

Application: It is a Set of Programs.

Types of Application:

- Stand alone application: It is a application which is already present in our System & we can access without using internet.
Ex: Notepad, Gallery, MS office, Call log etc..

Types of Stand alone application:

- Mobile app: The app which is present in SmartPhone.
Ex: Settings, Cam, MSG etc..
- Desktop app: The application present in System (or) Computer.
Ex: PeopleBn, This pc, MS office etc..
- WEB Based application: It is a application which is not present in our System but it is present in other System like Server.

To access the Web based application we need browser & Network.

* Browser: It is a searching machine.

* N/w: It is a Combination of Devices.

Types of N/w:

- Intranet: It is a private N/w we can access within the range. Ex: LAN (Local Area Network)
- Internet: It is a public N/w we can access worldwide.
Ex: Global data.

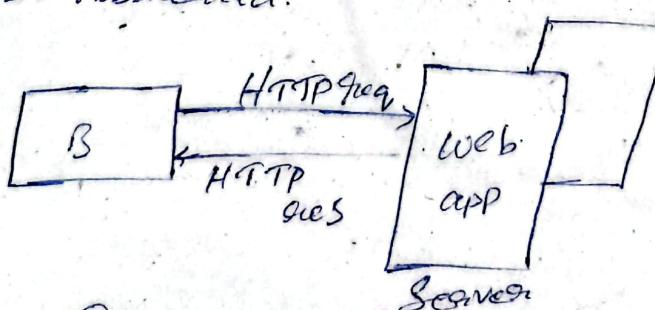
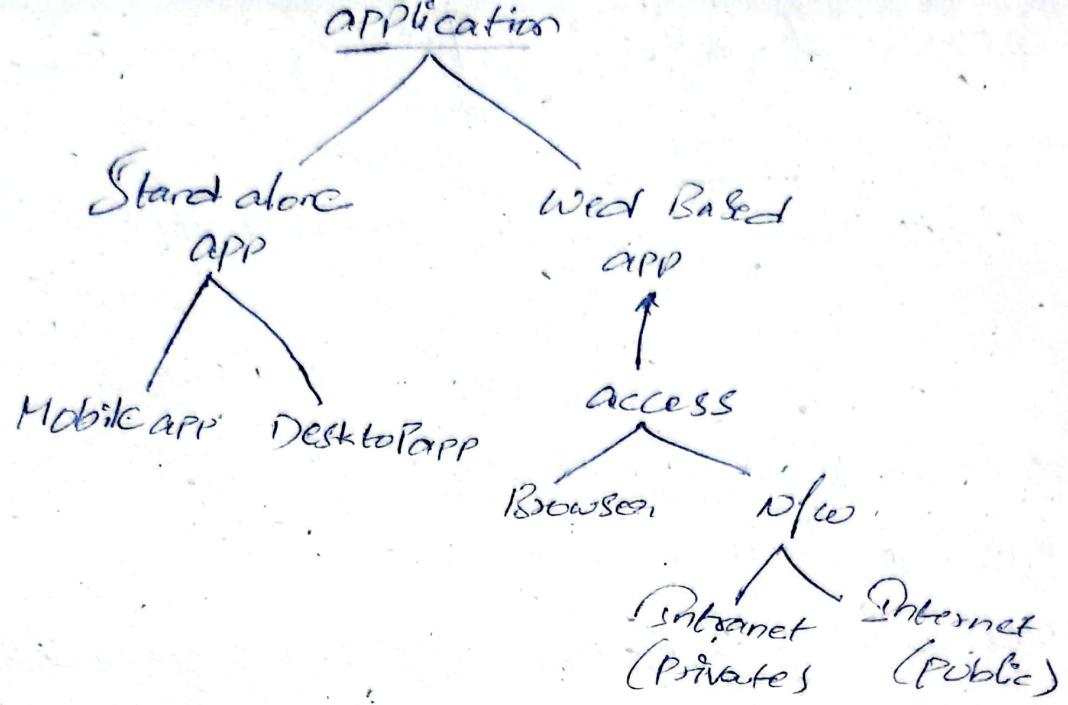
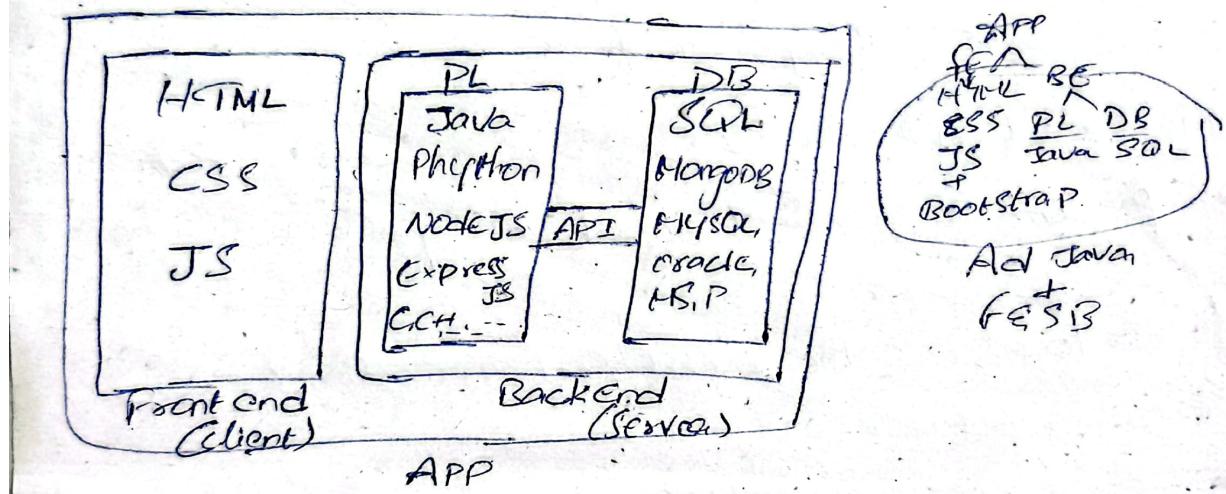


