access cPanel if your domain hasn't propagated yet

It would look something like this- **http://xx.xx.xx.123/cpanel**

2) Using your Domain Name

Can only do this once your domain name is working

This would be **http://yourdomain.com**

Enter either cPanel address in the address bar of your browser (either the IP Address, or the Domain Name).

The next pop-up screen will be a login, calling for your user name and password. They should have been given to you in your welcome email also. Fill in those two fields, and click ok.

That's all there is to it! You are now logged in to your cPanel and can begin to set up email accounts, parked domains, databases, shopping carts, and many, many more features!

To exit cPanel, simply click on the Logout icon in the right hand corner, or simply close your browser window. However, if you are using a public computer, always remember to logout instead of just closing the browser because of security concerns.

Q: How to Change Your cPanel Password?

A: Once logged in, at the top of the page you will find a link to "MY Services", Click it to go to the next page.

On the next page you will find a listing of the hosting account(s) you have with us. Find the account you want to change the cPanel password to. At the far right of that account listing you will find a small icon under "View Details". Click the icon and go to the next page.

Scroll down the page and you will find your current username and password combination, and the fields where you can change your password to cPanel. Keep in mind you will also be changing your password for FTP access to your account.

You can now exit cPanel by closing your browser, or by using the Logout button in the upper right corner. Remember, if you are using a public computer, ALWAYS Logout of cPanel before closing due to security reasons.

Q: Becoming Familiar And Navigating Around in CPanel?

A: Lets learn about cPanel, and how to navigate it's many pages and functions. Making sure that your cPanel works at its best and set up just as you want it. This tutorial will assume that you are logged into your cPanel. If you are having trouble doing that, please see the tutorial named "How to Login to cPanel".

One of the first things you should do is go to Preferences, and click on Update Contact Info. It is very important that you keep that information up-to-date so that you can receive any important email from your hosting company.

You can go to the top of the left column, and check out the Switch Theme pull-down list. From here you can easily change how your cPanel looks by changing the theme, but it does not change the way it works.

The Switch Account drop down list. You will find this list on top of the right column. If you have more than one account, this list will show you which account you are currently controlling with cPanel, and you can switch accounts here.

Stats. Scroll down, and on the left you can see important information about the account. For example, it will show you how many email account you have, and how many you are allowed with your hosting account. It will give your bandwidth usage, show your home directory, and so much more. Scrolling down further, you will find information about the operating system, php version, the MySQL version and more.

The last stat is Server Status. Click on this link and it will take you to a page that will show you how the server you are on is performing. Green lights mean the server is performing properly. Click the Go Back link to exit.

Now let's look at the right side of the cPanel screen. The right side includes icons grouped into specific boxes. These icons allow you to do specific tasks within cPanel like checking your webmail, setting up databases, setting up email addresses and auto-responders.

At the very bottom of the page is a link called Documentation. Documentation is the link to a comprehensive cPanel Manual where you can learn all there is to know about cPanel. This manual contains information

about all the features of cPanel, and has sections on everything from common questions to something from every section in cPanel. It is always available from the home page of your cPanel.

Something new in this version of cPanel is that you can rearrange the windows to suit your needs. For example, if you would like to have the window titled Mail on the top, you can move it by simply dragging and dropping the window where you want it.

Q: How To Use Webmail From Within CPanel?

A: There are two ways to access webmail. You can actually login to webmail without first logging into cPanel by simply typing the following into your browser:

"<http://yourdomain.com/webmail/> " (replace your domain with your actual domain name.)

On your main cPanel page, scroll down to the section named Mail, and click on the Webmail icon. This will take you to the main Web Mail page. Click on the icon called Go To Webmail Login. You will find three webmail programs to choose from. You can select from Neomail, Horde or SquirrelMail. This tutorial will look at SquirrelMail. All three programs are very similar in how they process mail.

Click the SquirrelMail icon. This will take you to the main screen of your account, and shows you the contents of the main Inbox.

In the top menu, you will find a button called Options. Click on the button, and it will take you to a screen where you are given several options for configuring the way your webmail displays for you. Some of the options include Folder Preferences, Display Preferences, Personal Information, and others.

Next to Options, you will find Folders. Clicking that tab takes you to a screen where you can create folders and subfolders to organize and store email messages. You can also rename and delete folders in this area. You can create as many folders and subfolders as you wish, whatever meets your needs. They will display in the left hand column.

The next item in the menu is Addresses. Click on the link, and it will take you to the SquirrelMail Personal Address Book which you can use to store commonly used email addresses. After filling in the blanks, click on the Add address button, and the contact will be added to your address book.

