

CSS

* Cascading StyleSheet .

x < p style = "color: blue; font-size: 30px;"> xyz</p>

This is inline CSS .

x ~~<head>~~ Below is internal CSS .
<style type = "text/css">

```
P {  
    color: blue;  
}
```

</style>

put this in head or atleast.

* External CSS :- Need to create file with .css extension . example xyz.css .

```
P {  
    color: blue;  
    font-size: 20px;  
}
```

and link it in head tag like below .

<link rel = "stylesheet" type = "text/css" href = "xyz.css" />

* Preferences Rule

Inline CSS > [Internal CSS = External CSS]

last rule will applied .

* External CSS :-

- It helps in separating content related code and presentation related code of website .
- It may or may not have lesser priority than internal CSS .
- It helps in writing less repeated code hence the loading time of page decreases .
- It helps in easy debugging and maintenance of code .
- It is preferred over inline and internal CSS . For styling purposes , as you can not reuse inline or internal CSS with other HTML code files .

* Type Selector .

Flag
{
}

* **Class Selector** :- add 'class' attribute to the html tags for which you want to apply same style ~~and class names can be separated by space in html & by comma in css.~~
multiple & separated by space in html & by comma in css.
• class name {
 property name : value;
}

* class & tag selectors are used to specify a group of elements.

* **Id selector** :- id should be unique to each element.
- add id attribute &
id name {
 property name : value;
}

* Preference or specificity of selectors
Inline CSS > id selector > class selector > Type selector

* **Super class** :- Apply specific style when condition satisfying.
like (:hover)

* **Colors** :- Names, Hexadecimal codes, ~~#~~rgb(, ,),
0-255 opacity 0-1, rgba(, , ,) , hsl(hue saturation light
0 120 240 0-100 0-100

* **CSS Units** :-

Absolute :- exact
1cm
1inch
 $1px = \frac{1}{96} \text{ inch}$.

Relative :- proportionate to parent
relative to parent
relative to font size
relative to viewport height
relative to viewport width

relative to font size of root element
(1.00)
1em - font size of root
em - font size of parent

* **Border** :-

Border-width, border-style, border-color, border-radius
top right bottom solid/dashed/double
left

Structure :- border : 4px solid red;

* Text Styling :-

```
font-size: 30px;  
color: blue;  
font-weight: bold; /* 100 - 900 */  
text-align: justify;  
line-height: 30px;  
word-spacing;  
text-transform: uppercase;  
text-decoration: underline;
```

* Background :

```
background-image: url(path);  
background-repeat: no-repeat;  
background-position: center;  
background-size: contain;  
background-attachment: fixed;
```

- We can set more than one background image.

* Margin : Space around element

margin: 4px; — cell sides

margin: 4px 8px; — top-bottom left-right

margin: 4px 8px 6px; — top-left right bottom

margin: 4px 8px 6px 1px; — top right bottom left

margin-top: red;

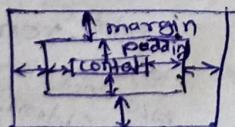
margin: auto; — center of ~~parent~~ parent.

- Vertical margins collapse.

- Horizontal margins don't collapse, they add up.

- We can use negative values in margin property.

* Padding : Space within content & ~~border~~ border of element



- No negative values ~~are allowed~~.

* Display Property :

Inline : Should not have height or width and vertical margin + padding.

Block :

Inline-block : There is some spacing.

* Position Property .

- ① static ② relative ③ absolute ④ fixed
- ⑤ sticky

① static :- Normal position .

② relative :- relative to normal position .

position: relative;

{ space normal position also
left: 20px; get blocked . }

③ absolute :- with respect to first position parent .

+ No space is reserved .

④ fixed :- stick to viewport ; not take place .

⑤ sticky :- fixed ~~till~~ container . start sticking from some point (depends on top)

* Box Model .

① Content Box Model :- margin Default



Actual Height = content
+ padding
+ border

box-sizing: content-box

margins don't add up .

② Border Box model .

box-sizing: border-box .

Then, actual Height = Height .

* Min Max Width :-

min-width

max-width .

overflow: scroll ; scroll / hidden / auto

* *{} to apply style to every element of HTML page .

* Resumie Project .

Home → About → skills → Experience & education,
Contact ← Portfolio

* Select <x> that is immediately preceded by <y>

⇒ y + x { . . . }

*. tag with specific attribute
input [disabled] { -- }

* Target all the images whose extension is "jpg"?
img [src\$=".jpg"] { ... }

* box-shadow property :- Used to produce shadow like effect for an element.

syntax box-shadow: none | n-offset v-offset blur-radius
spread-radius color .

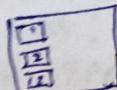
h=0.83d & v-offset are required

values can be negative

* Flex : arrange multiple element vertically & horizontally smoothly.

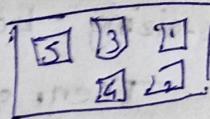
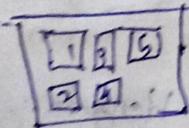
display: flex;

`flex-direction: column; flex-direction: row-reverse; flex-direction: column-reverse;`



order : 1 ; Higher the order last placed.

