

# HTML : Hyper text Markup language

because it can't show errors

- \* initially HTML code starts with `<doctype HTML>` tag.
- \* next `<head>` tag there 6 heading tags.  
these are represent with `<h1>` `<h2>` `<h3>` `<h4>` `<h5>` `<h6>`
- \* body tag ~~and~~ contains body of the code these encloses with `<body>` `</body>`.
- \* paragraph tags contains paragraph (`<p>` `</p>`).
- \* Anchor tag, it uses to load any URL, it contains "href" attribute.  
it represents with `<a>`, `<a>`  
if we want to load our URL in <sup>new</sup> tab, we use target attribute with value '-blank'.
- \* Image tag, These are also called as self tags, void tags.  
\* it doesn't contain end tag. it represent with `<img/>`. to display image with the help of source (src) attribute. By any problem the image was not displayed in this situation we use ~~src~~ "alt" attribute. alt is used when the image not loaded.

## lists

- \* ordered list: it represents with `<ol>` `</ol>` and it contain child tags represent with `<li>` `</li>`. This list is used to ~~display~~ display in ordered way.
- \* unordered list: it represent with `<ul>` `</ul>` it also contains child tags.

These lists have one attribute named as "type"

- \* Description list: It represent with `<dl>` `</dl>` it contains child tags named as data term `<dt>` `</dt>`  
`<dd>` `</dd>`

### Table tags

it represent with `<table>` `</table>`

by using `<br>` `</br>` tag we can insert data. } child tags  
`<td>` `</td>` this is used to insert data in that table

It contains border attribute.

### Fav icon

`<link type = "image/x-icon" rel = "icon" href = "/hi.jpg" > </link>`

This tag is used to maintain logo for website. rel means relation.  
(icon) mandatory.

This tag is always written in head tag. for href '/' is mandatory.

### Form tag

It represent with `<form>` `</form>`

`<input>` this tag is used to take input this is child tag of form

`<label>` `</label>` is used to ~~what~~ represent what data give  
input to input

~~input~~ tag contain 'type' attribute, 'id' attribute, value attribute

ex `<input type = "button" value = "submit" />`

and some other attributes are

placeholder = it is use to mention the area name

required = \* input tag is a self corvoid tag.

### Basic tags

`<small>` this tag used to minimize the para  
`</small>`

`<br>` `</br>` this is used to break the line

### HTML element

combination of open tag containing closing tag.

attribute It gives extra behaviour.

### label tag

It represents with `<label> </label>`

label tag contains for attribute, these attribute used for developer purpose for knowing about the code

\* for attribute & id attribute should be same

\* ~~input~~ input tag also contains "name" attribute. It is used as reference of the tag. means display the given data at URL section.

\* if we use two radio buttons, should use name = "radio-btn" it help to take only one radio button

### select tag

select tag is used to select one option in a group with the help of option tag.

select ~~tag~~ accepts name attribute

option tag contain value attribute it helps to store data.

ex `<select name = "xxx">`  
`<option value = "xxx"> ---- </option>`  
`</select>`

Snake case: underscore should be mandatory. (radio-btn)

Pascal case: second word 1<sup>st</sup> letter should capital (radioBtn)

### comment lines: ctrl + ~~alt~~ /

Semantic tag : meaningful tag

It gives a meaning full structure

Non semantic tag : non meaningful tag

It not gives a meaning full structure.

\* Semantic tags contains several tags are header, nav, section, footer, aside.

nav tag acts as parent tags, it accepts many child tags. basically used `<ul>` `</ul>`

\* non-semantic tags contains

`<div>` `</div>`, `<span>` `</span>`

\* div tag is block element.

\* Block element:

Block elements are occupy over all ~~space~~ horizontal space of a page.

\* It doesn't accept another tag besides the first tag to display.

\* Inline Element:

Inline elements are occupy <sup>space</sup> what they want in the page.

\* It accept another tag besides the first tag to display.

~~Form~~

\* Form tag contains text area tag. This tag is help to increase the space of the text box.

`<text area>`

\* In input tag type = number, we <sup>can specify</sup> ~~min~~ min & max values

`<br>` `</br>` is not a responsive tag.

alternative of break tag is div tag.

===== o =====



## CSS

CSS - cascading style sheet

\* These are 3 types. , These are prioritized.

\* In-line CSS

\* Internal CSS

\* External CSS

\* Inline CSS :-

This CSS is used in inside the open tag at before closing angle bracket

Inline-CSS has attribute named as style.

\* If we add two or more properties in style attribute, we add property at after ';' & before ''.

