

# CSS(by Hakon Wium Lie)

1)**CSS(Cascading Style Sheets)**-It is a style sheet language used to style ,to make responsive layouts ,to create animations and transitions in a HTML document/webpage.

## **Syntax :**

```
selector {  
  
property : value ;  
  
}
```

2)**CSS3**-It is third(latest) advanced version of CSS in which new features have been added which are not available in CSS like Responsive design by supporting media queries,text shadows,animations and transitions,new color formats and gradients,modules,faster than CSS and supported by all modern browsers.

## 3)**Types of CSS/Ways to insert CSS to HTML document-**

1. **Inline CSS**: directly apply CSS styles to individual HTML elements of webpage using the style attribute ,not recommended for large amounts of CSS code, as it can make the HTML code difficult to read and maintain.

```
<p style="color: blue;">paragraph</p>
```

2. **External CSS**: most common way to include CSS to HTML document for larger projects by creating a separate CSS file and then linking to it from the HTML document using the <link> tag in the <head> section in order to keep CSS code separate from your HTML codes so that it can be maintainable easily.

```
<head>
```

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

```
</head>
```

3. **Internal CSS**: CSS code is written within the <style> tag in the <head> section of an HTML document for styling a single HTML document.

```
<head>

  <style>

    p {

      color: red;

    }

  </style>

</head>

<body>

  <p>This is a red paragraph.</p>

</body>
```

#### 4) **CSS frameworks**-

4. **Bootstrap**: It is a widely used CSS Framework developed by Twitter ,that follows a class-based approach having predefined classes to apply them to HTML elements to style them, and contains in-built components and utilities that can be used to quickly and easily create a website by maintaining consistency and to developing responsive websites using Grid System of it.
  5. very popular and well-supported
  6. easy to learn and free to use as it is open source
  7. customizable but less flexible
8. **Tailwind CSS**: It is also a CSS framework that contains predefined classes for styling instead of inbuilt components.
  9. more flexible

## 5)CSS Comments-

**`/* single-line or multiline comment */`**

## 6)Selectors-

## 7)CSS Properties-

i)color- to set the color of HTML elements for text, background, etc.

### Color format-

- **RGB Format**- R, G, B values range between 0 to 255.

#### Syntax-

**`rgb(red, green, blue)`**

**Eg**-Red color is (255, 0, 0), Green color is (0, 255, 0), Blue color is (0, 0, 255),black color is rgb(0, 0, 0),white color is rgb(255, 255, 255).

- **RGBA Format** - similar to the RGB but contains A (Alpha) also for the transparency of elements where value of alpha lies between 0.0 to 1.0 where 0.0. represents fully transparent and 1.0 represents not transparent.

#### Syntax-

**`rgba(red, green, blue, alpha)`**

- **Hexadecimal Notation**-begins with # symbol followed by rrggbb where rr (red), gg (green) and bb (blue) are hexadecimal values between 00 and ff.

#### Syntax-

**`#rrggb`**

**Eg**-red is #FF0000, green is #00FF00, blue is #0000FF etc.

- **HSL(Hue, Saturation, and Lightness)**
- **HSLA(Hue, Saturation, and Lightness,Alpha)**

## ii)border-

border-style: dotted solid double dashed// **top right bottom left**

border-style: dotted solid double//**top right bottom**

border-style: dotted solid//**top-bottom right-left**

border-style: solid//**all sides**

## Shorthand Property-

**border: border-width border-style border-color**

### Eg-

```
selector{  
    border:5px solid red;  
}
```

ii)height and width-do not include padding, borders, or margins.

## iii)font-

Eg-Sofia font with text-shadow: 3px 3px 3px #ababab;

10. font-variant: small-caps; //Output-

11. default text size is 16px

12. 1em=16px=default size

13. Font Effects-

### HTML-

<head>

<link rel="stylesheet"

href="https://fonts.googleapis.com/css?family=Sofia&effect=neon|

**fire|outline|emboss|shadow-multiple|3d|3d-float">**

</head>

<body>

<h1 class="font-effect-**neon**">Neon Effect</h1>

<h1 class="font-effect-**fire**">Fire Effect</h1>

<h1 class="font-effect-**outline**">Outline Effect</h1>

<h1 class="font-effect-**emboss**">Emboss Effect</h1>

<h1 class="font-effect-**shadow-multiple**">Multiple Shadow  
Effect</h1>

<h1 class="font-effect-**3d**">3d Effect</h1>

<h1 class="font-effect-**3d-float**">3d float Effect</h1>

</body>

### CSS-

selector {

font-family: "Sofia", sans-serif;

font-size: 15px;

}

### Output-

iv)

