

CHAPTER 10
HTML-I
BASIC HTML ELEMENTS

- HTML (Hyper Text Markup Language) is a document-layout and hyperlink-specification language i.e., a language used to design the layout of a document and to specify the hyperlink.
- HTML tells the browser how to display the contents of a hypertext document i.e., a document including text, images and other support media.

HTML : What it is	HTML: What it is not
Web Page Layout Language	Word Processing Tool
Hyperlink Specification Language	Programming Language

WRITING HTML DOCUMENTS

HTML is made up of **Tag** and **Attribute**.

TAG

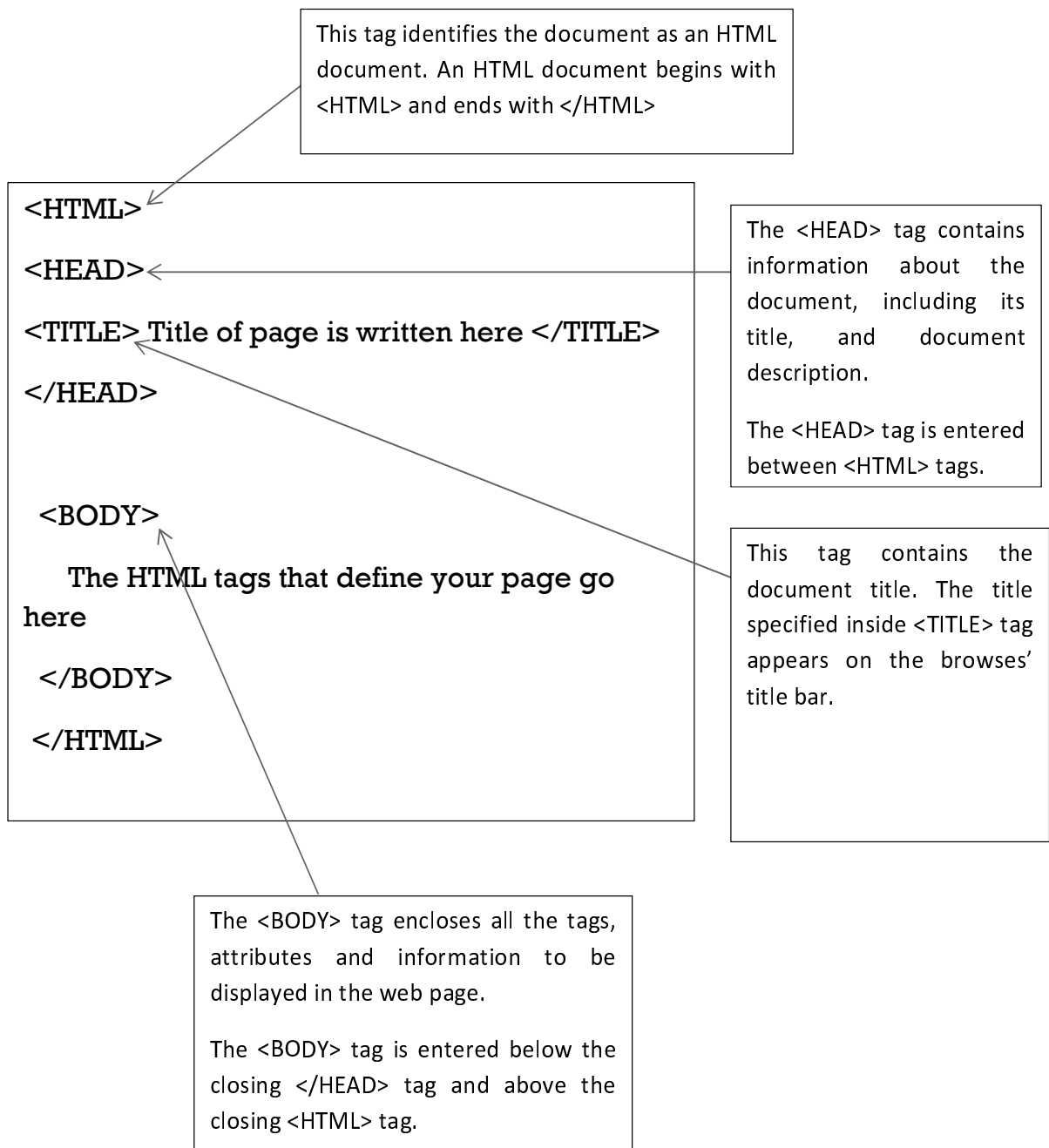
A Tag is a coded HTML command that indicates how part of web page should be displayed. All HTML tags are contained with angle brackets (< >) e.g., <HEAD> is a tag. Similarly <H1> is a tag.

