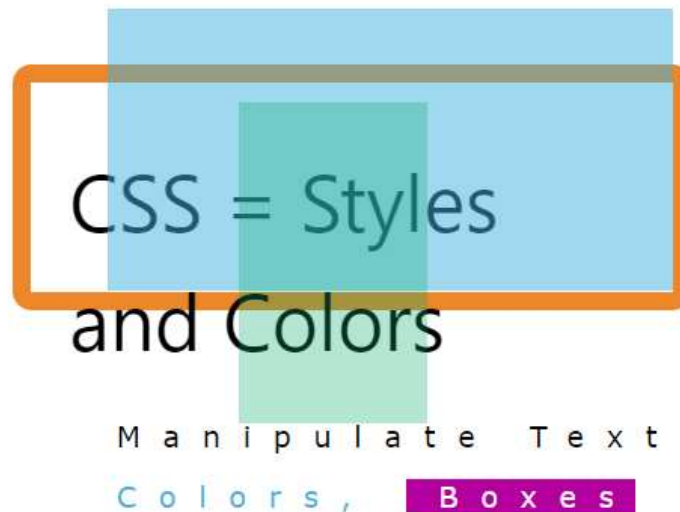Statement Purpose:

To familiarize the students with

- ▣ CSS Internal and External Styling
- ▣ Web page using CSS styling

CSS = Styles and Colors

What is CSS?

Cascading Style Sheets (CSS) is used to format the layout of a webpage.

With CSS, you can control the color, font, the size of text, the spacing between elements, how elements are positioned and laid out, what background images or background colors are to be used, different displays for different devices and screen sizes, and much more!

Using CSS

CSS can be added to HTML documents in 3 ways:

- **Inline** - by using the style attribute inside HTML elements
- **Internal** - by using a <style> element in the <head> section
- **External** - by using a <link> element to link to an external CSS file

The most common way to add CSS, is to keep the styles in external CSS files. However, in this tutorial we will use inline and internal styles, because this is easier to demonstrate, and easier for you to try it yourself.

Inline CSS

An inline CSS is used to apply a unique style to a single HTML element.

An inline CSS uses the style attribute of an HTML element.

The following example sets the text color of the <h1> element to blue, and the text color of the <p> element to red:

Example

```
<h1 style="color:blue;">A Blue Heading</h1>

<p style="color:red;">A red paragraph.</p>
```

Internal CSS

An internal CSS is used to define a style for a single HTML page.

An internal CSS is defined in the <head> section of an HTML page, within a <style> element.

The following example sets the text color of ALL the <h1> elements (on that page) to blue, and the text color of ALL the <p> elements to red. In addition, the page will be displayed with a "powderblue" background color:

Example

```
<!DOCTYPE html>
<html>
<head>
<style>
body {background-color: powderblue;}
h1   {color: blue;}
p    {color: red;}
</style>
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

External CSS

An external style sheet is used to define the style for many HTML pages.

To use an external style sheet, add a link to it in the <head> section of each HTML page:

Example

```
<!DOCTYPE html>
<html>
<head>
  <link rel="stylesheet" href="styles.css">
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

CSS Colors, Fonts and Sizes

Here, we will demonstrate some commonly used CSS properties. You will learn more about them later.

The CSS color property defines the text color to be used.

The CSS font-family property defines the font to be used.

The CSS font-size property defines the text size to be used.

Example

Use of CSS color, font-family and font-size properties:

```
<!DOCTYPE html>
<html>
<head>
<style>
h1 {
  color: blue;
  font-family: verdana;
  font-size: 300%;
}
p {
  color: red;
  font-family: courier;
  font-size: 160%;
```

```
}
</style>
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

Webpage Layout

Sample code

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>CSS Website Layout</title>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<style>
* {
  box-sizing: border-box;
}

body {
  margin: 0;
}

/* Style the header */
.header {
  background-color: #f1f1f1;
  padding: 20px;
  text-align: center;
}

/* Style the top navigation bar */
.topnav {
  overflow: hidden;
  background-color: #333;
```

```css
}

/* Style the topnav links */
.topnav a {
  float: left;
  display: block;
  color: #f2f2f2;
  text-align: center;
  padding: 14px 16px;
  text-decoration: none;
}

/* Change color on hover */
.topnav a:hover {
  background-color: #ddd;
  color: black;
}

/* Create three equal columns that floats next to each other */
.column {
  float: left;
  width: 33.33%;
  padding: 15px;
}

/* Clear floats after the columns */
.row:after {
  content: "";
  display: table;
  clear: both;
}

/* Responsive layout - makes the three columns stack on top of each other instead of next to each other */
@media screen and (max-width:600px) {
  .column {
```

```
    width: 100%;
  }
}
</style>
</head>
<body>

<div class="header">
  <h1>Header</h1>
  <p>Resize the browser window to see the responsive effect.</p>
</div>

<div class="topnav">
  <a href="#">Link</a>
  <a href="#">Link</a>
  <a href="#">Link</a>
</div>

<div class="row">
  <div class="column">
    <h2>Column</h2>
    <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas sit amet
pretium urna. Vivamus venenatis velit nec neque ultricies, eget elementum magna
tristique. Quisque vehicula, risus eget aliquam placerat, purus leo tincidunt eros,
eget luctus quam orci in velit. Praesent scelerisque tortor sed accumsan
convallis.</p>
  </div>

  <div class="column">
    <h2>Column</h2>
    <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas sit amet
pretium urna. Vivamus venenatis velit nec neque ultricies, eget elementum magna
tristique. Quisque vehicula, risus eget aliquam placerat, purus leo tincidunt eros,
eget luctus quam orci in velit. Praesent scelerisque tortor sed accumsan
convallis.</p>
  </div>

  <div class="column">
```

```html
    <h2>Column</h2>
    <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas sit amet
pretium urna. Vivamus venenatis velit nec neque ultricies, eget elementum magna
tristique. Quisque vehicula, risus eget aliquam placerat, purus leo tincidunt eros,
eget luctus quam orci in velit. Praesent scelerisque tortor sed accumsan
convallis.</p>
  </div>
</div>


</body>
</html>
```