

Front End Design Techniques: Practical List (MCA)

Lab Session 1: Basics of Internet, HTML, and HTTP

- **Objective:** Understand the history of the internet, World Wide Web, and HTTP. Learn basic HTML tags.
 - **Tasks:**
 1. Discuss HTTP, SMTP, and MIME with practical examples using a browser's developer tools.
 2. Create a basic HTML page with a heading, paragraph, list, table, and image.
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Lab Session 2: Forms, Frames, and Cascading Style Sheets (CSS)

- **Objective:** Work with forms, frames, and style HTML pages using CSS.
 - **Tasks:**
 1. Create an HTML form for user registration with fields like name, email, and password.
 2. Use frames to split a webpage into multiple sections.
 3. Style the form and frames using an external CSS file.
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Lab Session 3: JavaScript Basics and Dynamic HTML

- **Objective:** Learn JavaScript basics and implement dynamic behaviors in HTML.
 - **Tasks:**
 1. Write a JavaScript program to validate the email field in the form created earlier.
 2. Use JavaScript to dynamically change the background color of a webpage on button click.
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Lab Session 4: Advanced JavaScript and Objects

- **Objective:** Explore JavaScript objects and manipulate HTML elements dynamically.
 - **Tasks:**
 1. Create a JavaScript object for a "Product" with properties like name, price, and category.
 2. Use the object to display product details dynamically in an HTML table.
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Lab Session 5: Introduction to Bootstrap

- **Objective:** Build responsive web pages using Bootstrap.
 - **Tasks:**
 1. Create a responsive navigation bar using Bootstrap classes.
 2. Design a grid-based layout to display images with captions.
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Lab Session 6: Introduction to MEAN Stack

- **Objective:** Understand the MEAN stack architecture and set up a basic project.
 - **Tasks:**
 1. Install Node.js and MongoDB.
 2. Create a simple Express server that responds with "Hello, World!"
 3. Connect the server to a MongoDB database and store/retrieve a simple record.
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Final Project: (Any one)

1. **Interactive Learning Website**
2. **Portfolio Website**
3. **Online Quiz App**
4. **Image Gallery**
5. **Blog Website**