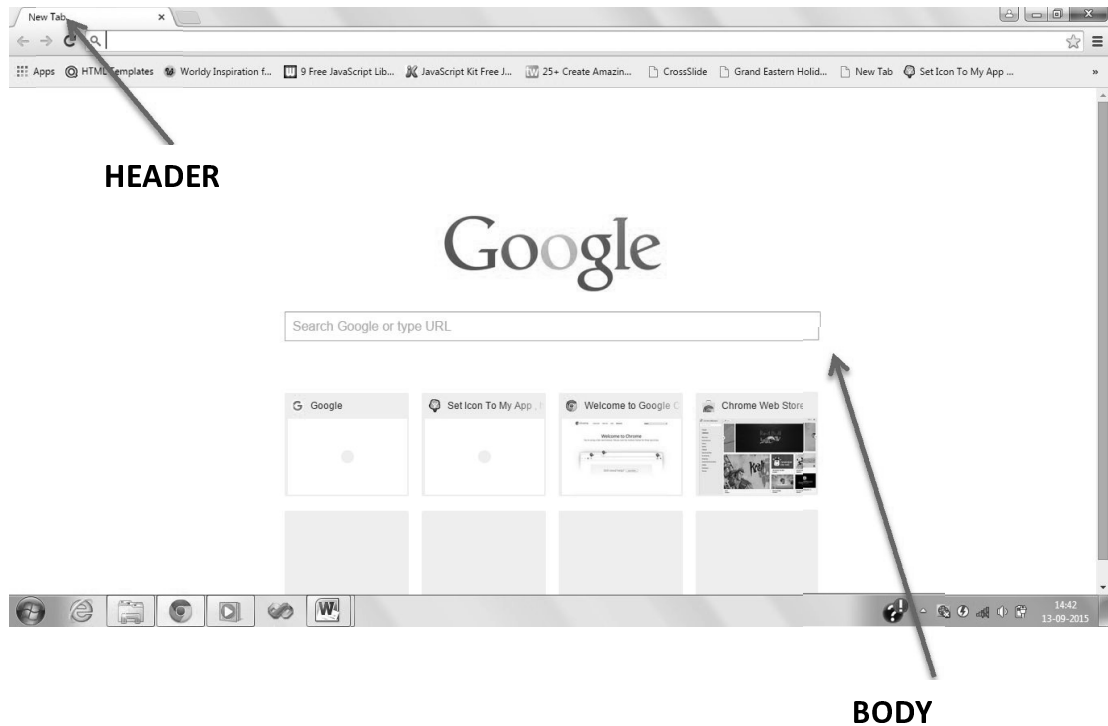
ATTRIBUTE

An Attribute is a special word used inside tag to specify additional information to tag such as color, alignment etc.

You can type HTML in capital letters as well as in small letters.

HTML DOCUMENT STRUCTURE





WHERE TO WRITE HTML CODE

1. Open Text Editor, (Notepad in case of Windows Operating System).
2. Type the HTML code in it.
3. Save the file with extension .html/.htm
4. To view the created HTML file in browser , double click on the file.

CONTAINER ELEMENTS

HTML container elements require a starting as well as an ending tag. Some examples of container elements are:

<HTML></HTML>

<HEAD></HEAD>

<TITLE></TITLE>

EMPTY ELEMENTS

HTML Empty elements require just a starting tag and not an ending tag. Some examples of Empty Container are:

<hr>

HTML TAG STRUCTURE

1. Every HTML tag consists of a tag name, sometimes followed by an optional list of attributes, all placed between opening and closing angle brackets (< and >).
2. A tag attribute's value, if any, is given after the equal sign (=) in quotes generally after the attribute name. For example,

<A href = <http://www.netscape.com/yellowpages>>

Some examples of HTML tags with attributes are:

<body bgcolor = "red">



BASIC HTML TAGS

1. The HTML Tag

- The <HTML> and </HTML> tags are used to mark the beginning and end of an HTML document.
- This tag does not have any effect on appearance of document.
- This tag is used to make browsers and other programs know that this is an HTML document.

Attributes of HTML tag

(i) The DIR attribute

This attribute can have values either ltr(left-to-right) or rtl(right-to-left).

e.g. <HTML dir = ltr>

(ii) The LANG attribute

This attribute of <HTML> tag specifies the language you've generally used within the document.

To specify base language of web page, the LANG attribute is used. e.g. "en" is used to specify English Language and "fr" is used to specify French language.

e.g. <HTML lang = en>

HTML Tag	
Type	Container Element
Function	Delimits a complete HTML document
Attributes	DIR, LANG
Contains	Head-tag, body-tag

2. The HEAD Tag

The HEAD tag is used to define the document header.

