

The background of the slide is a light beige color. In the top left corner, there is a corkboard with a few papers pinned to it. In the center, there is a large, dark blue banner with the text 'WEB TECHNOLOGIES' in white. To the right of the banner, there are several colorful circles containing text: 'www' (blue), 'HTML5' (red), 'js' (red), 'Cloud' (grey), 'XML' (orange), and 'PHP' (green). These circles are connected by dashed lines. In the bottom left corner, there is a dark blue banner with the text 'Dr. Pritpal Singh' in white. Below this banner, there is a white banner with the text 'Associate Professor' in dark blue. In the bottom right corner, there is a laptop displaying a website with a colorful bar chart. To the left of the laptop, there is a red control panel with two gauges and a red button. The overall theme is web technologies and engineering.

ECAP472

WEB TECHNOLOGIES

Dr. Pritpal Singh

Associate Professor

Learning Outcomes



After this lecture, you will be able to

- Work with Colors in CSS.
- Understand font styling using CSS.

Cascading Style Sheet

- CSS is used to control the style of a web document in a simple and easy way.
- CSS is the acronym for "Cascading Style Sheet".
- Cascading Style Sheets, fondly referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable.
- CSS is a MUST for students and working professionals to become a great Software Engineer specially when they are working in Web Development Domain

Why to Learn CSS?

- **Create Stunning Web site** - CSS handles the look and feel part of a web page. Using CSS, you can control the color of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colors are used, layout designs, variations in display for different devices and screen sizes as well as a variety of other effects.
- **Become a web designer** - If you want to start a career as a professional web designer, HTML and CSS designing is a must skill.
- **Control web** - CSS is easy to learn and understand but it provides powerful control over the presentation of an HTML document. Most commonly, CSS is combined with the markup languages HTML or XHTML.
- **Learn other languages** - Once you understand the basic of HTML and CSS then other related technologies like javascript, php, or angular are become easier to understand.

CSS Style Rule Syntax

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

Selector

table

Declaration

{ border : 1px solid #C00; }

Property

Values



Example

- `<html>`
- `<head>`
- `</head>`
- `<body>`
- `<h1 style = "color:#36C;">`
- `This is inline CSS`
- `</h1>`
- `</body>`
- `</html>`

This is inline CSS

CSS Colors

- Colors in CSS can be specified by the following methods:
 - Hexadecimal colors
 - Hexadecimal colors with transparency
 - RGB colors
 - RGBA colors
 - HSL colors
 - HSLA colors
 - Predefined/Cross-browser color names
 - With the `currentcolor` keyword

Hexadecimal Colors

- A hexadecimal color is specified with: #RRGGBB, where the RR (red), GG (green) and BB (blue) hexadecimal integers specify the components of the color. All values must be between 00 and FF.
- For example, the #0000ff value is rendered as blue, because the blue component is set to its highest value (ff) and the others are set to 00.

Hexadecimal Colors

- A hexadecimal color is specified with: #RRGGBB, where the RR (red), GG (green) and BB (blue) hexadecimal integers specify the components of the color. All values must be between 00 and FF.
- For example, the #0000ff value is rendered as blue, because the blue component is set to its highest value (ff) and the others are set to 00.

Example

- different HEX colors:
 - #p1 {background-color: #ff0000;} /* red */
 - #p2 {background-color: #00ff00;} /* green */
 - #p3 {background-color: #0000ff;} /* blue */

Hexadecimal Colors With Transparency

- A hexadecimal color is specified with: #RRGGBB. To add transparency, add two additional digits between 00 and FF.
- Example
- Define different HEX colors with transparency:
 - #p1a {background-color: #ff000080;} /* red transparency */
 - #p2a {background-color: #00ff0080;} /* green transparency */
 - #p3a {background-color: #0000ff80;} /* blue transparency */

RGB Colors

- An RGB color value is specified with the `rgb()` function, which has the following syntax:
- `rgb(red, green, blue)`
- Each parameter (red, green, and blue) defines the intensity of the color and can be an integer between 0 and 255 or a percentage value (from 0% to 100%).

RGB Colors

- An RGB color value is specified with the `rgb()` function, which has the following syntax:
- `rgb(red, green, blue)`
- Each parameter (red, green, and blue) defines the intensity of the color and can be an integer between 0 and 255 or a percentage value (from 0% to 100%).

