REACT NATIVE

ZETLAN TECHNOLOGIES

e-Learning Course

Module 1: Introduction to React Native

- What is React Native?
- React Native vs. Other Mobile Frameworks
- Setting Up the Development Environment
- Understanding the Folder Structure
- Running Your First React Native App

Module 2: Core React Native Components

- View, Text, and Image Components
- Button and Touchable Components
- ScrollView and FlatList for Handling Lists
- StyleSheet and Styling Best Practices

Module 3: React Native Navigation

- Understanding Navigation in Mobile Apps
- React Navigation Setup
- Stack Navigation
- Tab Navigation
- Drawer Navigation
- Passing Data Between Screens

Module 4: State Management in React Native

- Managing State with useState and useEffect
- Context API for State Management
- Redux and Redux Toolkit
- React Query for Data Fetching
- MobX (Optional)

COURSE MODULES

Module 5: Handling User Input & Forms

- TextInput Component
- Handling Form Submission
- Form Validation with Formik & Yup
- Keyboard Avoidance Techniques

Module 6: Working with APIs and Networking

- Fetching Data with Fetch API & Axios
- Handling API Requests & Responses
- Using AsyncStorage for Local Data Storage
- Offline Data Handling

Module 7: Native Modules & Third-Party Libraries

- Linking Native Modules
- Using React Native Vector Icons
- Image Picker & Camera Access
- Push Notifications with Firebase (FCM)

Module 8: Performance Optimization

- Handling Performance Issues
- Optimizing FlatList and ScrollView
- Reducing App Bundle Size
- Profiling and Debugging with React DevTools

Module 9: Authentication & Security

- Implementing Firebase Authentication
- Social Login (Google, Facebook)
- Secure Storage & Environment Variables
- Protecting Routes & Secure API Calls

Module 10: React Native Animations

- Animated API
- Layout Animation
- Reanimated & Gesture Handler
- Creating Smooth UI Interactions

Module 11: Testing and Debugging

- Debugging with React Native Debugger
- Unit Testing with Jest & React Testing Library
- End-to-End Testing with Detox

Module 12: Deployment & Publishing

- Preparing the App for Release
- Building & Deploying to Android (Google Play Store)
- Building & Deploying to iOS (App Store)
- Code Signing and Certificates