Fig: Web based application.



Client-Side architecture :-



Web Technology

Web Technology is a process of developing & hosting the web pages.

Using HTML, CSS & JS we are developing the web pages.

HTML is a Hyper Text Markup language. It is used to give the structure to the web page. Present Version is HTML-5.

CSS:- CSS is a Cascading Style Sheet. It is used to design for HTML Page. → Version CSS-5

JS :- JS is a client Side & Server Side Scripting language

④ With respect to Front End JS is used for dynamic & Validation. → Version ES-6 → ECMAScript

ECMA - European Computer Manufacturers Association.

HTML (HyperText Markup Language)

- Introduction
- Basic Text Formatting Tags
- Character Entities
- Attributes
- Media Tag
- Creation of List
- Creation of Tables.
- Hyper Links
- Forms
- HTML-5

Markups:

< : Open Markup

> : Close Markup

<> : markups

Tags:

<> : Open Tag

</> : Closing Tag

<>---</> : tags

Types of Tags:

① Paired Tag: Combination of open Tag & Closing Tag

Ex: <element name> --- </element name>

② Un-Paired Tag: It is having only open Tag

Ex: <element name>

Note:

* To write the code we are using Simple editors like (notepad, wordpad, editplus, VS-Code etc..)

* To run the code we are using Browsers like (Google Chrome, Mozilla etc..)

* It is Error free language.

HTML Structure:

Basic Syntax

<!DOCTYPE html> // Version of HTML

<html>

root

```

<head>--- Invisible Contents --- </head>
  |
  <body> --- Visible Contents --- </body>
  |
</html>

```

Note: html is a root tag of HTML

Structure of the HTML Page:

```
<!DOCTYPE html>
<html>
  <head>/| Visible Contents
    <meta>
    <title>--- </title>
    <style>--- </style>
    <script>--- </script>
    <link>
  </head>
  <body>--- Visible Contents --- </body>
</html>
```

Note:

- * <meta> → tag is used to write small information about the webpage & it is an unpaired tag.
- * <title> → tag is used to title name for the webpage & it is a paired tag.
- * <style> → tag is used to write CSS code & it is paired tag.
- * <script> → tag is used to write JS code & it is paired tag.
- * <link> → tag is used to link external file & it is an unpaired tag.