\* Internal CSS :-

This CSS used in head tag with the help of style tag.

\* In this style tag we ~~can~~ specify the tag name for what you add properties.

```
Ex: <style>
    h1 { some properties }
</style>
```

\* External CSS :-

~~This~~ This CSS is created separately, so This CSS is link with original code with help of <link> </link> tag.

\* In it we can specify some styling properties.

— o —

\* we can specify style of a particular word in a para with help of <span> </span> tag.

— o —

## prioritized css :

css has priorities.

First priority is In-line-css.

Second priority is Internal-css.

Third priority is External-css.

\* If you same properties in 3 css of a particular tag. Firstly it executes In-line, Internal, External.

Selector To select <sup>(or) target</sup> a particular element (or) ~~css~~ attribute.

These are 3 types. This is also prioritized

1st priority 1. id selector  
2nd priority 2. class selector  
3rd priority 3. Element selector

} This are also ~~called~~ called as attribute selector.

To select particular element con tag. for styling.

Ex: span { properties }

### id selector:

To select id attribute for styling with help of #  
id should be unique. the name of id should not use again.

Ex: # id name { }

### Class selector

To select class attribute for styling with help of .  
class should be duplicate, the name of class can be used again.

Ex: . class name { }

Note These are used only in Internal & External css.

## Some properties :

\* text-align ~~attribute~~ : It is used of align text horizontally.

\* border ~~attribute~~ : It takes three values at a time. those are  
1. width = px 2. type = solid, dotted, ... 3. color = some colors.

Ex: tag name { 2px solid Red }

\* border radius : It is used styling borders.

Ex: tagname { border radius : 10 px }

px is the unit of css

\* width: To change the width in CSS

- \* height : To change the height in css

\* text-align: justify is used to align text properly.

- \* opacity : The values upto 0 to 1 only. It is used for change opacity. It doesnot have any unit.

\* line-height: It is used for maintain height b/w ~~two~~ lines.

\* line-height: It is used for maintain height. It does not change the weight of font. it does not have any unit. values upto 1 to 100

## Box - Model

Box model contains.

\* Margin = The ~~difference~~<sup>space</sup> between two layouts.

- \* border

- \* padding = The <sup>space</sup> difference between content & layout

\* some properties in margin are:

1. margin left - it moves away from ~~right~~ left  
2. margin right - it moves away from right  
3. margin top - it moves away from top  
4. margin bottom - it moves away from bottom
- } These are ~~negative~~ values.
- as mentioned below

\* IF we use these 4 properties as 1 property follow the below sequence  
top, right, bottom, left

ext margin = top, right, bottom, left-  
values

padding: padding is just work like margin values.  
padding doesn't have negative values.

units of CSS &

They are two types.

1. absolute units  
These are fixed  
in any devices  
(or) screens
2. relative units  
These are changeable  
based on the  
screen.



## \* absolute units :

1. px - pixels
2. pt - points
3. pc - picas

## \* relative units :

sub types of relative units:

1. %
  2. VW - view port width
  3. VH - view port height
1. EM 2. rem } These are font relatable changes

\* view port is the ~~vis~~ visible screen.

VW means change horizontally.

VH means change vertically.

\* if we change total body ~~and~~ or every element in the code we can use root selector (or) unit selector.

it is represents with '\*'

\* rem default value is 16px. It <sup>can</sup> be changed based on root selector. \* relative units <sup>EM</sup> changed based on parent tag units.

## display property :

These property has some values.

1. inline - It gives inline properties to block elements.
2. inline-block - It gives block properties to inline elements.

## Descendent selector :

If we give style properties <sup>to child</sup> with help of parent ~~and~~ <sup>\* parent & child</sup> separated by space

syntax : parent name child name { }

\* The default margin of a website can be changed with help of root selector (or) universal selector.



## audio tag

it is represented with `<audio>` `</audio>`

audio tag has child tags named as `<source>` `</source>`.

\* The open audio tag must have controls attribute and also autoplay attribute used for autoplay.

\* source tag have src attribute used for <sup>placed</sup> path of the audio.

## video tag

It works same as audio tag.

but it has height, width and loop ~~attributes~~ <sup>changes</sup> attributes. height and width attr is used for change the size of the video.

loop attr is used for play the video repeatedly.

## background image

\* for background image we use

background-image property and it has value "URI".

This is used for place the path of the image.

\* we use background-repeat = no repeat for no repeating the image

\* we use background-size for sizing the background and it has values auto, contain and cover.

\* auto is used for actual size.

