

KEY TO WEB DESIGNING

HTML 5 AND CSS TUTORIAL GUIDE

**Welcome to the World Web Designer's guide
Am going to take you through HTML 5 and CSS**

Objectives.

By the end of this workshop, you will be able to:

- ❖ Use a text editor to author an HTML 5 document.
- ❖ Be able to use basic tags to denote paragraphs, emphasis or special type.
- ❖ Create hyperlinks to other documents.
- ❖ Create an email link.
- ❖ Add images to your document.
- ❖ Use a table for layout.
- ❖ Apply colors to your HTML 5 document.

INTRODUCTION.

WELCOME TO KEY TO WEB DESIGNING HTML 5 AND CSS TUTORIAL GUIDE.

Becoming a web designer is just a matter of going through a few steps.

First you have to learn HTML 5, then CSS, JAVA Script, PHP, and SQL.

In this book am only covering HTML 5 and CSS. HTML 5 is used to create a frame of a webpage, then we style it with CSS, functions are added to it by Java Script lastly if we want to store information in it, SQL applies.

NOTE: I don't recommend copying and pasting codes from this book to any text editor because some codes having quotation marks may not work due to the arrangement of the marks, you have just to read and understand because I explain each and every thing here.

WEB DESIGNING STEPS.

Remember: HTML 5 just builds the frame of a website.

CSS styles the frame to make it look good and attractive.

JAVA Script adds functions to the frame.

PHP adds communication to the input forms and other components available to in the frame

SQL (Structured Query Language) stores information inside the frame.

What is HTML5?

HTML5 will be the new standard for HTML, XHTML, and the HTML DOM.

The previous version of HTML came in 1999. The web has changed a lot since then.

HTML5 is still a work in progress. However, most modern browsers have some HTML5 support.

How Did HTML5 Get Started?

HTML5 is a cooperation between the World Wide Web Consortium (W3C) and the Web Hypertext Application Technology Working Group (WHATWG).

WHATWG was working with web forms and applications, and W3C was working with XHTML 2.0. In 2006, they decided to cooperate and create a new version of HTML.

Some rules for HTML5 were established:

- New features should be based on HTML, CSS, DOM, and JavaScript
 - Reduce the need for external plugins (like Flash)
 - Better error handling
 - More markup to replace scripting
 - HTML5 should be device independent
 - The development process should be visible to the public
-

New Features

Some of the most interesting new features in HTML5:

- The canvas element for drawing
- The video and audio elements for media playback

- Better support for local offline storage
 - New content specific elements, like article, footer, header, nav, section
 - New form controls, like calendar, date, time, email, url, search
-

Browser Support

HTML5 is not yet an official standard, and no browsers has full HTML5 support.

But all major browsers (Safari, Chrome, Firefox, Opera, Internet Explorer) continues to add new HTML5 features to their latest versions.

GETTING STARTED.

You will need a text editor, such as Notepad and an Internet browser, such as Internet Explorer, Fire Fox or Chrome. But I recommend you to have Fire Fox or Chrome because they both support almost all features of HTML 5.

What is Notepad and where do I get it?

Answer: Notepad is the default Windows text editor. On most Windows systems, click your Start button and choose Programs Then Accessories. It should be a little blue notebook.

Mac Users: SimpleText is the default text editor on the Mac. In OSX use Text Edit and change the following preferences: Select (in the preferences window) Plain text instead of Rich text and then select Ignore rich text commands in HTML 5 files. This is very important because if you don't do this HTML 5 attributes probably won't work. One thing you should avoid using is a word processor (like Microsoft Word) for authoring your HTML 5 documents.

HTML 5 DOCUMENT.

HTML 5 documents begin with the <html></HTML 5> tag this tag alerts the server that this is an HTML 5 document.

Inside the <html></HTML 5> tags we have the <head></head> tag. This were the <title></title> tag which defines the title of the webpage is placed, styling of the webpage using CSS is also done in the <head></head> tag plus the Link tags to external documents as we shall see later in this book and the meta information.

Again inside the `<html></HTML 5>` tag we have the `<header></header>` tag. This contains the title of the website or the Logo. After the header tag we have the `<body></body>` tag. This contains information that is supposed to be read by the web users. Lastly the `<footer></footer>` tag this contains the Location, email address, copy right rules and contacts of the web owners.

NOTE: In this book somewhere when describing some tags, I will be using only the body tag where I will be placing other tags. But this is not recommended I will be using this method just to be precise.

Tags like `<header></header>` and `<footer></footer>` will be used later in this book as you advance.

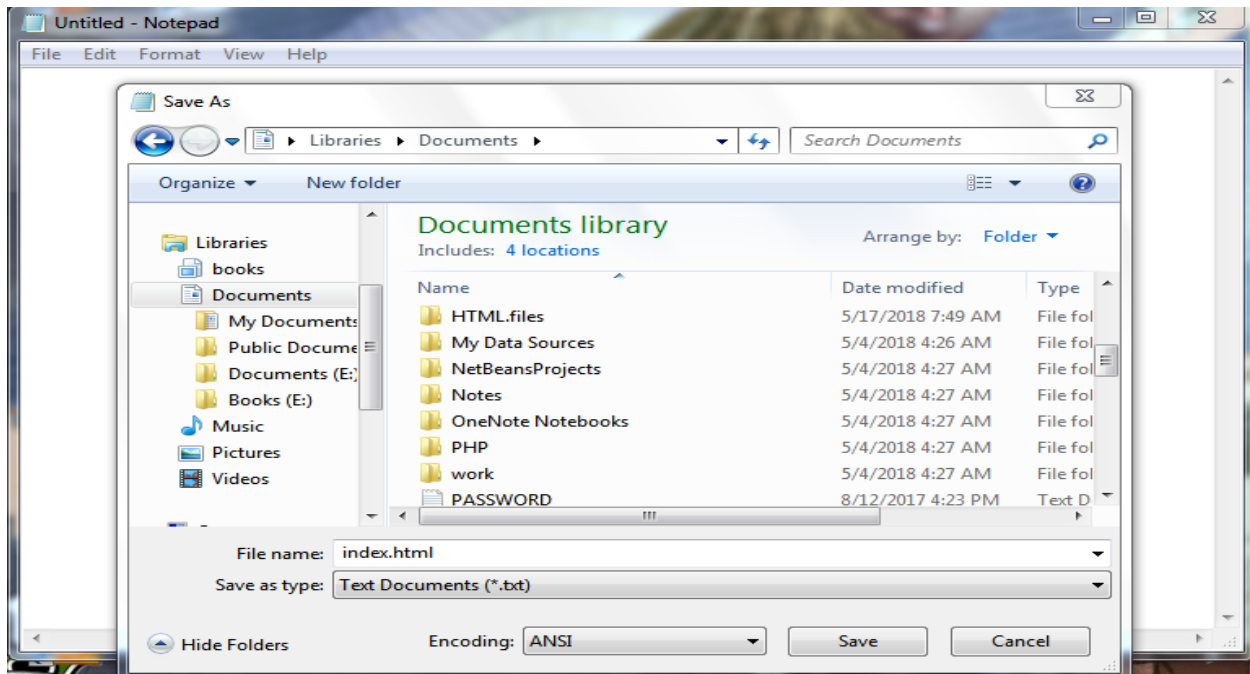
SAVING AND RE-OPENING HTML 5 DOCUMENTS.

After finding Notepad as instructed above. You need to learn how to save and re-open the saved document. Let me begin with

saving.

