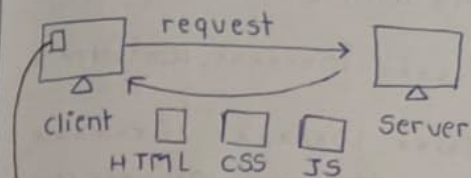


HTML - Short Notes

HTML - Hypertext Markup Language



The web browser receives these 3 files. They are bounded together

HTML structure CSS styling JS interactive

- In 1990's we needed to remember the url of website. Then **Hyperlink** was introduced.

- Hyperlink made it easy to connect webpages to visit pages
- HyperText in HTML means hyperlink

Markup - refers to way text & other contents are structured, using tags.

- Hosting our code in a server is a long process, so we host it in our m/c

`https://127.0.0.1:Port No/index.html`

loop-back Address

Extension

HTML Tags

1) Heading Tags

→ Ranges from h1 to h6, based on importance

`<h1> Sakshi Jain </h1>`
opening tag content element HTML closing tag

→ Use heading tags in sequence for better SEO.

2) Paragraph Tags [`<p>`]

→ Define a paragraph of text

`<p> lorem20 </p>`

→ dummy paragraph of 20 words

3) Horizontal Rule Tag [`<hr>`]

- Creates a horizontal line
- It is self closing tag

4) Line Break Tag [`
`]

- use to go to next line
- It is self-closing tag

5) Pre-Formatted Text [`<pre>`]

- It is used to design pre-formatted text. It preserves both spaces & line breaks.

HTML Lists

Un-ordered [``]

- order does not matter
- marked with bullet pointed

``
`.....`
`.....`
``

Bulleted list

can we change it?

→ Yes, use **attributes**

Described property of an element. Defined in key-value pair

`<ul style="list-style type: square;">`

disc, circle, none can also be used

Ordered [``]

- order matters
- holds semantic meaning

``
`.....`
`.....`
``

Numbered list

`<ol type = "a, A, 1, I, i">`
cases default roman

There is an attribute for starting no.

`<ol start = "10">`
starts from 10

Nested Lists

``
` Array`
``
` 1D Array `
` 2D Array `
``
``
``

• You can use all properties and attributes in nested lists as well.

• Anchor Tag [<a>]

↳ used to create hyperlinks

↑ ↑ ↑
hyperlink link open link in
reference new tab
attribute

• Image Tag []

- Display image on webpage

↑ ↑
url or file path alternative text

↑ ↑ ↑
set height & width

 <img src = "-----" alt = "-----" width = "device-width",
initial-scale = "1.0"

> -----

clickable image

Absolute Path → c:/WebDev/Day 3/Do.png

Relative Path → ./Do.png (same level)

../Day 2/do.png (parent folder)

Does not work!

↳ Servers can collect my data, to use it without my permission

Comments in HTML

↳ <!-- Comment -->

<!-- Do you liked Notes -->

HTML Boiler Plate

<!DOCTYPE html> → html version 5

<html lang = "en">

↳ content of html is english, but we can change it. This is usually done for SEO

<head>

↳ holds data about data

information about data in body tag

data in body tag

<meta charset = "UTF-8">

↳ whenever you write in english, or other language it will be convert to binary. It is encoding method.

ASCII/English → 1 byte

Latin → 2 byte

memory allocation in UTF-8

Asian Languages → 3 byte

Emoji's → 4 byte

memory allocation in UTF-8

• 1 byte → starts with 0xxxxxxx, where x is data

• 2 byte → 110xxxxx 10xxxxxx, where x is data

• 3 byte → 1110xxxx 10xxxxxx 10xxxxxx

• 4 byte → 11110xxx 10xxxxxx 10xxxxxx 10xxxxxx

↳ This is how data is determined by UTF-8.

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

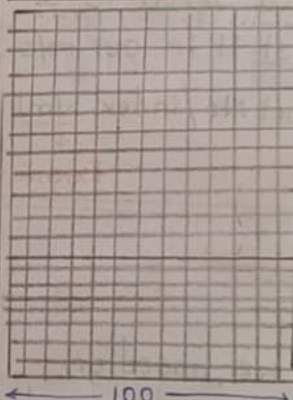
viewport → Area where web content is seen

width = "device-width",
initial-scale = "1.0"
adjusts to device width zoom level

<title> ----- </title> → Title of webpage

<body> → display all content of website

How Images are stored in system?



• Total pixels = 10000

• Each pixels colour is stored.

• RGB is used to make any colour

R = 0-255 → 8 bit

G = 0-255 → 8 bit

B = 0-255 → 8 bit

24 bit
↓
3-bytes

• Total size = 10000 * 3 = 30000
byte = 30kB

HTML TABLES

thead

↓
define heading row

tbody

↓
define the table data

tfoot

↓
draw conclusion about table

• <tr>

↳ defines the row of table

↳ In tr, we could either put th or td → table data

define the data of table

table heading

↳ defines the heading of table

- colspan and rowspan are attributes used in th or td, to control how many rows/columns should span.
- If span in thead is used, then it will span till thead only.
- same for tbody.

