

Web technology

- * Web Technology :- It is used to create applications or software.
 - It is used to access web pages.
 - To create web application we need HTML, CSS, Java Script.

* Application :- It is a set of programmes or operations performed on web pages.

* Types of Applications :-

- 1) Standalone Application.
- 2) Web Application.

i) Standalone Application :- This application which is present in our system and this application runs without internet. All the codes and logics are inbuilt in the operating system.

* Two types of standalone app :- e.g. record camera, mobile app :- calculator, note, clock

ii) desktop app :- paint, ms-excel, ms-word, vs code, eclipse etc.

* Web based application :- This application runs on a web pages, using internet and browser. These applications are not present in our system. Ex:- Gmail, Instagram, Facebook etc.

* To access web based applications we required :-

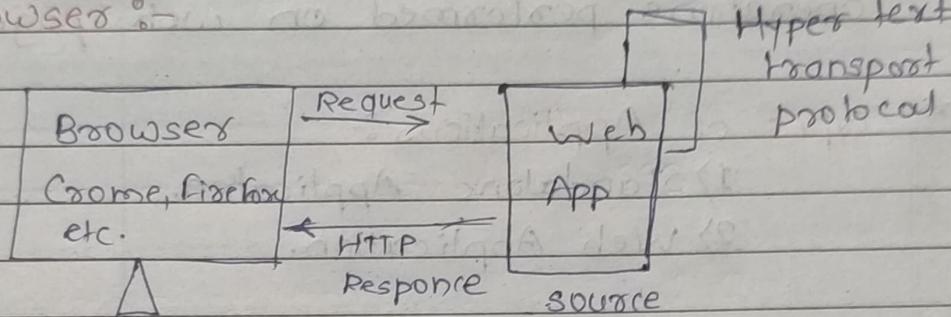
- i) Network.
- ii) Browser.

* Network :- Group of computers or combination of many systems together. Exchange information etc.

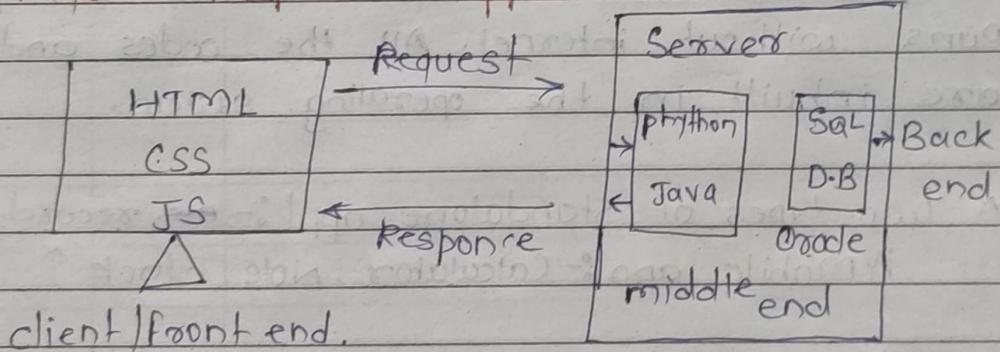
i) Intranet (Private) :- wifi, hotspot etc.

ii) Internet (Public) :- mobile data.

* Browser :-



* Request Response Application :-



A1) HTML = is used to display content in web pages using tags.

2) CSS = is used to style or design HTML page or HTML document.

3) JavaScript :- dynamic programming language for development responsive webpage.

A Editors :-

To write code :- (Note pad, Word pad, Edit plus...).

Advanced version

VS-code - visual code.

To run code :- Browser (chrome, firefox, Edge etc.)

A How to create Extension :-

- html
- css
- js

* Hyper Text Mark-up Language *

* HTML *

Page No.

Date

28 9 22

* Introduction :-

<text> (tags)

<(Opening tag)>

>(closing tag)

* HTML was introduced by Sir Tim Berners Lee in 1991.

1st version of HTML is HTML 1.0
introduced in year 1993.

