

# Selenium WebDriver Mobile

Appium

# Mobile & WebDriver

- AndroidDriver
- Selendroid
- Appium

# Appium

- <http://appium.io>
- Runs a WebDriver Grid Hub
- Written in node.js
- When connected it installs '.apk' to device

# Installation

- Install Android SDK
- <https://developer.android.com/studio/install.html>
- <https://developer.android.com/studio/index.html>
- Either full studio or SDK tools package installer
- On windows I install to [d:\android](#) to avoid permission issues
- 'android sdk manager' runs at end of install
  - Install all recommended installs and updates

# Environment

- environment variable `ANDROID_HOME`
  - e.g. `D:\Android\android-sdk`
- Add the tools to your path
  - `%ANDROID_HOME%\tools`
  - `%ANDROID_HOME%\platform-tools`

# Basic Android SDK Install

Command Prompt - android sdk

```
Microsoft Windows [Version 10.0.10586]
(c) 2015 Microsoft Corporation. All rights reserved.





















C:\Users\Alan>android sdk
```

Android SDK Manager

Packages Tools

SDK Path: D:\Android\android-sdk

Packages

 Name	API	Rev.	Status
<input type="checkbox"/>  Tools			
<input type="checkbox"/>  Android SDK Tools		25.1.7	 Installed
<input type="checkbox"/>  Android SDK Platform-tools		24	 Installed
<input type="checkbox"/>  Android SDK Build-tools		24	 Installed
<input type="checkbox"/>  Android N (API 24)			
<input type="checkbox"/>  SDK Platform	24	1	 Installed
<input type="checkbox"/>  Android TV Intel x86 Atom System Image	24	4	 Installed
<input type="checkbox"/>  Intel x86 Atom_64 System Image	24	4	 Installed
<input type="checkbox"/>  Intel x86 Atom System Image	24	4	 Installed
<input type="checkbox"/>  Extras			
<input type="checkbox"/>  Google USB Driver		11	 Installed

Show: ☐ Updates/New ☒ Installed Select [New](#) or [Updates](#)

☐ Obsolete [Deselect All](#)

[Install packages...](#)

[Delete packages...](#)

Done loading packages.