Move the mouse to the top left corner of the Notepad window and click on the “File” menu on the menu bar. Select the “Save as” menu item. Select the folder where you want your HTML 5 document to be saved and then fill the “File name:” text field with the name you want to give your HTML 5 document then add “.html” extension on the name e.g.

In the example below I have named my HTML 5 document “index”



Re-opening HTML 5 Documents.

After saving your document to a specified folder, it will appear like this in that very folder.



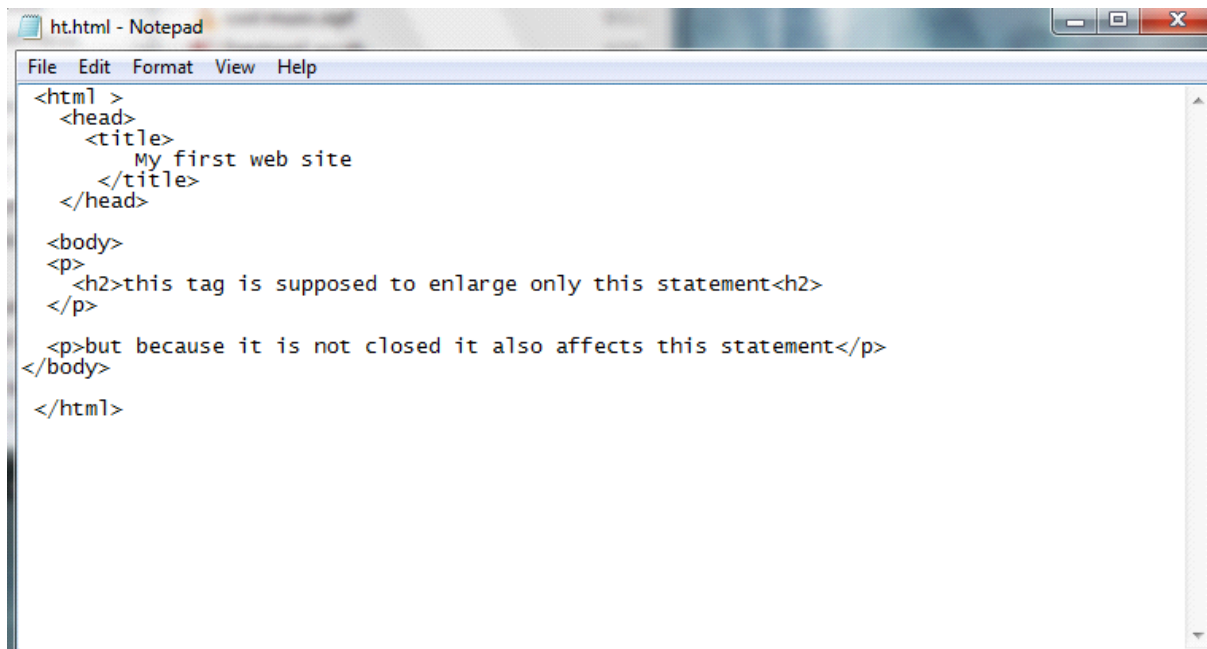
Now to re-open it in Notepad, Right click on the document and select the “Open with” option and then click on the small icon of Notepad.

COMPOSITIONS OF HTML 5 TAGS.

HTML 5 tags are made up of three symbols and the name inside the symbols. Symbols include:
< / >

Every HTML 5 statement is composed of the *opening* and the *closing* tag respectively i.e. <p> this is my first web page </p>.

If a tag is not closed by the </> symbol, then the defined tag is likely to affect the all HTML 5 document example.



```
<html >
<head>
  <title>
    My first web site
  </title>
</head>

<body>
<p>
  <h2>this tag is supposed to enlarge only this statement<h2>
</p>

<p>but because it is not closed it also affects this statement</p>
</body>
</html>
```

HTML 5 has some tags which cause no effect even if they are not closed like:

- Break line tag
.
- Image tag .

We will talk more about these tags later in this chapter

NOTE:

- HTML 5 tags can be nested.
Nesting means defining more than one tag in a statement.
The order of closing the tags does not matter but they must be closed with the </> symbol
- HTML 5 tags are not case sensitive.

The tags can be of upper case or lower case.

Try out this in your Text editor (Note Pad)

Well closed tags. Organized order of closing tags	Poorly closed tags Disorganized order of closing tags
<html> <head> <title> My first web site </title> </head>	<html> <head> <title> My first web site </title> </head>

<pre><body style="background-color: green;"> <p><i><h2>This tag is nested with three tags at the same time</h2></i></p> <p>I want to become the most famous web designer</p> </body> </html></pre>	<pre><body style="background-color: red;"> <p><i><h2>This tag is nested with three tags at the same time</p></h2></i> <p>I want to become the most famous web designer</p> </body> </html></pre>
---	---

The above codes give the same result.

THE <body></body> tag

The body tag contains information that is to be put in the body part (middle) of the webpage. Most of the formatting is done in the within the body tag. The <body> tag also can be used to give background color to the webpage or an image can be used as background.

NOTE: Images will be explained later in this book. And so will the (style attribute)

After opening your text editor as instructed in prerequisites **A:** above,

Try out the following indicating the format of an HTML 5 document Format;

```
<html>
<head>
<title>
My first web site
</title>
</head>
<body style="background-color: blue;">
<p><h2>My name is (insert your name) </h2></p>
<p>I want to become the most famous web designer</p>
</body>
</html>
```

FORMATTING TAGS

Formatting tags are tags used to edit body texts, text heading and paragraph text.

Formatting tags include;

Heading formatting tags :<h1> <h2> <h3> <h4> <h5> <h6>

These are arranged beginning with the <h1> which is the largest font size to <h6> which is the smallest. E.g.

They can be used to change the font size of texts.

```
<body>
<h1>formatting tag</h1>
<h2> formatting tag </h2>
<h3> formatting tag </h3>
<h4> formatting tag </h4>
<h5> formatting tag </h5>
<h6> formatting tag </h6>
</body>
```

Other tags include;

HTML 5 Text Formatting Tags

Tag	Description
<u></u>	Defines bold text
<u><big></u>	Defines big text
<u></u>	Defines emphasized text
<u><i></u>	Defines italic text
<u><small></u>	Defines small text
<u></u>	Defines strong text
<u><sub></u>	Defines subscripted text
<u><sup></u>	Defines superscripted text
<u><ins></u>	Defines inserted text
<u></u>	Defines deleted text

HTML 5 "Computer Output" Tags

Tag	Description
<u><attribute></u>	Defines computer attribute text
<u><kbd></u>	Defines keyboard text
<u><samp></u>	Defines sample computer attribute
<u><tt></u>	Defines teletype text
<u><var></u>	Defines a variable
<u><pre></u>	Defines preformatted text

HTML 5 Citations, Quotations, and Definition Tags

Tag	Description
-----	-------------

<u><abbr></u>	Defines an abbreviation
<u><acronym></u>	Defines an acronym
<u><address></u>	Defines contact information for the author/owner of a document
<u><bdo dir="rtl"></u>	Defines the text direction
<u><blockquote></u>	Defines a long quotation
<u><q></u>	Defines a short quotation
<u><cite></u>	Defines a citation
<u><dfn></u>	Defines a definition term

NOTE: All the above tags must be closed with closing tags

RESPONSIVENESS.

In HTML responsive refers to re-building. A responsive website fits on every device with all information displayed.

Responsiveness is created by the meta tag as shown in the following code.

REMEMBER: meta tags are only found in the head tag.

```
<head>
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>
```

The above code re-sizes the website to fit on every device whether phones or tablets.

