

# CSS AND Bootstrap

## Objectives:

In this lab, student will be able to

- 1.Develop web pages using design templates
- 2.Familiarize with Cascading Style Sheets
- 3.Learn how to use bootstrap elements ***What is Bootstrap?***

## CSS – Cascading Style Sheet

CSS is a stylesheet language used for describing the presentation of a document written in a markup language ie it describes the style of a web document including the layout, design and display variations for various displays.

CSS can be applied to a web document in 3 ways.

- 1) Inline style – Right next to the text it decorates, by using style attribute.

```
<h1 style = “color : blue ;”> Hello </h1>
```

- 2) Internal style – At the top of the web page document, using

```
<style> element in <head>
```

```
<head>
```

```
    <style>
```

```
    h1 { color : blue ;}
```

```
    </style>
```

```
</head>
```

- 3) External style – in a separate file

```
<head>
```

```
<link rel=”stylesheet” href = “style.css”>
```

```
</head>
```

```
style.css
```

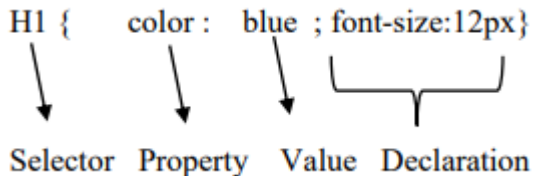
```
h1 { color : blue ;}
```

The style definitions are usually saved in an external stylesheet since changing one single file can help in redesigning the entire web document with new look and feel.

## CSS syntax

A CSS rule set consists of a selector and a declaration block. The selector points to the HTML element to be styled. The declaration block contains one or more declarations separated by semicolons

H1 { color : blue ; font-size:12px }



Selector   Property   Value   Declaration

CSS Selectors are used to “find” or select HTML elements based on their element name, id, class, attribute etc. The element selector selects the elements based on the element name. The id selector uses the id attribute of an HTML element to select a specific element. The id of an element should be unique within a page. To select an element with a specific id, write a # character followed by the id of the element.

```
#para1 {
text-align: center;
color:red; }
```

The class selector selects the elements with a specific class attribute.

To select elements with a specific class, write a period (.) character, followed by the name of the class.

```
.center {
text-align: center;
color:red;
}
```

## ***Bootstrap***

- Bootstrap is a free front-end framework for faster and easier web development
- Bootstrap includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels and many other, as well as optional JavaScript plugins
- Bootstrap also gives you the ability to easily create responsive designs(automatically adjust themselves to look good on all devices)
- Example:

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<title>Bootstrap Example</title>
```

```
<meta charset="utf-8">
```

```
<meta name="viewport" content="width=device-width, initial-scale=1">
```

```
<link rel="stylesheet"
```

```
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
```

```
<script
```

```
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>
```

```
</head>
```

```
<body>
```

```
<div class="container">
```

```
<h1>My First Bootstrap Page</h1>
```

```
<p>This part is inside a .container class.</p>
```

```
<p>The .container class provides a responsive fixed width container.</p>
```

<p>Resize the browser window to see that its width (max-width) will change at different breakpoints.</p>

</div>

</body>

</html>

## Button Styles

Bootstrap 4 provides different styles of buttons:

Basic

Primary

Secondary

Success

Info

Warning

Danger

Dark

Light

[Link](#)

```
<button type="button" class="btn btn-outline-primary">Primary</button>
```

```
<button type="button" class="btn btn-outline-secondary">Secondary</button>
```

```
<button type="button" class="btn btn-outline-success">Success</button>
```

```
<button type="button" class="btn btn-outline-info">Info</button>
```

```
<button type="button" class="btn btn-outline-warning">Warning</button>
```

```
<button type="button" class="btn btn-outline-danger">Danger</button>
```

```
<button type="button" class="btn btn-outline-dark">Dark</button>
```

```
<button type="button" class="btn btn-outline-light text-dark">Light</button>
```

**Exercise:**

1. Design the student bio-data form using button, label, textbox, radio button, table and checkbox using CSS.
2. Design a web page which shows the database oriented CRUD operation. Consider Employee data using CSS.
3. Create a web page using bootstrap as mentioned. Divide the page in to 2 parts top and bottom, then divide the bottom into 3 parts and design each top and bottom part using different input groups, input, badges, buttons and button groups. Make the design more attractive using bootstrap.
4. Design your class timetable using bootstrap table and carousel.

**Additional Exercise:**

1. Design an attractive 'train ticket booking form using CSS.
2. Design an attractive 'magazine cover page' using different bootstrap elements.