Block level Tags: Getting the output in next line (or) new line is called it as "Block level Tags".

Ex: Heading Tags, P, br, hr, etc.,

Inline level Tags: Getting the output in same line or side by side is called it as "Inline level Tags".

Ex: b, i, mark, em, sup, etc,

<pre></pre> -- Preformatted Tag-->

```
class demo ()  
{  
    SVM (SCJA)  
    {  
        S.O.Pln ("Hello");  
    }  
}  
</pre>
```

Media Tags:-

Insection of Images:-

- tag is used to insert the image.
- It is unpaired Tag and inline Element.

Eg:-

Insection of Videos:-

- <video> tag is used to insert the Video.
- It is Paired tag and inline level element.
- We want to use Control attribute to play video.

Eg:- <Video Src="Path" Controls></video>

Insection of Audio:-

- <audio> tag is used to insert the audio
- It is Paired Tag inline level element
- We want to use Control attribute to play audio.

Eg:- <audio Src="Path" Controls></audio>

Attributes:-

- src attribute is used to insert of path to media files.
- alt attribute is used to display alter message or error msg
It will display when some errors in the Path.
- height & width attribute is used to set the size.

```
<marquee scrollamount = "100">
```

```
    <img src = ".\Images\g1.gif" height = "250">
```

```
</marquee>
```

```
<marquee direction = "right">
```

```
    <img src = ".\Images\gml.gif" height = "150">
```

```
</marquee>
```

```
<marquee direction = "right">
```

```
    <img src = ".\Images\g2.gif">
```

```
    <img src = ".\Images\gml.gif" height = "150">
```

```
</marquee>
```

```
<marquee behaviour = "slide" > → behaviour = "alternate"
```

```
    <img src = ".\Images\gml.gif" height = "150">
```

```
</marquees>
```

```
<!-- Marquee Tag is used to scroll the contents from one end to another end.
```

Attributes:

- direction attribute is used to change the

direction = "left (default) / right / up / down"

→ behaviour attribute is used to change the behaviour of marquee tag

behaviour = "slide / alternative"

→ scrollamount attribute is used to increase the speed of marquee tag (scrolling contents)

scrollamount = "numbers"

→

List :- It is used to group the related data in the format of otherwise or un-ordered wise.

Types of List :-

1. Ordered List.
2. Un-ordered List.
3. Definition List.

→ Ordered List :-

→ it is used to Create the ordered list by using col tag

→ In tag using tag we are inserting the related data of list.

→ tag & tag are the paired tag & Block level tag.

Syntax :-

Attribute :-

→ In <cols> tag type attribute is used to change the type of format.

Ex:- type="1(default) / A/a/I/;"

→ Start attribute is used to insert number from where to start.

3. Un-ordered list :-

→ It is used to create the list in un-ordered wise by using tag.

→ In tag using tag we are inserting the related data of list.

→ tag & tag are paired tag & Block level Tag.

Syntax:-

 -- --

 -- --

 -- -- --

Attributes :-

→ In tag type attribute is used to change the type of format.

Ex:- type="disc/Square/Circle/none"

3. Definition list :-

→ Using <dl> tag we are creating the definition list.

→ <dt> tag is used to insert the title/heading of the data.

→ <dd> tag is used to insert the description of the data.

Syntax:-

<dl> definition list

 <dt> - - data Title - </dt>

 <dd> - - data description - </dd>

 </dl>

Attributes which is present in stable tag:

- Border attribute is used to give the border for the table.
 - Height & width attribute is used to set the size of the table.
 - align attribute is used to align the table like right side or center.

Ex :- align = "left (default)/Center/Right"

 - Cell Padding attribute is used to give space b/w the content & the border.
 - Cell Spacing attribute is used to give space b/w the cells.
 - Style attribute is used to write CSS code. Here we are using CSS property to make single line border for the table.

Attributes which are present in <th> tag or <td> tag

Hyperlinks :-

Syntax :-

<h1> Hyperlinks </h1>

 Click Here

<p href = ""> Click Here </p>

<h3> Absolute URL </h3>

① <a href = "https://www.facebook.com"

title = "Facebook Page">

② Click here

<h3> Relative Path </h3>

Click here

[target = "-blank"]

• / → Relative Path

-blank → it opens in different tab

-Parent → it opens in the same tab

Hyperlinks :- It is used to navigate from one webpage to another webpage.

