**HTML**

1. Frontend languages:

Front end development is the development of visual and interactive element of website that users interact with directly.

* HTML
* CSS
* JAVASCRIPT

1. Client-side:

* What is client end/side programming?
* Client side programming involves court that runs on the client machine (Usually within a web browser). It deals with user interface or display and other processing that occurs on the client side.
* Responsibility of client side programming
  + - 1. Interacting with temporary storage.

Ex. :- coockies

2. Creating interactive web pages.

3. Interacting with local storage.

4. Sending request for data to the server.

5. Serving as an interface between server and user.

* Client-side technologies or programming languages.

1. HTML (5th version)
2. Css (4th version)
3. Javascript (ES 14th version)

3. server-side:-

Server-side programming refers to the code that runs on the server itself, handling task related to the generating web content.

* Responsibilities of the server side.

1. Querying databases
2. Performing operation over databases
3. Accessing and writing files on the server
4. Interacting with other servers
5. Structuring web application
6. Processing user input

ex: running search algorithm based on the user queries.

* Server-side technologies or programming languages.

1. PHP
2. C++
3. Java
4. Python
5. JSP
6. Ruby, etc.

4. HTML: Hypertext Markup Language

Language:

It is nothing but a system of communication with his own convention like words or signals. In computer terminology, language is nothing but a set of instruction which are used to communicate with the computer.

Markup: Highlighting or editing the information is called as markup. Hypertext:

It is a test which is having hyperlinks, here hyperlink is used to navigate from one web page to another web page.

Use of HTML: Html’s web technology and Html is used to develop or design the websites.

History:

HTML Is developed by Tim Berners Lee in 1990 Before HTML web pages are used to develop by a technology called SGML (Standard Generalized  metal language). Html is provided by W3C (World Wide Web Consortium) Organization.

**HTML VERSIONS:**

HTML in 1991

HTML 2.0 in 1995

HTML 3.0 in 1997

HTML 4.01 in 1999

XHTML in 2000

HTML 5 in 2014

**5. Define Html:**

It is a standard mark-up language for creating web pages.

Html describes the basic structure of web page.

Html consist of a series of element.

**Markup language:**

This type of language is used to develop the webpage. In markup language we do not use any programming language concept like variable, operators, control statements, etc. To represent anything in markup language we use tags.

**Define html Tags**: Html tags are like keyword which defines that how web browser will form and display the content with the help of tags. Web browser can differentiate between an html content and a simple content.

HTML tag contain three main parts

1 open tag

2 contents

3 close tag

<tagname> CONTENT </tagname>

**NOTE:** Some html tags are unclosed tags.

Many web browsers read and html document browser reads it from top to bottom and left to right.

**Types of tags (5):**

1. Pre-defined tags
2. User-defined tags
3. Single tags
4. Paired tag
5. Nested tags

**1. Pre-defined Tags:**

Pre-define tags are already available so we cannot create and we can directly use the predefined tags.

Example: html, head, body

**2. User-defined tags:**

These tags are not available, so we cannot create and use the user define tags.

Ex: emp,stu,product

NOTE: In Html, we cannot create user defined tags. We use predefined tags only.

**3. single tags (self-closing tag):** Also called as inline tags and in this single tag, starting tag and ending tag should be the same tag. It is not possible to place any content inside the single tag.

Syntax: <tagname/>

Ex: -

<br/>, <hr/>, <img/>

4. **Paired tags**: Also called as Block tags. In paired tags starting tag and ending tag are separated in different tags and it is possible to place the content inside the paired tags.

Syntax: <tagname attribute events>

Content

</tagname>

Ex. <Marquee> content </marquee>

5. **Nested tag:** Tag inside another tag are called as nested tag. In nested tag outer tag must be paired tag and child tag are either paired tag or single tag.

Syntax: <tagname>

<tagname>

content

</tagname>

</tagname>

Example.

<html>

<head>

</head>

<body></body>

</html>

6. HTML Elements:

An element is defined by a start tag, some content by an end tag.

Ex.<tagname> content….. </tagname>

NOTE: Some elements are having no content (like the <br> element).

These empty tags do not have an end tag.

**There are 2 types of elements:**

1. Block level elements

2. Inline elements

**BLOCK LEVEL ELEMENT:**

It always starts on a new line and the browser automatically add some spaces (a margin) before and after the element.

* It always takes up the full width available (stretch of the left and right as far as it can).
* Two commonly used block elements are <P> and <div>.
* The <p> elements define a paragraph in a html documents.
* The <div> elements define a division or a section in a HTML documents.
* The <p> elements is a block-level element.
* The<div> element is a block-level element.

