Ubuntu and macOS Setup for Android Development and React Native

# **Check Java Version**

java –version

# **Check javac Version**

javac --version

# **Install CPU Checker**

sudo apt install cpu-checker  
kvm-ok

# **Install Packages**

sudo apt install qemu-kvm libvirt-daemon-system libvirt-clients bridge-utils

# **Download and Install Android Studio**

1. Go to More Actions in Android Studio  
 2. Install Android 8.1 Oreo from Device Manager  
 3. Install Android Studio command line tools (latest) from SDK Tools

# **Setup Virtual Device**

1. Go to More Actions and select Virtual Device Manager  
 2. Select Nexus 6 device and click Next  
 3. Click on the download icon after Oreo 8.1 and Finish

# **Create a New Project**

1. Create a new Project and select a Basic Activity course  
 2. Name: TestApplication  
 3. Minimum SDK: API 27  
 4. Language: Java

# **Run Emulator**

1. Open Device Manager from the right side menu  
 2. Click on the play (|>) button on the Nexus device  
 3. If permission issues occur, run:  
 echo $USER  
 sudo appuser $USER kvm  
 If issues persist, run:  
 sudo chown $USER /dev/kvm

# **Configure Emulator and Platform Tools (Ubuntu)**

1. Open terminal and edit .bashrc:  
 vim .bashrc  
 2. Add the following lines to the end of the file:  
 export ANDROID\_HOME=$HOME/Android/Sdk  
 export PATH=$PATH:$ANDROID\_HOME/emulator  
 export PATH=$ANDROID\_HOME/platform-tools:$PATH  
 3. Save and exit (:wq)  
 4. Reload .bashrc:  
 source .bashrc  
 5. Check list of AVDs:  
 emulator -list-avd  
 6. Start emulator:  
 emulator @Nexus\_6\_API\_27

# **Configure Emulator and Platform Tools (macOS)**

1. Open terminal and edit .zshrc:  
 nano ~/.zshrc  
 2. Add the following lines to the end of the file:  
 export ANDROID\_HOME="/Users/himanshu/Library/Android/sdk"  
 export PATH="$ANDROID\_HOME/emulator:$PATH"  
 export PATH="$ANDROID\_HOME/platform-tools:$PATH"  
 3. Save and exit  
 4. Check list of AVDs:  
 emulator -list-avd  
 5. Start emulator:  
 emulator @Pixel\_3a\_API\_30

# **Install Node.js and React Native CLI**

1. Install Node.js:  
 sudo apt install nodejs  
 2. Check Node.js version:  
 node –version  
 3. Check npm version:  
 npm –version  
 4. Install npx globally:  
 npm i -g npx

# **Start React Native Project**

1. Open Emulator  
 2. Create directories for your project:  
 mkdir React-Native\_Apps  
 cd React-Native\_Apps  
 mkdir 1  
 cd 1  
 3. Initialize a new React Native project:  
 npx react-native init WelcomeExample  
 4. Use the following commands for development:  
 R - Reload  
 D - Open Developer tool  
 I - Open in iOS  
 A - Open in Android  
 5. Select 'A' to open in Android and start development

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RAW Notes

Platform Ubuntu:

Check Java Version

> java –version

Check javac version

> javac --version

Install CPU Checker

>: sudo apt install cpu-checker

> kvm-ok

Install these four packages

sudo apt install qemu-kvm libvirt-daemon-system libvirt-clients bridge-utils

Now Download Andriod Studio.

After Installation go to more actions

Install 8.1 Orio (from Device Manager) -> finish

Install Andriod Studio command line tools (latest) from SDK Tools -> Finish

Again click on more actions and select Virtual Device Manager

Select Nexus 6 device and click next

Click on the download icon after Orio 8.1 and Finish

Create a new Project and select a basic activity course

Give name TestApplication

Minimum SDK api 27

Language Java

There is option in right side menu Device Manager

Click on play |> button on the Nexus device

If you are getting permission issues then we have to give permission to the device

> echo $USER

> sudo appuser $USER kvm

Still have issue then we have to change ownership

>sudo chown $USER /dev/kvm

Now your Emulitor is Open.

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But we are not going to use Andriod studio.

We have to configure emulator and platform tool to system so we can open it directly from anywhere.

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Terminal

> vim .bashrc

File open go to insert mode and write in last

export ANDRIOD\_HOME=$HOME/Andriod/Sdk

export PATH=$PATH:$ANDRIOD\_HOME/emulator

export PATH=${ATH:$ANDRIOD\_HOME/platform-tools

:wq (save and exit)

>source .bashrc

Check list of avds of emulator

>emulator -list-avd

Nexus\_6\_API\_27

> emulator @Nexus\_6\_API\_27

* Emulator starts

For mac, if you are following the same process

You have to add these files in

>nano ~/.zshrc

Add

export ANDROID\_HOME="/Users/himanshu/Library/Android/sdk"

export PATH="$ANDROID\_HOME/emulator::$PATH"

export PATH="$ANDROID\_HOME/platform-tools:$PATH"

And save

Then

> emulator -list-avds

> emulator @Pixel\_3a\_API\_30

Emulator will Open.

Then

Install Node

>sudo apt install nodejs

> node –version

>npm –version

> npm i -g npx

Lets Start

> Open Emulator

>mkdir React-Native\_Apps

>cd React-Native-Apps

> mkdir 1

>cd 1

1> npx react-native init WelcomeExample

R - Reload

D open Developer tool

I open in ios

A open in android

Select a

And go to File and Enjoy