2nd version of HTML is HTML 2.0.
introduced in year 1995

3rd version of HTML is 3.0
introduced in year 1997

4th version of HTML is 4.0
introduced in year 1999

5th version of HTML 5.0
is introduced in year 2012

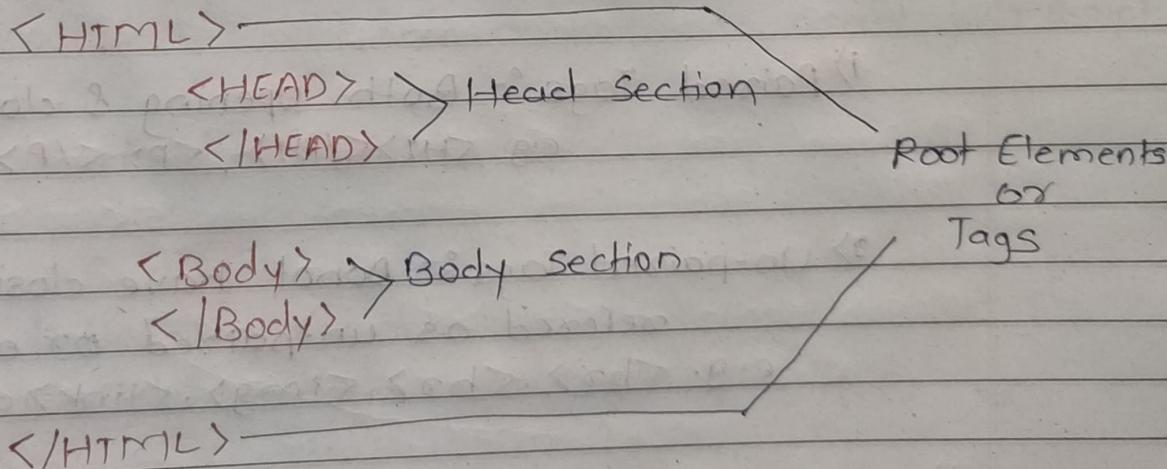
- It describes the structure of webpages.
- It consists of series of elements or tags.
- Elements or tags tells the browser how to display the data.
- It is used for creating web pages or own web sites.

* Contents :-

- 1) Basic HTML Tags, Head section, Body section.
 - 2) Attributes.
 - 3) Lists.
 - 4) Tables.
 - 5) Multimedia.
 - 6) Hyperlink.
 - 7) Forms.
 - 8) Character Entities
 - 9) HTML 5 (latest tags)
- Extensions :-
- 1) live Source
 - 2) HTML/CSS Support
 - 3) Java Script ESC
 - 4) material icon theme
 - 5) Better Comments.

* Structure of HTML (Syntax) (Shift + 1)

<! DOCTYPE HTML> Declaration, indicates current version of HTML (Not a HTML tag)



* Short Cut :-

Word Wrap = Alt + Z

Comment = Ctrl + / (not recognised by browser)
But taken by HTML code.)

* HTML tags or Elements :-

- HTML elements consists of both opening and closing tags.
- The closing tag should be indicated using forward slash (/).

< > - opening tags.

</> - closing tags.

* Types of Tags :-

1) Paired Tags :- Both opening & closing tag

e.g. <H1></H1>, <P></P>, <U></U>.

2) Un-paired Tags :- Do not have closing tags.

referred as un-paired or empty tag.

e.g.
,
, , <link> etc.

* Head Section :-

`<Head>`

`<Meta>`

- Contains small info about
HTML page.

`<Title></Title>`

- It is used to provide title or name for
web page.

`<link>` :- It is used to apply icons to webpage.

`xref` = accepts icon as value.

`href` = accepts image as path.

It is used to link some external file.

`<Style> </Style>` :- It is used to apply css designs
to web pages.

`<script> </script>` :- It is used to apply java script
to web pages.

`</Head>`

* Body Section :-

1) Heading Elements :-

`<H1> </H1>` upto `<H6> </H6>`
`<H2> </H2>`

Add headings to web pages.

2) Paragraph tags :-

`<P> </P>`

Add paragraph to web pages.

`<lorem>` (dummy content)

3) Underline :-

`<u> </u>`

It helps in adding underline to content.

4) Bold :- ` ` It helps to make content bold.

