

KIDS & TEENS FREELANCING TRAINING INSTITUTE

React JS Training Course Outline

Module 1: Introduction to React JS

- What is React JS and why it's popular for building modern web apps
- Real-life example: A digital display board where content changes dynamically (React components)
- Setting up your development environment (Node.js, npm, Create React App)
- Understanding the basics of React: Components, JSX, and Virtual DOM
- Activity: Create your first "Hello World" React app

Module 2: React Components and JSX

- What are components in React and how they structure your app
- Real-life example: Building blocks of a website (header, footer, content)
- Understanding JSX and how it makes HTML-like syntax work in JavaScript
- Creating functional and class-based components
- Activity: Build a simple webpage using React components and JSX

Module 3: Handling State and Events in React

- What is state and how it controls dynamic content in React
- Real-life example: A to-do list that adds and removes tasks (state management)
- Handling user interactions with events like clicks and form submissions
- Activity: Build a counter app that increases the count when a button is pressed

Module 4: React Forms and Controlled Components

- Understanding controlled components in React
- Real-life example: A form where data is captured and managed in real time

- Handling form submissions, input validation, and resetting form data
- Activity: Create a contact form with controlled inputs and submit the data

Module 5: React Router – Navigating Between Pages

- What is React Router and why it's essential for multi-page React apps
- Real-life example: A multi-page website with navigation links
- Setting up routes, links, and route parameters with React Router
- Activity: Build an app with multiple pages and navigation links using React Router

Module 6: Fetching Data with React and Axios

- How to fetch data from external APIs and display it in React components
- Real-life example: A news website that fetches the latest articles from an API
- Using Axios or the Fetch API to retrieve data asynchronously
- Activity: Build an app that fetches and displays data from a public API (e.g., JSONPlaceholder)

Module 7: React Lifecycle Methods

- What are lifecycle methods in React and when to use them
- Real-life example: A plant that needs watering (component mounting and unmounting)
- Understanding componentDidMount(), componentWillUnmount(), and other lifecycle methods in class components
- Using useEffect () for lifecycle-like behavior in functional components
- Activity: Create a component that fetches data when mounted using lifecycle methods

Module 8: Final Project – Build a Complete React App

- Plan and build a fully functional React web app using components, state, and React Router
- Use data fetching, form handling, and lifecycle methods
- Test your app locally and debug common issues
- Activity: Present your final project, explaining how you used React concepts

Bonus Materials

- React JS cheat sheet with component lifecycle and hooks
- Links to React libraries for routing, state management (Redux, Context API)
 List of free React resources, tutorials, and community forums
- Interactive coding challenges and quizzes
- Certificate of Completion for React JS Basics