# HTML

# Introduction to HTML

#### **HTML-HyperText Markup Language**

- In the above sentence Hypertext refers to the hyper links that are present in the website.
- Whereas Markup Language defines the entire tags that are used to define the page layout & elements within the page.
- This is developed by W.W.W.
- It is used to create static webpages webpages.
- The entire content/document of a Webpage is written in between the html tags

i.e <html> .....</html>



#### Example:

```
<!doctype html>
<html>
<head>
<title>TechTerms.com</title>
</head>
<body>
This is an example of HTML.
</body>
</html>
```

- 1. The first line defines the type of contents the document contains.
- 2.The **Head tag** contains the Metadata and title.
- 3.The **body** part contains the actual data/content of website.

# **HTML Page Creation and Editing:**

- Notepad is the Standard text Editor that comes with the Microsoft Windows Operating System.
- Create your document (HTML) in the Notepad.
- Understand and Set all the document Properties.
- Save your file with the extension of .html .
- View your results in the Browser.

# Tags used in html:

#### **Heading Tag**:

- It is used to set the Heading.
- H1 is the highest level of heading, followed by H2....till H6.
- You should not skip heading levels: e.g., **H3** should not appear after an **H1**, unless there is **H2** between them.

```
<HTML>
<HEAD>
<TITLE> Example Page</TITLE>
</HEAD>
<BODY>
<H1> Heading 1 </H1><H2> Heading 2 </H2>
<H3> Heading 3 </H3><H4> Heading 4 </H4>
<H5> Heading 5 </H5><H6> Heading 6 </H6>
</BODY>
</HTML>
```

The output of the above code will be similar to:

## Heading 1

### Heading 2

Heading 3

Heading 4

Heading 5

Heading 6



#### Paragraph Tag and Span tag:

- This tag is used to write paragraphs.
- Each line of text will stretch the entire length of the window.
- This is a paragraph tag.
- The tag is a block element (as is, for instance, h1 and div), whereas span is an inline element (as, for instance, b and a)
- Block elements by default create some whitespace above and below themselves, and nothing can be aligned next to them, unless you set a float attribute to them.
- Inline elements deal with spans of text inside a paragraph.
   They typically have no margins, and as such, you cannot, for instance, set a width to it.

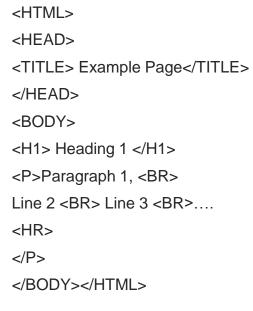
ı

#### **Break Tag:**

- Line breaks allow you to decide where the text will break on a line or continue to the end of the window.
- A <BR> is an empty Element, meaning that it may contain attributes but it does not contain content.
- The <BR> element does not have a closing tag.

#### **Horizontal Rule:**

 The <HR> element causes the browser to display a horizontal line (rule) in your document.



The output of the code be like:

### **Heading 1**

Paragraph 1 Line 2 Line 3

• • • •



**COLOR CODES:** These are used to add colors to the text / background

# HTML/CSS COLOR CODES



#### **TEXT COLOR:**

- In order to add Color to the text we use tag Text="#00cc99"
- It makes the entire text to look in the same color.

#### **BODY BACKGROUND COLOR:**

- It helps to add the color for the entire body.
- SODY BGCOLOR="#ffffff"></BODY> .

```
<!doctype html>
<html>
<head>
<title>TechTerms.com</title>
</head>
<body bgcolor="red">
This is an example of HTML.
</body>
</html>

NOTE:<body>
body style="background-color:"#000000"></body>
```

#### **Anchor Tag:**

- It defines a hyper link that links one page to other page.
- It can create hyperlink to other webpage as well as files,location,or any URL.
- It links to the destination page or URL.
- The href attribute is one of the most important attribute in html.
- <a href="link" >click here</a>.

