

Introduction to HTML5

The Internet presents information in the form of websites. These websites consist of millions of web pages called web pages., which contain text, video, graphic, audio, and link to other pages called Hyperlink. These web pages are created using HTML. HTML is most widely used language to design web content for the Internet.

What is HTML?

HTML stands for **Hypertext Markup Language**. It is a complete code package that allows user to create pages that contain both text and graphics. All the web browser are designed to understand and interpret this language.

Hypertext-It is a piece of ordinary text that has special feature of linking to other document or webpages. When user click on the hypertext, it opens a new page.

Markup Language- It is a language that uses special symbols called ‘Tags’ to mark-up a text document that instructs the browser how to display the text.

Tools to be used:

HTML Editor – for creating and saving the documents.
Browser - for viewing the documents

HTML Editors

There are two types of HTML editors :

WYSIWYG Editor : It stands for **What You See Is What You Get**. This type of editor allows developer to see what the end result will look like while the document is being created. These editors provide various tools and graphical interfaces where the web pages are designed. While using WYSIWYG, users may not require the knowledge of HTML commands. As the elements (images, tables, lists, etc.) can be placed on the interface and the required HTML code will be added automatically.

Text Editor – HTML document can also be created using normal text editor like Notepad or WordPad. One is required to have a proper knowledge of HTML commands to develop web pages.

Browser – Web Browser are used to view HTML document. Commonly used web browser are :
Google Chrome, Internet Explorer, Apple Safari, Mozilla Firefox, Opera

Creating an HTML Document :

- a. Open Notepad by clicking on **Start > All Programs > Accessories > Notepad**.
- b. In Notepad window, type the HTML code.
- c. Click on **File > Save** option. In **Save As** dialog box, select the target folder and mention the file name in **File name** text box with the extension **.html/ .htm . (better to save in Desktop)**
- d. Click on **Save** button.

Viewing an HTML Document

If the web page is saved on Desktop, double click on the page icon to open it in browser window.

Tags : Tags are the building blocks of a web page. They contain elements which define how the information on a web page is formatted or displayed. We can also include non-text items such as images, links and lists on the web page using the text. tags do not appear in the browser window but they affect the display of the text and non-text items in it. Each tag in HTML follows specific rules and syntax. These tags are not case sensitive.

The HTML tags or commands are inserted before and after the text. Each tag begin with ‘ < ‘ sign and ends with ‘ > ‘ sign.

for ex : <p> some text

Elements – An HTML element consists of an **ON** tag, the content, and **OFF** tag.

HTML element can be categorized as :

Container element – The element includes both ON and OFF tag are called container tag.

e.g. This make the text bold

Empty element- Empty element contain only ON tag. They do not have OFF tags. These elements do not enclose any data, instead they do some function on their own.

e.g.
 tag (It breaks the line and displays the text from the next line.)

Attribute –An Attribute is the property that provides additional information about an HTML element. It enhance the functionality of a tag. An attribute uis always specied inside the iopening tag. All attributes consist of two parts – a name and a value. The ‘name’ is the property that we want set and the ‘value’ is what we want for the respective property. Attribute is always enclosed within the quotes.

eg. <hr size=6 width=60%>

Here ‘hr’ is the tag and its attribute size will define the thickness and width will define the length of horizontal line.

Rules for writing HTML code

- ❖ Tags and attributes names are not case-sensitive. However, lowercase is recommended.
- ❖ Container tags should always be enclosed because as unclosed tag can lead to undesired result.
- ❖ Values given to attributes should be enclosed within the quotes especially if the value contains any blank space.
- ❖ Attributes values can be case sensitive.
- ❖ When the tags are embedded, i.e., when we start a tag within another tag, we need to close the inner tag before closing the outer tag.
eg. <p>Hello</p>
- ❖ Tags names should not contain spaces.
- ❖ There should be no space between ‘<’ , name of the tag and ‘>’ in a tag.

HTML Document Structure

The general structure of an HTML document has two sections : Head and Body

HEAD Section - It provides general information about the document, eg., The title defines a title for the page on the browser’s Title Bar.

BODY Section – The BODY section contains the text which gets displayed on the web page along with other tags and attributes. It includes text, graphics, and other HTML elements that provide control and formatting to page like fonts, paragraph, list and other elements.

The HTML document starts with ?<html> tag and ends with </HTML> tag. Everything is written within these tags . If the commands are not enclosed in tags then a web browser will assume the commands as text.

<**HEAD**> tag is the HTML document header. It lies below the <HTMML>tag. It contains information that is important about the web page, but we cannot see in the browser window. The <head> contain no text within itself.

<TITLE> tag is to be given within the <HEAD> tag.. It contains the title of the document. The title is displayed on the Title bar at the top of the browser window and not inside the window itself. The title should be short and includes less than 64 characters.

<BODY>tag contains the contents of our document which gets displayed on the web page in browser window. In the <body> tag we use number of formatting elements, images, heading, list, and hypertext links There are two basic categories of HTML elements used in the body tag :

Block level elements

Text-level elements

A **Block level element** take up the full width available and by default begins on a new line. these elements include tags like :

- Paragraph <p>
- Heading <h1>
- Horizontal rule <hr>
- Centering <center>

Text level elements are used to make up bits of text. It does not start on a new line and only takes up as much width as necessary. These tags include :

- Bold
- italics <i>
- Line Break

Heading – This tag is used to define heading levels in an HTML document. It is basically used to emphasize the text. There are six heading levels, H1 to H6. The H1 heading style displays the text in the largest size and its mainly used for main headings. The lower levels are used for sub headings and less important things. These headings are written within <body>tag.

Paragraph – To display a long piece of text on a web browser, paragraph element <p>is used, which makes a block of text as a paragraph. To mark the end of paragraph, <p> tag is used. When we start another paragraph, the web browser will leave one line between the two paragraphs.

Line Break – It splits the line and displays the text on a new line. It is like an Enter key on the keyboard which takes the cursor on the next line. It is written as
 tag. It is empty tag so closing tag is not required.

Horizontal Rule – It is used as a separator between blocks of text. The <hr> tag draws a horizontal line across the page.

Comment – It helps to write the notes for ourselves in an HTML document which will not get displayed in the web page. It can be written in following ways :

<!--Learning HTML is great fun -->

or

<comment> Learning HTML is great fun</comment>

Bold – It emphasize the text by making it bold.

KIDS POOL

Result – **KIDS POOL**

<BODY> **Tag attributes** – It has the following attributes :

a. **bgcolor**- It is used to change the background colour of web page.

<body **bgcolor=red**> The background colour of web page will be changed to red.

b. **text**- It change the text colour of entire web page.

<body **text=blue**> The entire text of web page will be displayed in blue colour.

c. **background** – It set an image as background.

<body **background="Location of image file"**>

Note : *You can use either bgcolor or background tag.*