

HTML

CSS

JS

structure /
layout

style

logic

Ex: walls, doors

Ex: Paint and
decor

Ex: electricity
to make things
work like fan
and light.



HTML

Hyper text Markup Language

HTML is the code that is used to structure a webpage and its content

The component used to design the structure of websites are called HTML tags.

First HTML File

index.html

it is the default name for a website's homepage.

HTML Tag

A container for some content or other HTML tags

<P> This is a paragraph </P>
content
Element

Basic HTML page

`<!DOCTYPE html>` tells browser you are using HTML5
root of an html document
`<html>`
container for meta data
 `<head>`
 `<title> My First page </title>` page title
 `</head>`
 contains all data rendered by browser
 `<body>`
 `<p> hello world </p>` paragraph tag
 `</body>`
`</html>`

Quick points

- `html` tag is parent of `head` & `body` tag
- Most of `html` elements have opening & closing tags with content in between
- some tags have no content in between, eg - `
`
- we can use inspect element / view page source to edit `html`

comments in HTML

This is part of code that should not be parsed

<!-- This is an HTML comment -->

HTML is not case sensitive

<html> = <HTML>

<p> = <P>

<head> = <HEAD>

<body> = <BODY>

HTML Attributes

Attributes are used to add more information to the tag

<html lang="en">

↓ ↓

Language English

Attribute

Heading Tag

used to display heading in HTML

h1 (most important)

h2

h3

h4

h5

h6 (least important)

Anchor Tag

used to add links to your page

```
<a href = "https://google.com"> Google </a>
```

Image Tag

used to add images to your page

```
<img src = "/image.png" alt = "Random image">
```

↓
Relative url

```
<img src = "/image.png" alt = "Random image" height = "100">
```

↓
height

Br Tag

used to add next line (line breaks) to your page.

```
<br>
```

Bold, Italic & underline Tags

used to highlight text in your page.

```
<b> Bold </b>
```

```
<i> italic </i>
```

```
<u> underline </u>
```

Big & Small Tags

used to display big & small text on your page.

`<big>` Big text `</big>`

`<small>` small text `</small>`

Hr Tags

used to display a horizontal ruler, used to separate content.

`<hr>`

Subscript & Superscript Tag

used to display a text slightly below or slightly above the normal line of text in HTML

`_{` subscript `}`

H_2O

`^{` superscript `}`

$A^n + B$

Pre Tag

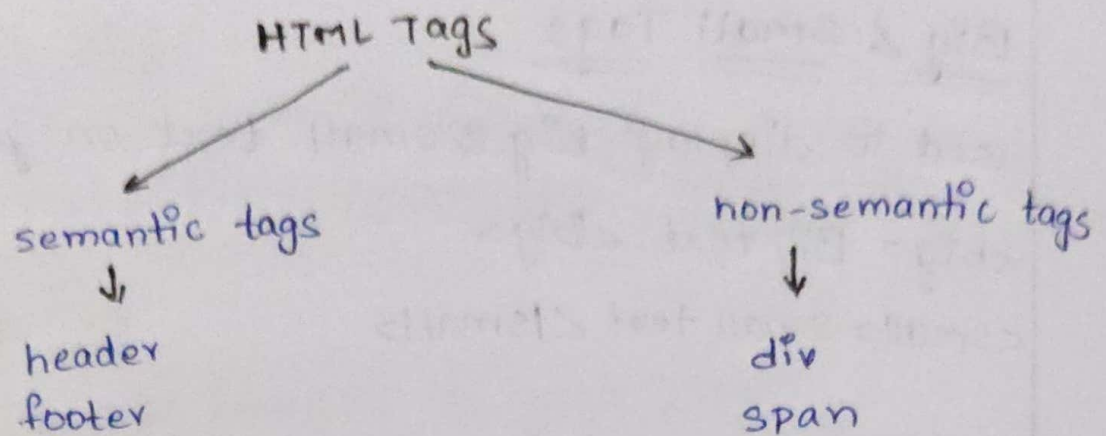
used to display text as it is (without ignoring spaces & next line)

`<pre>` This

is a sample

text.

`</pre>`



Page Layout Techniques

using semantic tags for layout

using right tags

i) header

```
<body>
```

```
<header>
```

```
<h1> Education </h1>
```

```
<h1> projects </h1>
```

```
</header>
```

```
</body>
```

ii) footer

```
<body>
```

```
<footer>
```

```
<h5> contact me: helloworld@gmail.com </h5>
```

```
</footer>
```

```
</body>
```


iii) main

<body>

<main>

</main>

<body>

Inside main Tag

section Tag

For a section on your page

<section>

Ex:

<body>

<main>

<section> Education: B.tech (Aurora university)

</section>

<section> Percentage: B.tech (90 points)

</section>

</main>

</body>

Article Tag

For an article on your page

<article>

Ex:

```
<body>  
  <main>  
    <article> my story: </article>  
  </main>  
</body>
```

Aside Tag

For content aside main content (ads)

<aside>

Ex:

```
<body>  
  <main>  
    <aside> this is an ad </aside>  
  </main>  
</body>
```


Revisiting Anchor Tag

`Google `
↑
for new tab

` `
↑
clickable pic

Revisiting Image Tag

``
↑
set height

``
↑
set width

Div Tag

Div is a container used for other HTML Elements.

