

# Learn ReactJS

React is a view library to develop single page applications in Javascript. It is the most popular library backed by Facebook. With React library, you can develop dynamic frontend applications which come with great features like component architecture, data binding, declarative views, universal apps.

## ReactJS Training Objectives

All students will gain knowledge:

- Understand how Single Page React application is different than traditional web development frameworks
- Code using new ES6 language features
- Develop an application from scratch using React 16
- Understand the benefits of unidirectional data flow
- Understand and use React, React Router, Redux, Redux Saga and other popular libraries
- Creating redux middleware with Redux saga
- Use styled-components to create presentational components (CSS in JS)
- Taking the advantage of React and Redux dev tools for better debugging
- Taking the advantage of immutable.js library to follow the immutable state principle
- Unit test React components, redux using Jest, Enzyme and sinon
- Implementing server-side rendering for SEO benefits and to reduce initial load times
- Understand webpack bundler and its killer features like code splitting, lazy loading, tree shaking, hot module replacement
- Create, build, and deploy react applications to cloud
- React ecosystem and sources for good third-party libraries

## After Completing Our Course, You Will Know














- The fundamentals of React.js. How it is different from frameworks
- The various components of React.js, JSX and the Flux architecture
- To build complex user interfaces having a unidirectional data flow, with React.js
- React.js best practices and how to use them to build state-of-the-art apps

## Essentials :










- HTML, CSS, JavaScript OOP basics

## ReactJS Course Syllabus :





### ES6 Overview

 Lesson 1. <b>History of Javascript</b>
 Lesson 2. <b>What is ES6</b>
 Lesson 3. <b>A word on babel</b>
 Lesson 4. <b>Block scope, let &amp; const</b>
 Lesson 5. <b>Template literals</b>
 Lesson 6. <b>Arrow functions</b>
 Lesson 7. <b>Spread and Rest operators</b>
 Lesson 8. <b>Destructuring</b>
 Lesson 9. <b>Classes - Inheritance, Static properties and methods</b>
 Lesson 10. <b>Inheritance</b>
 Lesson 11. <b>Static properties and methods</b>
 Lesson 12. <b>Promises</b>
 Lesson 13. <b>Modules</b>

## Introduction to React


	Lesson 1. What is React?
	Lesson 2. Why React?
	Lesson 3. React version history
	Lesson 4. React 16 vs React 15
	Lesson 5. Just React - Hello World
	Lesson 6. Using create-react-app
	Lesson 7. Anatomy of react project
	Lesson 8. Running the app
	Lesson 9. Debugging first react app

## Templating using JSX

	Lesson 1. Working with React.createElement
	Lesson 2. Expressions
	Lesson 3. Using logical operators
	Lesson 4. Specifying attributes

 Lesson 5. Specifying children

## It's all about components


 Lesson 1. Significance of component architecture


 Lesson 2. Types of components - Functional, Class based, Pure


 Lesson 3. Component Composition


## Working with state and props

 Lesson 1. What is state and its significance

 Lesson 2. Read state and set state


 Lesson 3. Passing data to component using props

 Lesson 4. Validating props using propTypes




 Lesson 5. Supplying default values to props using defaultProps

## Rendering lists

 Lesson 1. Using React key prop





 Lesson 2. Using map function to iterate on arrays to generate elements

## Event handling in React




	Lesson 1. Understanding React event system
	Lesson 2. Understanding Synthetic event
	Lesson 3. Passing arguments to event handlers









## Understanding Component Lifecycle

## Working with Forms






	Lesson 1. Controlled components
	Lesson 2. Uncontrolled components
	Lesson 3. Understand the significance to defaultValue prop
	Lesson 4. Using react ref prop to get access to DOM element

## Routing with React Router






	Lesson 1. Setting up react router
	Lesson 2. Understand routing in single page applications
	Lesson 3. Working with BrowserRouter and HashRouter components

 Lesson 4. <b>Configuring route with Route component</b>
 Lesson 5. <b>Using Switch component to define routing rules</b>
 Lesson 6. <b>Making routes dynamic using route params</b>
 Lesson 7. <b>Working with nested routes</b>
 Lesson 8. <b>Navigating to pages using Link and NavLink component</b>
 Lesson 9. <b>Redirect routes using RedirectComponent</b>
 Lesson 10. <b>Using Prompt component to get consent of user for navigation</b>
 Lesson 11. <b>Path less Route to handle failed matches</b>



## Just Redux

 Lesson 1. <b>What is redux</b>
 Lesson 2. <b>Why redux</b>
 Lesson 3. <b>Redux principles</b>
 Lesson 4. <b>Install and setup redux</b>
 Lesson 5. <b>Creating actions, reducer and store</b>


## Immutable.js for immutable data structures


 Lesson 1. <b>What is Immutable.js?</b>
 Lesson 2. <b>Immutable collections</b>
 Lesson 3. <b>Lists</b>
 Lesson 4. <b>Maps</b>
 Lesson 5. <b>Sets</b>


## React Redux


 Lesson 1. <b>What is React Redux</b>
 Lesson 2. <b>Why React Redux</b>
 Lesson 3. <b>Install and setup</b>
 Lesson 4. <b>Presentational vs Container components</b>
 Lesson 5. <b>Understand high order component</b>
 Lesson 6. <b>Understanding mapStateToProps and mapDispatchToProps usage</b>

## Redux saga(Redux middleware)

 Lesson 1. <b>Why redux middleware</b>

 Lesson 2. Available redux middleware choices

 Lesson 3. What is redux saga

 Lesson 4. Install and setup redux saga

 Lesson 5. Working with Saga helpers

 Lesson 6. Sagas vs promises

## Project

 Lesson 1. Performing CRUD Operations in ReactJS