Next up is Compose. This is the Link to select to send an email. After clicking the link, you will get a blank email form. To send it to someone whose address is in your Personal Address Book, click on the Addresses button, and select the person, or people you wish to send the email to. There are check boxes to indicate whether they should be put in the To line, or the Cc (Carbon copy) line, or Bcc (Blind carbon copy) field. Once you choose a name, and select a field, click the Use Addresses button. This takes you back to the

email blank, where your recipient is automatically inserted into the field you selected. Now fill in the rest of the details, such as Subject and Enter the email message in the large box. Scroll down and click the send button. That completes the composing and sending of an email message.

To view your messages, look at the left hand column. If the Inbox is highlighted, it will have a number after it. That is the number of messages you have in your box. Click on Inbox, and open it up. Your messages will be listed by who sent them, date sent, and subject. If the message is junk, and you wish to delete it, click in the small check box in front of the message. Then Click the Delete button. To move a message to a different folder, mark the check box in front of the message. Go up the pull-down menu and select the folder you wish to move the message into. Then click on the Move button.

When you are finished with Webmail you should always exit by signing out. The link to Sign Out is in the upper right corner. This will take you to a confirmation screen that will verify that you have signed out of Webmail. This is the end of the tutorial. You now know how to use Webmail, specifically SquirrelMail. You can now return to your main cPanel page. Remember, you do not have to login to cPanel to access your webmail, you can access it by using "<http://yourdomain.com/webmail/>" (replace "your domain" with your actual domain name) in your browser.

You can now exit cPanel by closing your browser, or by using the Logout button in the upper right corner. Remember, if you are using a public computer, ALWAYS Logout of cPanel before closing due to security reasons.

Q: How to Create A POP Email Account?

A: Scroll down your main cPanel page to the section called Mail, and click on the icon that says Email Accounts. This will open the main Email Accounts page.

If you scroll down, you will see that there is already a POP email account, listed as the Default Email Account. This is the main account that every hosting account comes with, and is the "catch-all" for all un-routed email that comes to your domain. This default account has no quota, and cannot be deleted. We are now going to create a new account.

Find the first box in the section Add a New Email Account. If you should have more than one domain in your account- (for example, a parked domain, or add-on domain) be sure to choose the correct domain from the pull-down menu for which you want to create your POP email account.

Once you have selected the correct domain, in the box that says email, you will write the name of the first account you wish to establish. This account can be whatever you choose. Your name, or an employee name

can go here, such as Bob or Fred, or Nancy or you may put in a department name, such as sales, accounting, or customerservice. It should be written as one word, with no spaces. Give the account a password that you can remember, and enter it again to verify it. If it is too weak, it will not be accepted, and you will be prompted to try again. A strong password is very important to protect your email from hackers.

So now you have your email account - [something@yourdomain.whatever \(.com, .net, .org, etc\)](#). Now you need to decide how much space of your hosting package you are going to dedicate to your mail. You have the option to set a quota limit of space. If you give it a set limit of a certain number of MB, and the box is full, you will get warnings to clean it out. You may also leave it as unlimited, but if you don't remember to check and empty it off the server, you run the risk of using all your server space. After setting the quota, click on create account and you have completed your first email account.

Click on the Go Back button, and you will see your new address listed, along with a list of actions that you may perform on that account. You can change your password, change the mail quota, Delete the account entirely or even access webmail here. You can also configure an email client (Outlook, Outlook Express, Thunderbird, etc.).

After creating your first account, repeat for as many accounts as your plan allows. Remember to record the passwords somewhere safe so that you will be able to access the email for reading later. When you are done, click on the home icon in the upper left corner to return to your cPanel. This is the end of the tutorial. As always, if using a public computer, remember to close your cPanel by clicking on Logout rather than just closing the browser window.

Domain & Web Hosting FAQ

Q: What Are Domain Names and How Do They Work?

A: Every website on the Internet can be located by its IP address. The IP address is a unique set of numbers, assigned to every computer that has access to the Internet. Our hosting servers all have IP addresses, which you will be included in your welcome email. Anyone looking for your website can enter those numbers in the address bar of their browser, and they will find your website. So, are you going to tell people to look for you on the Internet by just entering 162.86.47.128? (Just an example.) Will anyone remember that?

This is where the idea of Domain Names came about. Instead of having to enter a bunch of numbers, we can now assign a name to those numbers. Domain names can contain letters, numbers and hyphens. They can be hundreds of characters in length, but the shorter the domain name, the better. You can also have more than one domain name pointing at the same website.

