

HTML:

Chp 1: Creating our first website

We start building a website by creating a file named `index.html`. `index.html` is a special file name which is presented when the website root address is typed.

A Basic HTML page:

```
<!DOCTYPE html> → responsible this is an HTML site  
<html> → root of an HTML page  
<head> → contains page metadata → data of original data  
<title> Siddhi's website </title> → contains title  
</head>  
<body> → the main body of the page (and rendering the browser)  
<h1> This is a heading </h1> → heading tag  
<p> My paragraph is </p> → paragraph tag  
</body> → closing body tag  
</html>
```

A tag is like a container for either content or other HTML tags.

HTML Document → Browser → Rendered page.

MAP NOTES of `index.html` file structure

Head & body tags are children of HTML tag.

HTML is the parent of head & body tags

Most of the HTML elements have opening & closing tag with content in between opening & closing tags.

Some HTML tags have no content. These are called Empty elements eg `
`

We can either use `.htm` or `.html` extension

You can use "Inspect Element" or "View Page source" option from chrome to look into a website's HTML code.

HTML element = ^{Start} tag + content + End tag

Comments in HTML

Comments in HTML are used to mark text which should not be passed - they can help document the source code.

<!-- HTML -->

{written/used to comment out}

Case sensitivity:

HTML is a case insensitive language; <H1> and <h1> tags are the same. But highly recommended to use lower case.

[chp 2]. BASIC HTML TAGS

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

HTML Element

Everything from starting to the ending tag

<body> → opening tag
→ content ←

</body> → closing tag

HTML Attributes

Used to add more information corresponding to an HTML tag.

Eg: Harry

We can use either single or double quotes in attributes.

The Heading Tags

Heading tag is used to mark headings in HTML from h1 to h6, we have tags for most imp. to the least imp. heading.

<h1> most imp. heading </h1> NOTE! We should not

<h2> Another imp. h2 </h2> for all HTML headings

<h3> " " h3 </h3> to make text

<h4> " " h4 </h4> thick or bold.

<u><i>
 this is underlined </i></u>

Page :
Date :

Paragraph tag:

Paragraph tags are used to add paragraphs to an HTML page.

<p> This is a paragraph </p>

The Anchor tag:

The anchor tag is used to add links to an existing content inside an HTML page.

 click me

The img Tag:

img tag is used to add images in an HTML page.

Bold Italic & underline tags:

We can use bold, italic & underline tags to highlight the text as follows

 This is bold

<i> This is italic </i>

<u> this is underline </u>

br tag:

The br tag is used to create line breaks in an HTML document.

Big & small tags:

We can make the text a bit longer/larger & a bit smaller using big & small tags respectively.

hr tag:

<hr> tag in HTML is used to create a horizontal ruler often used to separate the content.

Subscript & superscript:

We can add subscript and superscripts in HTML as follows:

_{this} is subscript

^{this} is superscript

pse tag:

HTML always ignores extra spaces and newlines. In order to display a piece of text as is, we use pse tag.

<pse>

This is written

using <c

Creating a page layout:

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

We use the following tag to get the job done.

<header> } containing nav tag

<main> } website layouts

<footer> } footer

Inside the main tag we insert the following tags:

<main> → The main opening tag

<section> → A page section

<article> → a self contained content

<aside> → content aside from the content (eg Ad etc)

</main> → The main closing tag

Creating a page like this is not necessary but it creates a readable & structured layout.

Link attributes:

 contact us → contact page opens in same tab

 contact us → open in new tab

We can put any content inside an anchor tag (images, headings etc are all allowed)

If the page is inside a directory, we need to make sure that we link to correct page

we can add links to images like this

``

↳ height will be 200 automatically

The Div Tag:

div tag is often used as a container for other elements, div is a block level element.

↳ always takes full width

The span tag:

Span is an inline container

↳ takes as much width as necessary

Lists, Tables & forms :

Lists:-

Lists are used to represent display a content which represents a list

Unordered list:- Used to list unordered items

``

` Home `

` About `

``

Ordered list:- Used to list ordered items

``

` Phone `

` PC `

` Laptop `

``

Tables:

The <table> 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.

We can define as many table rows as we need.

To add a caption to a 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 attribute is used to create cells spanning multiple columns.

<th colspan = "3"> Harry </th>
span 3 columns

HTML FORMS :

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

<form>

-- Element of the form --

</form>

There are different form elements for diff. kinds of user input.

- input element: can be of type text, checkbox, radio, button and submit. We also have a 'file' type.

- textarea element: Defines a multi line text input. cols & rows attributes can be used to size the textarea.

- select element: Defines a drop down list.

Embedding videos:

Video tag is used to play videos in HTML

<video src = " harry.mp4 "> Error </video>

Attribute for video:

We can use:

width: to adjust width of a video (ht automatically gets adjusted)

We can use Autoplay / loop to autoplay or loop the video.

SEO:

We will focus only on HTML standpoint of SEO. We will not be looking into keyword building and content of optimizing aspect of SEO.

Type of SEO:

on page SEO - can be done by HTML developers

off page SEO

HTML SEO:

HTML developer can implement SEO using the following techniques

Set the title very nice & to the point.

Set the meta description.

<meta name = "description" content = " . . ." >

Set a nice URL slug.

Set the meta keywords tag.

Set the meta author tag.

<meta name = "author" content = " Harry " >

Set a favicon.

compress images & other resources

Remove unused HTML/CSS & JS files + compress them.

Add alt text to image.