

## Experiment 05: Create a registration or contact form using Bootstrap form components and style it.

**Learning Objective:** Student should be able to integrate the Bootstrap front-end framework into a project and utilize its pre-built form components and grid system to rapidly create a professional, responsive checkout form.

**Tools:** Notepad, Google Chrome

### **Theory:**

Bootstrap is a powerful, free, and open-source front-end framework for developing responsive, mobile-first websites. As M.E. students, think of it as a comprehensive library or toolkit for UI development. Instead of writing all the CSS from scratch for common components like buttons, navigation bars, or forms, Bootstrap provides pre-styled, ready-to-use classes.

### **Key advantages of using Bootstrap:**

- **Speed:** Drastically reduces development time.
- **Responsiveness:** Its built-in grid system allows you to create layouts that automatically adapt to different screen sizes (desktops, tablets, phones).
- **Consistency:** Ensures a consistent design language across your entire website.
- **Cross-browser Compatibility:** Components are tested to work on all modern browsers.

To use Bootstrap, you simply add its CSS and JavaScript files to your HTML, typically via a CDN. A CDN hosts the files on high-speed servers around the world, ensuring fast delivery to your users.

### **Core Bootstrap Form Classes:**

- **.form-control:** Apply this to <input>, <select>, and <textarea> elements to give them a full-width, styled appearance.
- **.form-label:** Styles the <label> for proper spacing and font weight.
- **mb-3 (Margin Bottom 3):** A spacing utility class used on a container <div> to create vertical space between form fields.
- **.btn & .btn-primary:** Base button style and a modifier class for a primary action button (typically blue).
- **.row & .col-md-6:** Part of the grid system, used to place form elements side-by-side on medium-sized screens and larger.

## Result and Discussion:

GadgetGalaxy

Home | Products | Cart | Checkout

**Checkout**

Please fill in your details to complete the purchase.

**Shipping Address**

First Name

Last Name

Email Address  you@example.com

Address  1234 Main St, Bandra

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**Payment Information**

Name on card

GadgetGalaxy

Home | Products | Cart | Checkout

**Aura T-800 Wireless Noise-Cancelling Headphones**



**Product Description**

Experience unparalleled audio with the Aura T-800. These headphones feature state-of-the-art active noise cancellation, a 40-hour battery life, and crystal-clear microphone quality for calls. Designed for comfort and durability, the plush earcups and lightweight frame make them perfect for long listening sessions, whether you're at the office in Mumbai or travelling the world.

**Price**

₹14,999

**Key Features**

- Active Noise Cancellation (ANC) with Transparency Mode

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Webpage displaying a two different pages in frames in a single webpage with responsiveness.

**Learning Outcomes:** The student should have the ability to integrate a third-party CSS framework like Bootstrap into a web project and use its utility classes to rapidly construct a styled and responsive user interface component, such as a complex form.

**Course Outcomes:** Upon completion of the course students will be able to design and develop modern, responsive user interfaces by leveraging industry-standard frameworks. Also, students will be able to apply client-side technologies to build interactive web components (as this form is a prerequisite for client-side validation).

**Conclusion:**

This experiment successfully demonstrates the power and efficiency of using a front-end framework like Bootstrap. We have built a complex, responsive checkout form for “GadgetGalaxy” with minimal effort, allowing us to focus on functionality rather than basic styling. This component is now a fully-styled and professional foundation, ready for the addition of client-side validation in the next stage.

For Faculty Use

Correction Parameters	Formative Assessment [40%]	Timely completion of Practical [40%]	Attendance / Learning Attitude [20%]	
Marks Obtained				