THE DIV TAG.

Definition and usage.

The <div> tag defines a division or a section in an HTML 5 document.

The <div> tag is often used to group block-elements to format them with styles. e.g.

```
<div style="color:red">
  <h3>This is a header</h3>
  <p>This is a paragraph.</p>
</div>
```

COMMENTS.

Comments in HTML 5 are used as reminders or sometimes to mark where a web designer has ended incases they are designing a website that is to carry out more functions.

```
<!--This is a comment in HTML 5. Comments are not displayed in the browser-->
```

```
/* This is a comment in CSS */
```

PARAGRAPHS.

A Paragraph in HTML 5 is used to begin a new sentence as used in written stories and poems. It is represented by <p></p> tags e.g.

```
<body>
```

```
<p>This is my first web page .am still learning how to use paragraphs. this is experiment 1</p>
```

```
<p> This is my first web page .am still learning how to use paragraphs. this is experiment 2</p>
```

```
</body>
```

Inside paragraphs we can use all tags in order to format our text.

The most important tag is the
 which is used to break a sentence or to create sentence on a new line e.g.

```
<body>
```

```
<p>This is my first web page. <br/>Am still learning how to use paragraphs. <br/> This is experiment 1</p>
```

```
<p> This is my first web page. <br/>am still learning how to use paragraphs. <br/> This is experiment 2</p>
```

```
</body>
```

HORIZONTAL LINES and UNDERLINING A TEXT

Horizontal line is represented by the <hr></hr>. the horizontal line can be given a specified width and it can be aligned in the center, left and right as shown below

NOTE: It's better to use percentages (%) when specifying the width of the horizontal line.

The percentage value can be any integer less than 100.

```
<body>
```

```
<p>This is a horizontal line which is 50% in width and it is aligned in the left position</p>
```

```
<hr align="left" style="width: 50%;" </hr>
```

```
<p>This is a horizontal line which is 50% in width and it is aligned in the right position</p>
```

```
<hr align="right" style="width: 50%;"> </hr>
```

```
<p>This is a horizontal line which is 50% in width and it is aligned in the center position</p>  
<hr align="center" style="width: 50%;"> </hr>
```

```
</body>
```

Underlining a text.

To underline a text, we use the <u></u> tag where by the “u” stands for underline

```
<body>
```

```
<p> <u> This is my first web page. </u> <br/>am still learning how to use paragraphs. <br/> This  
is experiment 2</p>
```

```
</body>
```

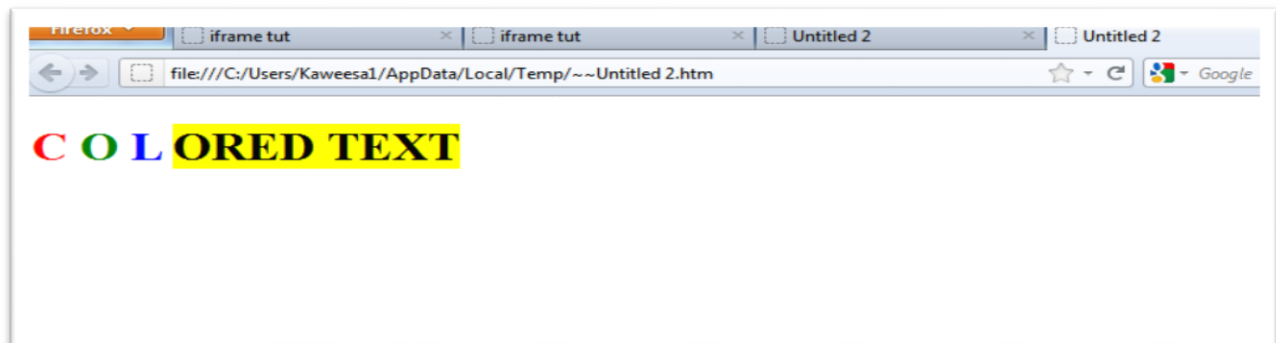
THE SPAN TAG.

The span tag can be used to create a multi-colored text or to style a particular text without affecting the entire text. e.g.

```
<body>
```

```
<h1> <span style="color:red;"> C</span><span style="color:green;"> O</span> <span  
style="color:blue;"> L</span> <span style="background-color:yellow;">ORED TEXT</span>  
</h1>
```

```
</body>
```



IMAGES.

Images are very common in almost every website.

The images are added to WebPages using the

```
 tag
```

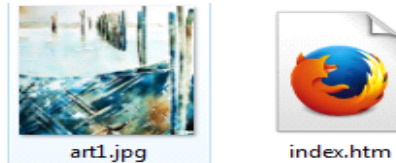
The width and height can be either in “%” or pixel count.

The 'src' attribute locates the image with its format. When inserting an image, we begin with the name of the image and the it's format. The formats include;

- .jpg (Not jpeg)
- .png
- .gif

Example

NOTE: To avoid confusions when inserting images in a webpage it's better to first put the images in the same folder where the webpage is. my webpage is called index.html and I have one image in the same folder.



If am to insert this image in my webpage am going to write this attribute.

By pixel count.

```

```

By percentage.

```

```

In case the web page user is not able to view the image, the alt attribute is displayed instead. Images can be used in the body tag as background as shown below.

```
<body background="art1.jpg">  
</body>
```

Images can also be aligned as shown below

```

```

Basic Notes - Useful Tips

Note: If an HTML 5 file contains ten images - eleven files are required to display the page right. Loading images take time, so my best advice is: Use images carefully.

Note: When a web page is loaded, it is the browser, at that moment, that actually gets the image from a web server and inserts it into the page. Therefore, make sure that the images actually stay in the same spot in relation to the web page, otherwise your visitors will get a broken link icon. The broken link icon is shown if the browser cannot find the image.


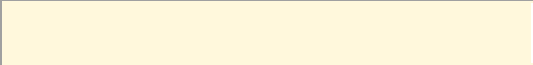

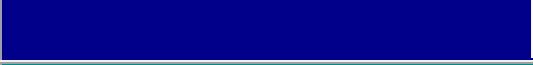






COLOR NAMES SUPPORTED BY ALL BROWSERS

147 color names are defined in the HTML and CSS color specification (17 standard colors plus 130 more). The table below lists them all, along with their hexadecimal values.



Tip: The 17 standard colors are: aqua, black, blue, fuchsia, gray, grey, green, lime, maroon, navy, olive, purple, red, silver, teal, white, and yellow.


