

# ITAC

(Interactive Test Automation Cartridge)

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## Emulator & Real Device Set up for MAC

### Setup Appium for iOS and Android in Mac Machine

#### Step 1: Install JAVA SDK

Download Link here : <http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>

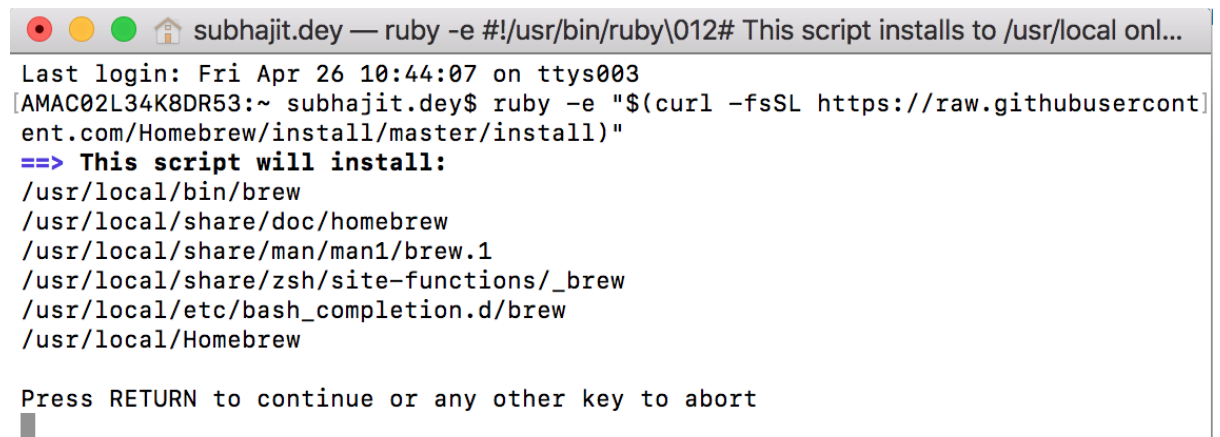
#### Step 2 : Install Android Studio

Download Link here: <https://developer.android.com/studio/index.html>

#### Step 3 : Install Home Brew

Open Terminal app in Mac machine and execute below commands

```
ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"
```



```
subhajit.dey — ruby -e #!/usr/bin/ruby\012# This script installs to /usr/local onl...
Last login: Fri Apr 26 10:44:07 on ttys003
[AMAC02L34K8DR53:~ subhajit.dey$ ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"
==> This script will install:
/usr/local/bin/brew
/usr/local/share/doc/homebrew
/usr/local/share/man/man1/brew.1
/usr/local/share/zsh/site-functions/_brew
/usr/local/etc/bash_completion.d/brew
/usr/local/Homebrew

Press RETURN to continue or any other key to abort
```

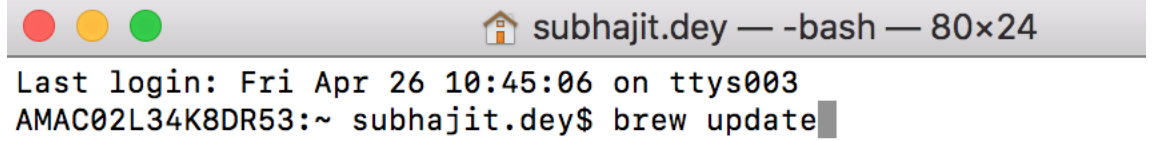
#### Step 4 : Install Node.js

Download installer: <https://nodejs.org/en/download/> and run

### Step 5 : Install NPM

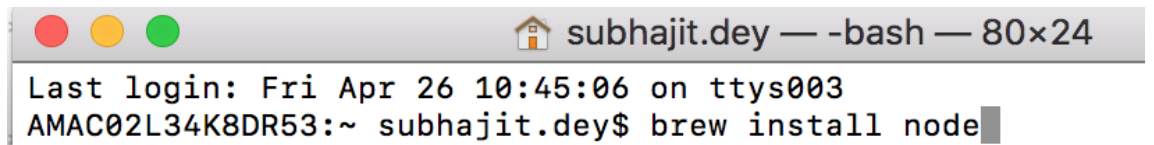
Open Terminal app in Mac machine and execute below 3 commands one after another

- a. brew update



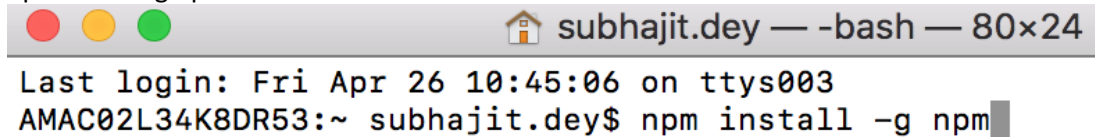
A screenshot of a macOS Terminal window. The title bar shows three colored window control buttons (red, yellow, green) and the text 'subhajit.dey — -bash — 80x24'. The terminal content shows 'Last login: Fri Apr 26 10:45:06 on ttys003' followed by the command 'AMAC02L34K8DR53:~ subhajit.dey\$ brew update' with a cursor at the end.

