

HTML

HTML: means hyper text markup language. It's a computer language which is used to create webpages.

HTML contains both text as well as special instructions (commands) which are known as tags.

HTML documents are always saved with an extension of .htm or .html.

In HTML language specific instructions are enclosed in angular brackets (<, >).

Some tags have both opening and closing tags whereas some have only the opening tags. The closing tag is differentiated with forward slash (/) for example:-

 Delhi Public School

Programmes Used to write HTML coding :-

- 1) Text Editor (Notepad): Is a simple programme used to create and edit documents that contain only text. It doesnot include advanced editing and formatting features.
- 2) Word Processor: It is a software used to create and edit documents that contain text as well as graphics. It provides advanced editing and formatting features ex. MS word, Word Perfect, word star.

- Steps to create HTML document:-
- 1) Open notepad and write the html program
- 2) Then save the programme with extension of
◦ .HTM or .HTML
- 3) Close notepad
- 4) Open internet explorer or any other web browser
- 5) Go to file menu → open → browse → to look for file name → ok.
- 6) To get back to notepad click on view menu then source option (It will open notepad in IE window).
- 7) Make the changes and save it.
- 8) Click on the refresh button in view menu or toolbar or press F5 and changes will be visible on webpage.

HTML Elements:-

HTML elements are used to construct files there are two types of elements container element and empty elements

Container elements:-

Container elements have both opening and closing tags the closing tag is same as the opening tag except that it has a forward slash. The text is written between opening and closing tags.

example: ` Hello
Class `

Empty element: It only have a opening tag and does not have a closing tag
for ex <P> , <HR> , <BREAK>

Essential HTML tags

The four basic HTML tags for designing a webpage
<HTML> This tag marks the beginning and end of HTML coding it also helps to identify a document as an HTML document

<HEAD> It contains information about HTML document like the type of HTML document, title of document, scripts and style description and document description

<TITLE> Title contains title of webpage which appears on the title of the title bar of webpage

<BODY> Tags enclosed all the tags and attributes which are used for designing a webpage, all four basic elements are contained elements

Format for HTML coding

<HTML>

<HEAD>

<TITLE> HERE WE SPECIFY THE TITLE </TITLE>

</HEAD>

<BODY>

All tags used for designing a webpage

</BODY>

</HTML>

Hello

Attributes of Body Tags

- 1) Bg color: means the background colour. This attribute is used to apply background colour to a webpage
- 2) Text: This attribute is used to specify apply same font colour to whole webpage text.
- 3) Background: This attribute is used to put a background image to a webpage
- 4) Vlink - This is used to specify the visible color of unvisited links.
- 5) Link: This is used to specify the visible color of unvisited link.
- 6) Alink: which is used to specify the color of the active links, they are the links that are currently being clicked on.
- 7) The default colour of links is "BLUE"

Examples:

```
<Body BgColor "Red">
<Body Text = "Yellow">
<Body Background = "?">
<Body Background = "C:\My doc \ cloud.jpg">
<Body Link = "Red" Vlink = "Blue" Alink = "Orange">
```

Left Margins: This is used to leave blank spaces on left hand side of page i.e left Margin

Top Margin: This is used to leave some space from top of page.

Special Note:

These two values are specified in the units of pixels $72 \text{ pixels} = 1 \text{ inch}$.

Example

`<BODY Top Margin = 16 Left Margin = 70>`

Heading Tags in HTML

Heading Tag is used to add heading to our webpage. Headings are usually displayed in larger and bolder fonts than the normal text. There are six different heading levels, i.e. size of heading

Example `[<H1> to <H6>]`

where `<H1>` is the biggest font size and

`<H6>` is the smallest heading level

Heading tag is a container element

Special

Note:

Whenever we use heading tag, we cannot use the size attribute of font tag, as both have opposite sizes

`<H1> DPS </H1>`

Attributes of Heading Tags

Attribute of heading is align: which helps to set the alignment of heading text.

There are three alignments left, right, centre where left alignment is widely by default.

Example: `<H1 align = "Center" > DPS </H1>`

`<H2 align = "Right" > DPS </H2>`

`<H3 align = "Left" > DPS </H3>`

Paragraph Tag [`<P>`]

It is used to write text in a paragraph form. It's an empty element.

Attribute of `<P>` tag

Align: There are four alignment in `<P>` tags: Centre, Justified, left, Right. By default the `<P>` alignment is left.