Click on a color name (or a hex value) to view the color as the background-color along with different text colors:

Color Name	HEX	Color	Shades	Mix
AliceBlue	#F0F8FF		Shades	Mix
AntiqueWhite	#FAEBD7		Shades	Mix
Aqua	#00FFFF		Shades	Mix
Aquamarine	#7FFFD4		Shades	Mix
Azure	#F0FFFF		Shades	Mix
Beige	#F5F5DC		Shades	Mix
Bisque	#FFE4C4		Shades	Mix
Black	#000000		Shades	Mix
BlanchedAlmond	#FFEBCD		Shades	Mix
Blue	#0000FF		Shades	Mix
BlueViolet	#8A2BE2		Shades	Mix
Brown	#A52A2A		Shades	Mix
BurlyWood	#DEB887		Shades	Mix
CadetBlue	#5F9EA0		Shades	Mix
Chartreuse	#7FFF00		Shades	Mix
Chocolate	#D2691E		Shades	Mix




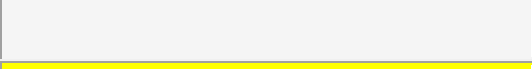


Coral	#FF7F50		Shades	Mix
CornflowerBlue	#6495ED		Shades	Mix
Cornsilk	#FFF8DC		Shades	Mix
Crimson	#DC143C		Shades	Mix
Cyan	#00FFFF		Shades	Mix
DarkBlue	#00008B		Shades	Mix
DarkCyan	#008B8B		Shades	Mix
DarkGoldenRod	#B8860B		Shades	Mix
DarkGray	#A9A9A9		Shades	Mix
DarkGrey	#A9A9A9		Shades	Mix
DarkGreen	#006400		Shades	Mix
DarkKhaki	#BDB76B		Shades	Mix
DarkMagenta	#8B008B		Shades	Mix
DarkOliveGreen	#556B2F		Shades	Mix
Darkorange	#FF8C00		Shades	Mix
DarkOrchid	#9932CC		Shades	Mix
DarkRed	#8B0000		Shades	Mix
DarkSalmon	#E9967A		Shades	Mix
DarkSeaGreen	#8FBC8F		Shades	Mix
DarkSlateBlue	#483D8B		Shades	Mix
DarkSlateGray	#2F4F4F		Shades	Mix
DarkSlateGrey	#2F4F4F		Shades	Mix
DarkTurquoise	#00CED1		Shades	Mix
DarkViolet	#9400D3		Shades	Mix
DeepPink	#FF1493		Shades	Mix

DeepSkyBlue	#00BFFF		Shades	Mix
DimGray	#696969		Shades	Mix
DimGrey	#696969		Shades	Mix
DodgerBlue	#1E90FF		Shades	Mix
FireBrick	#B22222		Shades	Mix
FloralWhite	#FFFAF0		Shades	Mix
ForestGreen	#228B22		Shades	Mix
Fuchsia	#FF00FF		Shades	Mix
Gainsboro	#DCDCDC		Shades	Mix
GhostWhite	#F8F8FF		Shades	Mix
Gold	#FFD700		Shades	Mix
GoldenRod	#DAA520		Shades	Mix
Gray	#808080		Shades	Mix
Grey	#808080		Shades	Mix
Green	#008000		Shades	Mix
GreenYellow	#ADFF2F		Shades	Mix
HoneyDew	#F0FFF0		Shades	Mix
HotPink	#FF69B4		Shades	Mix
IndianRed	#CD5C5C		Shades	Mix
Indigo	#4B0082		Shades	Mix
Ivory	#FFFFF0		Shades	Mix
Khaki	#F0E68C		Shades	Mix
Lavender	#E6E6FA		Shades	Mix
LavenderBlush	#FFF0F5		Shades	Mix
LawnGreen	#7CFC00		Shades	Mix

LemonChiffon	#FFFACD		Shades	Mix
LightBlue	#ADD8E6		Shades	Mix
LightCoral	#F08080		Shades	Mix
LightCyan	#E0FFFF		Shades	Mix
LightGoldenRodYellow	#FAFAD2		Shades	Mix
LightGray	#D3D3D3		Shades	Mix
LightGrey	#D3D3D3		Shades	Mix
LightGreen	#90EE90		Shades	Mix
LightPink	#FFB6C1		Shades	Mix
LightSalmon	#FFA07A		Shades	Mix
LightSeaGreen	#20B2AA		Shades	Mix
LightSkyBlue	#87CEFA		Shades	Mix
LightSlateGray	#778899		Shades	Mix
LightSlateGrey	#778899		Shades	Mix
LightSteelBlue	#B0C4DE		Shades	Mix
LightYellow	#FFFFE0		Shades	Mix
Lime	#00FF00		Shades	Mix
LimeGreen	#32CD32		Shades	Mix
Linen	#FAF0E6		Shades	Mix
Magenta	#FF00FF		Shades	Mix
Maroon	#800000		Shades	Mix
MediumAquaMarine	#66CDAA		Shades	Mix
MediumBlue	#0000CD		Shades	Mix
MediumOrchid	#BA55D3		Shades	Mix
MediumPurple	#9370D8		Shades	Mix

MediumSeaGreen	#3CB371		Shades	Mix
MediumSlateBlue	#7B68EE		Shades	Mix
MediumSpringGreen	#00FA9A		Shades	Mix
MediumTurquoise	#48D1CC		Shades	Mix
MediumVioletRed	#C71585		Shades	Mix
MidnightBlue	#191970		Shades	Mix
MintCream	#F5FFFA		Shades	Mix
MistyRose	#FFE4E1		Shades	Mix
Moccasin	#FFE4B5		Shades	Mix
NavajoWhite	#FFDEAD		Shades	Mix
Navy	#000080		Shades	Mix
OldLace	#FDF5E6		Shades	Mix
Olive	#808000		Shades	Mix
OliveDrab	#6B8E23		Shades	Mix
Orange	#FFA500		Shades	Mix
OrangeRed	#FF4500		Shades	Mix
Orchid	#DA70D6		Shades	Mix
PaleGoldenRod	#EEE8AA		Shades	Mix
PaleGreen	#98FB98		Shades	Mix
PaleTurquoise	#AFEEEE		Shades	Mix
PaleVioletRed	#D87093		Shades	Mix
PapayaWhip	#FFEFD5		Shades	Mix
PeachPuff	#FFDAB9		Shades	Mix
Peru	#CD853F		Shades	Mix
Pink	#FFC0CB		Shades	Mix

Plum	#DDA0DD		Shades	Mix
PowderBlue	#B0E0E6		Shades	Mix
Purple	#800080		Shades	Mix
Red	#FF0000		Shades	Mix
RosyBrown	#BC8F8F		Shades	Mix
RoyalBlue	#4169E1		Shades	Mix
SaddleBrown	#8B4513		Shades	Mix
Salmon	#FA8072		Shades	Mix
SandyBrown	#F4A460		Shades	Mix
SeaGreen	#2E8B57		Shades	Mix
SeaShell	#FFF5EE		Shades	Mix
Sienna	#A0522D		Shades	Mix
Silver	#C0C0C0		Shades	Mix
SkyBlue	#87CEEB		Shades	Mix
SlateBlue	#6A5ACD		Shades	Mix
SlateGray	#708090		Shades	Mix
SlateGrey	#708090		Shades	Mix
Snow	#FFFAFA		Shades	Mix
SpringGreen	#00FF7F		Shades	Mix
SteelBlue	#4682B4		Shades	Mix
Tan	#D2B48C		Shades	Mix
Teal	#008080		Shades	Mix
Thistle	#D8BFD8		Shades	Mix
Tomato	#FF6347		Shades	Mix
Turquoise	#40E0D0		Shades	Mix

Violet	#EE82EE		Shades	Mix
Wheat	#F5DEB3		Shades	Mix
White	#FFFFFF		Shades	Mix
WhiteSmoke	#F5F5F5		Shades	Mix
Yellow	#FFFF00		Shades	Mix
YellowGreen	#9ACD32		Shades	Mix

MARQUEE.

Many of us have ever watched movies up to their end. The words that are displayed at the end of the movie in an upward direction are in form of a marquee.

In HTML 5 a marquee is a tag or class that when created it makes webpage components to move in a particular direction. E.g. it has attributes like:

- ❖ direction.
This can be either up, down, left or right. This attribute changes the direction of the marquee.
- ❖ loop.
This attribute specifies how many times a marquee is displayed. its value is number with no units (px or %).
- ❖ behavior.
This specifies movements of a marquee. its values can be scroll, slide, or alternate
- ❖ width. (values in percentage)
- ❖ height. (values in percentage)

```
<marquee style="background-color:red;" direction="up" loop="2" behavior="alternate"
width="50%" height="50%">
<p>hello am a moving text</p>
<p> A marquee is making me slide across the webpage</p>
</marquee>
```

HYPERLINKS(LINKS)

Links in HTML 5 are used to jump from one page to another or to move from the bottom to the top of the webpage.