Here are the block-level element in HTML:

1. <address>

2. <article>

3. <aside>

4. <blockquote>

5. <canvas>

6. < div >

7. <figure> etc..

**Inline elements(No space elements(or)Zero space elements):**

* An inline element does not start on a new line.
* An inline element only takes up as much width is necessary.
* This is a <span> element inside a paragraph.

There is inline element in html.

* <a>
* <abbr>
* <br>
* <b>
* <big>
* <bdo> etc…

NOTE: An inline element cannot contain a block-level element.

**HTML Editors:**

* Notepad++
* Text mate
* Text wrangler
* Brackets
* Edit plus
* Komodo edits
* Ultra edit
* Atom
* Note pad
* PS pad
* BB edit
* CKeditor
* Programmers’ editors
* Sublime text
* Bluefish
* Text edit
* Visual studio

We can run in :

* Web browsers: Purpose is to read HTML document and display them correctly
* Web browser :- (chrome, edge, Firefox, safari)
  + A browser doesn’t display the html tags to determine how to display the document.

**7.Structure of HTML Document**:-

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<h1>BDPS</h1>

</body>

</html>

Doctype tag: this tag is used to specify the documentation type and version.

Syntax:

For 4TH version.

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">

<!DOCTYPE html> For html 5

1. HTML: Here html tag is the root tag of html document and this tag is having

number of subtabs some of them are:

2. HEAD: It is used to represent the head part of the web page and the this

tag is also subtab.

3. Title: Provide title of the html document.

4. Meta tag: Provides the extra information about the web page to the

search engine.

**META TAG:**

Meta tag HTML tags that provide information about a web page content to search engines and users-they play a crucial role in influencing how a website appears in search results and can impact click-through rate(CTR)

<meta name=”description” content=”Specifies the value associated with the http-equiv or name attribute” > The meta tag Defines metadata about an html document Metadata is data (information) about data. meta tag always go inside the <head> element and are

Name-attribute-Html data contents attribute – Html – meta charset attribute.

Example:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<meta name="keywords" content="loan, saving account, interest, money, transfer, imps, state bank of India, SBI">

<meta name="author" content="SBI Bank">

<title>SBI BANK</title>

<base href="file location">

</head>

<body>

</body>

</html>

Attribute’s of Meta tag

1. Name: “Any Keyword”

2. Content: “info about every keyword”

Html is a case sensitive language.

Html is an error free language.

We can develop the html document in any editors like Notepad, IDE (integrated Development Environment) like notebeans, eclips tools like (Dream viewer, WordPress, etc..) and we can save the html document with the extension of .html (or) .htm

Ex. **<!DOCTYPE html>**

**<html lang="en">**

**<head>**

**<meta charset="UTF-8">**

**<meta name="viewport" content="width=device-width, initial-scale=1.0">**

**<title>Document</title>**

**</head>**

**<body>**

**<h1>Html</h1>**

**<h1>CSS</h1>**

**<h1>Java Script</h1>**

**</body>**

**</html>**

8. HTML – Attributes

* Forbidden attributes

Forbidden Attributes:

When attribute name is equal to attribute value then those attribute are known as forbidden attribute.

example: download=”download”

noresize=”noresize”

disabled=”disabled”

9. HTML - Basic Tags & it’s attribute’s

* HTML is not a case sensitive:-

Lower case - <p> means the same <P> - UPPER CASE

* Heading tags:

By using this tag, we can place the heading in the web page.

There are 6 types of headings h1, h2, h3, h4, h5, h6.

**Attributes**:- Which is used to define Properties of the Elements.

**Syntax**:- Attribute name = “value”

Attributes are of two types

1. **common attribute** :-

Ex:- dir, title, name, id, class, style, link, vlink….etc.

These attributes can applicable for all tags in the HTML

2. **individual attribute** :-

Ex. :- font, size, face, align.

Table :- bgcolor, bordercolor, height, width

1. **Forbidden Attributes:**

When attribute name is equal to attribute value then those attribute are known as forbidden attribute.

example: download=”download”

noresize=”noresize”

disabled=”disabled”

**Heading** :-

Align:

Syntax: align=”left/right/center”

Example:-

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<h1 align="left">BDPS</h1>

<h2 align="right">COURSE</h2>

<h3 align="left">Html</h3>

<h4 align="right">CSS</h4>

<h5 align="center">JavaScript</h5>

<h6 align="center">Python</h6>

</body>

</html>

**Paragraph** : <p>

This tag is used to display the content in the form of paragraph.

