Training Day 11

3rd July 2025

TOPICS COVERED

- **try-catch Blocks –** The try...catch block is JavaScript's primary way of handling exceptions — it allows you to detect, manage, and respond to runtime errors without crashing the entire program.

It is especially useful in code that might fail, such as:

API requests

User input processing

Parsing data

Working with files or third-party libraries.

Syntax:

```
try {
  let result = riskyFunction();
  console.log(result);
} catch (error) {
  console.error("An error occurred:", error.message);
}
```

- **Introduction to React.js**

React.js is a JavaScript library developed by Facebook for building interactive user interfaces (UIs), especially single-page applications (SPAs).

Key Features:

Component-based architecture

Virtual DOM for efficient rendering

One-way data binding

Fast, dynamic, and reusable UI components

Why Use React?

Easy to build interactive UIs

Reusable and manageable components

Rich ecosystem (React Router, Redux, etc.)

- **Setting Up a React Project –** Create React App

The easiest way to start a React project is by using the official Create React App tool.

- **Steps to Create a React App:**

Make sure Node.js and npm are installed.

Open terminal/command prompt.

Run:

npx create-react-app my-app

Navigate into the app:

cd my-app

Start the app:

npm start

This opens your app

- **JSX – JavaScript XML**

JSX is a syntax extension for JavaScript used in React to write HTML-like code within JavaScript.

Example:

const element = <h1>Hello, React!</h1>;

Why JSX

Easier to visualize UI layout

Allows embedding JavaScript directly using { }

React components return JSX

TOOLS USED

Visual Studio Code

Node.js & npm

Chrome Browser (DevTools)

React Developer Tools Extension