

# CSS

- ⇒ Cascading Style Sheets 3
- ⇒ Released in 1996 and maintained by W3C Org
- ⇒ Used to change look/feel of html elements (makeover)  
Like color, background, border, alignment, wallpaper, animations, size of element, padding, margin, opacity etc...
- ⇒ CSS provides only styles but not tags
- ⇒ Style is group of properties or is a rule

Width=val	height=val ? html attributes
Width:val	height:val ? css properties

## Where we can define styles?

We can define styles in 3 places (scope), those are:

- Inline styles
- Internal styles
- External styles

Different ways to implement css:

### Inline (1<sup>st</sup> Approach)

Html tag and css properties both are defined within the same line

Syn:-

**<tag style="property:value; property:value; ... ">**

Unique style or personal styles

### Internal (2<sup>nd</sup> Approach):

Html tags and css styles are designed in the same program, but not in same line.

Internal css should be implements in **Style** tag, style tag must be sub tag “head” tag.

Syn:-

```
<style>
  tag{
    property:value;
    property:value;
    .....
  }
  tag{
    property:value;
    property:value;
    .....
  }
  Etc...
</style>
```

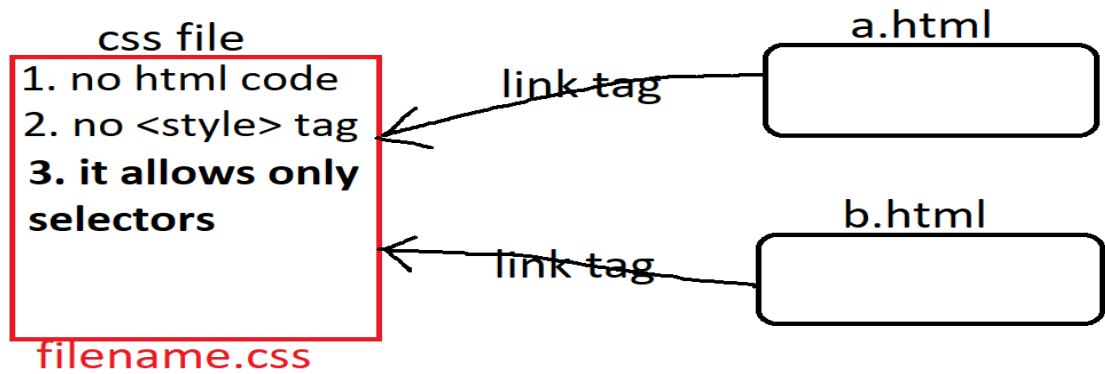
Personal style but repeated applying

### External (3<sup>rd</sup> Approach)

Css styles are defined in separate file and should be save with **“.css”**, html code designed in separate file should be save with saved with **“.html”**

Use link tag for mapping css file to html file

Syn:        **<link rel="stylesheet" href="filename1.css"/>**



### note:

- css attributes we can't use in place of html attributes.
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### html colors

html supports 3 types of patterns, those are

- > named colors
- > RGB colors
- > Hexadecimal colors

#### **named colors:**

- > it supports to write direct color name
- > we have some limited colors
  - ex: white, black, red, green etc...
- > Color names are not case-sensitive

#### **RGB colors:**

- > RGB model specifies that the composition of 3 basic colors (Red, Green, Blue)
- > RGB produces 16 millions colors.

Syn: **rgb**(red, green, blue)

red => 0 - 255

green => 0 - 255

blue => 0 - 255

ex: **rgb**(10, 45, 201)      401%255 ≈ 146

#### **Hexadecimal number colors:**

- > Hexadecimal model is the shortcut for rgb model

>Hexadecimal system ranges from 0 - 15

0,1,2,3,4,5,6,7,8,9,a,b,c,d,e,f

**Syn:** #RRGGBB            1,2 red            3,4 green            5,6 blue

ex: #1a4b68

#RGB

ex: #3d7

**Note:** in realtime "Hexadecimal model" is recommended.

these colors we can use for foreground color, background color, border color etc..

for setting colors we have some attributes, those are

**color**            ? to set/to change foreground color (text color)

**background-color** ? to set/to change background color

**border-color**            ? to set/to change border color (line color)

**box-shadow** ? to set/to change shadow color

**text-shadow**            ? to set/to change text shadow color

**Note:** all these are CSS attributes. Support by Most of html tags

### Gradient colors

background: #FC466B; /\* fallback for old browsers \*/

background: -webkit-linear-gradient(to bottom, #3F5EFB, #FC466B); ?

Chrome 10-25, Safari 5.1-6

background: **linear-gradient**(to bottom, #3F5EFB, #FC466B); ?W3C, IE 10+/  
Edge, Firefox 16+, Chrome 26+, Opera 12+, Safari 7+

**linear-gradient**(direction, color1,color2,...color-n)

dir: to left (r=>l)

to right (l=>r)

to top (b=>t)

to bottom (t=>b)

background: **linear-gradient**(to bottom, #3F5EFB 40%, #FC466B 60%);

-webkit-linear-gradient(to left, #3F5EFB, #FC466B);

linear-gradient(to left, #3F5EFB, #FC466B);

background: **radial-gradient**(circle, rgba(2,0,36,1) 0%, rgba(38,38,162,1) 60%,  
rgba(0,212,255,1) 100%);

**radial-gradient**(shape, color1, color2, ...color-n)

radial-gradient(circle, rgb(131,58,180) 0%, rgb(29,166,65) 50%, rgb(252,176,69) 100%);

radial-gradient(circle, rgba(166,29,142,1) 57%, rgba(100,180,111,1) 78%, rgba(69,252,96,1) 100%);

**Note:** while applying gradient colors we have to use “**background**” property in place of “**background-color**”.

opacity: 0.5;  
filter: blur(5px);  
    brightness(125%)  
    contrast(135%)  
    grayscale(100%)  
    invert(100%)  
    hue-rotate(180deg)  
    saturate(8)  
    sepia(100%)  
    drop-shadow(8px 8px 10px green)