A domain name is an easy to remember address that can be translated by domain name servers into server IP addresses. In order for your computer to figure out what IP address to use for a domain name, it has to connect with a name server, which is also called a DNS server. That server connects with another, which connects with another, and so on, until a server is found that knows the correct IP address for the domain name. When you purchase a domain name, you make sure the settings show that all requests for an IP address for that domain name are directed to our hosting name servers. The settings will be in the welcome email you receive when you purchase a hosting account with us.

Q: How Do I Choose a Domain Name?

A: One of the first things to think about when choosing a domain name is even though they can be hundred of characters in length, the shorter the better. Domain names can contain letters, numbers, and hyphens. You should avoid using hyphens if possible, because sometimes they make it hard to communicate your address to other people, and an easy understanding is very important. One drawback to shorter is that a lot of the shorter names are already taken, so your first choice may already be in use. You may have to add to it, or make some small changes to find a short name that is available.

You will also need to decide what top-level domain (TLD) or domain extension to use for your domain. There are many choices, such as .com, .net, .org, and so on. Recently, ICANN (Internet Corporation for Assigned Names and Numbers) who oversees all of this added several new TLD's, like .biz, and .museum. The TLD

doesn't matter much anymore, so you can use whichever sounds best and is available. If the .com of your choice is taken, maybe the .net version is available.

When selecting your domain, if you are operating a business website, you want it to reflect something about your products or type of business. For example, if your business is Joes Online Store, but your main product is blue widgets, your domain should be something to show that, like bluewidgets.net, or joesbluewidgets.com. People shopping for blue widgets will find you that way when they do a search. (It does take a long time and some effort to make yourself visible in a search unless your product is very unique and/or one-of-a-kind. That is called "search engine optimization") If you just use joesonlinestore.com as your domain, unless people know your name already you will be hard to find.

So, the key points of domain name selection are to keep it short, keep it simple and make it mean something relating to the purpose of your business. You can have more than one domain name pointing to the same website, in fact this may help improve your search engine rankings. This concludes the tutorial about how to choose a domain name.

Q: What is an IP Address...Do I need a Dedicated IP?

A: When you signed up for services from our hosting company, you were given an IP address to use until your domain name propagated. That IP address is how computers from all around the world will find your website, identifying it by the numbers. Every server is running a domain name server (DNS) at all times, which works like a switchboard for all the incoming requests for websites. The server can identify your site based on the IP numbers, and will then fetch it for the browser requesting it. The DNS server is responsible for informing all the other computers on the Internet about your website address and domain name. It keeps track of which domain names correspond to which IP addresses.

The IP address you were given is probably a shared one. You will usually share one with many other domain names. The important thing is that you have an IP address assigned to your domain, and that all the right nameservers know what it is. You can also purchase a dedicated IP Address from us, and that will be your address alone. But do you need a dedicated IP? Most websites don't. The most common reason that a website would need a dedicated IP is if it requires an SSL certificate for operating secure connections. Usually these are necessary if you are operating a business that processes transactions over the Internet. Any eCommerce site should have an SSL Certificate, and therefore would require a dedicated IP.

Q: What is a Control Panel?

A: What is the control panel? The control panel is a vital part of any web hosting account. Without some sort of control panel, you would not be able to do very much. The control panel is where you perform actions on your website, such as creating email accounts, creating databases, setting up security, and many other things. You need some sort of panel, even a basic one. Among the most widely used web hosting panels are cPanel, Plesk, and DirectAdmin. Some control panels only run on Linux, some are meant for Windows, and some will work with both types of operating systems.

One Important Note: Just because your computer at home is running Windows, it doesn't mean that you need to find a Windows hosting account. You only need a Windows account if your website requires features that only work on Windows. Otherwise, a Linux account will work just as well, and with very few differences. Most Windows accounts cost a little more because of the license costs.

Q: What is Web Hosting?

A: What is Web Hosting? It is a very important part of the way the Internet works today. To most people, the Internet seems to just work all by itself, but many website owners have come to learn that is not the case at all.

A web hosting service is a type of service provided by thousands of companies that allows individuals and organizations to make their own websites accessible on the World Wide Web, by way of computer servers that are connected to the Internet 24/7. Web hosts are companies that provide space on a computer system called a server they own or lease for use by their clients, and which are maintained in entire buildings called datacenters. These datacenters are climate controlled, as well quality and security controlled.

Web hosting give you access to the servers, via the Internet. With that access, you can upload your website to the server. Once it is configured properly, computers around the world will quickly know exactly where to find your website.

