

HTML

Aniket

Date

Page

7

Introduction - 1

HTML - Hyper Text Markup Language

HTML is the language of the web. It is used to create websites.

We use HTML tags to define look and feel of a website.

With understanding of these tags and how to put them together, we can create beautiful website easily.

Then Why CSS and JavaScript

- HTML - used for defining layout of a page - A backbone page structure
- CSS - used to add styling to that backbone page created using HTML
- Javascript - used to program logic for the page layout eg.
What happens when a user hovers on a text, when to hide or show elements etc.

A Beautiful analogy

HTML = Car body (only metal)

CSS = Car paint, decoration etc.

Javascript = Car engine + Interior logik

Creating our first Website - 2

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

A Basic HTML page.

`<!DOCTYPE html>` → specifies this is an html 5 doc

`<html>` → root of an HTML page

`<head>` → contains page metadata

`<title> Manish's website </title>` → title

`</head>` → head closed

`<body>` → Main body of the page rendered by browser

`<h1> Heading </h1>` → heading tag

`<p> paragraph </p>` → paragraph tag

`</body>` → closing body tag

`</html>`

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

Imp notes

- Head and body are children of HTML tag
- HTML is the parent of Head and Body tags
- Most of the HTML elements have opening and closing tag with content in between opening and 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 Comment -->`

HTML is not Case Sensitive

HTML is a case insensitive language.

`<H1>` and `<h1>` both tags are the same.

Since it has been 100 years of the
independence of India, it is a
good time to look back at the
past and see how far we have
come.

<--- 100 years of independence --->

The first 100 years of the
independence of India have
been a period of great
achievement and progress.

Basic HTML Tags - 3

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

Ex- ``
↑
href attribute Harry ``

We can either use single or double quotes in attributes

The Heading Tag

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

<h1> Most important heading </h1>

<h2> Another heading H₂ </h2>

⋮

<h6> Least important heading </h6>

Note: We should not use HTML heading to make text thick or bold.

The 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

tag → target = "blank"

It will generate a new tab for the given link. link will open on a new tab

The img Tag

img tag is used to add images in an HTML page

```

```

When image not found this will show

We can custome the size of image. we should custome either width or height

```

```

The video audio tag

Play audion in webrite

```
<audio src="audio.mp3" controls loop>  
audio </audio>
```

```
<video src="video.mp4" controls loop>  
a video </video>
```


Bold, italic and underline tags

We can use bold, italic and 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.

**
**

hr tag

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

<hr>

pre tag

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

<pre> Hi Hello </pre>

Tags.

Description

- ** - - - - - This is a logical tag which tells the browser that the text is important.
- <mark>** - - - - - This tag is used to highlight text. ~~Hello~~
- <tt>** - - - - - This tag is used to appear a text in teletype tt
- <strike>** - - - - - draw a strikethrough on a section of text. ~~Hello~~
- <sup>** - - - - - Superscript text displays the content slightly above the normal line. $2+4^2$
- <sub>** - - - - - subscript text displays the content slightly below the normal line. H_2O
- <big>** - - - - - Increase the font size
- <small>** - - - - - Decrease the font size

How to test a program? --- <program>

test program with data

test program with data

or test program with data --- <program>

test program with data

or test program with data --- <program>

test program with data

or test program with data --- <program>

test program with data

or test program with data --- <program>

test program with data

test program with data

or test program with data --- <program>

test program with data

test program with data

or test program with data --- <program>

test program with data --- <program>

Creating a page layout-4

When we use 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>

<main>

<footer>

Inside the main tag we insert the following tags:

<main>

<section> → A page section

<article> → a self contained content

<aside> → Content aside from the content

</main> (eg Ads etc)

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

Also they are useful for SEO.

Link attributes

`Contact` → Contact

page open in same tab

`Contact`

↳ opens in a new tab

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

if the page is inside a directory, we need to make sure that the link points to the correct page.

↳ same applies to img tag as well

We can add links to images like this

```
<a href="/about"><img src='a.jpg' width='120'>  
(/about) </a>
```

'about' will show when
image will not load.

The Div tag

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

↳ Always takes full width
• whole line it uses

CSS code will come on div tag as well as whole blocks of HTML in Div tag

The span tag

span is an inline container.

↳ TAKES as much width as
necessary

THEY are much better
MEMBERS

There is no more
concern

and they are

very good people
and they are very
good people

They are very good
people and they are
very good people

They are very good
people and they are
very good people

They are very good
people and they are
very good people

List, tables and forms 5

Lists

Lists are used to display content which represents a list

Unordered list : used to list unordered items

output:

- Home
- About

 Home

 About

ordered list : used to list ordered items

output:

1. Phone
2. PC
3. Laptop

 Phone

 PC

 Laptop

Description list or Definition list

output:

Car

<dt> Car </dt>

Vehicle

<dd> Vehicle </dd>

Bus

<dt> Bus </dt>

Vehicle

<dd> Vehicle </dd>

</dl>

<table cellpadding="1" >
↳ border="1" >



Aniket

Date

Page

8

Make border on all cells

Tables

The <table> tag is used to define table in HTML.

It is used to format and display tabular data.

<tr> table row

<th> table headers

<td> table data

We can define as many table rows as we want.

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

<thead> used to wrap table head
(caption with tr with th)

<tbody> used to wrap table body

colspan attribute - used to create cells spanning multiple columns

<th colspan="3"> Game </th>

↳ spans 3 columns
(over)

rowspan attribute: multiple rows

~~<td>~~ `<td rowspan="2"> Mobile Number </td>`

HTML forms

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

`<form>`

`<!-- Element of the form -->`
`</form>`

There are different form elements for different 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. columns and rows attributes can be used to size the textarea.

Select element: Define a drop down list

Embedding videos

video tag is used to play video in HTML

```
<video src="location/URL video" controls  
autoplay width="400">Video.</video>
```

controls → for control on video like Play, pause, etc.

- width: To adjust width of a video
- we can use autoplay / loop to auto-play or loop the video.

SEO-6

We will focus only on HTML standpoint of SEO. We will not be looking into Keyword building and Content optimization aspect of SEO.

Types of SEO

- On-page SEO → can be done by HTML
- off-page SEO → can be done by developers

HTML SEO


HTML developers can implement SEO using the following techniques:

1. Set the title very nice & to the point
2. Set the meta description
`<meta name="description" content="...">`
3. Set a nice URL slug
4. Set the meta Keywords tag
`<meta name="Keywords" content="...">`

5. Set the meta author tag

```
<meta name="author" content="Manish">
```

6. Set a favicon

 <https://Manish.com> Search bar

7. Compress images and other resources
it will fast rendering your site.

8. Remove unused HTML/CSS and JS files
+ compress them.

9. Add alt text to images

Task

Make a website that I have learned all concepts

Some keys.

- All favorite music, video and Actors.
- 12th marks sheet
- Make a form about your choices like - car
 - bike
 - Book etc.
- a brief summary of your HTML Learning.