CSS

Lecture 02

CSS Comments

- A CSS comment starts with /* and ends with */ for single line and multiline both: CSS comments are ignored by browsers

```
<html>
<head>
<style>
/* This is a single-line comment */
p {
  color: red;
}
</style>
</head>
<body>
<p>Hello World!</p>
<p>CSS comments are not shown in the output.</p>
</body>
</html>
```

CSS Colors

Colors are specified using predefined color names, or RGB, HEX, HSL, RGBA, HSLA values.

<u>Using color name</u>

```
<html>
<head>
<style>
P
{
 color:red;
}
</style>
</head>
<body>
<p>
Paragraph 1
</p>
</body>
</html>
```

CSS Colors

HEX Value

In CSS, a color can be specified using a hexadecimal value in the form:
#rrggbb

Where rr (red), gg (green) and bb (blue) are hexadecimal values between 00 and ff (same as decimal 0-255).

For example, #ff0000 is displayed as red, because red is set to its highest value (ff) and the others are set to the lowest value (00).

Using color name
```
<html>
<head>
<style>
P
{
 color: #ff6347;

}
</style>
</head>
<body>
<p>
Paragraph 1
</p>
</body> </html>
```

CSS Color

RGB Value

In CSS, a color can be specified as an RGB value, using this formula:
rgb(*red, green, blue*)
Each parameter (red, green, and blue) defines the intensity of the color between 0 and 255.
For example, rgb(255, 0, 0) is displayed as red, because red is set to its highest value (255) and the others are set to 0.

RGBA Value

RGBA color values are an extension of RGB color values with an alpha channel - which specifies the opacity for a color.
An RGBA color value is specified with:
rgba(*red, green, blue, alpha*)
The alpha parameter is a number between 0.0 (fully transparent) and 1.0 (not transparent at all):
Experiment by mixing the RGBA values below:

CSS Colors

Using RGB
```
<html>
<head>
<style>
P
{
 color:rgb(255,99,71);

}
</style>
</head>
<body>
<p>
Paragraph 1
</p>
</body>
</html>
```

Using RGBA
```
<html>
<head>
<style>
P
{

color:rgba(255,99,71,0.
5);
}
</style>
</head>
<body>
<p>
Paragraph 1
</p>
</body>
</html
```

CSS Colors

HSL Value
In CSS, a color can be specified using hue, saturation, and lightness (HSL) in the form:
hsl(*hue*, *saturation*, *lightness*)
Hue is a degree on the color wheel from 0 to 360. 0 is red, 120 is green, and 240 is blue.
Saturation is a percentage value, 0% means a shade of gray, and 100% is the full color.
Lightness is also a percentage, 0% is black, 50% is neither light or dark, 100% is white

HSLA Value
HSLA color values are an extension of HSL color values with an alpha channel - which specifies the opacity for a color.
An HSLA color value is specified with:
hsla(*hue*, *saturation*, *lightness*, *alpha*)
The alpha parameter is a number between 0.0 (fully transparent) and 1.0 (not transparent at all):

CSS Colors

Using HSL
```
<html>
<head>
<style>
P
{
 color:hsl(0, 100%, 50%, 0.5);
}
</style>
</head>
<body>
<p>
Paragraph 1
</p>
</body>
</html>
```

Using HSLA
```
<html>
<head>
<style>
P
{
 color:hsla(0, 100%, 50%, 0.5);
}
</style>
</head>
<body>
<p>
Paragraph 1
</p>
</body>
</html
```

CSS Backgrounds

The CSS background properties are used to define the background effects for elements.
In these chapters, you will learn about the following CSS background properties:
background-color
background-image
background-repeat
background-attach~~ent~~
background-posit~~ion~~

Properties	Description	Example

background-color	For adding colors in html elements
	Note: colors can be defined using color name, hex value, rgb, hsl, rgba, hsla
		P
		{
		  background-color:red;
		}
		tr
		{
		Background-color:#22aaff;
		}

background-image	For adding image in backgroud	P
		{
		background-image: url("img1.jpg");
		}

Properties	Description	Examples

background-repeat	By default, the background-image property repeats an image both horizontally and vertically.	body
		{
		background-image: url("img1.jpg");
		background-repeat: repeat-x;
		}
		
		body
		{
		background-image: url("img1.jpg");
		background-repeat: repeat-y;
		}
		
		body
		{
		background-image: url("img1.jpg");
		background-repeat: no-repeat;
		}

Properties	Description	Examples

background-repeat	The background-attachment property specifies whether the background image should scroll or be fixed (will not scroll with the rest of the page)	body {
		  background-image: url("img.png");
		    background-attachment: fixed;
		}
		
		body {
		  background-image: url("img.png");
		    background-attachment: scroll;
		}

background-position	The background-position property is used to specify the position of the background image.	body {
		 background-image: url("img.png");
		background-position: right top;
		
		}

CSS Background

```
<html>
<head>
<style>
body {
  background-color: #ffffff;
  background-image: url("img_tree.png");
  background-repeat: no-repeat;
  background-position: right top;
}
</style>
</head>
<body>
<h1>My Web Page</h1>
</body>
</html>
```

Assignment

- Try out these codes by creating html files and observe the effect and send all these html files on my email. Please mention your name and roll number.