There are many different types of web hosting providers, but you have chosen our hosting company based on your own particular needs. Most clients are just starting out, and are enjoying our popular shared hosting plan. This means you are sharing a server with many other clients websites, but you are still getting the quality and reliability for the cheapest cost.

Q: What are Web Servers and are they necessary?

A: Web Servers are powerful computers that have extremely large hard drives, or an array of hard drives, that have been set up by a hosting company, usually in a facility called a datacenter. A web server's only purpose is to store websites until someone wants to visit them, and then to quickly respond to the visitor's browser with the site's contents.

A server should be able to respond to at least several dozen requests at a time, if not hundreds. It depends on many factors, including server hardware and how popular the sites are. But even the most expensive server hardware isn't going to be very useful without the software to actually get things done. The key software programs of a web server are also themselves called servers, or daemons.

Most servers used for web hosting have at least four kinds of software running at all times:

- 1) An HTTP or web server to provide the websites
- 2) An FTP server for uploading files
- 3) An email server or two
- 4) A database server for storing information essential to the operation of a website)

Why can't you just run your website from your computer at home? There are several very good reasons why...Most ISP's specifically disallow people from running any type of web-related server on their networks. Doing so can get your Internet account terminated. Your upload and download speed would be very slow compared to what is offered by hosting companies. Now factor in the cost of electricity and failed parts, and upkeep for running it 24/7, and it is no longer financially good sense.

Q: What is a Favicon, and How Do I Create One?

A: A favicon (short for favorites icon), is also known as a shortcut icon, bookmark icon, URL icon, or a website icon. This tutorial will teach you how to make your own favicon.

A favicon is simply a 16 x 16 or 32 x 32 pixel square icon associated with a particular website or webpage. It is usually displayed to the left of the website URL in the browser address bar.

You need to start with a square image. When you have the image you want, name it favicon.ico. Now you need to use an FTP client and upload it to your document root directory. This is important, so if you don't know what your document root directory is, ask your hosting provider.

Now just add a little html code to your web pages so the the favicon will show up! It goes in the head section, and looks like this...

This can be before or after the title tags. Click on save, and now you have a favicon of your own!

Q: Difference between gigabyte, megabyte, or GB and MB?

A: The bit is the smallest unit of measurement on a computer. There is almost always eight bits in one byte. Very often these two terms are confused with each other. To make it even more confusing, the abbreviation for bit is a lowercase b, while byte is abbreviated with an uppercase B.

Most of the time, a kilobyte refers to 1024 bytes. A megabyte is 1024 kilobytes, and a gigabyte is 1024 megabytes. The next level would be terabytes, or 1024 gigabytes, but hard drives really haven't gotten past that at this point in time.

However, when you are talking about the speed of an internet connection, it is almost always going to be referred to in bits, whether it is kilobits (Kb), megabits (Mb), or gigabits (Gb). So, if the speed of a connection is referred to in megabits, for example, it would be megabits per second, or Mbps. That means a 100 Mbps connection can transfer 100 megabits every second, which equals about 12.5 megabytes per second.

Managing Files & Backups FAQ

Q: How To Backup Your Web site

A: On the main page of your cPanel, scroll down to the section called Files. Click on the Backup icon. This will take you to the main backup screen, where you can backup and/or restore the files in your hosting account.

There is a header called Systems Backups, and it will show you how often your account is being backed up by the server it is on. These are automatic backups, and could be daily, weekly, or monthly, or any combination of these - check with us to see how often we do backups. By clicking on any of these buttons, you can download a copy of these backups to your local computer.

If you scroll down on the main page, you will find the manual backup section. There are several ways to backup your files, depending on which files you want to backup. You can perform a backup of the home directory, or the backup of a MySQL Database, or you can backup only files in specific subdomains or filters.

You can also perform a Download/Generate Full Backup in this section. Click the button with this command on it. This will take you to a Full Backup Screen, that lists available backups for download. From the drop down box, set your back up destination. You may choose from Remote FTP Server, Remote FTP Server (Passive mode transfer) or Secure Copy. In the next box, enter the email address where you want a complete report of this backup to be sent. Fill in the other boxes as requested, and click the Generate Backup button. This will send you to a verification screen, to confirm that the backup is in progress, and that you will receive an email upon completion.

To Backup a Home Directory to your computer, Click on Home Directory in the Manual Downloads section. A File Download box will appear. Click OK. That will successfully backup the home directory to your local computer.

