Install node

Follow https://nodejs.org/en/download/package-manager/ link to install Node

The React native Cli

Run the following command in Command prompt or shell **sudo npm install -g react-native-cli**

JDK

React Native requires a recent version of the Java SE Development Kit (JDK) http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html

Android development environment

Install Android Studio

https://developer.android.com/studio/index.html

Android SDK

Android Studio installs the latest Android SDK by default. Building a React Native app with native code, however, requires the **Android 6.0 (Marshmallow)** SDK in particular.

The SDK Manager can be accessed from the "Welcome to Android Studio" screen. Click on "Configure", then select "SDK Manager".

Select the "SDK Platforms" tab from within the SDK Manager, then check the box next to "Show Package Details" in the bottom right corner. Look for and expand the Android 6.0 (Marshmallow) entry, then make sure the following items are all checked:

- Google APIs
- Android SDK Platform 23
- Intel x86 Atom_64 System Image
- Google APIs Intel x86 Atom_64 System Image

Next, select the "SDK Tools" tab and check the box next to "Show Package Details" here as well. Look for and expand the "Android SDK Build-Tools" entry, then make sure that 23.0.1 is selected.

Finally, click "Apply" to download and install the Android SDK and related build tools.

Create an Application

react-native init Calculator

Configure the ANDROID_HOME environment variable

Go to your React native Project -> android

Create a file local.properties

Open the file paste your Android SDK path like below

sdk.dir=/home/ranosys/Android/Sdk

Run your App

Running your app in Android Device

- 1.Enable Debugging over USB
- 2.Plug in your device via USB

Now check that your device is properly connecting to ADB, the Android Debug Bridge, by running **adb devices**

cd Calculator

react-native run-android

If it show error "Could not connect", then again hit react-native run-android command.

Now App will run in your Android device and app-debug.apk file is generated.

Location: /home/ranosys/Calculator/android/app/build/outputs

*Open **App.js** in your text editor of choice and edit some lines.

Useful Link: https://facebook.github.io/react-native/docs/getting-started.html

Generating Signed APK in React Native Generating Signing Key

keytool -genkey -v -keystore my-release-key.keystore -alias my-key-alias -keyalg RSA -keysize 2048 -validity 10000

Enter keystore password: ******
Re-enter new password: ******
What is your first and last name?
[Unknown]: Jitendra Chandwani

What is the name of your organizational unit?

```
[Unknown]:
What is the name of your organization?
 [Unknown]:
What is the name of your City or Locality?
 [Unknown]:
What is the name of your State or Province?
 [Unknown]:
What is the two-letter country code for this unit?
 [Unknown]:
Is CN=Jitendra Chandwani, OU=Unknown, O=Unknown, L=Unknown, ST=Unknown, C=Unknown
correct?
 [no]: yes
It then generates the keystore as a file called my-release-key.keystore.
Enter key password for <my-key-alias>
       (RETURN if same as keystore password): ******
Re-enter new password: ******
[Storing my-release-key.keystore]
```

Setting up Gradle variable

Copy the <u>my-release-key.keystore</u> file under the <u>project/android/app/</u> Edit **android/gradle.properties** and add

```
MYAPP_RELEASE_STORE_FILE=my-release-key.keystore
MYAPP_RELEASE_KEY_ALIAS=my-key-alias
MYAPP_RELEASE_STORE_PASSWORD=****** //(keystore password)
MYAPP_RELEASE_KEY_PASSWORD=****** //(key alias password)
```

Edit the file project/android/app/build.gradle and add the signing config,

```
signingConfig signingConfigs.release
}
}
...
```

**Update only Red highlight

Generating Release APK

cd android && ./gradlew assembleRelease

The generated APK can be found under android/app/build/outputs/apk/app-release.apk

Testing the release build of your app

react-native run-android --variant=release

Link: https://facebook.github.io/react-native/docs/signed-apk-android.html