Example:

`<P align = "Right">` This is an example of P tag Note
`</P>` this is second tag

Break Tag `
`

This tag helps to start a new line in a paragraph. It is an empty element.

Example: `<P>` OS `
` C.P. of C.

Centre Tag `<center>`

It is used to place text in centre.

It is a container element. This tag cannot be used with any align attribute.

Example `<center>` Hello class `</center>`

Base font Tag `<Basefont>`

When we want to apply same font to the whole webpage text. Then we use base font.

It is an empty element.

Attributes:

- in form
- ⇒ face: This attribute specifies style of writing the text on webpage
 - ⇒ Size: This attribute specifies size of text of webpage. We can specify the font size from 1 to 7. Where 1 is the smallest and 7 is the biggest.
 - ⇒ Colour: This attribute specifies the colour of text.
- tags
ult

2nd P tag Note: Base font tag and text attribute cannot be used together

Example:

a <Basefont size = 4 color = "Red" face = "Arial"

Font Tag

Tag is used to format the text, it has 3 attributes <Color>, <Face>, <SIZE>, as that of basefont tag. We can apply different font color, size and face on each line of a paragraph or a word or even a letter while using different font tags. It is a container element.

cannot
extra >

<FONT SIZE = 4 color = Red face = Red

> Example of font tag

to the
font

Tags used for changing appearance of Text

- i) Making Text bold - ` Computers `
- ii) Making Text Italics - `<I> Computers </I>`
- iii) Underlining Text `<U> Computers </U>`
- iv) Striking text `<Strike> Computers </Strike>`
- v) Super script: `A ² + B ²`
- vi) Sub scripting Text: `H ₂ O`
- vii) Enlarging Text `<Big> Computers </Big>`
- viii) Small Size `<small> Computers </small>`

All the above elements are container elements

Horizontal rule `<HR>`

The horizontal rule puts a line across a webpage to separate the sections of the document. The `<HR>` produces a horizontal line which spreads across the width of the browser window. One can change a rule's size that is the thickness and the width that is the percentage of window covered by rule. It has five attributes.

- 1) Size: Specifies thickness of rule in pixels. The default size of `<HR>` is 3 pixels.
- 2) Width: The width specifies percentage of window covered by rule. The default rule is drawn across the full width of window.

Text	The value of width that is length of <HR> can be an absolute number of pixels or a certain percentage of browser window width.
	
</I>	
<U>	
	
<sup>	
<sub>	
<big>	
<small>	
elements	
size of	
of the	
horizontal	
width of	
page a	
and the	
window	
bytes.	
pixels	
of	
rule is	
window	

The value of width that is length of <HR> can be an absolute number of pixels or a certain percentage of browser window width.

Align: This specifies the way a rule should be aligned on a page that is either left right or center.

Color: The colour specifies the color of the horizontal rule.

NoShade: This attribute is used to have a flat 2D rule. By default a 3D rule is displayed and with noshade a 2D rule is displayed.

<HR> is an empty

<HR size = 7 width = 75% color = "Red align = "center and noshade >

Comments :- (Comments <! - - - - - >

Comments are types of textual content which appear in HTML code but are not rendered by the users browser.

Comments are given between special mark up elements. The browser ignores the text between comment character sequences. Comments helps to recognize text or section of the page written on the webpage. It also helps to update a section of text or specifies why a particular tag or element has been used.

Example: `<!-- this is comment -->`
 — line ————
comments are empty elements

lists

Ordered list: means list in a specific order it is also known as ordered or numbered list. They are indented list that have nos. or letters in front of each list item.

Tags used to create ``

``, ``

`` specifies that we are starting with `` it is a container element.

Attributes of `` are

1) Type & Start

Type specifies the numbering style of ``
Possible values are A, a, I, i, 1

By default the value is ①.

2) Start: Start specifies the value by which the `` should start. By default it starts with ①

• `` specifies list items, it is an empty element. eg.

next

```
<H1> Days of week </H1>
<OL type="A" start="2">
<LI> Monday
<LI> Tuesday
<LI> Wednesday
</OL>
```

specific

to

list

front

```
<LI type="i"> Monday.
```

Unordered list:

Unordered list is a list in which no specific ordered is followed for writing the . It is also known as unnumbered or bulleted list.

ling
nt.