- b. brew install node



A screenshot of a macOS Terminal window. The title bar shows three colored window control buttons (red, yellow, green) and the text 'subhajit.dey — -bash — 80x24'. The terminal content shows 'Last login: Fri Apr 26 10:45:06 on ttys003' followed by the command 'AMAC02L34K8DR53:~ subhajit.dey\$ brew install node' with a cursor at the end.

- c. npm install -g npm

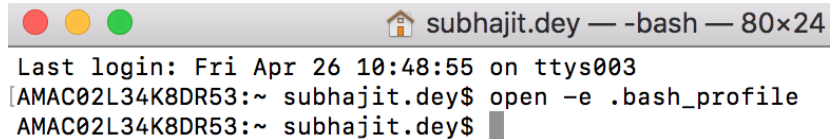


A screenshot of a macOS Terminal window. The title bar shows three colored window control buttons (red, yellow, green) and the text 'subhajit.dey — -bash — 80x24'. The terminal content shows 'Last login: Fri Apr 26 10:45:06 on ttys003' followed by the command 'AMAC02L34K8DR53:~ subhajit.dey\$ npm install -g npm' with a cursor at the end.

### Step 6 : Setup the Environment

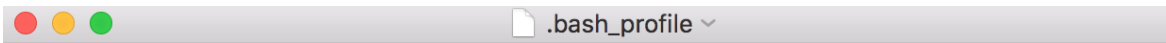
To open `bash_profile` in terminal, type the following command:

`open -e .bash_profile`



A screenshot of a macOS Terminal window. The title bar shows three colored window control buttons (red, yellow, green) and the text 'subhajit.dey — -bash — 80x24'. The terminal content shows 'Last login: Fri Apr 26 10:48:55 on ttys003' followed by the command 'AMAC02L34K8DR53:~ subhajit.dey\$ open -e .bash\_profile' and the prompt 'AMAC02L34K8DR53:~ subhajit.dey\$' with a cursor at the end.

Once the above command is executed the bash profile will open in Text file. Refer to the below screenshot. Edit that file for setting up the environment paths. Add the paths in the file and save it.



```
export JAVA_HOME=$(/usr/libexec/java_home)

export ANDROID_HOME=/Users/subhajt.dey/Library/Android/sdk
export PATH="{PATH}:/$ANDROID_HOME/platform-tools:/$ANDROID_HOME/tools:/$ANDROID_HOME/
tools/bin"
export PATH="/usr/local/Cellar/carthage/0.31.1/bin:$PATH"
export PATH=$HOME/local/bin:$PATH
```

**Note :** If bash profile not available, create a bash\_profile by following command

1. Start up Terminal
2. Type "cd ~/" to go to your home folder
3. Type "touch .bash\_profile" to create your new file.
4. Edit .bash\_profile with your favorite editor (or you can just type "open -e .bash\_profile" to open it in TextEdit.

Once it Opens in Text Edit then paste below lines

```
export ANDROID_HOME=/Users/user/Library/Android/sdk
export PATH=$ANDROID_HOME/platform-tools:$PATH
export PATH=$ANDROID_HOME/tools:$PATH
export JAVA_HOME=$(/Library/Java/JavaVirtualMachines/jdk1.8.0_141.jdk)
export PATH=${JAVA_HOME}/Contents/Home/bin:$PATH
export PATH=/usr/local/bin:/usr/local/sbin:~/bin:$PATH
export PATH=$PATH:/opt/bin:$PATH
```

Then Save (Ctrl+S) and exit

**NOTE:** As default Android studio and Java takes the above mentioned paths, if you have changed the path then do change it here with correct version

### Step 7 : Install Appium

In Terminal install Appium command line mentioned below one by one:

```
npm install -g appium@1.6.0-beta1
npm install wd
```

