

React Js Training

Topics : [Courses](#)

Written on [March 22, 2025](#)

Module 1: Introduction to React.js

- What is React?
- React vs. Other JavaScript Frameworks (Angular, Vue)
- Setting Up a React Project with Create React App (`npx create-react-app my-app`)
- Understanding the React Project Structure
- Introduction to JSX (JavaScript XML)

Module 2: React Components & Props

- Functional vs. Class Components
- Creating and Exporting Components
- Props in Components (`props.children`, Default Props)
- Conditional Rendering in React
- Rendering Lists (`.map()` method)

Module 3: React State & Events

- Understanding State in React (useState Hook)

- Updating State in Functional Components
- Handling Events (onClick, onChange)
- Forms and Controlled Components

Module 4: React Hooks

- Introduction to Hooks (Why Hooks?)
- useState for State Management
- useEffect for Side Effects and API Calls
- useContext for Context API
- Custom Hooks in React

Module 5: React Router (Navigation in React)

- Setting Up React Router (react-router-dom)
- Route Parameters and Query Strings
- Protected Routes (Private Routes)
- Dynamic Navigation using useNavigate

Module 6: API Integration with React

- Fetching Data using Fetch API & Axios
- Handling API Responses and Errors
- Displaying Data in React Components
- Loading and Error Handling in API Calls

Module 7: State Management in React

Context API

- Using React Context for State Management
- Global State with useContext

Module 8: Performance Optimization in React

- Code Splitting and Lazy Loading (React.lazy, Suspense)
- Memoization with useMemo and useCallback
- Virtualization for Large Lists (react-window)

Module 9: Authentication & Authorization in React

- Implementing Login and Logout with JWT
- Protecting Routes with Authentication
- Role-Based Authorization in React

Module 11: Deployment & Final Project

- Building a Production-Ready React App (npm run build)
- Final Project: Building a Full-Stack React Application