Links can be either words, images or buttons where by when you on click them they take you to anther webpage.

A link in HTML 5 is created by the <a>The name of the link goes here. tag.

In order to link to another page, we use the “href” attribute which contains the location of the webpage where you want to jump e.g.

Am using a group of words which when clicked will open another webpage

```
<a href = "index2.html">click me! </a>
```

An image as a link.

```
<a href="index2.html"></a>
```

.When you run and click on the image it will move you to a new webpage called index2.html

A button as a link.

Am going to use an input form to create a button link.

NOTE: Input forms will be covered later in this book.

```
<button onclick="location.href='nav.html'" type="button">click me</button>
```

The above <button></button> tags creates a button which is to link to another web page called “nav.html” using the “onclick” attribute which when clicked brings about the movement to another web page. The “type” attribute creates an input form of type button.

Mailto links;

Mailto links are used to open an email address with in the webpage

```
<a href="mailto:#">emailaddress@gmail.com</a>
```

NAVIGATION BAR.

A navigation bar is used mostly in the home page of the website. This is a horizontal bar containing links to different webpages. The <nav></nav> tag is the one used to create a navigation bar. the navigation bar is mainly put in the “header” and “footer” tag e.g.

```
<header>
```

```

    <nav style="background-color: greenyellow;">
    <a href="nav.html">HOME ||</a>
    <a href="job.html">CONTACTS ||</a>
    <a href="iframes.html">ABOUT</a>
    </nav>

</header>

```

NOTE: All the webpages you want to link to must be in the same folder for now.

STYLE TAG AND ATTRIBUTE.

STYLE ATTRIBUTE.

As I have been using the style attribute in the previous chapters. It is to used Edit the webpage in the following ways:

- Change the color of the text.
- Giving the text a background color.
- Float (align) the text in any position.
- Set specific margin distance.
- Set font size.
- Set font type.

It is used to edit the body contents in many other ways, i can't list them all. In this chapter we are going to only look at the listed items only.

changing color of the text.

```

<body>
  <p style="color:blue;"> am changing the color of this text</p>
</body>

```

Giving the text a background color.

```

<body>
<p style="background-color:red;">This text has a background color</p>
</body>

```

Float (align) the text in any position.

```

<body>
  <p style="float:right;">this can be either top, bottom, left, right or center alignment</p>
</body>

```

Set specific margin.

The margin is used to space the HTML 5 document from the boundary.

it is mostly used in the body and paragraph tags. You can specify the position where you want your margin to be placed by using the "margin-left, margin-right, margin-top, margin-bottom" attributes. OR you can just use the "margin" element which stands for all positions

```
<body style="margin-left:60px;">
  <p style="margin:45px;">I am 45px away from all boundaries</p>
</body>
```

Setting Font Size and Type(family).

```
<body>
  <p style="font-family: fantasy;">this is colored</p>
  <p style="font-size:35px;">This is a very large text</p>
</body>
```

NOTE: It can be added to any HTML 5 tag as described below.

-Always remember to add the ";" sign at the end of the assigned value.

-The style attribute can be defined more than one time(nested).

Tip: You can use some of the font names as used in applications like Microsoft Office or Adobe Cs.

-You can carry out research on the style attribute because it has a lot of functions that I have not talked about.

STYLE TAG (CSS STYLING).

As I have been using the style attribute, the style tag is also used to edit contents in HTML 5 tags.

CSS is used to style contents in tags, this is known as CSS styling.

CSS stands for Cascading Style Sheet.

For more information about CSS styling you can refer to CSS PDF guides because in this chapter am going to cover just a little about CSS styling.

As I told you in the beginning, the style tag is put in the header tag. When you want to style a tag you don't have to include the less than and greater than symbols instead you just write its name followed by the brackets { }.

Edits that I will commonly use in CSS styling.

<u>STYLE ATTRIBUTE.</u>	<u>VALUE.</u>	<u>FUNCTION.</u>
Color:	Red , black, blue (colors will be explained later)	Changing the color of the text in any tag.
text-align:	Left, right, center.	positioning the text.
font-size:	1px-100px(or more than 100px)	Defining font size
font-family:	Any font type	Defines font type
border:	Solid black 1px;(the color can be any type)	Defining border color and size for the border

border-radius:	1px-100px	curves the corners of any rectangular or square shaped object
background-color:	any type of color.	Defining background color
text-decoration:	overline and underline.	create a top or bottom line on the text.
text-transform:	UPPERCASE, lowercase or Capitalize	changes the text case or capitalizes each first letter.

In this case am styling the body tag. But as I said it can be any tag except the
 tag. You can also style more than one tag, this is commonly used when creating borders for the table and styling its contents as you shall see in the next chapter of TABLES.

NOTE: The semi colon necessary (;).

- More about CSS will be covered in the CSS styling book which is coming soon.

```
<html>
<head>

    <title>style</title>

    <style>
    body{
        border:solid black;
        color: greenyellow;
        font-size: 20px;
        font-family: Geneva, Arial, Helvetica, Sans-serif;
        background-color: blue;
        text-align: center;
        text-decoration: underline;
        text-transform: uppercase;
    }

    </style>
</head>

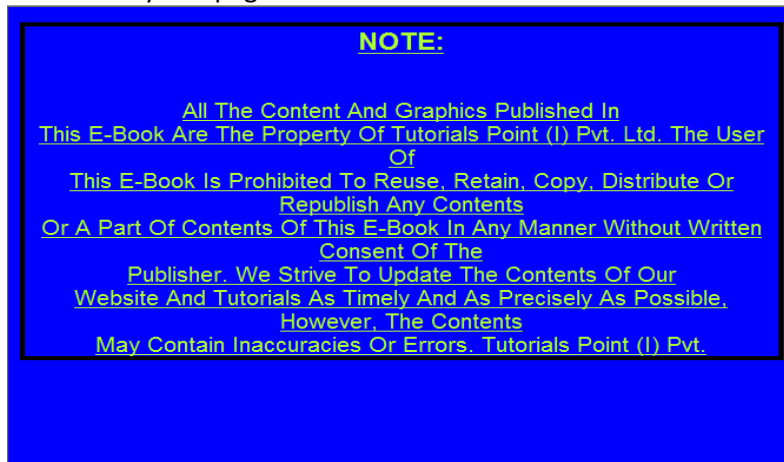
<body>

    <p style="color: red;"><h2>NOTE:</h2></p>
    <br>All the content and graphics published in <br>
    this e-book is the property of
    Tutorials Point (I) Pvt. Ltd. The user of <br>
    this e-book is prohibited to reuse, retain,
    copy, distribute or republish any contents<br>
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precisely as possible, however, the contents
may contain inaccuracies or errors.
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</body>
</html>

This how my webpage looks like.



NOTE: More about CSS styling will be covered in the next book of CSS style.

TABLES.

Tables are used to organize data in rows and columns. If you have some knowledge about Excel You can understand this better but if not, it's OK because am going to take you through Tables as used in HTML 5. The concept is still the same, data is organized in rows and columns as used in Excel.

A row is a horizontal. while a column is vertical

to create a Table in HTML 5 we use the <table></table> tag. This tag notifies the server that the user is trying to create a table.

Inside the <table></table> tag we have the <tr></tr> tag where "t" stands for table and "r" stands for row. This is used to create a new row where data is going to be put. And inside the <tr></tr> tag we have the <th></th> tag. This used to give each column a title as we are going to see later on in this chapter, in this case "h" stands for head.

And then the <td></td> tag, in this case "d" stands for data. This tag creates vertical or horizontal cells where data is to be put.

Summary of tables

<u>TAG</u>	<u>FUNCTION</u>
------------	-----------------

<code><tr></tr></code>	Creates a horizontal row
<code><th></th></code>	Creates a heading for the table
<code><td></td></code>	Used to input data in a table(Data is arranged in columns)
<code><table></table></code>	Alerts the server that a table is created

Organization of the table tags to create a table.

NOTE: Any type of data can be put in the table as long as it is well created table.

-Images can be part of data that can be put in the table.

-Tables can also be aligned to any position.

-The `<style></style>` tag will be explained in another CSS book. I have applied them to create borders to the table.

