

# Syllabus of ReactJS Online Training

## **Module 1: Introduction to Web Development and React**

- Building Blocks of Web Application Development
- Single-page and Multi-page Applications
- Different Client-side Technologies
- MVC Architecture
- Introduction to React
- Installation of React
- JSX and its use case
- DOM
- Virtual DOM and Its Working
- ECMAScript
- Difference between ES5 and ES6
- NPM Modules

## **Module 2: Components and Styling the Application Layout**

- React Elements
- Render Function
- Components
- Class Component
- Component Constructor
- Functional Components
- Multiple Components
- Props
- Props with Class based Component
- Props with Function based Component
- States
- Component Lifecycle
- React Events
- React Forms
- Different Form Concepts
- Styling in React
- Inline Styling
- CSS Stylesheet
- Building Music Shop Application using React Components

## **Module 3: Handling Navigation with Routes**

- Routing

- React-router
- Features of React-router
- Configuration of routing using React-router
- Navigation using Links
- 404 page (Not found Page)
- URL Parameters
- Nested Routes
- Implementing styles using NavLink
- Application Programming Interface
- Build a REST API using JSON-server
- API consumption in React application using Fetch method
- Build a dynamic Music Store application using Routing and API connectivity

#### **Module 4: React State Management using Redux**

- Need of Redux
- What is Redux?
- Redux Architecture
- Redux Action
- Redux Reducers
- Redux Store
- Principles of Redux
- Pros of Redux
- NPM Packages required to work with Redux
- More about React-Redux package

#### **Module 5: A Real-Time Application by using ReactJS**

- Create a React component with JSX template.
- How to create Nested Components?
- What is ReactJS render?
- React Props overview.
- Introduction of Props validation with data types.
- Flow of States, Initialize states and update states.

#### **Module 6: Asynchronous Programming with Saga Middleware**

- Need of Async operations
- Async Workflow
- Action Creators
- How to write Action Creators?
- Handling Async Actions via Reducers
- Middleware

- Redux-Saga
- Generators in Redux-Saga
- Saga Methods()
- Major Sections of Redux-Saga
- Building a Product List application using Redux-Saga Middleware
- Debugging application using Redux Devtools