

Course Durations: 27 Hours

Course Mode: Online/ Offline

About Company:

EduNextgen extended arm of Product Innovation Academy is a growing entity in education and career transformation, specializing in today's most in-demand skills. A platform with blended learning programs supported by in-trend technology platforms for learning. Engaging organizations for learning development objectives.

Training courses are designed and updated by renowned industry experts. Our blended learning approach combines online classes, instructor-led live virtual classrooms and virtual teaching assistance.

About The Course:

ReactJS is an open-source JavaScript library which is used for building user interfaces specifically for single page applications. The main purpose of React is to be Fast, Scalable, and Simple. It works only on user interfaces in application. This training provides you the skills needed to create dynamic Single Page Web Applications. This Training covers basics of ReactJs, its key features, basics of Redux. It will cover about the Data Flow and Usage with React and Middleware and React Router.

*The course curriculum and contents are made by industries expert.

Why This Course:

- This course is designed for Web Developers who want to use ReactJS to build sophisticated Client-Side Applications. Even students who want to make a career in Web Application Development will find this course useful.
- Developers upgrading from AngularJS, EmberJS or other similar UI Javascript frameworks
- Hands-on Experience and interview based Assignments and Quizzes.
- Industry Grade Real-Time Projects.
- Live Support (24x7)

Participants will get the Access to:

- LMS Access
- 50+ Assignments
- 100+ Quizzes
- 5+ Industry Grade Projects
- Live Support via Mail, Call and Screen Sharing
- Course Completion Certificate

Batch Schedule:

Weekend: 3 Hours per day (Online), 4 Hours per day (Offline)

Weekday: 2 Hours per day (Online), 2 Hours per day (Offline)

Course Curriculum

Module 1: Introduction to ReactJS and Fundamentals (1 hour)

This module will cover the overview of ReactJS, MVC and Development Environment. Below topics are covered in this module:

- Introduction to ReactJS
 - What is Single Page Application?
 - Introduction to Development environment
 - Introduction to Node.js
 - Introduction to npm (Node Package Manager)
 - React Component based Architecture
 - React Data Flow
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Module 2: React Tools Setup (1 hour)

This module will cover about NPM, Webpack, Environment Setup and Setup of Tools. Below topics are covered in this module:

- Installing Node.js
 - NPM
 - Webpack
 - WebPack Dev Server configuration
 - Babel Cli for ES6 + to ES5s
 - Development build with Webpack and Babel Cli
 - Production Build with Webpack, Babel Cli
 - Setup Debug Map Files
 - Visual Studio Code
 - Debugger for Chrome for Debugging with Visual Studio Code
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Module 3: Advanced JavaScript (1 hour)

This module will cover some advanced topics of JavaScript like Closures, Function Prototypes and some other topics. Below topics are covered in this module:

- JavaScript Modules
 - Functional Programming
 - Closures
 - Execution context
 - Callbacks
 - Working with 'this' in the JS code
 - bind/call/apply methods
 - function prototypes
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Module 4: ECMA 2015/ES6 and ES6+ (1 hour)

This module will cover about ES6 and its features and Overview of ES7. Below topics are covered in this module:

- Introduction to ES6 and Features
 - Template Literals
 - Block Scope, Let, Constant and Variables
 - Rest, Spread and Deconstruct
 - ES6 Classes, Inheritance, Getter and Setter
 - Arrow Operator
 - ES6 modules, export, import and module level scope
 - ES6 Promise, resolve, catch and then
 - New Features of ES7 and above
 - Understanding Babel Staged Features and Environment
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Module 5: Virtual DOM and JSX (1 hour)

This module will cover about Virtual DOM, Patching Process and JSX. Below topics are covered in this module:

- Introduction to Virtual DOM
 - Virtual vs Real DOM
 - Diffing Algorithm
 - Patching Process
 - Introduction to JSX
 - Using JSX in JS Files
 - View Components using JSX
 - JSX Syntax
 - Using JSX to create view classes
 - Conditional Rendering
 - Looping over elements and objects
 - Comments in JSX
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Module 6: Render UI with React (2 hours)

This module will cover about React Component, ReactDOM, States and Rendering. Below topics are covered in this module:

- React Component class using ES6
 - Introduction to ReactDOM
 - React Element
 - React Prop (Properties), Passing Props to Components
 - Parent Child Communication
 - Child Parent Communication
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- PropTypes
 - React State, Set state, forceUpdate APIs
 - Render function
 - Working with Text Input and Data Flow
 - Functional & Stateless Component
 - Content/Children Components Handling
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Module 7: React Events and Context (1 hour)

This module will cover about React Events such as DOM Events and Using React Context Below topics are covered in this module:

- Synthetic Events
 - Component Events
 - Working with click, DOM Events
 - What is React Context
 - Props and Cons of Using Context
 - Get Child Context with Examples
 - Using Ref to get access to DOM element
 - Use Ref to Access Child Component
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Module 8: Component (2 hours)

This module will cover about Components Life-Cycle and its Phases. Below topics are covered in this module:

- Introduction to Component Life-Cycle
 - Component Creation Life Cycle
 - Component update Life Cycle
 - Component Destruction Life Cycle
 - Movement of props to Child Component
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Module 9: React Router (2 hours)

This module will cover about Routing in React and different Properties of Routing. Below topics are covered in this module:

- Navigating webpages in Single Page Application
 - Hash URL & HTML5 Mode
 - Introduction to React Router 4
 - Switch, HashRouter and BrowserRouter
 - Nested Routing with React-Router
 - Route with Multiple Components
 - Path Matching
 - Routing with Dynamic Values
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- Accessing Route Values in match params
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Module 10: Code Splitting React Router Advanced (1 hour)

This module will cover about Code Splitting in Router and some Advanced Features of it. Below topics are covered in this module:

- Splitting Vendor and App Code
 - Splitting App Code into Modules and Load on Need Basis
 - Dynamic Component Loading on Need Basis
 - System.import, Dynamic Module Loading and Web Pack Customization
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Module 11: Ajax with Fetch and High Order Components (1 hour)

This module will cover about using Ajax with Fetch, Understanding Higher Order Components and some Functions. Below topics are covered in this module:

- Using Fetch.js or Axios for AJAX
 - HTTP backend REST API/Web API Communication with React
 - Promises and Flattening the Response
 - <https://github.com/github/fetch>
 - Understanding Higher Order Components
 - Higher Order Functions & Closure Revisit
 - Passing Properties to Higher Order Components
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Module 12: Redux & Flux (1 hour)

This module will cover Overview of Flux and its Features. Below topics are covered in this module:

- Flux Overview
 - Introduction to Flux Action, Dispatchers and Reducers
 - Introduction to Redux and a Flux Implementation
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Module 13: Redux Reducer and Action (1 hour)

This module will cover about Reducer its Properties and Action. Below topics are covered in this module:

- Reducer
 - Creating Reducers
 - Retrieving State
 - Combining Reducers
 - Action Creator
 - Action Types/Constants
 - Creating Actions
 - Dispatching Actions to the Dispatcher
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Module 14: Redux Stores and Dispatcher (1 hour)

This module will cover about Redux Stores and its States and Dispatcher. Below topics are covered in this module:

- Store
 - The role of Store
 - Initializing State
 - Maintain Application State and getState Method
 - Store Subscribe and Unsubscribe
 - Combine Reducers
 - Introduction to Dispatcher
 - The role of Dispatcher
 - Registering Callbacks
 - Triggering Actions
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Module 15: Bindings, Providers and Injections (1 hour)

This module will cover about React-Redux Bindings and Injecting Redux Store using Provider.

. Below topics are covered in this module:

- React-Redux Bindings
 - Binding Components to React Store using “Connect”
 - Injecting Redux Store using Provider
 - Using Providers with React Routers
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Module 16: Redux Middleware (1 hour)

This module will cover about Middleware and its applications. Below topics are covered in this module:

- Introduction to Middleware
 - Using and apply Middleware
 - Creating Logger Middleware
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Module 17: Advanced React and Redux, Handling Async in Redux (1 hour)

This module will cover some advanced topics in React and Redux. Also covers Async in Redux. Below topics are covered in this module:

- Dispatching Async Actions
 - Introduction to Redux-Thunk
 - Applying Redux-Thunk with Action
 - Fetching Data from Server using Thunk
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Module 18: Forms (1 hour)

This module will cover about React Forms and its Functions. Below topics are covered in this module:

- Introductions to React and Forms
 - Controlled Components
 - Working with Input Elements
 - Working with Select Elements
 - Uncontrolled Components (with ref)
 - One-Way and Two-Way Data Binding
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Module 19: Security Authentication and Authorization (1 hour)

This module will cover about Security, Authentication and Authorization with React 4. Below topics are covered in this module:

- Presenting Script Attacks
 - React Dangerous html attribute for whitelisting html
 - Handle Authentication with React Router 4
 - Handle Authorization with React Router 4
 - Use JWT for token based Authentication
 - Storing tokens in to localStorage
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Module 20: Unit Testing React Introduction (1 hour)

This module will cover about Testing in React using Jasmine, Jest and Enzyme. Below topics are covered in this module:

- React and Unit Testing with Jasmine, Jest, Enzyme
 - Testing Component using Snapshot
 - Testing Component using Enzyme
 - Shallow vs Mount Features of Enzyme
 - Jest Test Runner
 - Code Coverage Testing
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Module 21: Web Pack Add-ons (1 hour)

This module will cover about Webpacks and its Features. Below topics are covered in this module:

- Using WebPack for CSS
 - Webpack Development and Production Configuration
 - Webpack Bundle Creation for Production
 - Webpack Map Files Generation
 - Webpack Minification of Bundle
 - Webpack Sourcemap Creation
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Module 22: Setup Release Environments (1 hour)

This module will cover about Release Build and Setting up the Environment. Below topics are covered in this module:

- Release Build
- Bundle Creation
- Source map generation

Module 23: Advance Project (2 Hours)

Understand Project: What is the Project, Requirements, Step by step Project Creation and Testing etc