```

<html>
<head>
<title>
  tables
</title>
<style>
  table,tr,th,td{
    border:solid blue 1px;
  }
</style>
</head>
<body>
<table align="center">

<!--this is my first row -->
<tr>

  <th>
    Name:
  </th>
  <th>
    Age:
  </th>
  <th>
    Occupation:
  </th>
  <th>
    ID:
  </th>

</tr>

```

```

<!--this is my second row -->

<tr>

<td>
JONNY PAUL
</td>
<td>
35
</td>
<td>
WEB DESIGNER
</td>
<td>
001
</td>

</tr>

<tr>

<td>
EDDY KAY
</td>
<td>
20
</td>
<td>
ENGINEER
</td>
<td>
002
</td>

</tr>

<!--this is my third row -->

<tr>

<td>

</td>

```

```

        <td>
        
        </td>

        <td>
        
        </td>

        <td>
        
        </td>

    </tr>

</table>
</body>
</html>

```

LAY OUTS.

Tables and margins can be used to lay out components on a webpage.

Using tables.

When using table lay outs borders should not be included.

```

<table style="width:100%;">
    <tr>
        <td align="left"><h2>Hello</h2></td>
        <td align="right"><h2>Hello again</h2></td>
    </tr>

    <tr>
        <td align="center"><h2>Am using a table to lay out these texts </h2></td>
        <td align=""><h2>Hello again! am done</h2></td>
    </tr>
</table>

```

Using margins.

When using margins, a recommend using values in percentages because pixel count is a bit confusing and difficult.

```
<body>

<p style="margin-left:20%;">hello</p>
<p style="margin-left:40%;">now am using margins</p>
<p style="margin-left:10%;">how do you see this</p>

</body>
```

The direction from borders can be either left, right, top, bottom, or none.

LISTS.

Lists are used to create a menu selection or to arrange data or information in an organized order.

A list contains list items represented by the tag.

HTML 5 has got three types of lists and these include:

- Ordered lists
- U ordered lists
- Defining lists

Ordered lists

These are lists which number items from 1 to last value in the list.

An ordered list is created by the tag then followed by the tag e.g.

cars

planes

bicycles

vehicles

Un ordered lists.

These are lists that contain data/information that has bullets.

Un ordered lists are created by the tag then followed by the tag.

cars

planes

bicycles

vehicles

Styling Ordered and Unordered lists.

To style any of the above types of lists we use the “List-style” attribute after specifying the type of list tag we want to style.

Let me start with the Ordered lists (“ol”).

Remember that ordered lists are the lists with numbered items. When you can style this type of list by changing the numbers to:

- I. Upper-roman (I, II, III, IV, V, etc.)
- II. Lower-roman (i, ii, iii, iv, v, etc.)
- III. Lower-alpha (a, b , c ,d ,e, etc.)
- IV. Upper-alpha (A, B, C, D, E, etc.)
- V. decimal-leading-zero (01, 02, 03, etc.)

This is how it is done.

<html>

<head>

<title>style</title>

<style>

/*you can change the list-style value to any of the listed values above
and see the effect of each*/

ol{

list-style: upper-roman;

}

</style>

</head>

```
<body>

  <ol>

<li>cars</li>

<li>planes</li>

<li>bicycles</li>

<li>vehicles</li>

</ol>

</body>
</html>
```

Styling Unordered lists.

Remember that unordered lists have bullets. When styling them you can change the bullets to:

- disc (the marker black and circular)
 - circle (the marker is the one listed)
 - square (the marker is square)

This is how it is done.

```
<html>
<head>

  <title>style</title>

  <style>

/*you can change the list-style value to any of the listed values above
and see the effect of each*/
ul{
  list-style: square;

}

</style>

</head>
```

```
<body>

  <ul>

<li>cars</li>

<li>planes</li>

<li>bicycles</li>

<li>vehicles</li>

</ul>

</body>
</html>
```

Defining lists.

Defining lists are used to define item and then describe it.

Defining lists are created by the <dl></dl> tag. Inside the defining tag we have the <dt></dt> tag which defines the list item. Then followed by the <dd></dd> tag which describes the list item e.g.

```
<dl>
<dt>vehicle</dt>
<dd>A four wheeled means of transport</dd>

<dt>bicycle</dt>
<dd>A two wheeled means of transport</dd>

</dl>
```

MEDIA.

A media can be either an audio or video played on a web page or using other media players like VLC or Media player. In this chapter am going to teach you how to load and play medias on a web page.

NOTE: All medias to be uploaded to a web page must be in the same folder of the web page as we saw in uploading images.

A web page containing many medias might take long to load so you must upload them carefully and with purpose.

In order to ease adding medias on a webpage I recommend you to have FormatFactory software. It enables changing medias to any format.

Uploading Audios.

Formats supported by HTML 5 5.

<u>Format</u>	<u>Chrome 3.0</u>	<u>IE 8</u>	<u>Firefox 3.5</u>	<u>Opera 10.5</u>
OOgg Vorbis	Yes	No	Yes	Yes
MP3	Yes	No	No	No
Wav	No	No	Yes	Yes

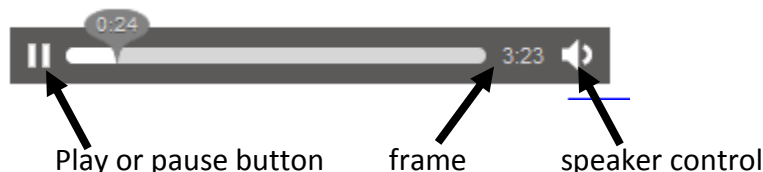
You have to first know the format of the audio you want to upload whether it is supported by the web browser or not as shown above.

To upload an audio clip am going to use the <audio></audio> tag.

Me am using Firefox so am uploading an audio of format .wav

```
<audio src="kalimba1.wav" controls autoplay></audio>
```

The above code is going to upload an audio on called kalimba1 on a webpage. It has two attributes “controls” and “autoplay”. The “controls” attribute adds control buttons and a frame to the audio. Without the control attribute it will be difficult to identify the position of the audio.



The “autoplay” attribute plays the audio the moment the webpage is displayed on the web browser.

NOTE: The autoplay attribute has no space within the spelling.

Adding the “controls” is a must but you can leave out other attributes.

Uploading videos.

The process of uploading videos also requires to take not of the formats of the videos to be uploaded. The table below show some of the formats supported by some web browsers.

<u>Format</u>	<u>Chrome</u>	<u>Safari</u>	<u>Opera Mini</u>	<u>Firefox</u>	<u>Internet Explorer</u>
---------------	---------------	---------------	-------------------	----------------	--------------------------

Ogg	YES	NO	YES	YES	NO
MP4	YES	YES	NO	NO	NO
Webm	YES	NO	YES	NO	NO

A gain am using Firefox so let me upload a video of format .Ogg

```
<video src="movie.ogg" controls></video>
```

The “autoplay” attribute can also be used in videos.

IFRAMES.

For me I define an iframe as a frame used to display a webpage inside the main webpage without leaving the linking to another page. It contains a vertical scroll bar.

An iframe is created by the `<iframe src="index.html" width="50%" height="50%"></iframe>` tag. Where index stands for the name of the webpage you want to add to your webpage.

In this image I have used an iframe to display the same webpage on my main webpage.



Here is the code.