Block Element (takes full width)

Ex:

```
<body>
  <main>
    <div>
      <p> Hello world </p>
      <p> Namaste </p>
      <p> Hi </p>
    </div>
    <div>
      <p> Bye </p>
      <p> Good Bye </p>
    </div>
  </main>
</body>
```

List: Block Tags

<address>	<fieldset>	<nav>
<article>	<figcaption>	<noscript>
<aside>	<figure>	
<blockquote>	<footer>	<p>
<canvas>	<form>	<pre>
<dd>	<h1> - <h6>	<section>
<div>	<header>	<table>
<dl>	<hr>	<tfoot>
<dt>		
<main>	<video>	

Span Tag

span is also a container used for other HTML elements

Inline Element (takes width as per size)

 hello world

List: inline Tags

<a>		<q>
<abbr>	<i>	< samp>
<acronym>		<script>
	<input>	<select>
<bdo>	<kbd>	<small>
<big>	<label>	
 	<map>	
<button>	<object>	<sub>
<cite>	<tt>	<sup>
<code>	<var>	<textarea>
<dfn>	<output>	<time>

List in HTML

Lists are used to represent real life list data.

unordered

 Apple

 Banana



•
•
•
•

ordered

 Apple

 Banana



1. I. a.
2. II. b.
3. III. c.
4. IV. d.

Tables in HTML

Tables are used to represent real life table data.

<tr> used to display table row.

<td> used to display table data.

<th> used to display table header.

Ex:

```
<table>
```

```
  <tr>
```

```
    <th> Name </th>
```

```
    <th> Roll No </th>
```

```
  </tr>
```

```
  <tr>
```

```
    <td> Siddhartha </td>
```

```
    <td> 1664 </td>
```

```
  </tr>
```

```
</table>
```

Name	Roll No
Siddhartha	1664

caption in Tables

<caption> Student Data </caption>



Student Data

Name	Roll NO
Siddhartha	1664

thead & tbody in Tables

<thead> to wrap table head

<tbody> to wrap table body

thead & tbody

<table>

<thead>

<caption> Student Data </caption>

<tr>

<th>

Name

</th>

<th>

Roll NO

</th>

</tr>

</thead>

<tbody>

<tr>

<td> G. Siddhartha </td>

<td> 1664 </td>

</tr>

</tbody>

</table>

thead

tbody

colspan

colspan is used to join two or more columns into one cell in table

Example:

```
<table>
  <thead>
    <caption> student Data </caption>
    <tr>
      <th colspan="2">
        INFORMATION
      </th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td> siddhartha </td>
    </tr>
    <tr>
      <td> 1664 </td>
    </tr>
  </tbody>
</table>
```

Student Data.

INFORMATION	
siddhartha	1664

Form in HTML

Forms are used to collect data from the user

eg- sign up / login / help requests / contact me

`<form>`

form content

`</form>`

Action in Form

Action attribute is used to define what action needs to be performed when a form is submitted

`<form action="/action.php">`

Form Element: Input

`<input type="text" placeholder="Enter Name">`

Enter Name

Example:

`<form action="/action.php">`

`<input type="text" placeholder="username">`

`<input type="password" placeholder="password">`

`</form>`

username

Password

label

<label for="100">

<input type="radio" value="class x" name="class"
id="100"> class x

</label>

<label for="101">

<input type="radio" value="class x1" name="class"
id="101"> class x1

</label>

☐ class x

☐ class x1

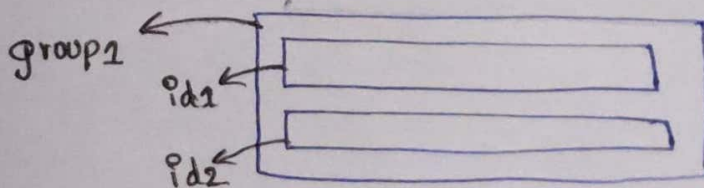
class & id

<div id="id1" class="group1">

</div>

<div id="id2" class="group1">

</div>



checkbox

<label for="math">

<input type="checkbox" value="math" name="subject"
id="101"> Mathematics

</label>

<label for="physics">

<input type="checkbox" value="physics" name="subject"
id="102"> Physics

</label>

☐ Mathematics

☐ physics

TextArea

<textarea name="feedback" id="101">

placeholder="please give your feedback">

Feedback </textarea>

please give your
feedback.

Select

```
<select name="city" id="city">  
  <option value="delhi"> delhi </option>  
  <option value="Hyd"> Hyderabad </option>  
  <option value="Mumbai"> Mumbai </option>  
</select>
```

delhi v

submit button

```
<input type="submit" id="submit">
```

Submit

iframe Tag

Website inside website

```
<iframe src="/link">
```

video Tag

```
<video src="myvid.mp4"> My video </video>
```

Attributes

controls

```
<video src="/link" controls> My video </video>
```

height

```
<video src="/link" height="100"> My video </video>
```

width

```
<video src="/link" width="100"> My video </video>
```

loop

```
<video src="/link" loop> My video </video>
```

autoplay

```
<video src="/link" autoplay> My video </video>
```