Types of Hyperlinks :-

1. External Hyperlinks :-

It is used to link to a new tab/page/another website

2. Internal Hyper Links:-

It is used to link same webpage

It is used to create hyperlinks Stop Scrolling in the Same Page

→ To Create Hyperlinks we are using `<a>` (Anchor) Tag & it is a paired Tag as well as it is ~~intervel~~ inline level Tag.

NOTE: Without using attribute in `<a>` tag it is act like a `<p>` (Paragraph) tag.

Ex: `<a>` -- Clickable Element -- ``

Attributes present in `<a>` tag:-

→ href (hyper reference) attribute is used to insert URL/Path of the file

Ex: `href = "URL/Path"`

Types of URL :-

→ Absolute URL: It means Complete URL (Protocol with Domain Name)

Ex: ` -- `

→ Relative URL: Relative Path of the file of the Same folder

Ex: ` -- `

→ Using title attribute we can give the title name for the hyperlinks.

→ Target attribute is used to specifies where to open the linked documents

Types present in Target attribute:

target = "-blank": opens the linked document in a new window or new tab

target = "-parent": opens the linked document in the parent tab / same tab (same as the default)

<h3> To make a call </h3>

=>
Call Me

=> <h3> To send a Mail </h3>

Send Mail

=> <h2> Link to My Page </h2>

=> <h2> Download </h2>

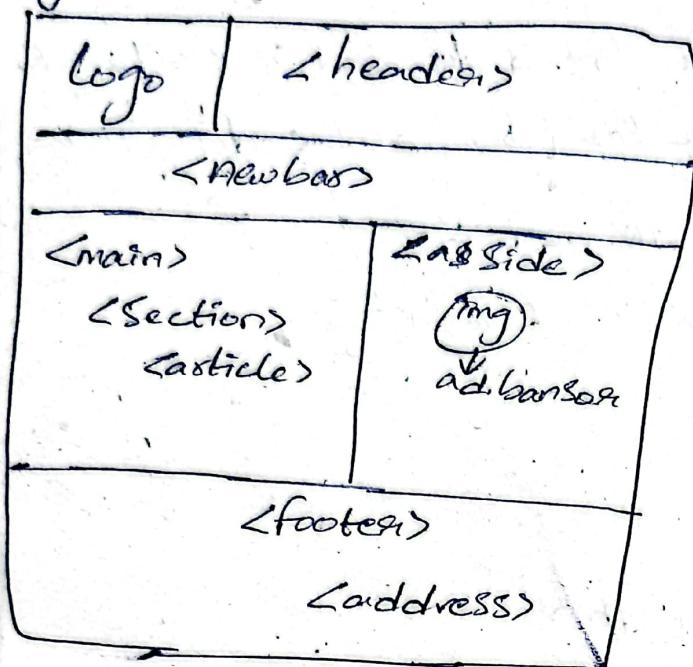
Click Here

<a download href = "">

HTML-5

It is used to group the elements in webpage.

Eg:-



① Web Technology is a process of developing & hosting the web pages with using HTML, CSS, JS.

② Set of Programs is known as applications.

Types of applications :-

① Stand alone application.

② Web based application.

→ Stand alone application :- It is an application which already exist in our System, if it is access without internet.

Types of Stand alone application :-

① Mobile app

② Desktop app

→ Web Based application :- The application which send in our system but present in another devices like Server. We can't access without internet.

② Network :-

Combination of two or more devices.

Types of Network :-

- ① Intranet :- It is a network based on private network.
- ② Internet :- It is a public network.
- ③ 2-Tier :- It is a client area is not having database.

3-Tier :- It is like Client Server has database also.

④ HTML-5

- ① It is used to develop & host the webpages.

- ② It consists of HTML, CSS, JS.
- ③ HTML is used to Create Structure to webpage.
- ④ CSS is used to give design to webpage.
- ⑤ JS is used to Create dynamic & Validation.
- ⑥ `<meta>` is used to give some information about webpage.
- ⑦ `<title>` is used to give some title to webpage.
- ⑧ `<style>` is used to mention addition structure.
- ⑨ Paired Tags :- the combination of open & closed tags.

