

Web Development

HTML

We start building a website by creating a file named `index.html`. It is a special name which is presented when the website address isn't typed.

Basic

`<head>` : contain page metadata

`<title>` - - - `</title>`

`</head>`

`<body>` → This is rendered by the browser.

`<h1></h1>` : Heading Tag

`<p>` : → Paragraph Tag

- `<div>` tag is like a container for either content or other HTML tags.
- Some tags have no content such as Empty tag. Eg. `
`.

- HTML is a case insensitive language

- Comments in HTML

"It is used to mark text which should not be parsed.

<!-- HTML Content -->

- Ctrl + / (Shortcut Key)

2) Basic HTML Tags

We can add elements inside the body tag to define the page layout.

HTML Element

Everything from Starting to Ending Tag.

<body> → Opening tag

</body> → Closing tag.

HTML Attributes

- Used to add more information.

Eg. ABC

Anchor tag

Link

Show Text to

which link is connected

The Heading Tag

Heading tag is used to mark heading from H_1 to H_6 . We have tags for most important to least important heading. `<Nav>` tag is used to create a navbar.

- Paragraph tag

`<p> - - - </p>`

- Anchor tag

Used to add link to an existing content.

` `

- Img tag

``

- Bold, Italic, Underline, `
`, `<hr>`

`` This is - - `` : Bold

`<i>` - - - `</i>` : Italic

`<u>` - - - `</u>` : Underline

`
` - \rightarrow (Empty) tag it create line break

`<hr>` \rightarrow line

Subscript & Superscript

- ↳ `_{- - -}`
Eg. CO_2 → To write below
- ↳ `^{- - -}`
Eg. ax^2 → To write above
- ↳ To add arrow & symbol (\rightarrow), get codes from MDN reference.

Pre tag

HTML always ignores extra spaces and new lines. In order to display a piece of text as it is, we use pre tag.

`<pre>`

`</pre>`

→ Render as it is.

3) Creating a page layout.

When we use right tag in right place it results in a better page layout, better indexing by search engine and better user experience.

`<header>` contains nav tag (General)

`<main>`

`<footer>`

Inside main tag we insert following tags:

<main>

<section>

<article>

<aside> → Content (like Ads) are placed.

</main>

Link attributes

i) -- → Content open in same tab.

ii) --
↳ open in new tab.

◦ We can put any content inside an anchor tag (images, heading etc)

◦ If the page is inside a directory, we need to make sure that we link to connect page.

↳ Same applies to image as well.

* We can add link to image

 link

Height will be set automatically

* The Div tag

"Div tag is often used as a container for other elements. Div is a block level element. i.e (Always takes full width)

* Span tag

"Span is an inline container i.e takes as much width as necessary

* Lorem — to generate Dummy text

* Ctrl + D to replicate lines

* Alt + Z : Word Wrap

Chapter-4 (List Table, forms)

List (Two types of list)

i) Unordered list

 Home

 About

⋮

⇒ Give Bullet (•) to list

ii) Ordered list

 Phone

 PC

 Laptop

⇒ Give number (1...) to list.

Tables

The <table> tag is used to define tables in HTML. It is used to format & display tabular data.

tr tag - used to display table row

td tag - used to display table data

th tag - used in place of table data for displaying table headers.

* To add a caption to the table, we use <caption> tag inside table.

thead tag - used to wrap table head (caption & tr with th)

tbody tag - used to wrap table body

Colspan Attribute

This is used to create cells spanning multiple columns

`<th colspan="3">Harry </th>`
↳ span 3 column

HTML Forms

An HTML form is used to collect input from the user. 'form' tag is used for it.

`<form>` - Element `<form>`

- There are different form elements for different kinds of user input.
- i) Input element: Can be of type text, checkbox, radio, button and Submit. We also have a file type.
- ii) Textarea element: Define a multi line text input column & rows attributes can be used to size the text area.
- iii) Select: Defines a drop down list

Embedding Videos

Video tag is used to play videos in HTML

```
<video src = 'happy.mp4' Embed/vide>
```

- * For YouTube video just copy the Embed video code, which occurs after clicking Embed option.

Attributes for video

- Width: To adjust width (Height automatically adjust)
- We can use autoplay / loop to autoplay the video.

SEO (Basic)

- Keyword building & Content Optimization aspect of SEO aren't included.

Types of SEO

- On page SEO → By HTML developer
- Off page SEO

HTML SEO

- i) Set the title very nice & to the point
- ii) Set metadescription
`<meta name = "description"
Content = "... ">`
- iii) Set a nice URL slug
- iv) Set the meta keyword tag.
- v) Set the meta author tag.
`<meta name = "author" Content
= "Harry">`
- vi) Set a favicon
- vii) Compress images & other resources
- viii) Remove unused HTML/CSS & JS files
+ Compress them
- ix) Add alt text to images.