<HEAD> tag contains information about the document, including its title and document description.

HEAD Tag	
Type	Container Element
Function	It defines the document header.
Attributes	-
Contains	<Title> tag

3. The TITLE Tag

TITLE Tag	
Type	Container Element
Function	Define the document title.
Attributes	-
Used Inside	<HEAD>....</HEAD> tags

Problem: To display the web page title as 'My First HTML Page'.

```
<HTML>
```

```
<HEAD>
```

```
<TITLE> My First Page </TITLE>
```

```
</HEAD>
```

```
<BODY>
```

```
</BODY>
```

```
</HTML>
```

4. The Body Tag

The body tag defines the document's body. It contains all the contents of an HTML document, such as text, images, lists, table, etc.

Attribute of Body Tag

1. Background attribute

This attribute allow you to include a background image.

```
<BODY background ="Pic.jpg">
```

This above statement will set pic.jpg image as background of the body of web page.

2. Background color, Text Color, Link Color

By default browsers display text in black.

If you want to change the color or text (by TEXT attribute), color of links (by LINK attribute), color of active links (by ALINK attribute) and background color (by BGCOLOR attribute).

Consider the following:

```
<BODY bgcolor = "teal" text = "magenta" link = "yellow" alink = "red">
```

- The background color is teal. (bgcolor = "teal")
- Text color is magenta.
- Links that have not been visited recently are made yellow(link = "yellow")
- Links that are currently being clicked on (alink = "lime")

Problem: To make the background appear black, text lime , links yellow and recently visited links red.

```
<HTML>
```

```
<HEAD>
```

```
<TITLE>Attributes of Body Tag </TITLE>
```

```
</HEAD>
```

```
<BODY bgcolor ="black" text= "white" link ="red" alink ="yellow">
```

Informatics practices Class XII

```
<a href="https://www.google.com"> Click here to access google search engine</a>
```

```
</BODY>
```

```
</HTML>
```

Setting Left and Top Margins

- The margin refer to the blank area left from the edge of page.
- If you want to leave some blank area in the left side, you can use LEFTMARGIN attribute as follows:

```
<BODY leftmargin = value>
```

The value is the number of pixels (72 pixels make an inch) to be left blank.

e.g. <BODY leftmargin = "60">

- If you want to set the top margin i.e. distance from the top edge, you can use TOPMARGIN attribute.

e.g. <BODY topmargin = "70">

This will make the body-text appear 70 pixels away from top edge of the page.

Problem: To make body text appear 60 pixels away from the top edge of page and 75 pixels away from left edge of page.

```
<HTML>
```

```
<HEAD>
```

```
<TITLE>Usage of Margins </TITLE>
```

```
</HEAD>
```

```
<BODY topmargin = "60" leftmargin = "75">
```

Information Technology is an important subject of Engineering.

```
</BODY>
```

```
</HTML>
```

5. Heading in HTML (H1 H6 Tags)

- HTML has six levels of headings, numbered 1 through 6, with 1 being the largest.
- Headings are typically displayed in larger or bolder fonts than normal body text.

Attribute of Heading tag

1. ALIGN - used to set the alignment of heading. It can take either LEFT, RIGHT or CENTER as its value.

Problem: To display multiple headings in multiple forms using H1 H6 tags.

```
<HTML>
<HEAD>
  <TITLE> Headings in HTML </TITLE>
</HEAD>
<BODY>
<H1> Level 1 Heading </H1>
<H2 align = "center"> Level 2 Heading </H2>
<H3> Level 3 Heading </H3>
<H4 align = "right"> Level 4 Heading </H4>
<H5> Level 5 Heading </H5>
<H6 align = "left"> Level 6 Heading </H6>
</BODY>
</HTML>
```

6. <P> (Paragraph) Tag

- To start a new paragraph, <P> tag is used. It is a container tag.

Attribute of <P> tag

1. ALIGN - used to set the alignment of paragraph. It can take either LEFT, RIGHT or CENTER as its value.

Problem: To display text with line and paragraph breaks.

```
<html>
<head>
  <title> Paragraph</title>
</head>
<body>
  <p> This will start a new paragraph</p>
  <p align="center"> Again starting of new paragraph </p>
</body>
</html>
```

**7.
 tag**

- To end one line , and to jump to the next
 tag is used.

```
<html>
<head>
  <title> Paragraph</title>
</head>
<body>
  Writing a line. I want to write in next line.<br/>
  I am in a new line.
</body>
</html>
```

8. <CENTER> Tag

- To centralize a segment of text, just type the text between <CENTER> and </CENTER>.

For example, the code

```
<CENTER> This is centralized </CENTER>
```

Will make text – This is centralized – appear centralized on browser window.

