KOENIG
step forward

KOENIG SOLUTIONS · COURSE OUTLINE

ReactJS: Components, Hooks & Routing

Learn to build React applications with components, hooks, routing, forms and Material design UI libraries.

4 Days	48	9
DURATION	TOPICS	HANDS-ON ACTIVITIES

COURSE OVERVIEW

Training aimed at imparting knowledge to build Rich Internet Application (RIA) using ReactJS, this involves hands-on practice sessions to create a web-app from scratch to the first full fledge working application that having multiple views / components with Router implementation, login view, security, dashboard and Add /Update / Delete CRUD operations. Making participants confident in ReactJS Web Development.

WHO THIS COURSE IS FOR

- **Web Developer, fresher with programming skills**
- **Web developer who wants to build best-of-breed web UIs with the simplicity and elegance of JavaScript**
- **Information Technology, Computer Science, Engineering**

PREREQUISITES

- Participants must have intermediate web development experience in JavaScript, HTML and OOPs concepts.

TOOLS AND REQUIREMENTS

Lab Need

- NodeJS
- SublimeText / VSCode
- Chrome
- Windows / Linux or Macbook with minimum 8GB RAM
- Internet Connection (with permissions to install npm modules)

LEARNING OBJECTIVES

At the end of this training course, the participants will:

- Able to confidently create, implement ReactJS applications
- Understand ReactJS (compare it with other technologies)
- Get the architecture of a React application

COURSE SYLLABUS

48 Topics

DAY 1

Understanding JavaScript

2 Hands ons

TOPICS

Functions as first-class citizens · Prototypical chain · Asynchronous programming · OOPs in JS · Events / Callbacks in JS · DOM fundamental · JavaScript and jQuery

Design Pattern

TOPICS

- ReactJs comparison with other framework
- Advantages of using frameworks (Design patterns , performance, maintainability)
- Why ReactJS

ES2015 Introduction

TOPICS

ES6 Overview · Classes & Modules · Destructuring Objects & Arrays · Template String · Spread & Rest operators · Arrow Functions · Optional and Named Parameters

DAY 2

Components

3 Activities

TOPICS

Component Life-Cycle · Virtual DOM · Component Events · Using States and Properties · Initialising States from properties · Accessing DOM nodes using refs · Nested component

React Functional Component / Hooks

Activity

TOPICS

Component Compositions · Reusable Components · Type Checking With PropTypes · CRUD operations React Nested CustomerAPP

DAY 3

TOPICS

Activity Activity

Properties State Lifecycle · Communication Between Components · The Core of React Class · Routing · Params , match · Handling routing in ReactJS

Forms

TOPICS

Controlled Components · Uncontrolled Components ReactLink · Principle of One-Way and Two-Way Data Binding · Best Practices · Styled Component in ReactJS · Services · Communication with Server / Fetch

DAY 4

React Class Component

TOPICS

SetState · componentDidMount · componentWillMount

UI Libraries in React

Activity

TOPICS

- Material Design Introduction
- Concepts and GRID / layouts in CSS and Material design
- React with Material design
- Themes and Templates

NOTES

- Complexity Level of the Course: Basic

HANDS-ON ACTIVITIES

Practise What You Learn

MODULE	ACTIVITY
Understanding JavaScript	HANDS ON - Hands on HTML5 and Javascript - Customer Application in CRUD in HTML5
Components	HANDS ON EXERCISE - React Functional Component / Hooks - UseState - UseEffect
React Functional Component / Hooks	**Hands On and practice session:** Hands On and practice session on ReactJS Components
Day 3	**Hands On and practice session:** Hands On and practice session on ReactJS Router **Hands on Exercise:** Forms exercise
UI Libraries in React	**Hands on Exercise:** Building an application from scratch with Routing, LoginPage, Fetch API and Responsive design using Material design

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training | Live Online Classes (ILO) | Fly-Me-A-Trainer (FMAT) | Flexi (Self-Paced) | 1-on-1 Training

Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

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