React JS Course Syllabus

Module 1: What is React JS?

- ➢ React JS Introduction
- ➢ Advantages of React JS
- ➢ Workflow of React JS
- ➢ Scope of React JS

Module 2: Overview of JSX

- ➢ Introduction of Virtual DOM.
- ➢ Difference between JS and JSX.
- ➢ React Components overview
- ➢ Containers and components
- ➢ What is Child Components?
- ➢ What is Name spaced components?
- ➢ What are the JavaScript expressions available in JSX?

Module 3: React JS Environment Setups

- ➢ Node setup
- ➢ How to use NPM?
- ➢ How to create package.json and purpose of it?
- ➢ ES6 Introduction and features.
- ➢ Webpack Overview
- ➢ Best IDE for React JS and How to write optimized code in React JS?
- ➢ React JS browser plugins overview.

Real-time Practicals

- ➢ NPM Installation by locally and Globally
- ➢ Create a Basic App with ReactJS and other Supported NPMs.

Module 4: 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.

Real-time Practicals

- ➢ Create a Small React Module
- ➢ Use All the states in in the created Application.

Module 5: ReactJS forms and UI

- ➢ Lists of Form components.
- ➢ Setup Controlled and Uncontrolled form components.
- ➢ Control Input elements.
- ➢ How to set default values on all formats of Input elements.
- ➢ ReactJS Form validations.
- ➢ How to write Styles?
- ➢ Animations overview

Real-time Practicals

- ➢ Create a React Form.
- ➢ Client-side form validation.
- ➢ Applying form components.
- ➢ Submit and Rest the form.

Module 6: ReactJS Component Life Cycles Overview

- ➢ Initial Render
- ➢ Props Change
- ➢ Stage Change
- ➢ Component willMount
- ➢ Component didMount
- ➢ Component Unmount

- ➢ **Real-time Practicals**

- ➢ Applying Different Lifecylces in the Application.
- ➢ When to choose Appropriate lifecycles.

Module 7: Routing in ReactJS and Other JS concepts

- ➢ Single Page Application Overview.
- ➢ How to configure React Router?
- ➢ History of Router
- ➢ How to Handle Conditional statement in JSX?
- ➢ IIFE in JSX for complex logic overview.
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- ➢ Create a Single Page Application.
- ➢ Applying Routing.
- ➢ Dynamically render the components based on the url.

Module 8: Event Handling in JSX

- ➢ onBlur, onKeyUp, onChange and other useful primary events in ReactJS.
- ➢ How to Sharing events between the components?
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- ➢ Communicate Data between components.
- ➢ Applying all lists of events.

Module 9: How to write Styles in ReactJS?

- ➢ CSS and inline styles in ReactJS overview.
- ➢ Introduction to styled components
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- ➢ Styling the application using styled component
- ➢ How to use Animations in the Application.

Module 10: React Router with Navigation

- How to Load the router library?
- Configure the React Router?
- How to Pass and receive parameters?
- Integration of React-cookie overview.

Module 11: Flux overview

- What is Flux Architecture?
- What are the Flux Components available?
- Stores.
- Dispatchers.
- View Controllers.
- Actions.
- Views.
- How Flux works?
- Flux and React works together.

Module 12: Redux Overview

- Introduction to One Store.
- Provider Component
- Actions.
- Reducers.
- sagas
- Dispatchers
- View Controllers
- Selectors

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- Redux application Development with Real-time Project

Module 13: Unit Testing Overview

➢ What are the necessary Tools required for Unit Testing?

➢ React Unit Testing overview

➢ Introduction to JEST.

➢ How to Test React Component?

➢ How to Test React Router?