React Js

Overview: React is an open-source JavaScript library for building user interfaces. It is maintained by Facebook and a community of individual developers and companies.

React can be used as a base in the development of single-page or mobile applications.

Course Objectives

- Understand the React and technical concepts behind React
- Structure a React application in modules
- Understand and use the CLI and CDK
- Understand Routing
- Understand the ES6, JSX
- Use built-in forms
- Understanding Props and States

Module 1: - Course Introduction

- ❖ Welcome To the Course
- ❖ Course & Projects Outline
- ❖ Introduction React

Module 2: - Getting Started

- ❖ What Is React
- ❖ Environment Setup
- ❖ ES6 Refresher - Part 1
- ❖ ES6 Refresher - Part 2 ES6
- ❖ Refresher - Part 3
- ❖ Installing & Using the CLI A
- ❖ Look At the Initial React Files & How They Work

Module 3: - Components, JSX & Props

- ❖ Thinking In Components
- ❖ What Is JSX JSX
- ❖ Expressions
- ❖ Creating Your First Component
- ❖ Functional Components
- ❖ Working With Props
- ❖ Type checking With Prop Types
- ❖ CSS In React Adding Bootstrap

Module 4: - State & the Context API

- ❖ Changing State from Another Component
- ❖ Using The Context API & Provider State
- ❖ Adding A Context Reducer for Actions
- ❖ Creating State
- ❖ Events In React
- ❖ Changing State

Module 5: - Working with Forms

- ❖ Creating A Form with State
- ❖ Controlled Components & onChange
- ❖ Text Input Group Component for DRY Code
- ❖ Uncontrolled Components & Refs
- ❖ Form Submit Action to Context
- ❖ Error Checking & Display

Module 6: - React Router v6

- ❖ React Router Setup
- ❖ Links, Params & Redirect
- ❖ 404 Not Found Page

Module 8: - Lifecycle, HTTP & Deployment

- ❖ Lifecycle Methods
- ❖ GET Requests
- ❖ POST & DELETE Requests
- ❖ Using Async Await
- ❖ Edit Contact Component & Fetch Contact
- ❖ PUT Request & Update Action
- ❖ Deploy To Heroku Pages

Module 9: - Learning Redux

- ❖ A Note on Redux
- ❖ App Starting Point for Redux
- ❖ Redux Store Setup & Contact Reducer
- ❖ Connecting Components & Dispatching Actions
- ❖ Creating A Separate Actions File
- ❖ Delete & Add Contact Action

Module 10: - Redux & HTTP

- ❖ GET Request Dispatch
- ❖ POST & DELETE Request Dispatch
- ❖ Get Single Contact for Edit
- ❖ PUT Request & Dispatch

At the end of the course participants will be able to do some assignments and Mini Project

- ❖ **Project 1 – Blog Application**
- ❖ **Project 2 – Shopping Cart Application and Deployment**