

SVKM's NMIMS
Mukesh Patel School of Technology Management & Engineering (Mumbai Campus)
Computer Engineering Department (B.Tech Integrated Sem V)
Fundamentals of Website Designing
Lab Manual
PART A

(Part A: TO BE REFFERED BY STUDENTS)

Experiment No. 09

A.1 AIM:

To create a webpage using Bootstrap.

A.2 Pre requisite:

Basic Knowledge of HTML,CSS and JavaScript

A.3 Outcome:

After successful completion of this experiment students will be able to:

1. Create interactive webpage using bootstrap

A.4 Theory:

Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains CSS and (optionally) JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components.

Bootstrap is an HTML, CSS & JS Library that focuses on simplifying the development of informative web pages (as opposed to web apps). The primary purpose of adding it to a web project is to apply Bootstrap's choices of color, size, font and layout to that project. As such, the primary factor is whether the developers in charge find those choices to their liking. Once added to a project, Bootstrap provides basic style definitions for all HTML elements. The result is a uniform appearance for prose, tables and form elements across web browsers. In addition, developers can take advantage of CSS classes defined in Bootstrap to further customize the appearance of their contents. For example, Bootstrap has provisioned for light- and dark-colored tables, page headings, more prominent pull quotes, and text with a highlight.

Bootstrap also comes with several JavaScript components in the form of jQuery plugins. They provide additional user interface elements such as dialog boxes, tooltips, and carousels. Each Bootstrap component consists of an HTML structure, CSS declarations, and in some cases

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accompanying JavaScript code. They also extend the functionality of some existing interface elements, including for example an auto-complete function for input fields.

The most prominent components of Bootstrap are its layout components, as they affect an entire web page. The basic layout component is called "Container", as every other element in the page is placed in it. Developers can choose between a fixed-width container and a fluid-width container. While the latter always fills the width of the web page, the former uses one of the five predefined fixed widths, depending on the size of the screen showing the page:

- Smaller than 576 pixels
- 576–768 pixels
- 768–992 pixels
- 992–1200 pixels
- Larger than 1200 pixels

Once a container is in place, other Bootstrap layout components implement a CSS Flexbox layout through defining rows and columns.

A precompiled version of Bootstrap is available in the form of one CSS file and three JavaScript files that can be readily added to any project.

Advantages of Bootstrap:

- Easy to use: Anybody with just basic knowledge of HTML and CSS can start using Bootstrap
- Responsive features: Bootstrap's responsive CSS adjusts to phones, tablets, and desktops
- Mobile-first approach: In Bootstrap 3, mobile-first styles are part of the core framework
- Browser compatibility: Bootstrap is compatible with all modern browsers (Chrome, Firefox, Internet Explorer, Edge, Safari, and Opera)

Bootstrap 5 is the newest version of Bootstrap; with new components, faster stylesheets, more responsiveness etc. It supports the latest, stable releases of all major browsers and platforms. However, Internet Explorer 11 and down is not supported. The main differences between Bootstrap 5 and Bootstrap 3 & 4, is that Bootstrap 5 has switched to JavaScript instead of jQuery.

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There are two ways to start using Bootstrap on your own web site. You can:

- Download Bootstrap from getbootstrap.com
- Include Bootstrap from a CDN.

Create First Web Page With Bootstrap

1. Add the HTML5 doctype : Bootstrap uses HTML elements and CSS properties that require the HTML5 doctype. Always include the HTML5 doctype at the beginning of the page.

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
  </head>
</html>
```

2. Bootstrap 3 is mobile-first : Bootstrap 3 is designed to be responsive to mobile devices. Mobile-first styles are part of the core framework. To ensure proper rendering and touch zooming, add the following <meta> tag inside the <head> element:

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

The width=device-width part sets the width of the page to follow the screen-width of the device (which will vary depending on the device). The initial-scale=1 part sets the initial zoom level when the page is first loaded by the browser.

3. Containers : Bootstrap also requires a containing element to wrap site contents. There are two container classes to choose from:

- The .container class provides a responsive fixed width container
- The .container-fluid class provides a full width container, spanning the entire width of the viewport

A.5 Procedure/Task:

1. Create webpages as shown below using bootstrap.

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LOGO

HomeContactAbout UsMessages12

Dashboard:

| Name | Team | All Star | Remove |
|--------|-----------|----------------------|--------------|
| Steph | Warriors | Yes | <div>×</div> |
| Lebron | Cavaliers | Yes | <div>×</div> |
| Dwayne | Heat | Yes | <div>×</div> |
| Kobe | Lakers | Yes <div>Last</div> | <div>×</div> |
| Isaiah | Celtics | Yes <div>First</div> | <div>×</div> |

Todos:

Feel good about Bootstrap

Feel informed about Bootstrap

Feel warned about Bootstrap

Maybe I should read the docs...

Danger zone

I really should read the docs...

Project name

HomeAboutContactDropdown

Email

Password

Sign in

Hello, world!

This is a template for a simple marketing or informational website. It includes a large callout called the hero unit and three supporting pieces of content. Use it as a starting point to create something more unique.

Learn more »

Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

View details »

Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

View details »

Heading

Donec sed odio dui. Cras justo odio, dapibus ac facilisis in, egestas eget quam. Vestibulum id ligula porta felis euismod semper. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus.

View details »

2. Prepare the document. Save and close the file and name it as **EXP09_Roll no_Batch no.**

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PART B

(PART B: TO BE COMPLETED BY STUDENTS)

(Students must submit the soft copy as per following segments within two hours of the practical. The soft copy must be uploaded on the Blackboard or emailed to the concerned lab in charge faculties at the end of the practical in case there is no Black board access available)

| | |
|----------------------|---------------------------|
| Roll No. : | Name: |
| Class : | Batch : |
| Date of Experiment : | Date/Time of Submission : |
| Grade : | |

B.1 Code:

(Paste your Code here)

B.2 Output

(Take screen shots of the output at run time and paste it here)

B.3 Conclusion:

(Students must write the conclusion as per the attainment of individual outcome listed above)

B.3 Observations and Learning:

(Students must write their observations and learnings as per the attainment of individual outcome listed above)

B.4 Question of Curiosity

(To be answered by student based on the practical performed and learning/observations)

Q1. What are the default Bootstrap text settings?

Q2. Explain Bootstrap Grid System.

Q3. Differentiate between Bootstrap 3, Bootstrap 4 and Bootstrap 5.