

# Web Development

Frontend —

1. HTML

2. CSS

3. JavaScript

4. Frameworks

Backend —

1. Version control

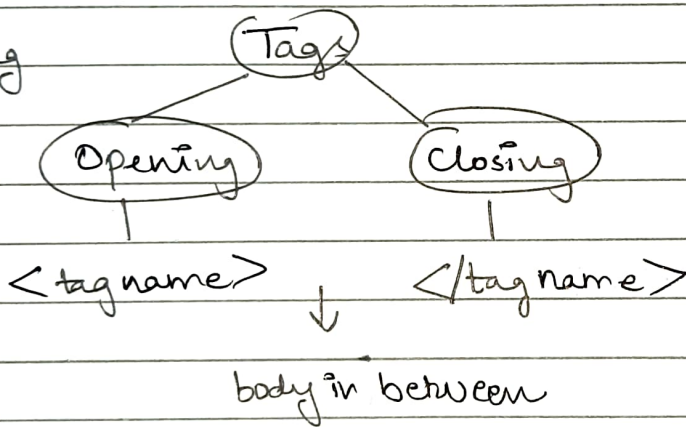
2. Node JS

3. Databases



## \* HTML (Hyper text markup language)

1) Tag



Note:

Only opening tag is used in image insertion

``

2) Nesting of elements:

Nesting of elements into elements (mixing the properties)

Attributes — adding attributes / properties in elements

Syntax: `<tagname attributename="attribute value">`

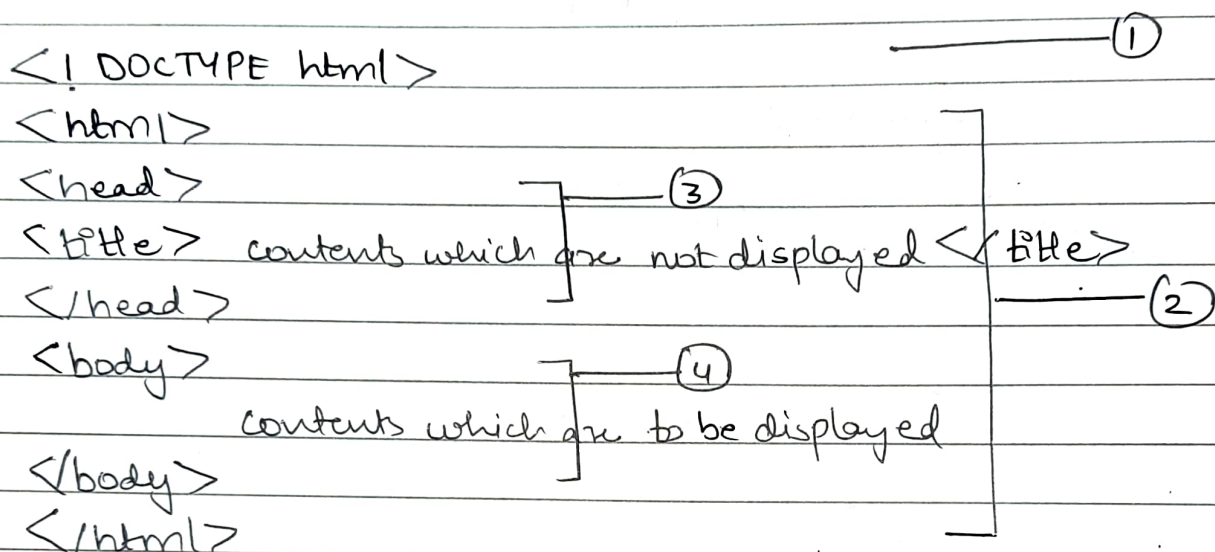
Boolean attribute: attribute which doesn't have values

General purpose attribute:

1) ID - Giving unique value to elements

2) class - Giving same values to more than one element

### 3) Document structure



### 4) Elements:

#### (i) Heading elements (`<h1>` - `<h6>`)

Size is in decreasing order

`<h1>` ..... `<h6>`

HELLO

HELLO

#### (ii) Paragraph elements

`<p>` paragraph content `</p>`

`<br>` line break `</br>`

`<hr>` horizontal line

`<b>` bold writing `</b>`

Note:

Shortcuts:

!  $\Rightarrow$  Driver code

Ctrl alt F  $\Rightarrow$  Format Doc

Ctrl Shift P  $\Rightarrow$  Command palette

Shift + Alt + A/V  $\Rightarrow$  Copy line

## 5) HTML entities

Display reserved characters in HTML

It can display + Reserved characters

- ↳ Special characters
- ↳ Entities - emojis
- ↳ Symbols

Syntax  $\Rightarrow$  &entity\_name; .or &#entity\_number;