9. Horizontal Rules - <HR> - Tag

- The <HR> tag produces a horizontal line spread across the width of the browser window.

Attributes of <HR> tag

(i) Size

- This attribute allows you to set the size of the horizontal rule.

Problem: To display horizontal rules of various sizes.

```
<HTML>
```

```
<HEAD>
```

```
<TITLE> Various Horizontal Rule </TITLE>
```

```
</HEAD>
```

```
<BODY>
```

```
<P> This is conventional document text. </P>
```

```
<HR>
```

The next three horizontal rules are of different sizes.

```
<HR size=12>
```

```
<HR size =36>
```

```
<HR size =72>
```

```
<BODY>
```

```
</HTML>
```

(ii) **width Attribute of <HR>**

- The length of horizontal rules can be controlled with **width** attribute.

Problem: To display horizontal rules of different widths.

```
<HTML>
```

```
<HEAD>
```

```
<TITLE>Width of Horizontal Rule</TITLE>
```

```
</HEAD>
```

```
<BODY>
```

```
<P>
```

The following two rules have widths of 100 and 200 pixels respectively

```
<HR width=100><br><br>
```

```
<HR width=200>
```

```
</BODY>
```

```
</HTML>
```

10. tag

- It lets you change the size, style and color of the text – It is generally used for changing the appearance of a short segment of text.

Attributes of tag

- (i) **size:** used to specify the size of the text.
- (ii) **color :** used to change the color of text.
- (iii) **face :** used to change the way of displaying text.

Problem : To display a paragraph on red color in size 4 but its first letter should be of size 7 and of blue color.

```
<HTML>
<HEAD>
  <TITLE>Base Font</TITLE>
</HEAD>
<BODY>
<FONT size=7 color="blue"> U </FONT>
<FONT size=4 color="red"> sing the largest font </FONT>
</BODY>
</HTML>
```

Problem: To display text in a particular font-type.

```
<HTML>
<HEAD>
  <TITLE>Font Faces</TITLE>
</HEAD>
<BODY>
<FONT size=7 color="blue" face="Broadway,Arial, Albertus">
The font are displaying .
</FONT><br>
This is the text without any specific font.
</BODY>
</HTML>
```

11.<BASEFONT> tag

- This tag lets you define the basic size for the font, the browser will use to render normal document text.

Attribute of <BASEFONT> tag

- **size** – its value determines the document's base font size. It has a value between 1 and 7.

Problem: To display text by changing base font sizes.

```
<HTML>
```

```
<HEAD>
```

```
<TITLE> Base Font </TITLE>
```

```
</HEAD>
```

```
<BODY>
```

This text is being displayed in default font size as no basefont size has been set as yet.

```
<BASEFONT size =5>
```

This text has base font size =5.

```
</BODY>
```

```
</HTML>
```

Comments <!... and>

- Comments are one type of textual content which appear in your HTML code, but are not rendered by user's browser.
- Comments are given between special <!-- and --> characters.
- Browsers ignore the text between comment characters.

LOGICAL AND PHYSICAL TEXT STYLES

HTML has two types of styles for individual words or sentences:

- (i) Logical and
- (ii) Physical styles

LOGICAL TEXT STYLES

- Logical styles render the text according to its meaning e.g. is for emphasizing something and is for strongly emphasizing something.

- **Various logical styles are:**
 - <DFN> - for a word being defined. Typically displayed in italics.
 - - for emphasis. Typically displayed in italics.
 - <CITE> - for titles of books, films, etc. Typically displayed in italics.
 - - for strong emphasis. Typically displayed in bold.

(all above mentioned tags are container elements)

PHYSICAL TEXT STYLES

- It indicate the specific type of appearance for a section e.g. bold, italics etc.
- Various physical text styles are;
 - - bold text
 - <I> - italic text
 - <U> - underlined text

(all above mentioned tags are container elements)

SUBSCRIPT AND SUPERScript

- To write something like H₂O, you can write it as H ₂O.
- Similarly, to write something like X², you can write it as X².

SPECIAL CHARACTERS

- The left angle bracket (<), the right angle bracket (>) and the ampersand (&) have special meaning in HTML and therefore cannot be used in normal text.
- To use one of the three characters in an HTML document, you must enter its escape sequence instead as illustrated below:
 - < - the escape sequence for <
 - > - the escape sequence for >
 - & - the escape sequence for &

Problem: To display special characters.

```
<HTML>
```

```
<HEAD>
```

```
  <TITLE> Special characters </TITLE>
```

```
</HEAD>
```

```
<BODY>
```

```
  <P> &lt; and &gt; and &amp; are special characters that are displayed
```

```
  Using escape sequence. </P>
```

```
</BODY>
```

```
</HTML>
```