```
<html>
```

```
<head>
```

```

        <title>iframe tut</title>
</head>

<header style="background-color:palegreen;">



<span style="color: chocolate;">

    <h1 align="right"> PENGUIN ACADEMY OF<br/> WEB DESIGNERS </h1>

    <h2 align="right">BY Kaweesa Moses <br/>Leader </h2>

</span>

</header>

<body style="background-color: gold;">

<h3 align="center"><u> <b>Welcome to PENGUIN ACADEMY!!</b></u></h3>

<p style="color: red;"><h2>NOTE:</h2></p>

    <br>All the content and graphics published in <br>
    this e-book is the property of
    Tutorials Point (I) Pvt. Ltd. The user of <br>
    this e-book is prohibited to reuse, retain,
    copy, distribute or republish any contents<br>
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    any manner without written consent of the<br>
    publisher.
    We strive to update the contents of our<br>
    website and tutorials as timely and as
    precisely as possible, however, the contents<br>
    may contain inaccuracies or errors.
    Tutorials Point (I) Pvt.

    <p align="center" style="background-color: ghost white;">Below is the webpage designed by
    our student</p>

<iframe src="iframes.html" width="100%" height="50%" style="float: left;"></iframe>
</body>
</html>

```

Iframes have a “seamless” attribute which makes the iframe appear as if it is part of the webpage.

NOTE: All the tags I have used to create this webpage are already explained except colors which I will explain later.

INPUT FORMS.

Input forms in HTML 5 are used to input and submit data in an HTML 5 document.

Input forms include:

- ❖ Text
- ❖ search
- ❖ Password
- ❖ Radio
- ❖ Check box
- ❖ Button
- ❖ Reset
- ❖ File
- ❖ Submit

All the above input forms are grouped in the `<form></form>` tag. Inside the form tag we have the `<input />` tag, it has no closing tag like the `` tag. The `<input />` tag is used to access all the above listed input forms. Here is how it is done.

Accessing “text” and search forms.

Text form.

The “text” form is a text field. It is commonly used in webpages where the user has to enter their user name or Email address. It is accessed by the following lines of code,

```
<form>
  NAME:<br/>
  <input type="text" placeholder="ENTER_ USER NAME"/>
</form>
```

The “placeholder” attribute displays a temporary text in the text field. The may be instructing the user what to fill in the text field.

Search form.

The search form is used to access information which is no visible on the webpage display but available in the webpage. For those who have ever used Face Book to search for a friend by writing the name in the search field, have some knowledge about this form. It is created by the following code.

```
<form>
<label> <input type="search" placeholder="search"/> </label>

</form>
```

I have used an icon image for labeling this search form.

Accessing “password” form.

the password form is used to enter a password for a particular account.

```
<form>
  PASSWORD:<br/>
  <input type="password" placeholder="ENTER_ USER PASSWORD"/>
</form>
```

NOTE: All the above forms are for inputting texts, their default size is 20 but is can be customized to any desired size by using the size attribute.

```
<form>
  NAME:<br/>
  <input type="text" placeholder="ENTER_ USER NAME" size="40"/>
</form>
```

Accessing “radio and checkbox” buttons.

Both buttons are used in case the user has to choose from a menu list. In HTML 5 a radio button is commonly used in areas where the user is required to choose their gender. The difference between the two buttons is that the radio button is circular while the checkbox is square shaped.

Accessing radio buttons.

```
<form>
gender:<br/>
```

```

    <label><input type="radio" name="gender" value="malesOnly" checked />
male</label><br>
    <label><input type="radio" name="gender" value="femalesOnly" />
female</label><br>
    <label> <input type="radio" name="gender" value="othersOnly" />others</label>

```

</form>Explanation.

The <label> tag is responsible for indicating a specific name for each radio button.

The “value” attribute Specifies the value of an input element.

The “name” attribute Specifies the name of an input element.

NOTE: The value of the “name” attribute must be the same .

One of the radio buttons has to be checked with the “checked” attribute.

By default the radio buttons are unchecked.

Accessing checkbox buttons.

This is used when the user is required to accept a particular task.

```

<label><input type=checkbox name="send_receipt" value="yes" checked>
Send receipt by e-mail</label>

```

Buttons.

Buttons are mostly used to perform an event. We can create buttons in to different ways

First is by using the <button> tag. I have already shown you how to create a button by using its tag to perform a linking action. Let’s remind ourselves.

```

<button type="button" onclick="location.href='nav.html'">hello</button>

```

Here the “onclick” attribute is the one responsible for performing actions assigned to it.

Using the input form.

```

<form>
    <input type="button" value="hello" name="btn" onclick="location.href='nav.html'"/>
</form>

```

Here the “value” attribute is used to name the button

All the above buttons are linking to another webpage.

Reset button.

The reset button is mostly used to delete all the information that was filled in the input forms.

```

<form>
    <input type="Reset" value="Reset" name="resetButton"/>
</form>

```

Submit button.

The submit button is used to submit information entered in the input forms by the user. It's the same as the sign in button or create account button for those who have ever created or signed into their accounts. More about this button is explained in PHP pdf guides.

```
<form>
  <input type="submit" value="submit" name="submitButton"/>
</form>

</body>
```

Styling buttons.

Styling buttons is easily done when a button is created using the button tag.

```
<style>

button{
  color:red;
  background-color:blue;
  border:none;
  border-radius:5px;
  padding:5px;
}
```

```
</style>
```

The “border-radius” element makes the edges of the button circular.

The “padding” element spaces the name of the button from the borders.

FILE FORM.

The file form is used to upload images, videos and audio clips into a webpage.

```
<form>

<input type="file" accept="text/html" size="20" />

</form>
```

Drop-down lists.

Drop-down lists are used when the user is required to fill their year of birth. It is created by the <select> tag. Inside this tag we have the <option> tag which contains the list items.

```
<select>
  <option label="year of birth"> 1999</option>
  <option>1998</option>
  <option>1997</option>
  <option>1996</option>
  <option>1995</option>
  <option>1994</option>
  <option>1993</option>
</select>
```

Creating borders for input forms.

The <fieldset> tag is used to create borders around the input forms. The borders can be given a title by using the <legend> tag.

Here I have used input forms to create a create account webpage.