### Space

Result	Description	Entity Name	Entity number
␣	non-breaking space	&nbsp; or &#160;	
&	ampersand	&amp;	60
<	less than	&lt;	62
>	greater than	&gt;	38
"	double quotation	&quot;	34
'	apostrophe	&apos;	39

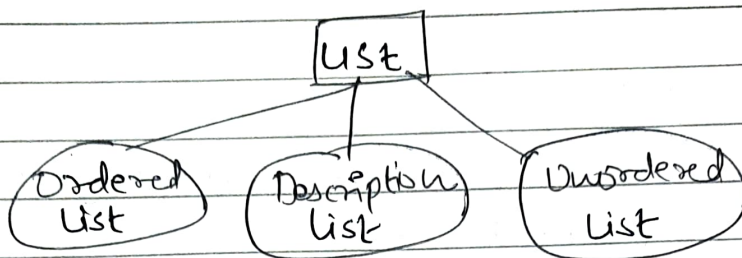
## 6) Comment line

<!-- Comment -->

### Font change

- (i) <b> content </b> [bold]
- (ii) <i> content </i> [cursive]
- (iii) <small> " </small> [smaller size]
- (iv) <sup> " </sup> [power] (down)
- (v) <sub> " </sub> [log] (down)

## 7) List



Ordered List (`<ol>`) (numberings)

Unordered List (`<ul>`) (bullets)

`<li>` content `</li>` (for list entries)

Note:

`<ol>` type "1/I/i/A"

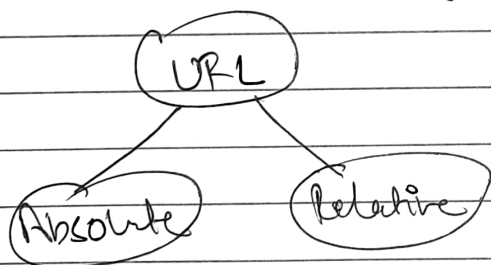
URL = Uniform Resource Locator

## 8) Hyperlink:

`<a href = "path location">` ~~for~~ location name `</a>`

example

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



Note

→ Add attribute

target = "blank"

to open the link in new tab

## 9) Image tags & video tags:

`<img src = "image location">` ~~image name~~

alt attribute (alternate) alt = " "

width " width = " "



<sup>src</sup>  
<video <sup>src</sup>="location of source"></video>

controls attribute

autoplay attribute

width attribute width="": "

muted attr

loop attribute (create loop video)

muted attribute (video muted initially)

Iframe

anything/anyframe

helps in copying ~~img or video~~ from other website

<iframe <sup>src</sup>="location" <sup>attributes</sup>></iframe>

1) Table:

<table>

- table creation

<tr>

- table row creation

~~<td>~~

<th>

</th>

- table heading creation

<td>

</td>

- table details

<th rowspan="2">\$

</th>

<td colspan="2">sum;

</td>

</tr>

</table>

<th rowspan="row numbers">content </th>  
to be combined

<th colspan="column no.">content </th>  
to be combined

<thead>

table structure:

<table>

<thead> <tr>

<th> content </th>

⋮

</tr> </thead>

<tbody> <tr>

<td> content </td>

⋮

</tr> </tbody>

<tfoot>

<tr> content

<th> content </th>

</tr>

</tfoot>

</table>

ii) elements in form:

Input types:

(i) ~~type~~ text type  $\Rightarrow$  <input type = "text">

(ii) password type  $\Rightarrow$  <input password = "password" type

(iii) option type  $\Rightarrow$  <input type = "radio">

(iv) check type  $\Rightarrow$  <input type = "checkbox">

(v) file selection type  $\Rightarrow$  <input type = "file">

(vi) submit button  $\Rightarrow$  <input type = "submit">

(vii) reset button  $\Rightarrow$  <input type = "reset">

(viii) Image selection  $\Rightarrow$  `<input type="image">`  
(ix) Textarea for paragraph type text

`<textarea cols=" " rows=" " >`

(x) select box

$\Rightarrow$

21  
20  
19  
18

`<select>`

`<option value="delhi">delhi</option>`

`<option value="newyork">newyork</option>`

`</select>`

(xi) email type  $\Rightarrow$  `<input type="email">`

(xii) url type  $\Rightarrow$  `<input type="url">`

(xiii) number type  $\Rightarrow$  `<input type="number">`

(xiv) date type  $\Rightarrow$  `<input type="date">`

Note

input\* = required keyword

Note:

`<fieldset> X </fieldset> =`

X

`<legend> content </legend> =`

content

required (keyword) [if input is must]

Semantic tag - tags which clearly defines the content

`<p>`, `<br>`, `<table>` etc

Non-Semantic tags - tags which doesn't define the content clearly.

`<div>`, `<span>`

`<em>` - Inline tag

`<em>` content `<em>` → to

`<em>` content `<em>`

⇓ content content

`<link>` - link css files in HTML