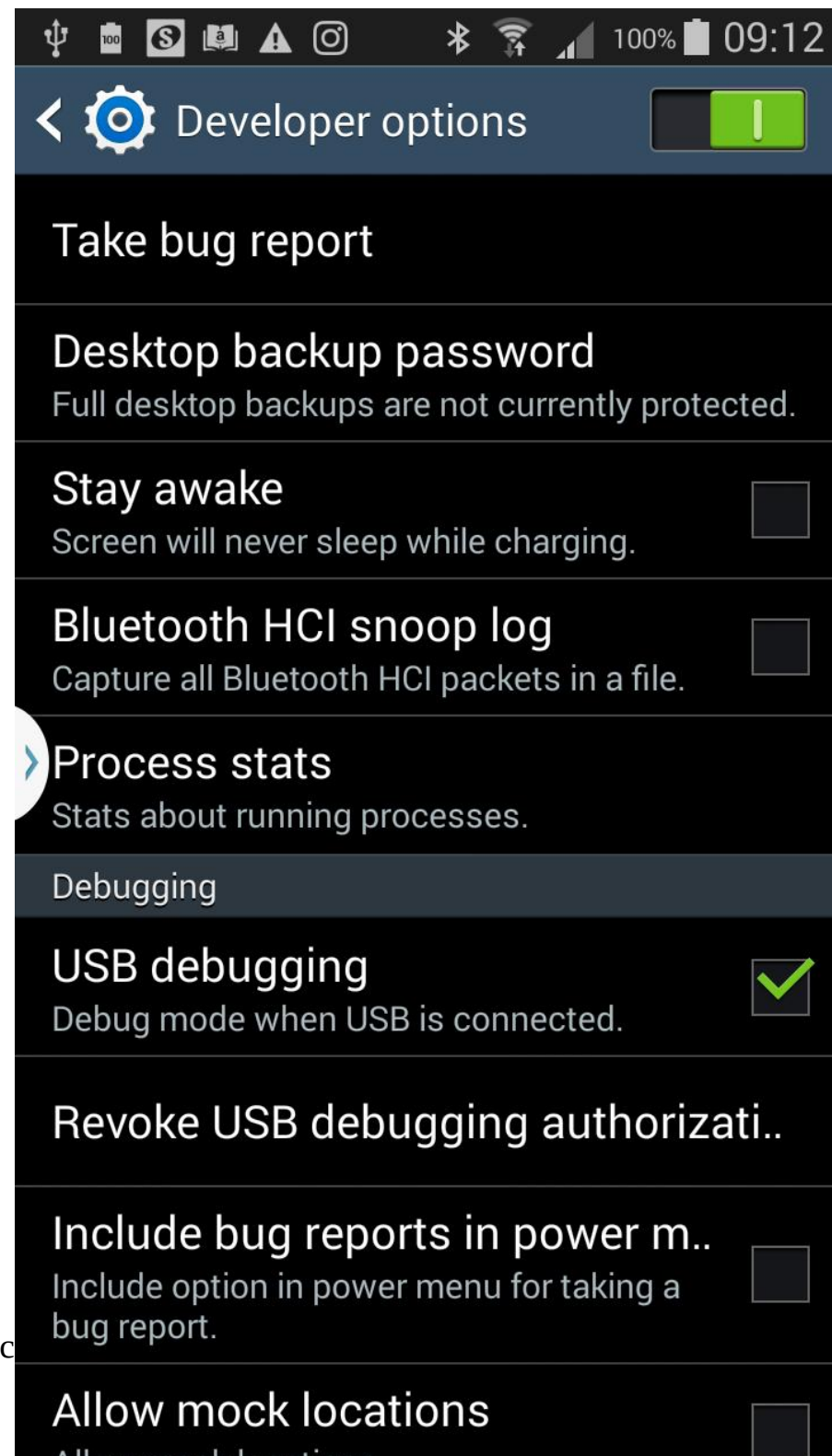
# Check SDK is working

- ``android sdk`` - runs the sdk manager
- ``adb version`` - check adb is running
- ``adb`` documentation
  - [developer.android.com/studio/command-line/adb.html](http://developer.android.com/studio/command-line/adb.html)
- Cmd tools documentation
  - [developer.android.com/studio/command-line/index.html](http://developer.android.com/studio/command-line/index.html)

# Phone must be set for usb debugging

- [developers.google.com/web/tools/chrome-devtools/debug/remote-debugging/remote-debugging](https://developers.google.com/web/tools/chrome-devtools/debug/remote-debugging/remote-debugging)
- <http://bit.ly/29yGMN0>

<http://compendiumdev.c>



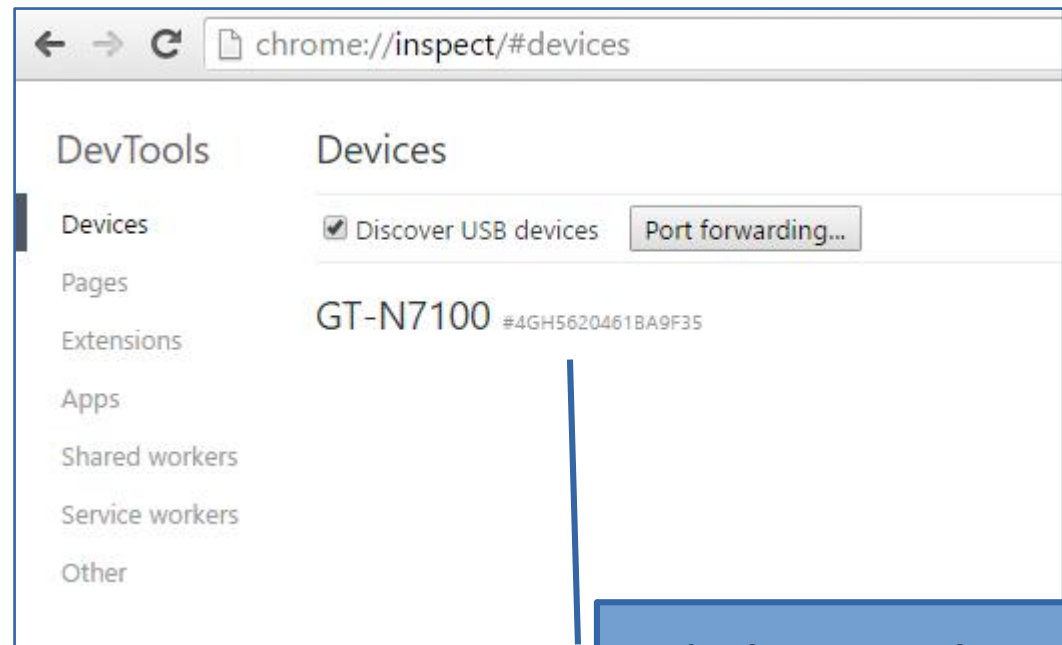


# Check everything works

- Connect phone/device to computer with usb
- Use Chrome remote debugging to see if it works
- `chrome://inspect`