```
<html>
<head>

  <title>input forms</title>

<style>

  legend{

    font-family:algerian;
    font-size:30px;
    color:darkblue;

  }

  fieldset{
    border-color:aliceblue;
    width:500px;
    margin-left:100px;
  }

  h1{
    color:chocolate;
```

```

}
h3{
    color:chocolate;
    margin-left:100px
}

form{
    padding-left:20px;

}

button{

    background-color:lightskyblue;
    padding:5px;
    border:none;
    border-radius:10px;
    alignment-baseline: central;

}
input{

    border-radius:50px;
    border: none;
    /**background-color:chocolate;**/
}

img{
    width:20%;
    height:20%;
    margin-left:35%;
    border:solid black;
}
</style>

</head>

<header>

    <h1 align="center">Welcome to Penguin Academy!</h1>
    <h3>Provide the information below by filling the fields.</h3>
</header>

<body background="bg.jpg">

```



```
<fieldset>
<legend>Creat Account</legend>
```

```
<form>
```

```
    First name:<br/>
    <input type="text" name="txt" placeholder="First_Name" size="25"/><br/>
    Middle name:<br/>
    <input type="text" name="txt" placeholder="Middle_Name" size="25"/><br/>
    Second name:<br/>
    <input type="text" name="txt" placeholder="Last_Name" size="25"/><br/>
<p></p>
```

Year of birth:

```
    <select>
    <option>year of birth </option>
    <option>2002</option>
    <option>2001</option>
    <option>2000</option>
    <option>1999</option>
    <option>1998</option>
    <option>1997</option>
    <option>1996</option>
    <option>1995</option>
    <option>1994</option>
    <option>1993</option>
    <option>1992</option>
</select>
```

Month:

```
    <select>
    <option >month of birth</option>
    <option>January</option>
    <option>February</option>
    <option>March</option>
    <option>April</option>
    <option>May</option>
    <option>June</option>
    <option>July</option>
    <option>August</option>
```

```
<option>September</option>
<option>October</option>
<option>November</option>
<option>December</option>
</select>
```

Date:

```
<select>
  <option >date of birth</option>
  <option>1</option>
  <option>2</option>
  <option>3</option>
  <option>4</option>
  <option>5</option>
  <option>6</option>
  <option>7</option>
  <option>8</option>
  <option>9</option>
  <option>10</option>
  <option>11</option>
  <option>12</option>
  <option>13</option>
  <option>14</option>
  <option>15</option>
  <option>16</option>
  <option>17</option>
  <option>18</option>
  <option>19</option>
  <option>20</option>
  <option>21</option>
  <option>22</option>
  <option>23</option>
  <option>25</option>
  <option>26</option>
  <option>27</option>
  <option>28</option>
  <option>29</option>
  <option>30</option>
  <option>31</option>
</select>
<br />
```

Gender:


```
<label><input type="radio" name="gender" value="malesOnly" checked /> male</label><br>
<label><input type="radio" name="gender" value="femalesOnly" /> female</label><br>
```

```

<P></P>
Email address:<br />
<input type="email" name="txt" placeholder="name@gmail.com" size="30"/><br/>
Create new password:<br />
<input type="password" name="txt" placeholder="At least two or more symbols" size="30"/><br/>
Re-type password:<br />
<input type="password" name="txt" placeholder="At least two or more symbols" size="30"/><br/>
<p></p>

<table>
<tr>
    <td><button type="submit">Sign in</button><td>

    <td><button style="background-color: red;" style="float: right;" style="margin:50px;"
type="reset">Reset</button></td>
</tr>
</table>
</form>

</fieldset>

</body>
</html>

```

PREVIEW.

Firefox | input forms | file:///E:/Documents/HTML.files/~account.html?txt=kaweesa&txt=moses&txt=&gender=malesOnly&txt

Welcome to Penguin Academy!

Provide the information below by filling the fields.

CREATE ACCOUNT

First name: kaweesa

Middle name: moses

Second name: kaweesamoses

Year of birth: 2002 | Month: June | Date: 17

Gender: ☒ male ☐ female

Email address: kawesa.moses02@gmail.com

Create new password:

Re-type password:

[Sign in](#) [Reset](#)

Text areas.

Text areas are used to write messages or post stories on a webpage

```
<textarea cols="30" rows="30" wrap="virtual" ></textarea>
```

The “wrap” attribute breaks line if the sentence is too long.

The “cols” and “rows” attribute represent the width and height of the text area.

NOTE: Submitting information filled in to the input forms is part of PHP. PHP is another level of learning web designing.

ORGANISING OUR WEBPAGE CONTENTS.

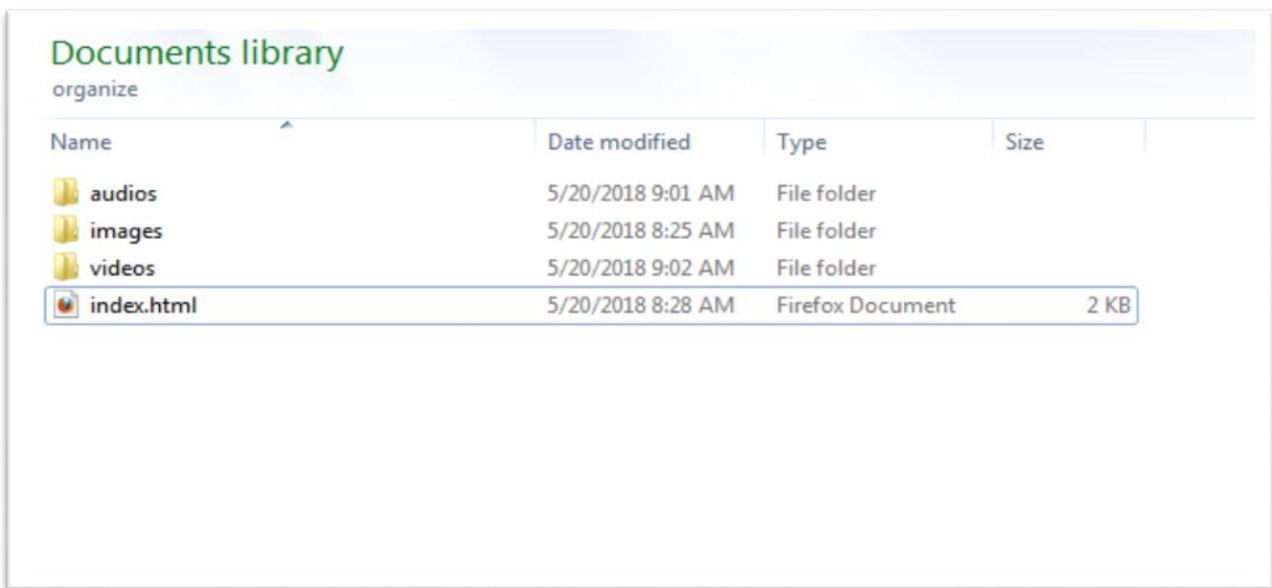
Sometimes you might get a contract of designing a webpage containing numerous images and medias. This might seem to be easy because I have taught you how to build a webpage, but on the other hand I might be difficult because the folder in which you will be working in might become congested since I have been advising you to put all the web contents in one folder. In this last chapter am solving the problem by teaching you how to organize web contents.

First

You have to identify external components that you are adding to your webpage.

Second

Create a folders grouping the external contents e.g. they might be image, audios and videos. This is what I mean.



In the previous chapters I have been uploading all external components using the following codes.

```

<video src="movie.mp4" alt="movies" width="200" height="200" controls> <video>
<audio src="movie.mp3" alt="music" controls> <audio>
```

Now since we have organized our components, the codes are also going to change by first writing the name of the folder in which the components are located followed by a slash "/".

```

<video src="videos/movie.mp4" alt="movies" width="200" height="200" controls> <video>
<audio src="audios/music.mp3" alt="music" controls> <audio>
```

Am uploading contents found in the above folders in the image.

GOOD BYE WEB DESIGNER.

The information in this book has been organized and written by **Kaweesa Moses**.
If you have any query about this book you can get me on my email
kawesa.moses02@gmail.com