### Step 8 : Install Carthage

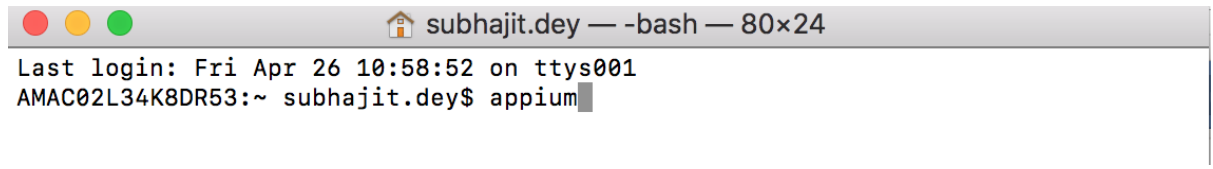
Now execute the following commands one after another to get into WebDriverAgent and Install carthage:

```
cd /usr/local/lib/node_modules/appium/node_modules/appium-xcuitest-driver/WebDriverAgent
brew install carthage
npm i -g webpack
```

### Step 9: Check whether Appium is installed from command line

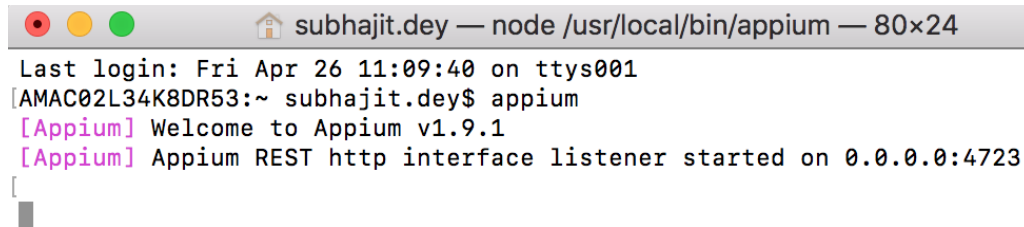
Open new terminal window and execute below command

appium



```
subhajit.dey — -bash — 80x24
Last login: Fri Apr 26 10:58:52 on ttys001
AMAC02L34K8DR53:~ subhajit.dey$ appium
```

Once executed it will start the Appium Server like below screenshot



```
subhajit.dey — node /usr/local/bin/appium — 80x24
Last login: Fri Apr 26 11:09:40 on ttys001
[AMAC02L34K8DR53:~ subhajit.dey$ appium
[Appium] Welcome to Appium v1.9.1
[Appium] Appium REST http interface listener started on 0.0.0.0:4723
[

```

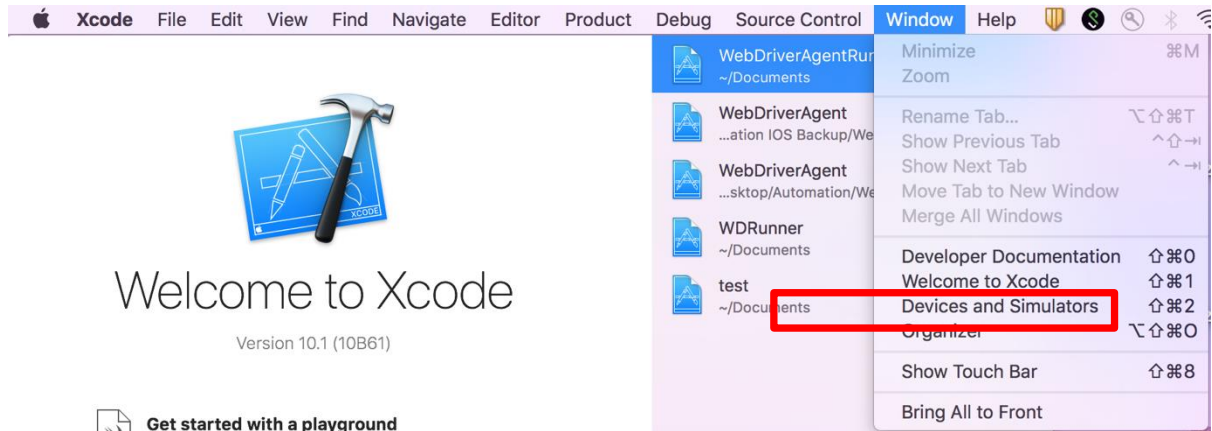
### Step 10 : Install Appium GUI desktop Server

