

Essential softwares:

- Android Studio
- Homebrew

```
/bin/bash -c "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"
```

- Azul **Zulu (OpenJDK distribution)**

```
brew tap homebrew/cask-versions  
brew install --cask zulu17
```

Add the following lines to your `~/.zprofile` or `~/.zshrc` (if you are using `bash`, then `~/.bash_profile` or `~/.bashrc`) config file:

```
export ANDROID_HOME=$HOME/Library/Android/sdk  
export PATH=$PATH:$ANDROID_HOME/emulator  
export PATH=$PATH:$ANDROID_HOME/platform-tools  
  
export JAVA_HOME=$(/usr/libexec/java_home)
```

- Git

```
brew install git
```

- GitHub Desktop
- XCode 14+ (<https://developer.apple.com/download/>)
- XCode command line tools
- Make sure you have Xcode.app inside Applications folder

```
sudo xcode-select --switch /Applications/Xcode.app
```

- Node Version Manager

```
brew install nvm
```

Add to `~/.bash_profile` or `~/.zshrc`:

```
source $(brew --prefix nvm)/nvm.sh
```

- Node (installed using NVM)
Install NodeJS using NVM:

```
nvm install 21.4.0
```
- Watchman (using homebrew)

```
brew install watchman
```
- Ruby

```
brew install rbenv ruby-build  
rbenv install 2.7.6  
rbenv local 2.7.6  
rbenv global 2.7.6
```
- Yarn

```
brew install yarn
```
- VSCode
- Cocoa pods

`sudo gem install cocoapods`

- Install Prettier extension in VSCode
- Select prettier as default formatter, format on save
- Install TeamViewer
- Install AnyDesk

Instructors can be reached to at any time for queries.

Fridays will have session for discussion related to weekend project or training feedback

Marketing Schedule:

Profiles will be forwarded for marketing on 4th week

Top consultant's profile will be rolled out in 6th week

- Every FE will maintain a GitHub account and relevant repositories required as per projects

Day	Topic
Week 1	
Day 1 & 2	<ul style="list-style-type: none">• React Native environment setup with above mentioned softwares/libraries• What is react• Why not just javascript• Manipulation of DOM• NPM modules• VSCode & Extensions• Revisit JS• Let, var & const• Reference vs primitive types• Arrow functions• Modern short notations• Imports & exports• Classes• Spread & Rest operators• Destructuring• Useful array functions• Async code and promises

	<ul style="list-style-type: none"> ● Practice above concepts on
Day 3	<ul style="list-style-type: none"> ● Create basic react project ● Concept of JSX ● Intro to TypeScript ● Stateful and Stateless components ● React Class Components ● React functional component ● Usage of States and props ● Practicing with state and props
Day 4	<ul style="list-style-type: none"> ● Using core components ● Concept of HOCs ● Passing data with props ● Styling hands on ● Practicing with combination of core components and their events
Day 5	<ul style="list-style-type: none"> ● Flexbox ● Working with Navigation ● Making Stacks and calling screens ● Passing props between navigation components and using with route params ● Weekend project - Create practice project with List view, Detail view with Add Record feature. Project will demonstrate usage of Navigation, Flatlist, state and props, flexbox, class component
Week 2	
Day 1	<ul style="list-style-type: none"> ● Difference between navigate and push ● Difference of goBack and popToTop ● Use of initialParams ● Updating params from within component ● useEffect Hook ● Passing params to previous screen ● Practice navigation with Login/Logout and Dashboard view
Day 2	<ul style="list-style-type: none"> ● Integrate Tab Controller in Navigation ● Integrate Drawer in Navigation ● Adding Modal views ● Working with Images ● Practice Image and modal components, tab and drawer navigation
Day 3	<ul style="list-style-type: none"> ● Component Lifecycle ● Difference between Component and Pure Component ● PureComponent using class components

	<ul style="list-style-type: none"> ● Concept of Side effects ● useState Hook ● Practice lifecycle events for class components
Day 4	<ul style="list-style-type: none"> ● Pure Component using functional component ● useCallback Hook ● useMemo Hook ● Memo ● Async storage ● PersistenceHelper with async storage ● Error boundaries ● Practice Hooks
Day 5	<ul style="list-style-type: none"> ● Types of states in app ● Props Drilling ● React Context API ● Limitations of Context API ● Practice React Context API, replace prop drilling with React Context API ● Provider hook pattern ● Weekend project: login view, dashboard view, populate list data on dashboard, logout, use context api for state management
Week 3	
Day 1	<ul style="list-style-type: none"> ● Handling Errors ● TypeScript - Types and Interfaces ● Console Logging ● Flipper integration ● Debugging ● useRef Hook ● Calling APIs using fetch ● Applying debugging skills to practice context api
Day 2	<ul style="list-style-type: none"> ● Redux & Redux Toolkit ● Dispatching actions ● Redux Connect ● Redux with class components ● Practice writing redux slices and debugging ● Revision of previous stuff
Day 3	<ul style="list-style-type: none"> ● Make Redux Persistent ● Controlling Navigation for Guest and Auth user using redux ● Logout functionality

