**Mobile Automation:**

1. **Installation with Node.js**

**STEP 1** Install Nodejs and run the exe file.

Check node –version and npm –version

**STEP 2** Install Appium by running the command

🡪 Npm install -g appium

Then Run the command 🡪appium

**(Optional)**

**Installation with Appium Desktop client**

Download Appium desktop client from <https://github.com/appium/appium-desktop/releases/tag/v1.22.0>  
Take the exe file and run to install.

1. Download the Android STUDIO and then all the SDKs. (Around 970MB file)
2. Install it completely and download all the SDKs of the respective android versions.
3. Then go to SDK Manager and download the latest SDK option given in the Android Studio (in the second tab written as command line tools latest. It is the 3rd option)
4. The ANDROID\_HOME path is same as of the SDK path shown in the android studio
5. Set the env variables as
   1. %ANDROID\_HOME%\cmdline-tools\latest\bin
   2. %ANDROID\_HOME%\platform-tools
   3. %ANDROID\_HOME%\tools
   4. %ANDROID\_HOME%\tools\bin
   5. C:\Users\a.khawaja\AppData\Local\Android\Sdk\tools\lib\x86\_64\swt.jar (Optional)
6. Open cmd and run sdkmanager –list (to download some repos)
7. Run the command uiautomatorviewer OR first go to the location in the bin folder of the tools and then run the command uiautomatorviewer

Make sure to use 1.8 and it does not work with any other JAVA version

Make sure to use COMPATIBLE Selenium and Appium versions like 3.141.59 and 7.6.0

1. If you want to use virtual devices, then got to Android Studio and select AVD
2. Then select the device and the android version you want to test with and download all the SDKs accordingly. Once done, go to next, select the setup you want.
3. Then launch the AVD
4. Now, you can either use Appium desktop or simply run from the cmd as we did above.

**[Optional: Download SDKs from Android studio**

STEP 1: Download from the android studio the SDKs (command line tools).

**The path should be like as below. Check that the “LATEST” part of the path is MISSING when you download. So, create the path accordingly.**

C:\Users\a.khawaja\Downloads\commandlinetools-win-7583922\_latest\cmdline-tools\**latest**

Go to **bin** folder and run the **following command** bat file

sdkmanager "platform-tools" "platforms;android-30"

STEP 2:

Set ANDROID\_HOME env variable with SDK path

Then add PATH with ANDROID\_HOME and \platformtools folder]

1. Set mobile device to make it available by:

Enabling the developerOption and **make sure to use a cable that is not power only**

Run the command on the cmd **adb devices**. The device will be shown

1. If you want to connect the device via WiFi then the following method is followed:

Connect the device with WIFI without Cable

1. Both the Appium server and the device should be connected with the same network
2. Connect phone with the machine
3. Run adb devices
4. Run adb kill-server
5. Run adb tcpip 5555
6. Disconnect device and get the ip from the phone
7. Run adb connect <ip> or adb connect <IP>:<Port>|

**Project**

Maven project

Have the following dependencies in the pom

1. Selenium Java
2. Appium JAVA client
3. Appium and the device should be ready
4. From here you can create the class to invoke the DesiredCapabilities.

Mobile App Testing  
  
MAT -- Mobile Application Testing

1. Installation
2. Launching
3. Interruptions

**Test Scenarios :**

**1. Installation** 1.1. ***Display in the search*** check the logo, category, title, image as per mentioned document. If Application not installed show “**FREE**”, if installed show “**OPEN**”, if not update show “**UPDATE**”

1.2. ***Pop up display***. Show complete app details, Description, Version, Company info, App info, App support, Terms and Condition, Privacy policy.

1.3. ***Fresh installation***. Click on install and status of the button changes to “installing”. Check the page displayed when you **Launch** the app 1st time.  
 1.4. ***Time to install*** (depend on networks).

2. Uninstallation

3. Launch of the Application