`flex-wrap: wrap;` wrapping in multiple line,
`wrap-reverse / nowrap`



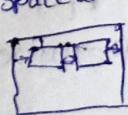
flex-grow: 1; It grows according to flex-grow
Total of flex-grow is 100%

flex-shrink: 4; ~~at shrink by 4 parts.~~ sibling.

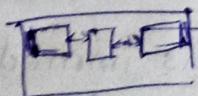
justify-content: flex-start; /* align items across row
main axis ← →
default: space-around



下四



Space-between

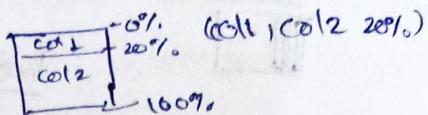


- * align-items
 - Align items across cross axis.
- * align-item: flex-start; flex-end / center
 -
- * stretch < height
 -
- * baseline
 -
- * nth-child
 - section: nth-child(n) { ... }
- * class > div - only to direct child
 - class div - all div children
- * flex-basis: ; initial length to the flex item.
- shorthand
 - * flex-flow: flex-direction flex-wrap (initial | inherit);
 - * initial - represents flexflow property as (row wrap)
 - inherit - inherits this property from its parent element.
- * flex: flex-grow flex-shrink flex-basis (auto | initial)
 - auto - → auto
 - initial - 0 → auto
 - none - 0 0 auto
 - inherit - property from its parent.
- * Grid; To create 2-dimensional layouts.
 - display: grid; grid or inlinegrid;
 - grid-template-rows: 1fr 3fr;
 - grid-template-columns: repeat(3, 1fr);
 - we can use px, %, rem also
 -
- * overflow-wrap: break-word; (word overflow word-wrap)
 - normal

* Gradients:

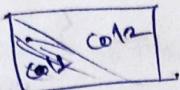
background-image: linear-gradient (color1, color2, ...);

can use 20px;



linear-gradient (to top right, col1, col2);

can use deg also



background: repeating-linear-gradient (col1, col2)

* radial-gradient (col1, col2)



* Pseudo Classes: - tag: link / active / visited

link

active - session is active

visited - vi

target is selected / clicked

* transition: all as ease-in-out;

* Pseudo elements: tag:: elements { }

* p::first-element { }

:: first-line

* @before / after pseudo element add virtual
element before & after

p::before {

content: *xyz; ,

required

}

z-index :- higher the z-index value it will be visible over element with lower z-index.

Advance CSS

Responsive Website

Three ways to make responsive.

① Responsive Web design - (CSS Rules).

② Dynamic Serving :- Use HTML / CSS / JS / etc code based on the device we are using.
Amazon is using it.

③ Separate mobile website :- Different URL used, generally starts from 'm' facebook.

Responsive Web Design :-

* Measurement units :- ① Absolute ② Relative.

Absolute :- px, in, cm

Relative :- %, vh, vw, rem, em
font-size | font-size
of HTML | of parent

* Fluid layouts : Content of the website adjust according to the browser window.
Relative units are used.

* Fixed layout :- Dimension are fixed.
Absolute units are used.

* Elastic layout :- Content of the website adjust according to the font size.
Relative typographic unit used like em.

* Hybrid layout :- mix of any of the above.

Viewport Meta tag :-

<meta name="viewport" content="width=device-width, initial-scale=1">

px
It can be good

* Media Query :- ① media type :- screen, print, speech, all
② media properties :-

① width ② height ③ resolution

④ media screen and (max-width: 600px) { }

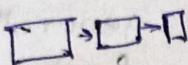
ex. @media screen and (max-width: 60px) { -- -- -- -- -- }

High condition to lower condition:
critical at last.

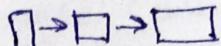
```
max-width: 600px { width: 60%; }
```

→ Design approaches

- ① Desktop first
 - ② Mobile first



- → □ → □



min-width: 600px[

min-width: 900px; /*

- media features :- width, orientation, resolution etc

```
* @media {max-width: 600px} { p{...} } .
```

→ Transitions & Transform

Transform: rotate(nodeg); (+deg clockwise)

: scale at ~~0.5~~, 0.4);

: translate(100px, 100px); → moves

transition: is `exec-in-out`; default "all"

`:height` is ease-in-out 0.55;

on what for How How much How each child after each other How many ideas much

Animation :

animename

animation: changeShape is ease-in-out

no of times form
2 alternate,
1 infinite,

* Create animation

animal
@ keyframes change shape
0% from 100%

change shape?
0% from { border-radius: 0%; }
100% to { border-radius: 50%; }

to amino
booster
smooth

We can add as many stages between 'from' & 'to' in form of %.
ex from { - } — from can be 0%
10% { - }
20% { - }
to { - } — to can be 100%.

We can create multiple animations and apply them to same element by adding ',' comma, animation.css

copy paste CDN and ~~not~~ give class to to element which ever animation you wanted to use.