Tags used to create are , .

le of

4

. Specifies that we are starting with it is a container element. Attribute of is type.

which
t starts

which specified the bullet style for each unnumbered list items

Possible values are sq, □, ○, ● Default

It is an empty element.

empty

```
<H1> Unordered list </H1>
```

```
<UL>
```

```
<LI> Keyboard
```

```
<LI> CPU
```

```
</UL>
```

<LI Type = "square" >
<UL

List of Definition:

Definition list coded as <DL> consist of a definition term coded as <DT> and definition description coded as <DD>.

web browsers generally formats the definition on a new line and indents it.

Creating a list of definition.

If we want to display some terms with their definition we use list of definition.

3 Tags are required to create <DL>

i) <DL> which means definition list, it specifies that we are starting with list of definition, it is a container element.

<DT> means definition term which specifies the term for which we write the definition. It is an empty element.

<DD> means define definition or definition description which specifies the definition, it is an empty element.

Eg.

<DL>

<DT> container element

<DD> opening element

<DT> empty element

<DD> It has only opening tags.

Nested list

Creating a list within a list is known as NL. In order to specify the suboption of a particular option i.e. in order to display additional information about a particular item in a list we create nested list.

definition

```
<H1> Parts of Computer </H1>
```

```
<UL Type = "Circle" >
```

```
<LI> Monitor
```

```
<LI> C.P.U
```

```
<LI> Keyboard
```

```
</UL>
```

```
<LI> Numeric Key
```

```
<LI> Special keys
```

```
</UL>
```

Introduction to tables:-

A table represents information in a tabular way like a spreadsheet distributed across a grid of rows and columns.

In its simplest form a table places information inside the cells formed by dividing a rectangle into rows and columns contain data

tags.

Attribute <Table>

<Table> - Starts with <table> & ends with </table>

1) Border defines the width of the number of ~~rows~~ and ~~columns~~ border surrounding table.

default value is 1 pixel eg <table border=3>

2) Border colour: sets the colour of border

3) Bg colour: sets the background colour of table

4) Align: By default the table is left.

Align is used to determine where table will appear in browser window.

5) Width: Sets width of the table on browser

6) Cell padding: It is used to specify space b/w border and the content in the cell 4px

7) Cell Spacing: This is used to specify the space b/w cells.

1) <Table> wraps up a table and its elements in HTML document body.

2) <TR> defines table row

3) <TH>

Defines table header

4) <TD> defines table cells

5) <Caption> gives caption to table

<TR> stands for table row which is used to define a row, **<TR>** marks the beginning of TABLE Row & **</TR>** marks the end of TRow.

Attributes:

- 1) **Border Colour**: Sets the colour of row.
- 2) **bgcolor** sets the background colour of row.
- 3) **align**: Aligns the cell contents horizontally in the cell which can be left right or centres.
- 4) **valign**: Aligns the cell contents vertically within the cell. It can be top, middle or Bottom.
- 5) **height**: Sets the minimum height of row it can be given in points or in % of the table height.

height of this row will be 4% of table i.e. out of 100% of height 4% will be allotted to it and rest 96% will be allotted to rest of the rows.

Attribute used along with **<TR>** tag is applied to entire row.

<TH> stands for table heading, the contents declared as headers are displayed in a distinctive style for eg. Bold face. Attributes of **<TH>** are same as **<TR>** Tag ones.

To apply a particular attribute to a heading one has to specify to each cell individually in `<TH>` Tag

• `<TD>` stands for table Data it defines each table data within a row into which text or graphic images can be placed. `<TD>` marks the beginning of Table Data & `</TD>` the end.

`<TD>` has all the attributes of `<TH>` & `<TR>` and in addition to other attributes we can have `<COLSPAN>` & `<ROWSPAN>`

`<COLSPAN>` Extends the cell horizontally it specifies upto how many columns of the table data cell will span

The Default `<Colspan>` is 1 and columns are from left to right.

for eg. `<TD colspan = "3">` will make the cell stretch across 3 columns.

`<ROWSPAN>` It Extends the cell vertically, it specifies upto how many rows of table a data cell will span. The default rowspan is 1 for eg. `<TD rowspan = "3">`

heading
individually

times
which
placed
the Data

→ <TR>

we

partially
use of the

the cell

usually, it
is a data
row is 1

• Sample

	1	2
A	3	4
C	D	

<Table >

<Caption> Sample </Caption>

<TR> <TD align = "center" Rowspan =

A </TD>

<TD> 1 </TD> <TD> 2 </TD> </TR>

<TR> <TD> 3 </TD> <TD> 4 </TD>

<TR> <TD> C </TD> <TD colspan =

D </TD>

</TR>

</TABLE>