\* contain is used

\* cover is used cover the overall display.

\* ~~we use~~ background-attachment property it has values scroll & fixed.

scroll is used background image scrolling with text.

fixed is used background image fixed while scrolling the text

\* HTML has priority of last one.

For ex

```
P {  
    background colour: red  
}  
P {  
    background colour: green  
}
```

For the above ex it consider green color, by overriding.

— o —

display property

\* display: flex property - It is a responsive property.

If we given this property to parent tag, then the properties are applied to all child tags within the parent.

\* gap - It give space b/w two tag.

\* justify-content - It is used for text arrangements

\* flex-direction - It is used for text arrangement in directions

\* flex-wrap: This is used to make display responsive

responsive: means working on all displays in understandable way.

\* align-items: It is used for align the items.

It works opposite to the flex-direction.

But justify content works based on flex-direction

These are all works when display: flex property is to be used.

\* HTML has an attribute "lang" is used for language

Box shadow property: It gives shadow for content

It has 5 values

h-offset v-offset blur spread color

\* if we add extra css for actual content ~~we can~~ by another class name, id and pseudo class.

Pseudo class is represent with . It can work when tags are similar. <sup>2 (or) more</sup>

• class <sup>(or) tagname</sup> name : nth-child (number)

ex • card : nth-child (2)

class name

If we want to add another class for actual class, then we add after the actual class.

class = "class name1 class name2"

### Colours in HTML

HSL = Hue saturation Lightness

hsla = Hue saturation lightness alpha  
(opacity)

rgb = red green blue

ex rgb(0,0,0)

It min and max values are 0 to 255.

rgba = red green blue alpha  
(opacity)

Hex code = hex code starts with # and continued with combination of letters and word (6 digits)

ex #000000 represents white.

key word = key word colors are red, blue, green, white.

\* HTML load hex code very accurately.

### Grouping selector

Grouping selector is used to styling one or more child tags, it is separated by ',' (comma). [form tag]

ex form input [type = "text"], ...

### Some properties

outline: outline is used to remove outline.

hover: it is a pseudo class is used to change the color when touch button.

cursor: it is used for change the cursor.



\* If we want to remove numbers<sup>(or)</sup> symbols in a list we use `list-style-type: none` property.

\* In href attribute `..|` gives neighbours files.  
but `..|` gives all files.

\* if we want to remove underline in URL section (anchor tag), we use `text-decoration: none` property.

## Media queries

Media queries is help to align text based on the screen. (i.e. make screens responsive)

### Syntax

@ media screen and <sup>(or) min width</sup> (max width: some value)  
<sub>space mandatory</sub> { tagname (h1) { some properties }

\* In media queries must be considered.

\* media queries words when link with head with the help of meta tags

Ex1 <meta name="viewport" content="width=device-width, initial-scale=1.0">

## Position Property:

\* By position property we can change the child position with the help of parent tag.

\* position property have some values those are

• static, relative, absolute, fixed, sticky.

\* By default HTML elements have position static.

<sup>position:</sup> \* static means original position (or) normal position.

<sup>position:</sup> \* relative means it can change their position from its

original position. when we use `position: relative` it

can unlock 4 properties those are top, right, bottom, left

<sup>position:</sup> \* absolute - It can depends upon a parent tag when <sup>otherwise</sup> ~~position~~ static ~~property~~, otherwise must in parent tag.  
position property



it depends upon body.

\* position: sticky : It works when we scroll the screen.

\* position: fixed : when we use this property the element should fixed position either top, right, bottom, left.

### Transition Property :

\* It is used to get transition properties

\* Transition property doesn't mention in pseudo class.

Transition property has three values

property, duration, timing function, delay

\* duration for transition time.

\* Timing function are five.

ease, linear, ease-in, ease-out, ease-in-out.

\* display: grid : It is used to take responsive for website. It has two attributes ~~display~~ grid-template-columns, grid-column.

\* grid-template-columns is used to arrange data in columns.

grid-template-columns : 20px 20px ...  
auto auto ...

no. of columns to be arranged.

### Animation property

Animation property is used to get animation while load the page.

Animation properties are

animation name - animation <sup>have</sup> must be unique.

animation duration - time duration for animation

animation delay - time delay for animation

animation iteration count - count for animation

@ keyframes ~~some~~ (name) <sup>ex</sup> { (or) @ keyframes ex-name {

Display: none +  
property.

\* It is used to help ~~some~~

display as blank.

from {  
 }  
to {  
 }  
}

0% {  
 }  
100% {  
 }

100% {  
 }

...% {  
 }