#### **Images:**

- The body element also gives you ability of setting an image as the document's background.
  - i.e <body background="hi.jpg"></body>
- IF u want the image to be at a certain height and width then we can write
- <body background="hi.jpg" height="300" width="300"></body>

- <img> TAG:
- The image tag is used to add an image to the html page.
- Images are linked to the webpage.
- This image tag has 2 required attributes.
- Src-It specifies the path to the image.
- Alt-specifies an alternate text for the image.
- <Img src="a.jpg" alt="spiderman" width="500" height="500">
- Style tag:
- The <style> tag is used to define style information (CSS) for a document.
- Inside the <style> element you specify how HTML elements should render in a browser.

#### **Character Formatting Elements:**

 Character Format elements are used to bring about a change in text that are written in between the tags. Only the characters present in between these tags are effected.

BOLD TAG: <B> BOLD </B>

ITALIC TAG: <i>iitalic </i>

UNDERLINE TAG: <u>underlined</u>

STRONG TAG: <strong>strong </strong>

EM TAG : <em>book</em>

- Similarly pre tag, cite tag, teletype tag has their own importance.
- \*If we want to add size, color to a particular text then
- <font size="1"> hai</font>
- <font color ="blue">hello</font>

#### **Text Alignments**

- These alignments of the text helps to align the text in a particular direction:
- It uses the style attribute.
- Example:

```
<!doctype html>
<html>
<head>
<title>TechTerms.com</title>
</head>
<body bgcolor="red">
This is an example of HTML.
</body>
</html>
```

#### **MARQUEE TAG:**

- This tag is used for scrolling piece of text or image either horizontally or vertically.
- <!doctype html>
  <html>
  <head>
  <title>TechTerms.com</title>
  </head>
  <body bgcolor="red">
  <marquee >THIS IS A MARQUEE TAG</marquee>
  </body>
  </html>

#### **DIV TAG:**

- The div tag is known as division tag.
- It is used to make divisions of content in the web page like text, images header, footer, navigation bar...etc.

```
<DIV>.....</DIV>
<!DOCTYPE html>
<html>
<body>
This is some text.
<div style="background-color:lightblue">
 <h3>This is a heading in a div element</h3>
 This is some text in a div element.
</div>
This is some text.
</body>
</html>
```

The output of the above code be like:

This is some text.

### This is a heading in a div element

This is some text in a div element.

This is some text.

#### **TABLES:**

- Tables allow web developers to arrange the data in the form of rows and columns.
- As we all know, every table has rows and columns, we also need to have some tags to open a row and a column.
- -this tag helps in opening a new row.
- -td>-this tag helps in opening a new column.
- -this tag will be used to give a heading to a column(table header)
- And we always start a table with tag .All the above tags lie inside the this tag and after we have created the required no . of rows and columns , we have to close this tab with .

- TABLE ATTRIBUTES:
- 1.Border:
- It adds border to the table
- i.e,.
- By default the value of border attribute is 0.

Name	Salary
Ramesh Raman	5000
Shabbir Hussein	7000

The table looks like this if we use border attribute. We also can increase border width if we want.



- Cell spacing tells the space between the cells in table whereas cell padding tells the space between content in the cell and border of the cell. These attributes are also used in the table tag only.
- Ex:

Name	Salary
Ramesh Raman	5000
Shabbir Hussein	7000

• The required output will be like this. There is no condition that both cell spacing and cell padding should have same values.

#### 3. Rowspan and Colspan:

• These rowspan and colspan are tag attributes and are used to merge rows and columns respectively.

```
Month Savings Savings for holiday!
January $100
$50
February
$80
```

Month	Savings	Savings for holiday!	
January	\$100	\$50	
February	\$80		

- Here,we used rowspan="2".So 2 rows are merged.
- Similarly, colspan attribute can also be used.

#### Lists:

Lists allow web developers to group a set of related items.

These lists are of 3 types:

- 1.Ordered lists
- 2.Unordered lists
- 3.Definition lists

#### **Ordered lists:**

- These lists start with tag. Each list element starts with tag.
- These list elements are numbered by numbers by default.
- If we don't want numbers and want something else like roman numbers etc., we can use type attribute.
- Default-Case Numerals.
- Upper-Case Numerals.
- Lower-Case Numerals.
- Upper-Case Letters.
- Lower-Case Letters.