Attribute of p tag:

Align =”left/right/center”

* NOTE: If you want to provide the space in starting of the paragraph, we use text indent property in style attribute.

Content:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<p align="center">Lorem ipsum dolor sit, amet consectetur adipisicing elit. Sed vitae nobis omnis accusamus ullam excepturi libero totam quos accusantium sit eos exercitationem, voluptatibus similique aspernatur velit vel cumque culpa ratione. </p>

</body>

</html>

Hr tag: <hr>

HR stands for horizontal ruler. And it is used to draw horizontal line on the web page.

Attributes of the hr tag:

1. color:

By Using we can specify color of the horizontal line.

Syntax: color=”colorname/colorvalue”

2. size:

This attribute specifies the thickness of the line.

Syntax: “no. of px / %”

3. Width:

Syntax: width=”no. of px”

4. Align:

Syntax : align=” left/right/center”

Ex.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<h1>Computer</h1>

<hr color="red" size="10px" width="100px" align="right">

<p align="center">content...........</p>

</body>

</html>

BODY tag :

This tag is used to represent the body part in the web page and by using this tag, we can place the content in the web page.

Attributes of the body tag :

1. Align: It is used to specify the alignment of the content placed in the web page.

Example : align =“left”

2. Bgcolor: Is attribute is used to specify the background color of the web page.

Example: bgname=”color name/ color value”

3. Text : by using this attribute we can change text color.

Example : text=”colorname/colorvalue”

4. Title : It provides extra information about the webpage to the user.

Example: title=” any info.”

5. left margin, top margin :

By using this attribute we can set the margin for the web page.

Example: leftmargin=”no. of px, inches, percentage etc.”

topmargin=”no. of px, inches, percentage etc.”

6. Background: this is used to apply background image for web page.

Example: background=” location of image”

NOTE: whenever we apply the background image we need to apply the bg color.

Example:

<body align=” left” bgcolor=” red” text=” white” Title=” client tech” leftmargin=”10px” topmargin=”20px”

Backgound=” location of the img.type of file (png)”

Background are of two types:

1. Absolute path

2. Relative Path

1. Absolute path: in this type of path we can give the location of the file from the starting position of the drive.

Ex.: E:\2015\aug\html\one.jpg

2. Relative Path: We can give location of the file from our current

location.

Ex.: image\one.jpg

**Font Tag:**

We can customize the style of the font for specified text in the web

Page.

Attributes:

1. color: specify the text color

Syntax: color=”colorname/colorvalue”

2. size: it is use to change the size of the font from ‘1’ to ‘7’

(default size is ‘3’)

Syntax: size=”1/2/3/4/5/6/7”

3. Face: it is used to specify the font family face.

Syntax: Face=”any font family”

Example:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<font color="blue" size="5" face="arial black">BDPS</font>

</body>

</html>

Br tag: <br>

This tag is used to break the line and moves the curser to next line, br tag is a single tag </br> or <br>.

Center tag: <center>

It is used to display the content in center.

Pre tag: <pre>

This tag is used to display the content in the web page as it is we written in html document and wherever we use pre tag it displays the content in teletype or type writing format.

Example:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<p> Software is a set of instruction <br> data</p>

<center>BDPS</center>

<pre>software is,

it is a opposite if hardware </pre>

</body>

</html>

Formatting tags:

These are used to display the content in the webpage in specified format. In HTML there are so many types of formatting tag are available some are of them are:-

1. <b>, <strong> tags:

These tags are used to display the text in bold.

2. <i>, <em>, <address>, <dfn>:

These tags are used to display the text in italics

3. <s>, <strike>, <del>:

These tags are used to strike out the text.

4. <u>, <ins>:

These tags are used to insert underline for specified text.

5. <sub>:

These tags are used to display the text in subscript

Ex. Co2

6. <sup>:

These tags are used to display the text in superscript

Ex. 10th

7. <small>, <big>:

These tags are used to increase or decrease the font size by 2px

8. Mark tag:

These tags are used to highlight the specific content

9. Blink:

These tags are used to blink the word it works in firefox, it doesn’t work in chrome.

10. Bdo:

Bidirectional order

Dir=”rtl/ltr”

11. Abbr Acronym:

These tags are used to place abbreviation in webpage .

Example: <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<p> <bdo dir="rtl">sadiq</bdo> <b> <i>Software <mark> is a set <sub> of <sup> instruction data

<u>software is a <s> opposite if <big>hardware </p>

<details>

Hypertext Markup Language

<summary>HTML</summary>

</details>

</body>

</html>

For displaying any <code>:

ex. : <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<code> #include <stdion.h></code>

</body>

</html>

**Image Tag: <img>**

This tag is used to display the image in web page. We can place any format of the image like png, gif.

Attribute of the img tag:

1. Src : It is used to specify the location.

Syntax: src=” path of the image”

2. border: It is used to specify the thickness

Syntax: border=” no. of px”

3. height, width: It is used to specify the height and width of the img.

Syntax: height=” no. of px”

width=” no. of px”

4. align:

Syntax: align=” right/left”

5. hspace, vspace:

Use to specify the position of the image.

Syntax: hspace=” no. of px”

vspace=” no. of px”

6. alt:

This attribute is used to write alternative message for the image and it is displayed when the image is not available.

Syntax: alt=”any information”

Example: <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<img src="path" alt="loading..." border="5px" height="350px" width="350px" align="right" hspace="10px">

</body>

</html>

**Marquee tag**: This tag is used to scroll the content inside the web page.

Attribute of the marquee tag:

1. Direction: By using this tag we can specify in which direction content

will be scrolling.

Syntax: direction=”left/right/up/down”

2. bgcolor:

Syntax: bgcolor=”colorname/colorvalue”

3. height, width:

Syntax: height =”no. of px”

Width =”no. of px”

4. scroll amount: This attribute is used to specify how many numbers of

pixel will be scrolled at a time.

Syntax: scrollamount =”no. of px”

5. scrolldelay: We can specify how much time scrolling content will be

Wait.

Syntax: scrolldelay=”no. of px ”

6. Behaviour: it is used to specify the behaviour of the scrolling content.

Syntax: behaviour=”slide/motion/alternate”

7. loop: by using this attribute we can specify how many times scrolling

content will be scrolled.

Syntax: loop=”no. of times”

Example:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<marquee behavior="alternate" direction="right" bgcolor="yellow" height="15px" scrollamount="10px" scrolldelay="0.8msec" loop="2" > bdps</marquee>

</body>

</html>

Image scrolling:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<marquee behavior="alternate" direction="right" scrollamount="10px" scrolldelay="0.8msec" loop="2" ><img src="path" alt="loading...."></marquee>

</body>

</html>

**Hyper links:** Hyperlinks are nothing but hypertext which is used to perform a

Perform a particular task like navigation from one webpage to another or transferring the data from 1 webpage to the users.

* In HTML there are four types of hyperlinks.

1. Hyper link
2. Weblink
3. Email link
4. Download link

* Hyper link: these are used to navigate from one webpage to another webpage in the same website.
* Web link: These are use to navigate from one page to another website
* Email links: these are used to transfer data from one webpage to the same website or different website.
* Download link: these link gives the information to the users to create any type of link in html we use <a> (anchor) tag.

Attribute of the hyperlinks:

1.href(hyperlink reference): This attribute is used to specify the

destination file location.

Syntax: href=”path of the file”

2. Name: It is used to give the name for the hyperlink.

Syntax: name=”any name”

3. Title: it is used to give extra information to the user.

Syntax: title=”any text”

4.Target: It is used to specify where the destination file we be opened

Syntax: target=”self/blank/new/win/win/framenames”

Forbidden Attributes:

When attribute name is equal to attribute value then those attribute are known as forbidden attribute.

example: download=”download”

noresize=”noresize”

disabled=”disabled”

**Empty anchors:**

In empty we do not provide destination file location.

Example: <a href=#> click here </a>

**Named anchors:**

If you provide names of the hyperlinks that hyperlinks are called as named anchors.

Example: <a href=”pre.html” name=”first”> click here </a>

Example:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<a href="path" name="styles" title="webpage" target="window" download="download">link</a> <br>

<a href="#">link2</a>

</body>

</html>

**Image as a link**:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<a href="path"><img src="path" alt="loading..."></a>

</body>

</html>

More than 1 image:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

<base href="file location">

</head>

<body>

<img src="image name " alt="loading...">

</body>

</html>

**10. HTML Colors:**

* Html colors are three types name, values and code.
* Style is attribute is used to define a color of background, text and border etc.

**Color by name:**

* Background color:

<p style=”background-color:blue:”>content…..</p>

* Text color:

<p style=” color:green:”>content…..</p>

* Border:

<p style=”border:2px solid yellow;”>content…..</p>

**Color by value:**

1. rgb (red, green, blue)

Each parameter (red, green, blue) defines the intensity of the color with the value between 0-225.

256\*256\*256\*=16777216 possible colors.

Ex.: <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Data List</title>

</head>

<body>

<p style="color: rgb(255, 0, 0);">content…..</p>

</body>

</html>

2. rgba (red, green, blue, alpha)

Note: specifies the opacity for a color.

Ex.: <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Data List</title>

</head>

<body>

<p style="color: rgba(140, 25, 190, 0.7);">content….</p>

</body>

</html>

**Color by code:**

Hex color

Hexadecimal colors:

1. rrggbb : rr(red) gg(green) bb(blue)

Hexadecimal color between 00-ff (00-min ff-max)

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Data List</title>

</head>

<body>

<p style=”color:#ff0000;”>content..</p>

</body>

</html>

2. HSL color:

HUE, saturation, lightness

Hue: it is a degree on color wheel from 0 to 360.0 is red 120 is green and 240 is blue.

Saturation: Percentage value, 0% means a shades of gray and 100% is the full color.

Lightness: Lightness is also percentage value, 0% is black and 100% is white.

Example: <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Data List</title>

</head>

<body>

<h1 style="color: #9a7dff;">Html</h1>

<h1 style="color:hsl(152, 85%, 50%);">Html</h1>

</body>

</html>

**11. Favicon:**

A favicon is a small file containing the one or more icons which are used to represent the website or a blog. It is also known as a tab icon, website icon, URL icon, or a bookmark icon. This icon is actually displayed on the address bar, browser's tab, browser history, bookmark bar, etc.

Syntax: <link rel=”Icon” type=”image/x-icon” href=”path”>

Example: <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>icon</title>

<link rel="icon" href="pa.png" type="img/img-icon" >

</head>

<body>

</body>

</html>

**LIST:** If you want to place the content in list format we use this three

following types of lists.

1. Ordered list
2. Unordered list
3. Definition list (or) Description list

**Ordered list:** It can display number before the content of the list to create

order list we use tag <ol> and to place list item in ordered to list we use a tag <li>.

Attribute of <ol> tag :

1. Type: This attribute specifies the order type.

Syntax: type=”a/A/i/1”

1. Start: : This attribute specify from which number list will be started

Syntax: start=”any no.”

**Unordered list**: It can display the symbols before the content of list items, to

create an order list we use a tag <UL> and to place list item in unordered list we use a tag <li>.

Attribute of <ul> tag:

1. Type: This attribute specifies the order type.

Syntax: type=”disk/circle/square/none”

**Definition list (or) Description list:**

Whenever we are using definition list it can place all the definition

List it can place all the definition in list format to create definition list/ description list we use a tag <dl> and to place definition type/description type list we use a tag <dt> and to definition data / description data in definition list we use a tag <dd>.

Example: <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

<base href="file location">

</head>

<body>

<h1>ordered list</h1>

<h4>Client side</h4>

<ol type="A" start="1">

<li>HTML</li>

<li>CSS</li>

<li>JAVASCRIPT</li>

<li>BootStrap</li>

<li>Angular</li>

</ol>

<h1>unordered list</h1>

<h4>server side</h4>

<ul type="sq">

<li>c</li>

<li>C++</li>

<li>JAVA</li>

<li>Python</li>

<li>Php</li>

</ul>

<h1>Description list</h1>

<h4>Database</h4>

<dl>

<dt>SQl

<dd>structure query language</dd>

<dt>DBMS

<dd>Data base management system</dd>

</dt>

</dl>

</body>

</html>

**List item as link:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

<base href="file location">

</head>

<body>

<ul type="square">

<li><a href="path">HTML</a></li>

<li><a href="path">CSS</a></li>

<li><a href="path">JavaScript</a></li>

</ul>

</body>

</html>

**Table Tag:** This tag is used to place the table in the web space and

divides the In to number of parts to represents rows in tables we use tag tr and to represents columns we use the tag td,th.

**Subtag of the table tag:**

1. Tr (table row)
2. Td (table data)
3. Th (tab header)
4. Caption

**Attributes of the table tag:**

1. Border: this is attribute is used to specify thickness of border

Syntax: border:”no. of px”

1. Border color: this is attribute is used to specify border color of the

table

Syntax: bordercolor:”colorname/colorvalue”

1. Bgcolor: this is attribute is used to change the background color of the

table

Syntax: bgcolor:”colorname/colorvalue”

1. Background: this is attribute is used to change the background image

for the table

Syntax: background:”path”

1. Align: this is attribute is used to specify the alignment of the table tag

Syntax: align: ”left/right/center”

1. Height, width: this is attribute is used to specify the size of the

table

Syntax: height=”no. of px”

Width =”no. of px”

7. Cellspacing: this is attribute is used to specify space between the cell

of the table tag.

Syntax: cellspacing=”no. of px”

8. Cellpadding: this is attribute is used to provide space between the

content of the table tag.

Syntax: cellpadding=”no. of px”

**Attribute of the tr tag:**

1. Bgcolor
2. Background
3. Height
4. Aling (right/left/ceter)
5. Valign (top/bottom/middle)

**Attribute of the td,th tag:**

1. Bgcolor
2. Background
3. Height
4. Aling (right/left/center)
5. Valign (top/bottom/middle)
6. Colspan: merging two or more cell in horizontal direction

(in same row)

Syntax: colspan=”no. of cell”

1. Rowspan: merging two or more cell in Vertical direction

(in same row)

Syntax: rowspan=”no. of cell”

8. Caption tag: it is used to give caption for the table

**Attribute:**

1. align=”top/bottom”

TO CREAT TABLE

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<table border="2px">

<tr>

<th>S.no</th>

<th>Name</th>

<th>Course</th>

</tr>

<tr>

<td>1</td>

<td>BDPS</td>

<td>HTML</td>

</tr>

</table>

</body>

</html>

Ex.2: <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

<base href="path">

</head>

<body>

<table border="2px" bordercolor="red" background="path" bgcolor="crimson" align="center"

cellspacing="50px" cellpadding="5px" height="150px" width="200px" >

<tr>

<th>S.no</th>

<th>Name</th>

<th>Course</th>

</tr>

<tr>

<td>1</td>

<td>BDPS</td>

<td>HTML</td>

</tr>

</table>

</body>

</html>

EX.3: <!DOCTYPE html>

<html>

<head>

<title>table</title>

</head>

<body>

<table border="1px" bgcolor="pink" align="center" height="200px" width="450px" >

<tr bgcolor="white" height="50px">

<th>S.no.</th>

<th>Subjects</th>

<th>Marks</th>

<th>Grade</th>

<th>RESULTS</th>

</tr>

<tr>

<td>1</td>

<td>HTML</td>

<td>94</td>

<td>A</td>

<td>PASS</td>

</tr>

<tr>

<td>2</td>

<td>ANGULAR/REACT</td>

<td>96</td>

<td>A</td>

<td>PASS</td>

</tr>

<tr>

<td>2</td>

<td>HTML</td>

<td>94</td>

<td>A</td>

<td>PASS</td>

</tr>

<tr>

<td>3</td>

<td>CSS</td>

<td>94</td>

<td>A</td>

<td>PASS</td>

</tr>

<tr>

<td>4</td>

<td>JAVASCRIPT</td>

<td>94</td>

<td>A</td>

<td>PASS</td>

</tr>

<tr>

<td>5</td>

<td>BOOTSTRAP</td>

<td>89</td>

<td>B</td>

<td>PASS</td>

</tr>

</table>

</body>

</html>

**Audio and Video tag**:

This tag is used for playing the audio or video on the webpage.

**Video tag:**

<video>

**Attributes**

1. Src
2. Controls
3. Height
4. Width
5. Loop
6. Autoplay

Ex.:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>video</title>

<base href="C:\Users\Lenovo23IN\Pictures\pictures\New folder\">

</head>

<body>

<video src="MVI\_0291.MOV" controls height="800px" width="700px" ></video>

<video src="MVI\_0201.MOV" controls height="800px" width="700px" loop="2" ></video>

</body>

</html>

**Audio tag:**

<audio>

**Attributes:**

1. Src
2. Controls
3. Loop

Ex.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Audio</title>

<base href="C:\Users\Lenovo23IN\Downloads\">

</head>

<body>

<audio src="O Maahi Dunki 320 Kbps.mp3" controls loop></audio>

<audio src="Lutt Putt Gaya Dunki 320 Kbps.mp3" controls></audio>

<audio src="Ve Kamleya.mp3" controls></audio>

</body>

</html>

**For MAPS:**

* Go to maps website in Google Select Country
* Click on share
* embedded code
* copy HTML link

**DIV:**

This tag is used to divide the webpage into number of parts and div tag is acting as a container. In div tag we can place any type of content like text, image, table, etc. And whenever we’re using div tag it can take less amount of memory to Compare frames and tables and it loads the webpage fast because div tag is lightweight component whenever we are use div tag it can divide the web page based on content here we no need to specify size.

**Attributes of div tag:**

1. align=”left/right/center”

Example:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<div>

<h1>HTML</h1>

<h1>CSS</h1>

<h1>JavaScript</h1>

<h1>BootStraped</h1>

</div>

<div>

<h1>Python</h1>

<h1>HTNK</h1>

<h1>C</h1>

<h1>C++</h1>

<h1>Java</h1>

</div>

</body>

</html>

**Frames:**

Frames is used to display the multiple documents in the same web page at the same time or divide the web page into multiple parts to work with frames we use a tag frameset.

<frameset>: This tag is used to divide the web page into either horizontally or vertically.

**Attribute:**

1. Row: divide it horizontally.

Syntax: rows=”size of every part % or PX”

1. Cols: divide it vertically.

Syntax: rows=”size of every part % or PX”

1. Border: Specifies the size of the frame.

Syntax: border= “no. of PX”

1. BorderColor: Specifies the border color of the frame.

Syntax: bordercolor= “colorname/colorvalue”

**Frame:**

This tag is used to display the particular document in particular division.

**Attributes:**

1. Src=”path”
2. Scrolling=”auto/yes/no”
3. Noresize=”noresize”
4. Name=” Used to identify frame easily”

Syntax: Name=”any name”

Example:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

<frameset rows="50%,30%,20%" cols="30%,30%,30%" border="5px" bordercolor="red">

<frame src="pa.png" scrolling="yes" name="frame1"> </frame>

<frame src="pa.png" scrolling="yes" name="frame1"> </frame>

<frame src="pa.png" scrolling="yes" name="frame1"> </frame>

<frame src="pa.png" scrolling="yes" name="frame1"> </frame>

<frame src="pa.png" scrolling="yes" name="frame1"> </frame>

<frame src="pa.png" scrolling="yes" name="frame1"> </frame>

</frameset>

</head>

<body>

</body>

</html>

**Example 2:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

<frameset cols="50%,50%,50%" border="5px" bordercolor="red">

<frame src="pa.png" scrolling="yes" name="frame1"> </frame>

<frameset rows="50%,50%">

<frame src="pa.png" scrolling="yes" name="frame1"> </frame>

<frame src="pa.png" scrolling="yes" name="frame1"> </frame>

</frameset>

<frame src="pa.png" scrolling="yes" name="frame1"> </frame>

<frame src="pa.png" scrolling="yes" name="frame1"> </frame>

</frameset>

</head>

<body>

</body>

</html>

**No frameset:**

<noframeset>

<h1>BDPS</h1>

</noframeset>

When the frames are not display then this content is shown in place of frame.

**What is inline frame <iframe>:**

* An inline frame <iframe> is a html element that loads another html page within the document it essentially puts another web page within the parent page.
* They are commonly used for advertisement emitted video web analytics and interactive content.

<iframe>: Iframe stands for inner frames by using this frame we can divide the one part of the web page.

**Attribute of iframe:**

1. Height=”no of px”
2. Width=”no of px”
3. Margin width=”no. of px”
4. Margin height=”no. of px”
5. Src=”location”
6. Scrolling=”aouto/yes/no”

Example 1:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<iframe src="pa.png" height="500px" width="280px" marginwidth="10px" marginheight="10px" scrolling="auto" ></iframe> <break>

</body>

</html>

Example 2:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<iframe src="pa.png" height="500px" width="280px" scrolling="auto" ></iframe>

<iframe src="pa.png" height="500px" width="280px" scrolling="auto" ></iframe>

<iframe src="pa.png" height="500px" width="280px" scrolling="auto" ></iframe>

</body>

</html>

**12. Forms controls:**

If you want to read the data from the user in the web page we use form controls. In html there are so many forms controls are available

**Attribute:**

**Action**: Action attribute defines the action to be performed when the form is submitted usually the form data is sent to a file on the server when the user clicks on the submit button.

**Target**: It is used to specify where to display the response that is received after the submitting the form blank/self/win/top/parent.

**Method**: The method attributes specifies the HTTP method to be used when submitting the form data.

The form data can be sent as URL variables (with method=”get”) or as HTTP post transaction (with method=“post”)

NOTES on **Get**

1. appends the form data to the url in name or value pairs.
2. Never use get to sense sensitive data (the submitted form data is visible in the url.)
3. The length of the url is limited 2048 character.
4. Useful for submitting where user wants to bookmark the result.
5. get is good for non-secure data like, query string in Google

NOTES on Post:

1. Appends the form data inside the body of HTTP requests (the submitted form data is not shown in the URL.)
2. Post has no size limitation and can be used to send large amount of data.
3. form submission with post cannot be bookmark.

**Autocomplete**:

This attribute specifies whether a form should have auto complete on or off when auto complete is on the browser automatically complete values based on values that the user has entered before.

**Element of form:**

<Input>

<Label>

<Select>

<Option>

<Optgroup>

<Datalist>

<Text area>

<Button>

<Field set>

<Legend>

<Output>

**Attribute for input tag:**

* Type
* name
* value
* size
* max length
* autofocus
* read only
* disabled
* checked
* multiple
* src
* height
* width
* required
* placeholder

Example:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<form action="" target="\_blank" autocomplete="on" method="post">

<input type="text"> <br><br>

<input type="password"> <br><br>

<input type="search"> <br><br>

<input type="checkbox"> <br><br>

<input type="button"> <br><br>

<input type="color"> <br><br>

<input type="date"> <br><br>

<input type="datetime"> <br><br>

<input type="datetime-local"> <br><br>

<input type="email"> <br><br>

<input type="file"><br><br>

<input type="hidden"><br><br>

<input type="image"><br><br>

<input type="number"><br><br>

<input type="radio"><br><br>

<input type="range"><br><br>

<input type="reset"><br><br>

<input type="tel"><br><br>

<input type="time"><br><br>

<input type="url"><br><br>

<input type="week"><br><br>

<input type="submit"><br><br>

</form>

</body>

</html>

Ex.2:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<form action="" target="\_blank" autocomplete="on" method="post">

<input type="text" name="user" value="enter the name" size="10px" autofocus="yes" placeholder="name" > <br><br>

<input type="button" disabled="yes"> <br><br>

<input type="number" maxlength="10"><br><br>

</form>

</body>

</html>

**Label:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<form action="" target="\_blank" autocomplete="on" method="post">

<label for="username">User Name</label>

<input type="text" name="user" placeholder="Enter your name" > <br><br>

<label for="pswd">Password</label>

<input type="password" placeholder="6 digits Password"> <br><br>

</form>

</body>

</html>

**Select tag**

<select>

Select tag **Attribute**:

1. name
2. multiple

**Subtag** of the select tag

<option>

**Attributes** of the option tag:

1. value
2. selected

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<form action="" target="\_blank" autocomplete="on" method="post">

<select name="software" id="software" multiple>

<option >HTML</option>

<option>CSS</option>

<option selected>JavaScript</option>

<option>Bootstrap</option>

<option>Java</option>

<option>Python</option>

<option>C</option>

</select>

</form>

</body>

</html>

**Option group tag**

<optgroup>

**Option group tag** Attribute**: -**

label

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

<body>

<form action="" target="\_blank" autocomplete="on" method="post">

<select name="software" id="software" multiple>

<optgroup label="Front-end desk">

<option >HTML</option>

<option>CSS</option>

<option selected>JavaScript</option>

<option>Bootstraped</option>

</optgroup>

<optgroup label="Back-end desk">

<option>Java</option>

<option>Python</option>

<option>C</option>

</optgroup>

</select>

</form>

</body>

</html>

Text area:

<textarea>

Attribute of text area:

1. name
2. rows
3. cols

Example:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>text area</title>

</head>

<body>

<form action="" target="\_blank" autocomplete="on">

<textarea name="comment box" id="para" cols="30" rows="10"></textarea>

</form>

</body>

</html>

Example:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>text area</title>

</head>

<body>

<form action="" target="\_blank" autocomplete="on">

<fieldset form="" name="Biodata">

<legend>Bio Data</legend>

<label for="name">Name</label>

<input type="text" name="enter ypur name"><br><br>

<label for="no.">Roll Numumber</label>

<input type="number" name="roll no."><br><br>

<label for="Mail">E-mail</label>

<input type="email"><br><br>

<label for="dob">D.O.B</label>

<input type="date"><br><br>

<label for="sex">Gender</label><br><br>

<label for="male">Male</label>

<input type="checkbox"><br><br>

<label for="Female">Female</label>

<input type="checkbox"><br><br>

<input type="submit"> <input type="reset">

</fieldset>

</form>

</body>

</html>

**<DATA List>**

Ex.1: <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Data List</title>

</head>

<body>

<form action="#" target="\_blank" >

<label for="browser">Choose your Program from the list:</label>

<input list="browsers" name="browser" id="browser">

<datalist id="browsers">

<option value="C">

<option value="C++">

<option value="Python">

<option value="Java">

<option value="HTML">

</datalist>

<input type="submit">

</form>

</body>

</html>

**Ex.2:** <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Data List</title>

</head>

<body>

<form oninput="x.value=parseInt(a.value)+parseInt(b.value)">

<input type="range" id="a" value="50">

+<input type="number" id="b" value="25">

=<output name="x" for="a b"></output>

</form>

</body>

</html>

**Ex.:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Data List</title>

</head>

<body>

<button type="button" value="press" name="bt1">Press</button>

</body>

</html>