5) Strong :- ` ` It is also used to make content bold.

6) Italic :- `<i> </i>` It helps make content italic.
` ` It is also used to make content italic.

7) Mask :- `<mask> </mask>` used to mask or highlight content in web page.

8) Code :- `<code> </code>` It will provide monospace font family.

9) Super Script :- `` represent super script of element e.g. $5^{²} = 5^2$

10) Sub Script :- `` represent in sub script of element $5^{₂} = 5_2$

11) Small :- `<small> </small>` to get small text compared to normal text.

12) Pre tag :- <pre></pre>

This tag will display pre formatted text that is it will display code as it is written in HTML file.

<pre>

In spider

Q Spider

webspider

PY spider

</pre>

pre tag will recognises extra spaces and line breaks.

13) Details and Summary:-

<details>

Cat says meow

<summary>

CAT:

<summary>

</details>

14)
 - To provide break after each content.

15) <Div> </Div> - Division tag.

It is used to make division of content in web page.

(text, image, header, footer, navigation etc).

16) Navigation Tag (`<Nav></Nav>`) :-

It is used for navigational section in HTML documents. Websites will have some navigational links which enables user to navigate sites. It is used to represent main menu.

`<HTML>`

`<Body>`

`<H1> Hi Good Morning </H1>`

`<H2> Navigation Tag </H2>`

`<Nav>`

` Home `

Interview

Language

Services

Policies

`</Nav>`

`</Body>`

`</HTML>`

17) Option Group tag :- This tag is used to create group of some category option in drop down list.

`<Opt Group> <Table>`

`<Option> </option> values`

`</optiongroup>`

`<select>`

`<opt group label="programming lang">`

`<option value="C"> C </option>`

"C++"

`</opt group>`

"java"

`<opt group label="Scripting Lang">`

`<option value="TS"> TS </option>`

"PHP"
"shell"

</opt group>

</select>

18) section tag :- It is used to define section of document like chapters, headers etc.

This section tag is used to divide the content into section and subsection.

<section> </section>

<section>

<H1> section 1 <H1>

<p> lorum </p>

</section>

<section>

<H1> section 2 <H1>

<p> lorum </p>

</section>

<section>

<H1> section 3 </H1>

<p> lorum </p>

</section>

<opt group>

<opt group table="scripting lang">

<option>

for better look & feel

* **Formatting Tags :-** Formatting is a process of formatt-

1) heading tag

2) Paragraph tag

3) Underline tag etc.

There are 14+ formatting tags in HTML

* **Inline level tags :-** The tags or elements which occupies only the required width based on added content.

- An inline level element does not start on a new line.

- An inline element only takes up as much as necessary.

e.g. , <a>, ,

 style = "Border: 2px solid BLACK">

Hello world .

* **Block level elements tags :-**

- Block level elements or tags always starts on a new line, the browsers add some space before and after the tag.

add some space before and after the tag.

Block level elements which occupies the full width of web page. They will have default margins.

E.g.) <p> and <div>

<p style="border: 2px solid black"> Hello world </p>

<div style="border: 2px solid black"> Hello world </div>

* **Semantic tags :-** Semantic tags are the elements / tags which defines the content to display it on web page.

A semantic tag clearly describes its meaning to both browser and developer.

e.g. <form>, <table>, <section>, <article>,
<Footer>

* **Non-Semantic Tags :-** Non-Semantic tags are the elements / tags which do not define its content, these which do not define its content tags accepts any content rather than the specified one.

Non-Semantic tags tells nothing about its content to the user or browser.

Ex:- <div> &

* **Attributes :-** Attributes are the properties of HTML elements.

They are the additional functionalities of HTML elements.

* **Types of Attributes :-**

1) Global Attributes

2) Local Attributes.

1) **Global Attributes :-** There are attributes can be used in all the HTML tags.
Ex:- style, class, id, title.

2) **Local Attributes :-** These tags can be used only in some specific tags.
e.g. SRC, href, height, width.

* **List :-** They are collection of short pieces of information and arrange them in list format.

* **Types of list :-**

1) Ordered / Numbered list.

2) Unordered / bulleted list.

3) Nested list.

4) Description list.