- <ol type = "I">
- Beetroot
- Ginger
- Potato
- Radish

#### Output be like:

- . Beetroot
- II. Ginger
- III. Potato
- IV. Radish



#### **Unordered lists:**

- These lists start with tag.
- Each list element starts with tag.
- Every element have bullets by default.
- We also have type attribute here.

These are the values of type attributes.

```
BeetrootGingerPotatoRadish
```

### Output be like:

- Beetroot
- Ginger
- Potato
- Radish

#### **Definition lists:**

- These lists help the web developers to define lists like in a dictionary or encyclopedia.
- These lists make the use of following tags:
- <dl> Defines the start of the list
- <dt> A term
- <dd> Term definition
- </dl> Defines the end of the list

```
<dl>
 <dt>
    <b>HTML</b>
</dt>
     <dd>This stands for Hyper Text Markup Language</dd>
<dt>
     <b>HTTP</b>
</dt>
     <dd>This stands for Hyper Text Transfer Protocol</dd>
   </dl>
Output be like:
HTML
     This stands for Hyper Text Markup Language
HTTP
```

This stands for Hyper Text Transfer Protocol

#### FORMS:

- Forms are required when you want to collect some data from the site visitor.
- These start with <form> tag.
- Input boxes are created using <input> tag.
- Type attribute is used to mention the type of input to be entered.
- Ex:

```
<form >
```

```
First name: <input type = "text" name = "first_name" /> <br>
<br/>
Last name: <input type = "text" name = "last_name" /> </form>
```

#### **Output:**

First name: Last name:



- If we want to enter a **password** which should not be visible to others then we can use type="password".
- If we want to enter a **button** which should not be visible to others then we can use type="button".
- If we want to enter a **radio button** which should not be visible to others then we can use type="radiobutton".
- If we want to enter a **checkbox** which should not be visible to others then we can use type="checkbox".
- If we want to enter a **submit button** which should not be visible to others then we can use type="submit".
- To give address as input, we use <textarea> tag. This increases the size of input box. It has rows and cols attributes which allow us to declare the required sized input box.

**Syntax is** <textarea rows="5" cols="50">

#### The < label > Element:

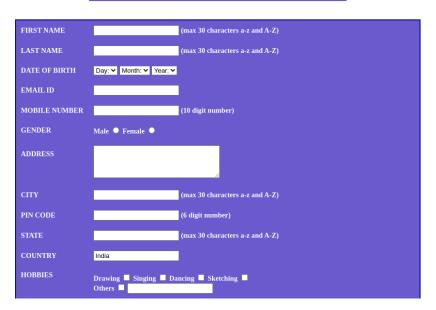
- The <label> tag defines a label for many form elements.
- The <label> element is useful for screen-reader users, because the screen-reader will read out loud the label when the user focus on the input element.
- The for attribute of the <label> tag should be equal to the id attribute of the <input> element to bind them together.

#### **Dropdown control:**

- Select box control(dropdown)
- Ex: <form> <select name = "dropdown">
- <option value = "Maths" selected>Maths
- coption value = "Physics">Physics
- </select>
- </form>

A sample form

#### **STUDENT REGISTRATION FORM**





#### **FRAMES**

- HTML frames are used to divide your browser window into multiple sections where each section can load a separate HTML document.
- A collection of frames in the browser window is known as a frameset.
- The window is divided into frames in a similar way the tables are organized: into rows and columns.
- While we are using Frames we should not use body tag.

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Frames</title>
</head>
<frameset cols = "25%,50%,25%">
   <frameset rows = "50%,*">
<frame name = "left top" src = "/html/top1_frame.htm" />
<frame name = "leftbottom" src = "/html/top2_frame.htm" />
</frameset>
<frame name = "center" src = "/html/main_frame.htm" />
<frame name = "right" src = "/html/bottom_frame.htm" />
</frameset> </html>
```

By using the above code our web page is divided similar to:

