

**K. J. Somaiya College of Engineering, Mumbai-77**  
(A Constituent College of Somaiya Vidyavihar University)

Batch:A3 Roll No.:16010123064

Experiment No. 03

**TITLE: Demonstrate the use of Bootstrap**

AIM: To use bootstrap (open source front-end development framework) for the creation of web pages.

**Expected Outcome of Experiment:** Re\_design of web pages using various HTML, CSS tags with bootstrap.

**Books/ Journals/ Websites referred:**

<http://getbootstrap.com/getting-started>

**Problem Statement:**

1. Students have to re-design web-pages developed in Experiment 1 and 2 by using bootstrap.
2. Create a webpage using bootstrap with following features,
  - i) use a container to set the content's margins dealing with the responsive behaviors of layout.
  - ii) shape the image into a circle
  - iii) use bootstrap grid system
  - iv) create basic pagination
  - v) insert search icon(glyphicon)

**Description of the application implemented with output:**

1.

Html File:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
```

**K. J. Somaiya College of Engineering, Mumbai-77**  
(A Constituent College of Somaiya Vidyavihar University)

```
<title>Document</title>
</head>
<body>
  <h1>A web page </h1>
  <p id="demo">0</p>
  <button typr="button" onclick="add()">add</button>
  <button typr="button" onclick="sub()">sub</button>
  <button typr="button" onclick="reset()">reset</button>
  <br>

  <h1>Select Gender</h1>
  Male <input type="radio" name="gender" value="male">
  Female <input type="radio" name="gender" value="female">
    <input type="button" onclick="totalElements()" value="Check
Gender">

  <p id="result"></p>

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

</body>
<script src="practice.js"></script>
</html>
```

**Css File:**

```
/* Base Font and Layout */
body {
  font-family: 'Ubuntu', 'Roboto Condensed', 'Inconsolata',
sans-serif;
  margin: 0;
  padding: 0;
  background-color: #f8f9fa;
}

#logo {
  font-size: 1.8rem;
  font-weight: 700;
  padding: 0.5rem 0;
  text-align: center;
}
```

**K. J. Somaiya College of Engineering, Mumbai-77**  
(A Constituent College of Somaiya Vidyavihar University)

```
/* Sidebar Customization */
#sidebar {
  position: fixed;
  top: 0;
  left: 0;
  height: 100vh;
  width: 240px;
  background-color: #111;
  color: white;
  z-index: 1000;
}

#sidebar .btn {
  font-size: 1rem;
  padding: 0.75rem 1rem;
  border-radius: 0.5rem;
  transition: all 0.3s ease;
}

#sidebar .btn:hover {
  background-color: #333;
  color: #fff;
}

/* Main content spacing (next to fixed sidebar) */
main {
  margin-left: 240px;
}

/* Search Bar and Create Button */
#searchbarCreateSection {
  flex-wrap: wrap;
  gap: 1rem;
}

#searchbarSection input {
  border-radius: 0.5rem 0 0 0.5rem;
}

#searchbarSection button {
  border-radius: 0 0.5rem 0.5rem 0;
}
```

**K. J. Somaiya College of Engineering, Mumbai-77**  
(A Constituent College of Somaiya Vidyavihar University)

```
/* Adboard Section */
#adboardOuter {
    height: 200px;
    background-image: url('banner-placeholder.jpg');
    background-size: cover;
    background-position: center;
    border-radius: 1rem;
    display: flex;
    align-items: center;
    justify-content: center;
    font-size: 1.5rem;
    font-weight: bold;
}

/* Filter Buttons */
#filter button {
    padding: 0.5rem 1rem;
    border-radius: 2rem;
    font-size: 0.9rem;
}

/* Video Container */
#mainVideoContainer {
    display: flex;
    flex-wrap: wrap;
    gap: 1.5rem;
}

.videoCard {
    width: 100%;
    max-width: 300px;
    background-color: white;
    border-radius: 1rem;
    box-shadow: 0 0.5rem 1rem rgba(0,0,0,0.1);
    overflow: hidden;
    transition: transform 0.2s ease;
}

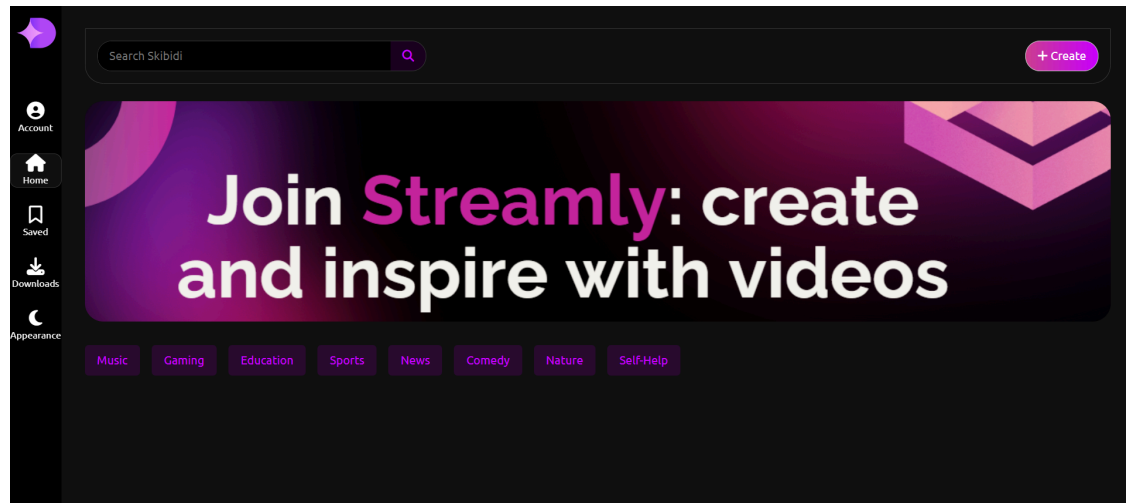
.videoCard:hover {
    transform: scale(1.02);
}

.videoThumbnail {
```

**K. J. Somaiya College of Engineering, Mumbai-77**  
(A Constituent College of Somaiya Vidyavihar University)

```
width: 100%;  
height: 180px;  
object-fit: cover;  
}  
  
.videoInfo {  
  padding: 1rem;  
}  
  
.videoTitle {  
  font-weight: 600;  
  font-size: 1rem;  
  margin-bottom: 0.5rem;  
}  
  
.videoMeta {  
  font-size: 0.85rem;  
  color: #6c757d;  
}
```

Output:



2.