To Restore the Home Directory Backup, Click on the Browse button next to the box marked Restore a Home Directory Backup in the Manual Download Section. This will open a File Upload box. Locate and select the backup file you wish to restore. Click the Open button. This will take you back to the backup main page. Click the Upload button. A screen will then open showing files are being restored.

This works the same for the other options in the manual section. You can now click the HOME link in the upper left corner and return to your cPanel main page. This is the end of the tutorial. You now know how to use the Backup utility, and can manually backup your files as often as you desire.

You can now exit cPanel by closing your browser, or by using the Logout button in the upper right corner. Remember, if you are using a public computer, ALWAYS Logout of cPanel before closing due to security reasons.

Q: Hidden Files

A: In computing, a hidden file or hidden directory(folder) on a computer is a folder or file which a user cannot see by default. Hidden directories most often serve to hide important operating system-related files and user preferences. Sometimes, they are used on shared computers to store information that the user doesn't want anyone else viewing. However, malicious programs can also use the "hidden" function to hide their presence from unaware users. Hidden file names start with a period/full stop character in Unix-like operating systems - some people refer to them as dotfiles. (for example: /home/user/.config)

To view the hidden files in Windows, Open Folder Options by clicking the Start button , clicking Control Panel, clicking Appearance and Personalization, and then clicking Folder Options. Click the View tab. Under Advanced settings, click Show hidden files and folders, and then click OK. If you do open your hidden files, remember to be very careful. Most are important operating system files, and you must take care not to alter or erase them, unless you are an experienced programmer.

Q: How To Use Web Disk In CPanel?

A: Web disk allows you to drag and drop files easily from your computer to your hosting account. It is just as if your account was part of your home computer. You can also navigate through the files in your hosting account, just as you do the files on your local computer. Scroll down to the Files section on the main page of your cPanel, and click on the Web Disk icon. This will take you to the Web Disk Accounts Main Page.

You will find a section called Create Web Disk Account. In the first box enter the username you want to use for login. If you have more than one domain, such as a parked domain or an add-on domain, make sure you use the drop-down menu to select the correct domain to create the web disk account on. Enter a password, then re-enter it to verify it is correct, then click the Create button. This will take you to the confirmation screen to verify that you have successfully setup a new Web Disk account. Click the Go Back link, and you will find your new account listed in the Web Disk Account Manager.

The Manager has a button called Access Web Disk. Click that button for your new account. The page that opens will give you the choice of three operating systems. You need to choose the one that you'll use to view Web Disk.

Main headings are Apple Operating Systems, Microsoft Operating Systems, and Linux/BSD Operating Systems. Each has a drop-down list of different systems. Find your system and follow the directions given in

the display box. There is a link to click to create a Desktop Shortcut, and a pop-up will open to start running the script. Click OK, and you are now able to launch Web Disk using the icon on your desktop.

Return to your main cPanel page by clicking on the HOME icon in the upper left corner. This is the end of the tutorial. You now know how to set up Web Disk, for the purpose of dragging and dropping files directly to and from your hosting account to your home computer.

Q: Using the Disk Usage Viewer

A: On the main page of your cPanel, scroll down to the section called Files. Click on the icon called Disk Space Usage. This will take you to the main page of the disk space usage page. On this page, you can see how much storage space is being used for each directory and sub-directory in your account. Scroll down to see the entire list of directories.

In the upper right corner of the list is a pull-down box called Actions. It can do many things, to show you different types of information. Some of the items in the Action box include Show Parent Directories, Show Top Level, Hide Small Files, and Show Files Sizes as Bytes.

Above the Left hand side are two buttons, Decrease Depth and Increase Depth. Increasing Depth will take you one more level down the path, for example: from "mail/abc123.com" to "mail/abc123.com/myname". Decreasing the depth will do the opposite.

As you can see, there are numerous ways to view the amount of storage space being used by your directories. This is useful in determining which directories are using the most storage space.

Return HOME by clicking on the icon in the upper left corner. This is the end of the tutorial. Once you know where most of your storage needs are, and where the most space is being used, you can determine whether you need to delete some files, or upgrade to a larger hosting package.

Q: Using File Manager

A: Scroll down to the section called Files, and click on the icon marked File Manager. This will take you to the File Manager interface. You can use the File Manager to upload files to your account, delete files, change file permissions, and several other functions.

On the left side you will find an expandable list of the folders in your account. On the right is a list of all the files and folders within the folder that you select on the left. The public_html folder is where your web site files (things like html pages, gif images, etc) must be placed.