Download link: <http://appium.io/>

### Step 11: Install XCode from App Store if it is not already previously installed.

Open XCode and click Window option from top

Then click on Devices and Simulators option in XCode

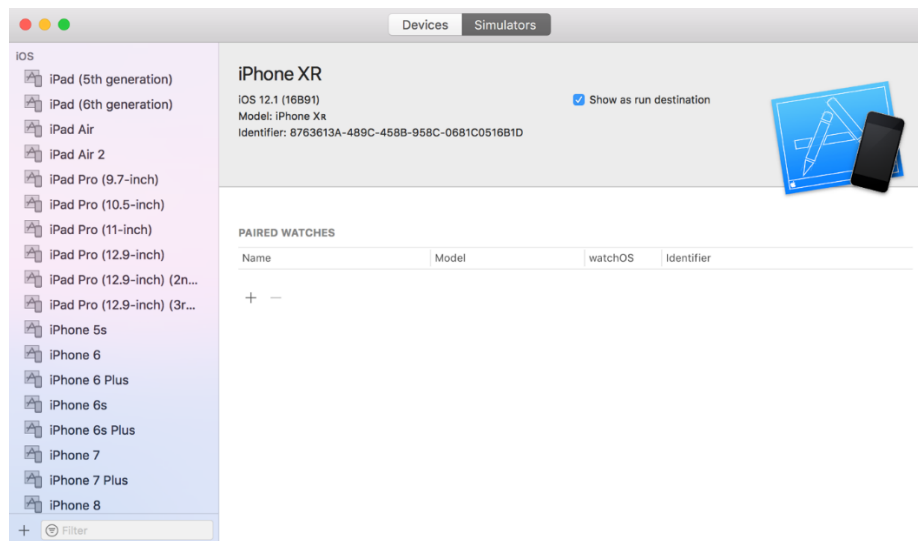


Check whether list of iOS Simulators is already there. Note down the “Model” and “Identifier” values for later use of the desired simulator.

Example :