```
<!DOCTYPE html>  
<html lang="en">  
<head>  
  <meta charset="UTF-8">  
  <title>Bootstrap Webpage Example</title>
```

**K. J. Somaiya College of Engineering, Mumbai-77**  
(A Constituent College of Somaiya Vidyavihar University)

```
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap
p.min.css">

<style>
    .center-text {
        text-align: center;
        margin-top: 20px;
    }
    .search-box {
        margin-top: 30px;
        text-align: center;
    }
    .img-circle {
        width: 150px;
        height: 150px;
    }
</style>
</head>
<body>

<div class="container">

    <div class="row center-text">
        <h1>Welcome to My Webpage</h1>
        <p>Using Bootstrap 3 Features</p>
    </div>

    <div class="row center-text">
        
    </div>

    <div class="row" style="margin-top: 40px;">
        <div class="col-sm-4">
            <div class="well">Column 1</div>
        </div>
        <div class="col-sm-4">
            <div class="well">Column 2</div>
        </div>
        <div class="col-sm-4">
            <div class="well">Column 3</div>
        </div>
    </div>
</div>
```

**K. J. Somaiya College of Engineering, Mumbai-77**  
(A Constituent College of Somaiya Vidyavihar University)

```
</div>
</div>

<div class="search-box">
  <div class="input-group" style="max-width: 300px; margin: 0
auto;">
    <input type="text" class="form-control"
placeholder="Search">
    <span class="input-group-addon">
      <i class="glyphicon glyphicon-search"></i>
    </span>
  </div>
</div>

<div class="row center-text" style="margin-top: 40px;">
  <ul class="pagination">
    <li><a href="#">&laquo;</a></li>
    <li class="active"><a href="#">1</a></li>
    <li><a href="#">2</a></li>
    <li><a href="#">3</a></li>
    <li><a href="#">4</a></li>
    <li><a href="#">5</a></li>
    <li><a href="#">&raquo;</a></li>
  </ul>
</div>
</div>

<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.4/jquery.min
.js"></script>
<script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.
min.js"></script>
</body>
</html>
```

## K. J. Somaiya College of Engineering, Mumbai-77

(A Constituent College of Somaiya Vidyavihar University)

Welcome to My Webpage

Using Bootstrap 3 Features



Column 1

Column 2

Column 3

Search



« 1 2 3 4 5 »



**K. J. Somaiya College of Engineering, Mumbai-77**  
(A Constituent College of Somaiya Vidyavihar University)

**Post Lab Questions:**

**1. What is the use of containers in bootstrap? Explain in detail.**

A. Containers are the basic building blocks in Bootstrap layout. They are used to wrap site contents and provide proper alignment and responsive spacing. Containers help organize the structure of a webpage and ensure that the layout adjusts neatly on different screen sizes.

There are two main types of containers in Bootstrap:

- `.container`:
  - Provides a fixed-width layout
  - Width changes at different breakpoints (responsive).
  - Adds left and right padding to center the content.
- `.container-fluid`:
  - Provides a full-width layout.
  - Stretches to 100% of the viewport width on all screen sizes.
  - Useful when you want content to span the entire width of the page.

**2. Name the classes to achieve the different button styles in bootstrap.**

A. Bootstrap offers a variety of predefined button styles that are easy to use and look consistent across all devices. Each button must use the base class `.btn` followed by a specific style class to indicate its purpose.

Common Button Classes:

- `.btn-default`: Neutral gray button for general use.
- `.btn-primary`: Blue button for primary or main actions.
- `.btn-success`: Green button indicating successful actions.
- `.btn-info`: Light blue button for informational messages.
- `.btn-warning`: Orange button for warnings or alerts.
- `.btn-danger`: Red button for errors or destructive actions.
- `.btn-link`: Makes a button look like a hyperlink (without background).

Button Size Classes:

- `.btn-lg`: Large button.
- `.btn-sm`: Small button.
- `.btn-xs`: Extra small button (Bootstrap 3 only).
- `.btn-block`: Full-width button that takes up the entire row.

**3. Write details about the Bootstrap Grid system.**

A. The Bootstrap Grid System is a powerful and flexible system for designing responsive page layouts. It is based on a 12-column layout, where the screen width is divided into 12 equal parts. You can use combinations of these columns to structure your content.

Key Features:

- Uses rows and columns to organize content.
- Columns must be placed inside `.row` elements.
- The grid is responsive and adjusts based on screen size.

Responsive Classes (by screen size):

- `.col-xs-*`: Extra small devices (phones, <576px).
- `.col-sm-*`: Small devices (tablets, ≥576px).
- `.col-md-*`: Medium devices (desktops, ≥768px).
- `.col-lg-*`: Large devices (larger desktops, ≥992px).
- `.col-xl-*`: Extra large devices (≥1200px).

**K. J. Somaiya College of Engineering, Mumbai-77**  
(A Constituent College of Somaiya Vidyavihar University)