• **<caption>** → used to caption the table

- We can also create nested tables, so a table inside a table.

```
<tr>
  <td> ----- </td>
  <td>
    <table border = "1">
      <tr>
        <td> ----- </td>
        :
      </tr>
    </table>
```

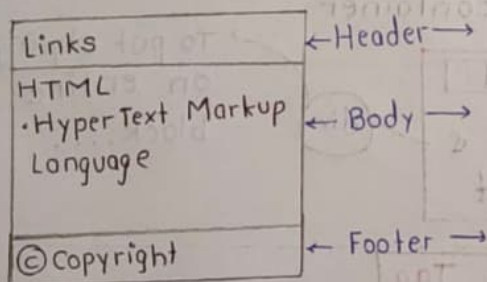
Applies border to the table

Navigation Tag

```
<nav>
  <a href = "-----" > Home </a>
  :
</nav>
```

Multipage Website

Website Structure



Class Vs ID

Class	ID
1) Multiple elements can be given same name.	1) A unique name is assigned to each element.
2) To refer to a group we use class. Ex: <h1 class = "first">	2) To refer to single element, we use id. Ex: <h1 id = "first">
• class { ----- { use case }	#id { ---- { use case }

Section Tag

- We can create multiple sections in a website, and could assign id or class.

Emmet Abbreviation

- 1) **li*5** → It contains creates 5 lists items
- 2) **ul>li*5** → unordered list of 5 lists
- 3) **p>p>p** → creates nested paragraph
- 4) **(ul>li*5)*3** → creates '2' 3 times
- 5) **p>nav>(ol>li*4)*3**
nested repeated 3 times
- 6) **p+nav** → Creates tag as siblings
- 7) **h1{Hello}** → <h1> Hello </h1>
- 8) **p.Sakshi** → creates p & gives it class = "Sakshi".
- 9) **p.first{Hello}** → <p class = "1st"> Hello </p>
- 10) **h2 #Second** → <h2 #second> </h2>
- 11) **p.first #tempo** → <p id = "tempo" class = "first">

HTML - MULTI MEDIA

Audio File

```
<audio src = "-----" controls > </audio>
• <audio controls>
  <source src = "-----"> } M-II
  :
</audio>
```

Suppose audio didn't play, we could give alternate file

Video File

```
<video src = "-----" height = "-----"
width = "-----" controls > </video>
• <video controls height = "-----" width = "-----"
  autoplay muted >
  <source src = "-----" type = "video.mp4"
  :
</video>
```

Youtube video

```
<iframe src = "https://www.youtube.com/
embed/video id. frameborder = "0"
use this allowfullscreen >
```


Elements

Inline

- ↳ Only takes width that is necessary
- ↳ doesn't start from new line.

↳ Ex: ``, `<a>`, ``, ``, etc.

Block

- ↳ takes entire block space / full width.
- ↳ starts from new line

↳ Ex: `<div>`, `<p>`, `<h1>`, ``, `<header>`, etc.

- We can also change block element into inline element

`<p style="display: inline;"> --- </p>`
`<h2 style="display: inline;"> --- </h2>`

HTML FORMS

• login id:

Pass:

Forms

- Use form tag to create a form

`<label for=" " >Login id: </label>`

`<input type="text">` Text

`<label for=" " >Pass: </label>`

`<input type="password">`

`<button> Submit </button>`

`<label for="first"> Name: </label>`

`<input type="text" id="first">`

- Both must be same, if we click on label then we go to input box directly.

`<input type="text" required>`

↑ mandatory to fill

`<input type="text" name="fname">`

stored in back-end & name / heading is fname

Message:

so here use textarea →

`<textarea name="m" id="m"`

`rows="5" cols="30"> </textarea>`

Gender: ☐ Male ☐ Female

`<label> Gender: </label>`

`<input type="radio" id="male" name="gen" value="m">`

`<label for="Male"> Male </label>`
• Same for female; just make sure to write name="gen" to select one value & value attribute goes in the backend.

- Use Fieldset to use, and select specif sections in forms, use legend in fieldset to set a title.

- Placeholder attribute will set a text on input.

Dept: → Drop down

`<label for="dept"> --- </label>`

`<select name="dept" id="dept" required>`

`<option value=" " disabled selected> --- </options>`

`<option value="eng"> --- </option>`

DIV TAG

- Div tag is a block level element that is used to group content for styling in a container

Food

Price & Rest

div

→ To put styling on entire block....

Span Tag

- Span tag is an inline element, used to style or group small portions of text or other inline elements

`<p> --- `
Highlight

--- Highlight → output