RGB Colors

- An RGB color value is specified with the `rgb()` function, which has the following syntax:
- `rgb(red, green, blue)`
- Each parameter (red, green, and blue) defines the intensity of the color and can be an integer between 0 and 255 or a percentage value (from 0% to 100%).

RGB Colors

- For example, the `rgb(0,0,255)` value is rendered as blue, because the blue parameter is set to its highest value (255) and the others are set to 0.
- Also, the following values define equal color:
`rgb(0,0,255)` and `rgb(0%,0%,100%)`

RGB Colors

- For example, the `rgb(0,0,255)` value is rendered as blue, because the blue parameter is set to its highest value (255) and the others are set to 0.
- Also, the following values define equal color:
`rgb(0,0,255)` and `rgb(0%,0%,100%)`

RGBA Colors

- RGBA color values are an extension of RGB color values with an alpha channel - which specifies the opacity of the object.
- An RGBA color is specified with the `rgba()` function, which has the following syntax:
- `rgba(red, green, blue, alpha)`

RGBA Colors

- RGBA color values are an extension of RGB color values with an alpha channel - which specifies the opacity of the object.
- An RGBA color is specified with the `rgba()` function, which has the following syntax:
- `rgba(red, green, blue, alpha)`

RGBA Colors

- RGBA color values are an extension of RGB color values with an alpha channel - which specifies the opacity of the object.
- An RGBA color is specified with the `rgba()` function, which has the following syntax:
- `rgba(red, green, blue, alpha)`

HSL Colors

- HSL stands for hue, saturation, and lightness - and represents a cylindrical-coordinate representation of colors.
- An HSL color value is specified with the `hsl()` function, which has the following syntax:
- `hsl(hue, saturation, lightness)`

HSL Colors

- HSL stands for hue, saturation, and lightness - and represents a cylindrical-coordinate representation of colors.
- An HSL color value is specified with the `hsl()` function, which has the following syntax:
 - `hsl(hue, saturation, lightness)`

HSL Colors

- HSL stands for hue, saturation, and lightness - and represents a cylindrical-coordinate representation of colors.
- An HSL color value is specified with the `hsl()` function, which has the following syntax:
- `hsl(hue, saturation, lightness)`

Predefined/Cross-browser Color Names

- 140 color names are predefined in the HTML and CSS color specification.
- For example: blue, red, coral, brown, etc:

Predefined/Cross-browser Color Names

- 140 color names are predefined in the HTML and CSS color specification.
- For example: blue, red, coral, brown, etc:

Example

```
<html>
<body style = "background-color:blue";>

<h1 style="background-color:DodgerBlue;">Hello World</h1>
<p style="background-color:Tomato;">Lorem ipsum...</p>

<h1 style="color:Tomato;">Hello World</h1>
<p style="color:DodgerBlue;">Lorem ipsum...</p>
<p style="color:MediumSeaGreen;">Ut wisi enim...</p>

<h1 style="border:2px solid Tomato;">Hello World</h1>
<h1 style="border:2px solid DodgerBlue;">Hello World</h1>
<h1 style="border:2px solid Violet;">Hello World</h1>

<h1 style="background-color:DodgerBlue;color:Tomato;border:2px solid Violet; ">Hello World</h1>

<p style="background-color: grey; color: blue ; font-weight: bold ;font-size: 40px" >
    Hello Campers...
</p>
</html>
</body>
```

Output

Hello World

Lorem ipsum...

Hello World

Lorem ipsum...

Ut wisi enim...

Hello World

Hello World

Hello World

Hello World

Hello Campers...

Image in css

```
<html>
<body bgcolor=yellow>
<h1 style="text-decoration:underline;color:#30F;"align="center">
Example for Inline CSS</h1>
<p style="font-family:Arial, Helvetica, sans-serif; align:left; color:#F00;">
Cascading Style Sheet is a style language </p>
<h2 align="center" style="color:#C0C;text-decoration:underline;">
Image affected with styles</h2>


</body>
</html>
```

Output

Example for Inline CSS

Cascading Style Sheet is a style language

Image affected with styles



That's all for
now...