To upload files, click on the folder icon (in the list on the left hand side) of the folder you want to place the upload into. Then click on the Upload icon in the list at the top of the page. This will take you to a page that

will show how much space is available for uploads, and give you space to select files to upload. Click on the Browse button, and look through the files on your computer for the one you wish to upload. When you find it, click on it, and click open. If you have more files to upload, repeat this. Otherwise, click on the Back sentence at the bottom of the page. This will take you back to the main File Manager page. It will verify that your page(s) have been uploaded successfully.

There are several things you can do with files in the File Manager. Some of them are Delete, Rename, View, Edit and Change Permissions. Each item will bring up a separate screen, that will give you directions to follow to perform the task. Now click the HOME icon in the upper left corner of the page to return to the main cPanel page. This ends the tutorial on the File Manager. It is a quick and easy way to access and manage your files without having to use an FTP program.

You can now exit cPanel by closing your browser, or by using the Logout button in the upper right corner. Remember, if you are using a public computer, ALWAYS Logout of cPanel before closing due to security reasons.

FTP Programs FAQ

Q: Configuring your web site in FileZilla

A: You should have FileZilla running on your computer, but not connected to a remote server. Start by opening the program. In the menu bar, select File. In the drop-down menu, select Site Manager. This will open the Site Manager window, and you need to click on the New Folder button.

This will show a new folder in the window on the left hand window, under My Sites. Enter a name for the new folder in the box. Now we need to configure a new site inside this new folder. Click on New Site, below the left hand window. This will create a new site below the folder we just created. Enter a name for the new site in the box. On the right hand side, there is a box called Host:. In this box, enter the name of the Host. Scroll down a little, and select Normal for logon type. Enter the Username in the box below the Logon type. The next box is for your Password. Then click Connect at the bottom of the window. That is it! You are now connected to the remote server. The login details have been saved for quicker connections in the future.

To disconnect from the server, click on Server in the top menu bar. Then click on Disconnect from the drop-down menu. This is the end of this tutorial. You should now know how to configure a web site in the FTP program FileZilla, in order to establish an FTP connection.

Q: Uploading and managing your files and folders using FileZilla

A: The FileZilla main screen is divided into three panels. The top panel is a running record of every command and the response of the server. It allows you to verify that any action you are performing has been completed successfully. Below that are two screens. The left screen is your local site. The right screen is your remote host, or your web site.

Let's look at how to upload, or transfer, a file to a remote server. In the left hand window (which is your local site), under the list called Filename, select a file you would like to upload. To select multiple files, press the CTRL (Control) key on your keyboard while making your selections. Right click the selected file(s). This will open a menu. Click on Upload. That is all there is to it. If you look in the right hand window (the remote server) you can see the files have successfully been uploaded.

To download a file(s) from the remote server to your local site, right click on the file you wish to download. When the menu opens, select Download. The file has now been downloaded, and can be seen in the list of files on the left hand side, in your local site. You now know how to transfer, or upload and download files from a remote server using the FTP program FileZilla.

Now let's learn how to manage files. To create a File in the Remote server, Right click anywhere in the remote server window. This will open a menu. Click on Create Directory. A window with a box will then pop up, asking you to enter a name for the new folder. Enter the name where it is highlighted. Then click OK. You have now created a new folder and it can be seen in the remote server window.

To rename a folder, in the remote server window, right click on the folder name. From the drop down menu, select Rename. Enter the new name of the folder in the highlighted box. The folder has now been renamed. To delete a folder, right click on the folder name. From the drop-down menu, select Delete. The folder is now deleted.

Now we will learn how to change file permissions. Find the file you wish to change permissions for, and right click on the file name in the remote server window. From the drop-down menu, select File Attributes. This will open a window called Change the attributes. It shows all the available attributes for each level of permission. (Read, Write, and Execute in Owner Permissions, Group Permissions, and Public or World Permissions) You will change them by clicking in the box of the ones you wish to change. When you are finished, click OK. That will take you back to the main screen.

Q: Configuring your web site in SmartFTP

A: SmartFTP is a desktop program that allows you to make a connection between a local host (your computer) and a remote server (your web site). This tutorial will teach you how to configure your web site in SmartFTP. For the purposes of this tutorial, you should have the SmartFTP program running, but not connect to a remote server at this time. The main screen is a large blank window at this time, with a panel below it. The panel is your Transfer Queue, where you can see all the actions as they are taking place and what their status is.