	<ul style="list-style-type: none"> ● Redux with functional components ● Practice redux with creating shopping cart ● Practice with Redux
Day 4	<ul style="list-style-type: none"> ● Keychain, ● user defaults ● shared prefs ● Adding Firebase Crashlytics ● Practice all storage libs for relevant data
Day 5	<ul style="list-style-type: none"> ● Redux Saga (Advanced Redux) ● Experimenting with Redux Saga ● Implementing Authentication using Token ● Weekend project: API integration using redux saga, User Authentication, Create User profile view, Use imagepicker for user profile, firebase integration
Week 4	
Day 1	<ul style="list-style-type: none"> ● ScrollView, Flatlist and VirtualizedList ● Extra Reducers ● Redux Toolkit Query ● RN Animatable ● Set permissions ● Use Image picker on android and ios ● Interview questions prep
Day 2	<ul style="list-style-type: none"> ● Handling user locations ● Writing location helper ● Show location on map ● Adding markers on map ● Discussion and revision of previous topics
Day 3	<ul style="list-style-type: none"> ● Handling Push notifications using firebase ● Writing Notification Helper ● Firebase Analytics ● Writing Analytics helper
Day 4	<ul style="list-style-type: none"> ● Discuss some refactor techniques by writing an ApiHelper using Promises ● SSL Pinning ● Some security practices
Day 5	<ul style="list-style-type: none"> ● useRef and its usage in core components and custom components ● Build distribution using firebase

	<ul style="list-style-type: none"> • Upload builds on AppStore, TestFlight and PlayStore guide • Weekend Project: Extend previous project with push notifications, analytics, send user locations on server and display on list, make build and distribute over firebase
Week 5	
Day 1	<ul style="list-style-type: none"> • Memory profiling • Cryptography • Use Native Modules for Android • Interview questions
Day 2	<ul style="list-style-type: none"> • Use Native Modules for iOS • Upgrade react native • Revision of past stuff
Day 3	<ul style="list-style-type: none"> • Implement AppState control • Difference Saga behaviors using takeLatest and takeEvery
Day 4	<ul style="list-style-type: none"> • Different aspects of Performance handling <ul style="list-style-type: none"> ◦ Lazy loading ◦ Memoization • Use Cloud messaging to handle tap gestures and navigate on screens • Integrate and workaround with some 3rd party modules, i.e. QR Code reader
Day 5	<ul style="list-style-type: none"> • Code smells in react native • Code Signing • Testing using JEST • Testing using React Testing Library • Revision of covered material <p>Project: support atleast two locales,</p>
Week 6	
Day 1	<ul style="list-style-type: none"> • Hands on Git & Gitflow • Internationalization in RN • Testing using e2e - Detox • Patching - Forking - Update Script • Appicons
Day 2	<ul style="list-style-type: none"> • Timers & JS Runtime discussion • OAuth using Facebook

	<ul style="list-style-type: none"> ● React Native APIs overview ● Final project discussion
Day 3	<ul style="list-style-type: none"> ● Firebase Authentication ● Firebase Firestore ● Multiple environment support using dev, stg and prod ● React Hook form ● Interview questions
Day 4	<ul style="list-style-type: none"> ● Change bundle id of android and ios codebases ● Implement custom fonts in android and ios ● SOLID Principles in React Native Revision of covered stuff
Day 5	Revision of covered stuff
Week 7	
All days	<ul style="list-style-type: none"> ● Catchup with previous topics ● Final project ● SCRUM ● Code Review Process
Week 8	
	<ul style="list-style-type: none"> ● Final project submission ● Resume rollout ● Mocks, Interview sessions and Profiles

Useful Resources:

React Code Challenges - <https://www.reacterry.com/portal/challenges>

Useful links -

<https://docs.google.com/document/d/1QS0weHxeNgZh3RWeQCESb-zwGOVUXANiMFOJWASm5Gg/edit>

Interview Question link -

<https://docs.google.com/document/d/18YpGwsJKPY8uVyiYaLTivQFaKTeMXFpBcLxUEMKyni4/edit#heading=h.h7xhjakqy3gd>

Recommended VSCODE Extensions:

- [ESLint](#)
- [Prettier](#)
- [tailwindcss IntelliSense](#)
- [Auto Rename Tag](#)
- [Auto close tag](#)
- [Auto Complete Tag](#)
- [Code spell checker](#)
- [GitLens](#)
- [Import Cost](#)
- [Turbo console log](#)
- [i18n Ally](#)
- [Github copilot](#)
- [Pretty TypeScript Errors](#)
- [Codium AI](#)
- [Color Highlight](#)
- [ES7+ React/Redux/React-Native snippets](#)
- [Flow Language Support](#)
- [Git Blame](#)
- [React Native Tools](#)
- [VSCode icons](#)