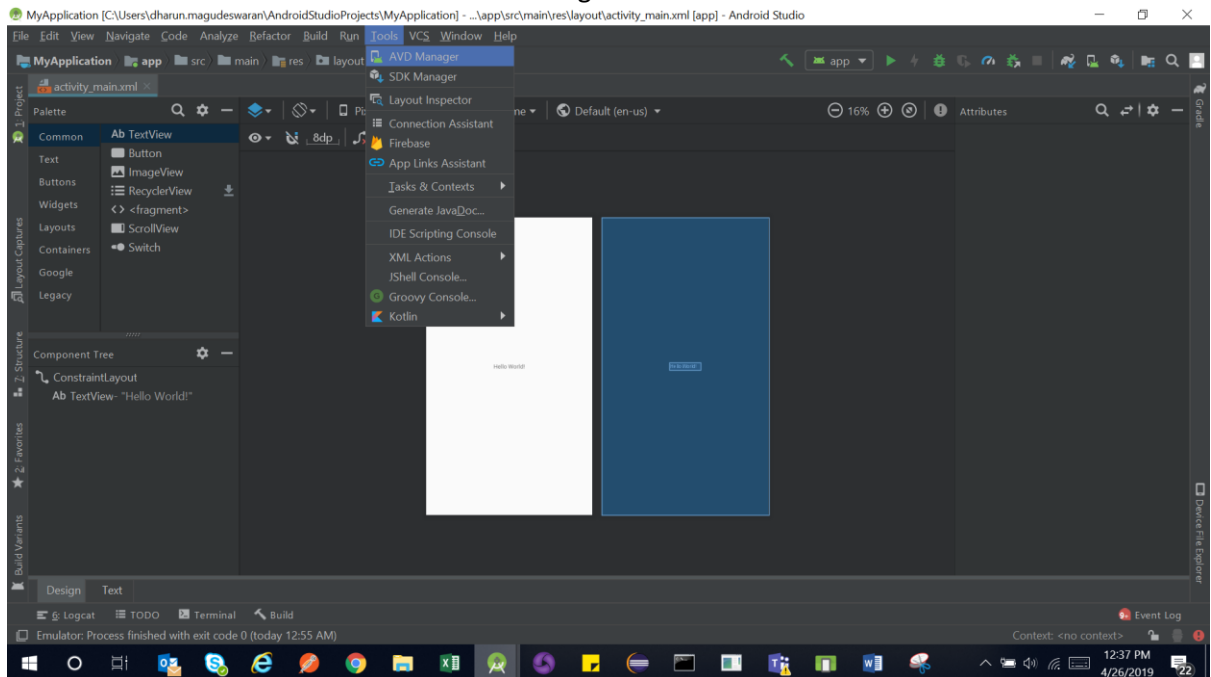
Model : iPhone XR

Identifier : 8763613A-489C-458B-958C-0681C0516B1D

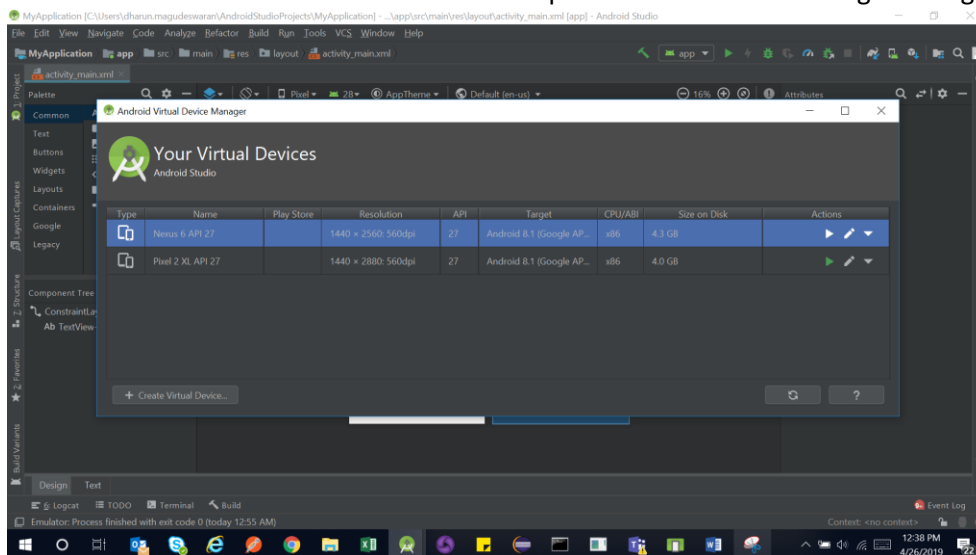


## Step 12: Setup Android Simulator from Android Studio

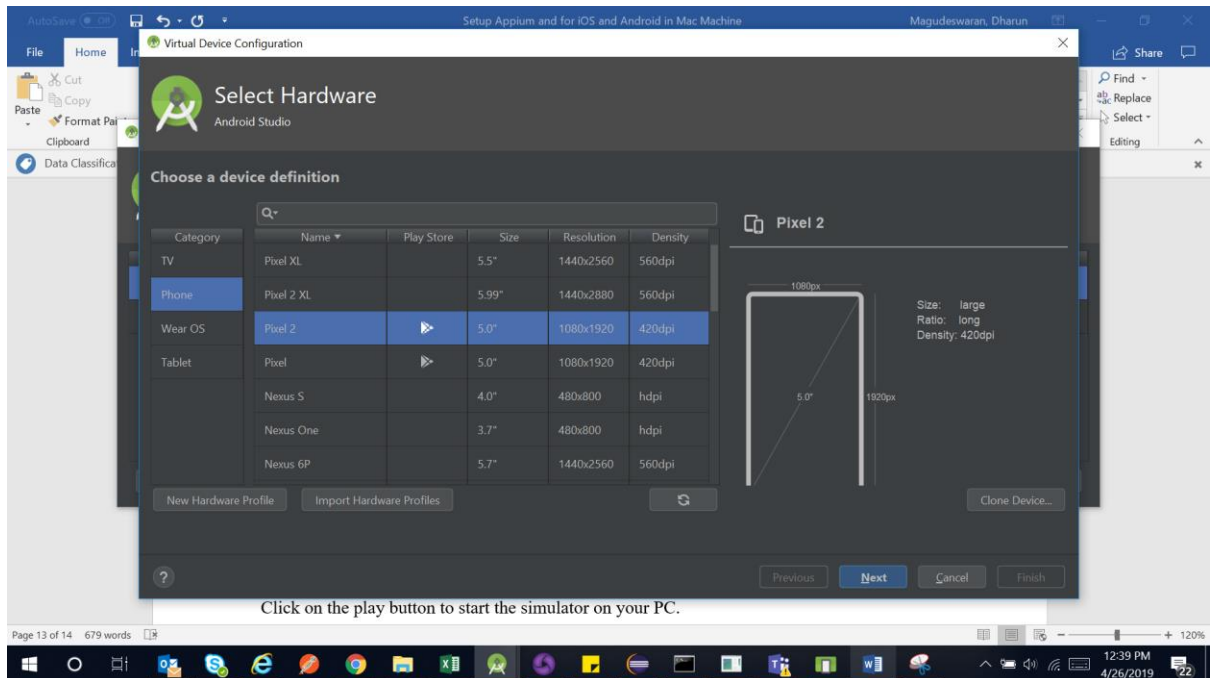
- Open Android Studio
- Go to Tools Menu and select AVD Manager