Let's start by Clicking on the Favorites in the menu in the top of the window. From the drop-down, click on Edit Favorites. The Favorites window will open, and you will now click the New Folder icon. It is in the Icon menu bar at the top. This will create a new folder in the list on the right hand side, and you should now enter a name for the new folder. The folder will now show up in the list on the left hand side, and you should select it. Now click the New Favorite Icon, from the Icon menu bar. It is located next to the new folder icon. This will show up in a list on the right hand side of the window. You now need to enter a new name for the new favorite, by clicking on it and typing in the name. Now we need to configure the properties of the new favorite we have just created.

With the new favorite selected, Click on the Properties Icon. It is located in the Icon menu bar, and looks like several pages stacked. After you click on this icon, it will open up the Properties window. You now need to fill in the details of your web site so that SmartFTP can connect to it via FTP. On the line marked HOST, type the FTP address of the web site. This could be <ftp.yourdomain.com>, with the yourdomain.com being your

actual domain name, or your IP address. However, if your domain name has not propagated yet, you will have to enter the web site IP address instead of the domain name. Now go to the Login section. Enter your FTP Username and Password in the correct boxes. Then click OK. You have now successfully configured your web site in SmartFTP by setting it up in Favorites. Close the Favorites box by clicking the x in the upper right corner.

To connect to your web site, Click on Favorites in the menu bar at the top of the page. From the Drop-down, click on the folder name it's located in, and then click on the web site name itself. You are now connected to your web site via FTP. To disconnect, find and click the disconnect icon. It is located above the scroll down for the folders, and it looks like a computer with a red x at the end of its power cord. This is the end of this tutorial. You know how to configure your web site in SmartFTP, for the purposes of establishing an FTP connection.

Q: Uploading and managing your files and folders using SmartFTP

A: We will assume that you already have SmartFTP on your computer, and that you have it running, but not connected yet to any remote server. If you don't have your web site configured in SmartFTP yet, and need some assistance, please see the tutorial "Configuring your web site in SmartFTP". The program opens with a large blank window.

Let's learn how to upload your files and folders from your local host, or your computer to the remote server. First you need to open a browser window. Click on File, in the upper left corner. From the drop-down menu, click on New Local Browser. This will open a browser window, and you will see folders and files located on your computer.

The next step is to establish a connection with the remote server. There are two methods. The first method: Under the menu bar at the top of the window, you will see a series of boxes. The first box is called Address. The second box is Login, and the third box is Password. Into the first box, you would enter the remote server name, into the second box enter your FTP username and into the third you enter your FTP password. You then click the Green Arrow button at the end of the Address box. This will connect you with the remote server. The second method is to select Favorites from the menu bar at the top of the window. Select the folder you created for your web site, and click on it. Then click on the address of the web site. You are now connected using this method.

You now have two open windows. The one the right is the local host, or your local computer. The window on the left is the remote server. The first step to uploading is to establish where on the remote server you are going to upload the files to. You should start by finding public/html, and begin navigating from there, until you find the location for the upload. Now you need to select the files in your local computer (the right window)

screen for upload. To select the file, simply highlight name. To upload multiple files, hold the CTRL key while selecting the files you want to upload. When you are done, click the Upload Icon between the screens to begin the upload. It is a Blue arrow. When the upload is complete, you will see the files listed in the remote server window.

To download a file(s), simply select the file(s) by highlighting them, the same as you did to upload files. Then when you are ready, click on the Download Icon, which is the Blue circle with an arrow between the windows, pointing at the right window. When the download is complete, you will see the files in the right hand window, where they have been successfully downloaded.

You will now learn how to manage files and folders in SmartFTP. The first thing you are going to do is create a new folder on the remote server. Begin by clicking on the New Folder icon, which is located above the left hand window, and looks like an open folder. This will create a new folder in the remote server screen, and you will now need to give it a name. Type a name in the box. To rename a folder, highlight the name. Click on the Rename Icon, which is above the remote server window, to the left of the big red x. Type the new name in the box by the folder, and it is now renamed. Files can also be renamed this way.

To delete a file or folder, make sure it is highlighted. Now click on the Delete Icon. This is above the remote server window, and is a big red x. SmartFTP will ask you to confirm that you wish to delete the item, so click on the Yes. The folder or file is now deleted.

Now you are going to learn how to change the permissions of a file. First, select the file you wish to change the permissions on in the remote server window by highlighting it. Then click the Properties Icon, above the remote server window. It looks like a page, with a pencil in front of it. This will open the Properties window for the file you selected. To change the permissions, you can simply enter the new permissions value in the box, or you can check off the appropriate permission boxes from the list. When you are done changing permissions, click on OK. The permissions for the selected file have now been changed.

