

Course Name : **MOBILE APP DEVELOPMENT WITH REACT NATIVE**
Duration : **4 Days (Physical Classroom / Virtual Live Instructor)**
Skill Level : **Beginner**

COURSE DESCRIPTION:

In this React Native training, we shall get the candidates up and running with React Native quickly and teach the core knowledge the candidates need to deeply understand, and build React components for mobile devices. We start teaching React first and build the single-page Web Application using react. Once you are comfortable with React building blocks, we shall teach you all essentials to create your own React Native apps, publish them to the Google Play Store and Apple App Store and dive deep into the React Native ecosystem. At the end of the course, the candidates will build two mobile apps from scratch.

React Native is an excellent solution for developing apps on mobile in a fraction of the time it takes to make an equivalent iOS or Swift app. That is probably the reason why Instagram, Airbnb, Skype, and many other global companies are using it to build their mobile apps. By the end of the course, we shall teach all the steps required to get it into an app store.

WHAT WILL YOU LEARN?

We will start by mastering the fundamentals of React, including JSX, "props", "state", and event handling. Special attention has been paid to creating reusable components that you'll be able to make use of on your own fantastic projects. React Native is an excellent solution for developing apps on mobile in a fraction of the time it takes to make an equivalent iOS or Swift app. You will love seeing your changes instantly appear on your own device, rather than waiting for Swift/Java code to recompile! This quick feedback loop, along with excellent cross-platform support, is what has catapulted React Native to the top must-have skill for JavaScript engineers.

PREREQUISITE:

Beginners. Knowing JavaScript Basics is an added advantage to attending this course. Anyways, we spent a day teaching the fundamentals of JavaScript before diving into the actual modules.

METHODOLOGY:

This program will be conducted with interactive lectures, PowerPoint presentations, discussions, and practical exercises. This course can be conducted as instructor-led (ILT) or virtual instructor-led training (VILT).

JOB SCOPE:

Upon completion of this course, candidates may pursue the following career paths:

- Mobile Developer
- Mobile App Developer (iOS & Android)
- React Native Developer
- Mobile Application Developer
- Frontend UI Developer
- React Developer
- Hybrid Mobile App Developer
- Technical Lead/Manager in a web development team.

DAY I

MODULE 1: INTRODUCTION

- Welcome
- Introduction to ES6, React & React Native
- History

MODULE 2: MODERN JS - ES6 & TYPESCRIPT

- Intro to Harmony, ES6, and ES2015
- Let & Const
- Template Literals
- De Structuring
- Default Params
- For of Loop
- Spread & Rest Operators
- Arrow Functions
- Classes
- Import & Export
- Async & Await
- What and why is Typescript?
- Environment setup
- Variable Declarations
- Variable Types
- Functions
- Interface
- Class and Access Modifier

MODULE 3: WHY REACT

- Introduction
- What is Composition
- What is Declarative Code
- Unidirectional Data Flow
- React Is “just JavaScript”

MODULE 4: REACT - DEV ENVIRONMENT SETUP

- Add React to a Website
- Create a New React App
- CDN Links
- Hello World

DAY II

MODULE 5: INTRODUCING JSX

- Why JSX?
- Embedding Expressions in JSX
- JSX is an Expression Too
- Specifying Attributes with JSX
- Specifying Children with JSX
- JSX Prevents Injection Attacks
- JSX Represents Objects

MODULE 6: REACT COMPONENTS

- Creating a React component
- Adding component properties
- Working with lists
- Adding keys to list items
- Displaying images with React
- Using fragments

MODULE 7: REACT STATE IN THE COMPONENT TREE

- Generating a project with Create React App
- Touring a Create React App project
- DE structuring arrays and objects
- Understanding the useState Hook
- Working with useEffect
- Understanding the dependency array
- Incorporating useReducer

MODULE 8: HANDLING FORMS

- Working with uncontrolled components
- Creating controlled form elements
- Building a custom Hook
- Choosing a form library

DAY III

MODULE 9: ASYNCHRONOUS REACT

- Fetching data with Hooks
- Displaying data from an API
- Handling loading states
- Fetching data with GraphQL
- Working with render props

MODULE 10: REACT ROUTER

- Installing React Router v6
- Configuring the Router
- Incorporating the Link component
- Nesting links with React Router v6

MODULE 11: UP AND RUNNING WITH REACT NATIVE

- Introduction
- What is React Native/Why does it exist?
- Dev Environment Setup
- Using the Debugging

MODULE 12: REACT NATIVE BASICS

- Introduction
- Core Components vs Native Components
- React Basics for React Native
- Handling Text Input
- Using Scroll View
- Using List View
- Platform-Specific Code

DAY IV

MODULE 13: REACT NATIVE NAVIGATORS

- Stack Navigator
- Native Stack Navigator
- Drawer Navigator
- Bottom Tabs Navigator
- Material Bottom Tabs Navigator
- Material Top Tabs Navigator

MODULE 14: REACT NATIVE PROJECT 1: TODO APP

- Setting up Expo
- Getting started with App.js
- Build Tasks section
- Creating a reusable Task component
- Passing props
- Styling Task component
- Write a task section
- Task state
- Adding a task
- Deleting a task
- Final Touch to the Mobile App

MODULE 15: REACT NATIVE PROJECT 2: MOVIE APP

- Introduction
- Setting up Expo
- Getting started with App.js
- Setup a Movie DB API Key
- Setting up Styles
- Building Movie List Component
- Building Movie Component
- Passing props and state
- Create Popup movie description
- Build a search component
- Final Touch to the Mobile App
- App Store Preparation

CONCLUSION

- QA
- Useful React Resources
- Feedback