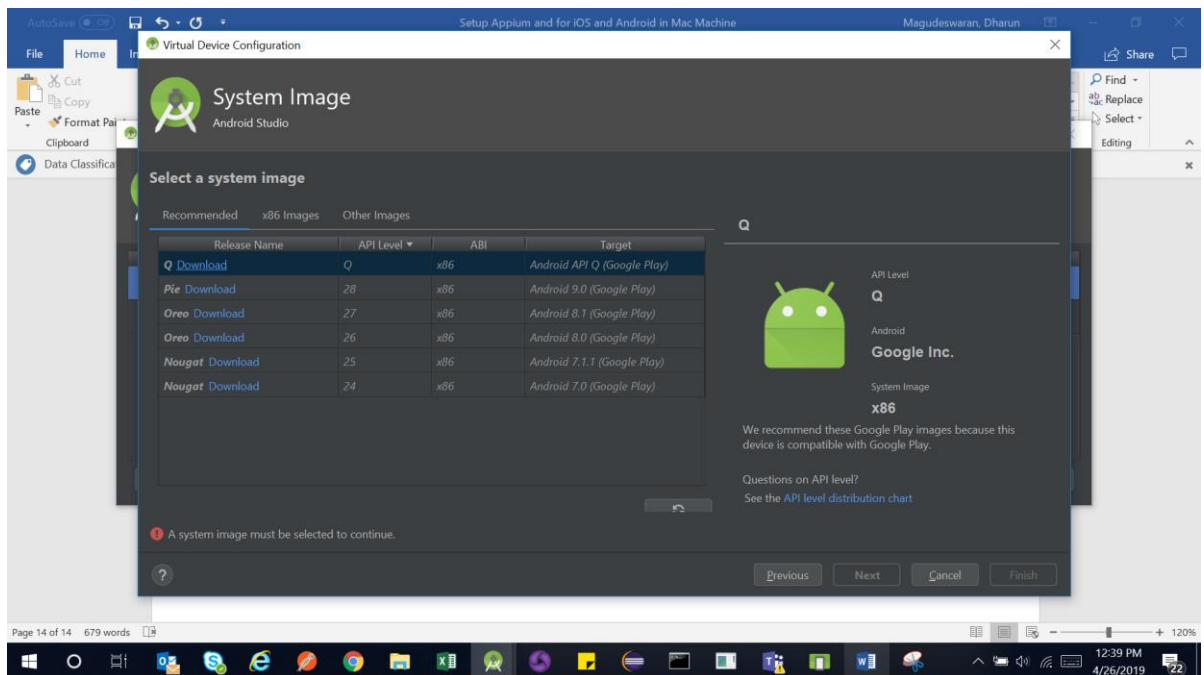
- Click on Create Virtual Device button present on the AVD Manager dialog box



- Choose the category and the device as required and select Next



- Choose the release version and select Next





- Click on Finish button
- Virtual device will be created on your system.
- Click on the play button to start the simulator on your PC.

### Step 13 : Run the Android project from Eclipse

- Simulator Settings in Eclipse
- Change the values only in yellow highlighted place if according to simulator name and os version.

```
caps.setCapability(MobileCapabilityType.DEVICE_NAME, "Nexus 6 API 27");  
caps.setCapability(MobileCapabilityType.PLATFORM_VERSION, "8.1.0");
```

```
// mandatory capabilities  
caps.setCapability(MobileCapabilityType.DEVICE_NAME, "Nexus 6 API 27");  
caps.setCapability(MobileCapabilityType.PLATFORM_NAME, "ANDROID");  
caps.setCapability(MobileCapabilityType.PLATFORM_VERSION, "8.1.0");  
caps.setCapability("noReset", true);  
caps.setCapability(MobileCapabilityType.AUTOMATION_NAME, "UiAutomator2");  
caps.setCapability("autoGrantPermissions", true);  
caps.setCapability("autoAcceptAlerts", true);  
caps.setCapability(MobileCapabilityType.APP, apkFile.getAbsolutePath());  
caps.setCapability("unicodeKeyboard", true);  
caps.setCapability("resetKeyboard", true);
```

- Start the Appium server