You can also view the contents of a file on the remote server without having to first download it to your computer. Select a file by highlighting it. Now click the View Icon, which is located above the remote server window. It looks like a page, with a green arrow pointing down. This will open your file for viewing, in a separate window. Close by clicking the x in the upper right corner.

To close the connection to the remote server, click the Disconnect Icon, which is above the remote server window. It looks like a computer with a red x on the cord. The SmartFTP program will ask you to confirm you want to close the Remote Browser. Click on the Yes. You are now disconnected.

Security FAQ

Q: How to Password Protect a Directory

A: Password protecting a directory will allow you to require a username and password to access a folder or folders from the web. This tutorial will assume that you are logged into your cPanel. If you are having trouble doing that, please see the tutorial named "How to Login to cPanel".

On your main cPanel page, scroll down to the section called Security. Click on the icon named Password Protect Directories. This will open a screen with your folders listed. Open your folders until you find the directory that you wish to protect. Select the directory by clicking on its name.

This will open a new screen that will allow you to set permissions for your directory. Make sure the correct directory is listed at the top of the page. Under Security Settings, check the box to password protect this directory.

On the next line, enter a name for this protected directory in the box. This name should be something to help you identify the purpose of the directory, such as Members Ideas, or Friends Photos. Click the Save button.

You are now taken to a verification screen, showing that the directory is protected, and allows access only to authorized users. It now requires a password to enter it by way of a browser. So we now need to create at least one user, and assign them a password to access the directory. Click the GO BACK link.

Under Create User, enter a User name. Enter a password, and re-enter the password. Then click the Add/Modify authorized user button. This takes you to the verification screen to confirm that the directory now has one user who has access to it. Repeat this process for each additional user you want to grant access to. Click the GO BACK link, and you can see the authorized user listed in the box.

You can return to this screen at any time to modify existing users passwords, add more users, or delete users.

When listed, your directory will now have a lock icon next to it, to indicate that it is password protected.

Q: How To Use The IP Deny Manager

A: IP Deny Manager block access to your web site from a specific IP address or IP address range.

On the cPanel main page, scroll down to the Security section. Click the IP Deny Manager icon. This takes you to the IP Deny Manager screen. In the section called Add an IP to Deny: Enter the IP address you wish to block in the first box. Click the Add button, and it will take you to the verification page. You have successfully blocked anyone from that IP from accessing your web site. Click the Go Back link.

Next on the page you will see a list of Current IP Addresses being blocked. At the end of each IP is a button to click if you wish to remove them from the blocked list. After clicking remove, click Yes to confirm, and the IP will no longer be blocked from your web site.

Click on the HOME button in the upper left corner to return to the main cPanel page. This is the end of the tutorial.

You now know how to block and unblock on IP address from visiting your web site.

You can now exit cPanel by closing your browser, or by using the Logout button in the upper right corner. Remember, if you are using a public computer, ALWAYS Logout of cPanel before closing due to security reasons.

Q: Using Hotlink Protection

A: Hotlink Protection prevents other web sites from directly linking to certain files (typically images) that are on your web site. This tutorial will assume that you are logged into your cPanel. If you are having trouble doing that, please see the tutorial named "How to Login to cPanel".

The purpose of Hotlink Protection is so that people can't link directly to images within your web site. You want to prevent this especially if you have copyrighted images, or simply to save on your bandwidth usage. By directly linking to your site, they are stealing your bandwidth.

On the main page of your cPanel, scroll down to the section called Security, and click on the icon named Hotlink Protection. On the Hotlink Protection screen, make sure all your own sites are listed in the "URLs to allow access" box, so you are able to hotlink with your own images.

In the next box, list all the extensions, or file types you want protected. For example, you might list .jpg,.jpeg,.gif,.png,.bmp, and so forth, all separated by commas.

In the next box enter a URL you want to redirect to, for anyone who tries to hotlink to your files and/or images. This could be something like your homepage, or an error page.

Next, if you want to enable someone to manually enter the URL of a protected file, check the allow direct requests box. Then click the Submit button.

This will take you to the confirmation screen, which will show you which web sites you have allowed to Hotlink, and the protected extensions.

To disable Hotlink Protection, simply click the Disable button. Click the HOME button in the upper left corner, to return to the main cPanel page. This ends the tutorial on Hotlink Protection. You now know how to add and disable the protection, and you can return here to add or remove file types to the protected list at any time.

You can now exit cPanel by closing your browser, or by using the Logout button in the upper right corner. Remember, if you are using a public computer, ALWAYS Logout of cPanel before closing due to security reasons.