

Training Day 11 Report

Date: 10 July 2025

S.T.E.P – Science & Technology Entrepreneurs' Park, GNDEC, Ludhiana

Topic Covered: JavaScript – DOM Manipulation & Events

Introduction

On Day 11 of our MERN Stack training, we learned about the Document Object Model (DOM) in JavaScript and how to manipulate webpage elements dynamically. We also explored JavaScript event handling, which enables us to respond to user actions like clicks, input, or page loading.

Key Topics Covered

1. What is the DOM?

- DOM represents the structure of an HTML document as a tree of nodes.
- JavaScript can access and change the content, structure, and style of a webpage using the DOM.

2. DOM Selection Methods

- `// By ID`
- `let title = document.getElementById("main-title");`
- `// By Class`
- `let items = document.getElementsByClassName("list-item");`
- `// By Tag`
- `let paragraphs = document.getElementsByTagName("p");`
- `// Modern Way`
- `let element = document.querySelector(".box");`
- `let allItems = document.querySelectorAll(".list-item");`

3. Changing Content and Style

- `document.getElementById("main-title").innerText = "Welcome!"`;
- `document.querySelector(".box").style.backgroundColor = "lightblue"`;

4. JavaScript Events

- `document.getElementById("btn").addEventListener("click", function() {`
- `alert("Button clicked!");`
- `});`

Activities Performed

- Selected elements using different DOM methods.
- Changed text, HTML content, and styling dynamically.
- Handled events like click, mouseover, and submit.
- Built an interactive form that displays input on screen after submission.

Task of the Day

Create a webpage where:

- A user enters their name and age.
- On clicking the "Submit" button, a greeting message is displayed dynamically using DOM methods.