



ReactJS Syllabus

Course Objectives:

- React is a declarative, efficient, and flexible JavaScript library for building Web Applications.
- It follows component-based approach.
- Easy to create smaller components and build large-scale applications.
- The main goal is to build large-scale high-performance applications with smaller and reusable stateful components.
- The main objective of React Training is to create smaller components to build Interactive User interfaces..

Introduction

- What is ReactJS?
- Installation or Setup
- Hello World with Stateless Functions

- Absolute Basics of Creating Reusable Components
- Create React App
- Hello World
- Hello World Component

Components

- Creating Components
- Basic Components
- Nesting Components
- Props
- Component states - Dynamic user-interface
- Variations of Stateless Functional Components
- setState pitfalls

Using ReactJS with TypeScript

- ReactJS component written in TypeScript
- Installation and Setup
- Stateless React Components in TypeScript
- Stateless and property-less Components

State in React

- Basic State
- Common Antipattern
- setState()
- State, Events And Managed Controls

Props in React

- Introduction
- Default props
- PropTypes
- Passing down props using spread operator

- Props.children and component composition
- Detecting the type of Children components

React Component Lifecycle

- Component Creation
- Component Removal
- Component Update
- Lifecycle method call in different states
- React Component Container

Forms and User Input

- Controlled Components
- Uncontrolled Components

React AJAX call

- HTTP GET request
- HTTP GET request and looping through data
- Ajax in React without a third party library - a.k.a with Vanilla

Communication Between Components

- Child to Parent Components
- Not-related Components
- Parent to Child Components

Stateless Functional Components

- Stateless Functional Component

Performance

- Performance measurement with ReactJS
- React's diffs algorithm
- The Basics - HTML DOM vs Virtual DOM.

Introduction to Server-Side Rendering

- Rendering components

Setting Up React Environment

- Simple React Component
- Install all dependencies
- Configure webpack
- Configure babe
- HTML file to use react component
- Transpile and bundle your component

Using React with Flow

- Using Flow to check prop types of stateless functional components
- Using Flow to check prop types

JSX

- Props in JSX
- Children in JSX

Keys in react

- Using the id of an element
- Using the array index

Higher Order Components

- Higher Order Component that checks for authentication
- Simple Higher Order Component

React with Redux

- Using Connect.