React Native Certification Course

Course Duration : 90 Days

Topics & Details

Introduction to React Native:

★ **Introduction to React Native**
- What is React Native?
- Key features and advantages
- Comparison with native development

★ **Setting Up Your Development Environment**
- Installing Node.js and npm
- Installing React Native CLI
- Setting up Android and iOS development environments (Android Studio, Xcode)

★ **Basics of React Native**
- Understanding React Native components
- JSX syntax
- State and props

★ **Building Your First React Native App**
- Creating a new project
- Running your app on Android and iOS simulators/emulators
- Exploring project structure

★ **Styling in React Native**
- Basic styling with StyleSheet
- Flexbox layout in React Native
- Responsive design and handling different screen sizes

★ **Components and APIs**
- Working with core components (View, Text, Image, ScrollView, etc.)
- Using platform-specific components
- Integrating third-party libraries

★ **Navigation and Routing**
- React Navigation basics
- Stack navigation
- Tab navigation
- Drawer navigation

★ **State Management**
- Managing state with useState and useReducer hooks
- Context API for global state
- Using Redux for state management (optional)

★ **Handling User Input**
- Forms and form validation
- Handling text input
- Working with buttons and touchables

★ **Networking and Data Fetching**
- Making API calls with Fetch or Axios
- Handling responses and errors
- Data persistence (AsyncStorage, SQLite, etc.)

★ **Working with Device Features**
- Accessing device camera and photo library
- Using geolocation
- Push notifications

★ **Debugging and Testing**
- Debugging React Native apps
- Unit testing and integration testing strategies
- Using debugging tools (React Native Debugger, Flipper)

★ **Deployment**
- Generating signed APKs and IPAs
- Deploying to Google Play Store and Apple App Store
- Over-the-air updates (CodePush)

★ **Performance Optimization**
- Identifying performance bottlenecks
- Implementing optimizations (memoization, virtualization)
- Profiling tools and techniques

★ **Advanced Topics (Optional)**
- Animation and gestures
- Native module integration
- Continuous integration and delivery (CI/CD)
- React Native CLI vs. Expo

★ **Best Practices and Patterns**
- Code organization and project structure
- Design patterns in React Native
- Accessibility considerations

★ **Troubleshooting Common Issues**
- Handling version mismatches
- Dealing with native module errors
- Debugging performance issues

★ **Community and Resources**
- Finding help and support (forums, communities)
- Recommended blogs, tutorials, and books
- Keeping up with React Native updates.