Un-paired Tags :- only Open Tag

- ⑩ `<meta http-equiv="Refresh" Content="5">`
- ⑪ `<sub>` is used to text below text e.g.: \hat{a}_3
- ⑫ `<sup>` is used to text upper text e.g.: \hat{a}^2

(1) Div :- It is used to group the elements & it is block level Tag.

Span :- Tag is used to group the Tag but it is inline level Tag.

(2) Inline level :- The text will be at the same line

Block level :- It will jump to next line

(3) & Copy;

(4) Semantic :- The tags which has defined & specific predefined meaning.

Non-Semantic :- The tag which doesn't have meaning but programmers use to group the elements.

(5) Attribute :- It is used to give additional information to the element.

(i) Global attribute :- It will use in any tag in HTML.

(ii) Local attribute :- It is used in some specific tag only.

(6) <HTML> is root tag of HTML.

(7) (i) Ordered List (ii) Un-ordered list

```
<ol>  
  <li>...</li>  
  <li>...</li>  
</ol>
```

```
<ul>  
  <li>...</li>  
  <li>...</li>  
</ul>
```

(iii) Definition list

```
<dl>  
  <dt>...</dt>  
  <dt>...</dt>  
</dl>
```

⑯ Table

<u>th</u>	<u>td</u>
<u>th</u>	<u>td</u>
<u>th</u>	<u>td</u>

<u>th</u>	<u>td</u>
<u>th</u>	<u>td</u>
<u>th</u>	<u>td</u>

⑰ Attribute in table Tag

- ① Border
- ② width
- ③ Cell Padding
- ④ Style
- ⑤ Cell Spacing
- ⑥ Align
- ⑦ height

⑲ Cell Padding :- It is used to give Space b/w Content & Cell borders.

Cell Spacing :- It is used to give Space b/w Cell

⑳ th :- It will align "Center" & bold text as
td :- It will display as Normal Text

㉑ RowSpan :- It will Merge Rows

ColSpan :- It will Merge Column

㉒ Hyperlink :- By Using a (anchor) Tag and inside the anchor tag Using href (hyper reference) we will Create hyperlink.

㉓ Link :- Link tag is used to link external files. It is an Unpaired Tag.

Hyperlink :- It is used to navigate one webpage to another webpage. It is a Paired Tag.

Q25) Hyperlink :- It is used to navigate one webpage to another webpage.

Types of Hyperlink :-

→ External Hyperlink :- It is used to go to new webpage (or) another webpage.

→ Internal Hyperlink :- It is used to navigate to same page where the content (or) link that is present in that page itself.

Q26) Absolute URL :- We want to copy the whole URL Protocol.

Relative URL :- We want to copy the path of a file which is present in local system/Server.

Q27) Insert Image :- Using `Src = "path"`

Insert Video :- `<Video Src = "Path" Controls>` `</video>`

Insert audio :- `<Audio Src = "Path" Controls>` `</audio>`

Q28) Controls :- It is used to play the video (or) audio.

Q29) By using `<frames>` tag we can create nested web pages.

Q30) `<form>` to create a form

`<input>` is used to create a input field

`<label>` is used to give name to the input field

Q31) Attributes in input field :-

Type :- We can use different type of input fields like characters, passwords, numbers etc.,

name :- If we want to send our data to backend
we want to use 'name' mandatory.

Value :- It will change the value of input field.

Required :- It will make mandatory input field without
that input field we cannot go to another process.

Placeholder :- It displays the msg for the input field
inside the input field.

(3) `<input type="Submit" Value="login">`

(33) **title tag :-** It is used to webpage title

titleattribute :- It is used to give title to HTML element

(34) Using `<Select>` tag we can create dropdown.

Using `<textarea>` tag we can create comment box.

(35) Using `<nspc>` we can give extra space.

(36) `<fieldset>` :- To group the details in a box.

`<legend>` :- to give a name to fieldset

(37) `<marquee>` :- To scroll the content

(38) **Radio button :-** We can only select one option

Check box :- We can select multiple option.

(39) **Checked :-** It is used to default option in Radio

Selected :- It is used to default option in checkbox.