

Installation

- a) NodeJS - <https://nodejs.org/en/download>
- b) Appium - <https://appium.io/docs/en/latest/quickstart/install/>
- c) Android Studio - <https://developer.android.com/studio>
- d) SDK Manager (Comes with Android Studio), Reference Link - <https://appium.io/docs/en/latest/quickstart/uiauto2-driver/>

Set Following Path Variables (Environment Variable)

- 1) ANDROID_HOME
- 2) ANDROID_SDK_ROOT
- 3) JAVA_HOME
- 4) PATH (platform-tools, adb)

Install UiAutomator2

- 1) `appium driver install uiautomator2`

Appium Inspector Download

- 1) <https://github.com/appium/appium-inspector/releases>

Run Appium with following command

appium

Appium Official Documentation

<https://appium.io/docs/en/latest/>

Add Java Client Dependency

<https://github.com/appium/java-client>

Command to check connected devices

adb devices

Appium Inspector Download Link

<https://github.com/appium/appium-inspector/releases>

Java Client Documentation

<https://github.com/appium/java-client?tab=readme-ov-file>

Appium Capabilities

<https://appium.io/docs/en/2.0/guides/caps/>

Set Environment Variable for Mac

- 1) Identify your shell by running `echo $SHELL` in the Terminal.
 - a) If output is `bin/zsh` then you are into `zsh` profile
 - b) If output is `bin/bash_profile` then you are using `bash_profile`
- 2) Edit the appropriate profile file using a text editor like `vim`:
 - For `bash`: `vim ~/.bash_profile` (or `~/.bashrc` if the former doesn't exist)
 - For `zsh`: `vim ~/.zshrc` (or `~/.zprofile` if the former doesn't exist)
 - Add a line similar to `export VARIABLE_NAME=variable_value` at the end of the file, replacing the placeholders with your desired variable and value.
 - Save and close the file - `esc & :wq`
 - Load the updated changes
 - `source ~/.bash_profile`
 - `source ~/.zshrc`
 - Open a new terminal window for the changes to take effect. You can verify the updated environment variable using `echo $VARIABLE_NAME`.

Capabilities Required to Start Appium Session

```
DesiredCapabilities capabilities = new DesiredCapabilities();
capabilities.setCapability("platformName", "Android");
capabilities.setCapability("deviceName", "RZ8N9250P5Z");
capabilities.setCapability("app", "Path To APK File");
capabilities.setCapability("automationName", "uiautomator2");
```

Transitive Dependency

<https://github.com/appium/java-client/blob/master/docs/transitive-dependencies-management.md>

How to Kill Process that is using port number 4723

- **Windows**
 - **Find Process ID**
 - `netstat -ano | findstr :4723`

```
C:\Users\khima>netstat -ano | findstr :4723
TCP    0.0.0.0:4723        0.0.0.0:0           LISTENING        6780
TCP    127.0.0.1:62753     127.0.0.1:4723      TIME_WAIT        0
```

- **Kill Process**
 - `taskkill /PID 6780 /F`

```
C:\Users\khima>taskkill /PID 6780 /F  
SUCCESS: The process with PID 6780 has been terminated.
```

- **Mac**

- 1. Identify the Process ID (PID):**

```
lsof -i :4723
```

- 2. Terminate the Process:**

```
sudo kill <PID>
```

MAC Installation

- 1) Install Brew**

Install it from the website - <https://brew.sh>

- 2) Install Node**

Execute Command - brew install node

- 3) Validate Node & NPM**

Execute Command - node -v and npm -v

- 4) Install Appium**

Execute Command - npm install -g appium

- 5) Install Xcode**

Install from App Store "XCode"

If it's not working then please install it from apple official website

<https://developer.apple.com/documentation/xcode-release-notes/>

- 6) Install Simulator**

- a) Right click on XCode Doc Icon or XCode menu

- b) Select **Settings**
- c) Go To **Platform** Tab
- d) Select Get option that is available for iOS 17

7) **Start Simulator**

- a) Open your Xcode project.
- b) Go to Xcode > Open Developer Tool > Simulator.