## Troubleshooting

- <http://bit.ly/29mShpR>

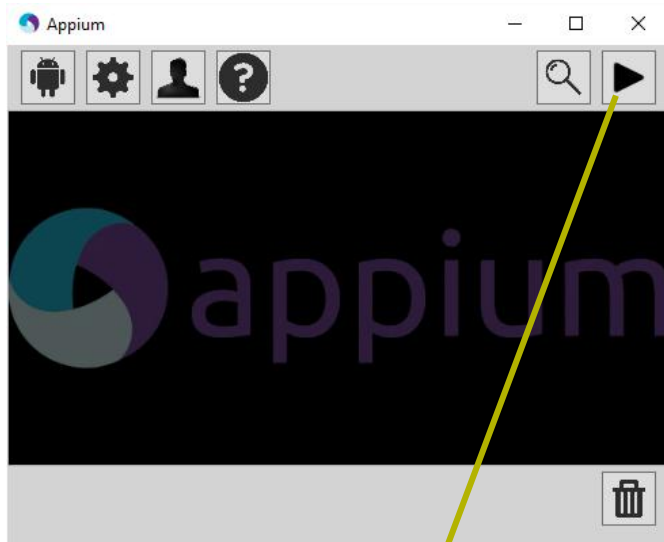


deviceName for  
RemoteWebDriver  
Connection

# Then install Appium

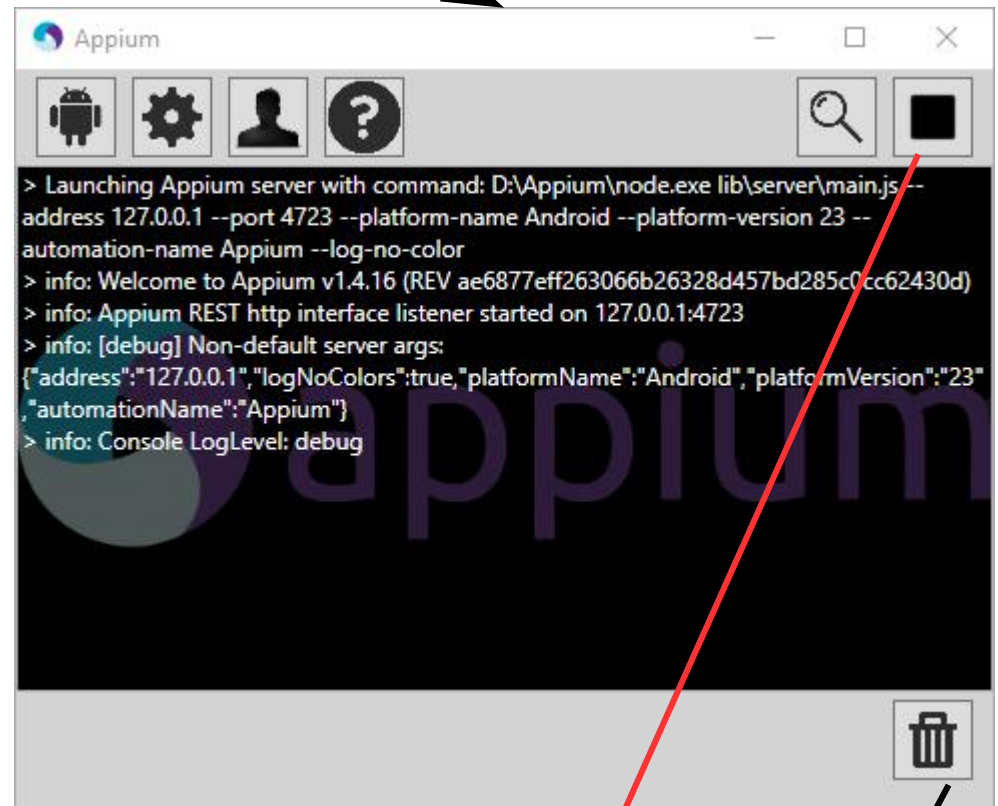
- <http://appium.io/downloads.html>
- Download the most recent Appium Desktop App

# Appium Gui



Start  
Server

"http://127.0.0.1:4723/wd/hub"



Stop  
Server

Clear Log

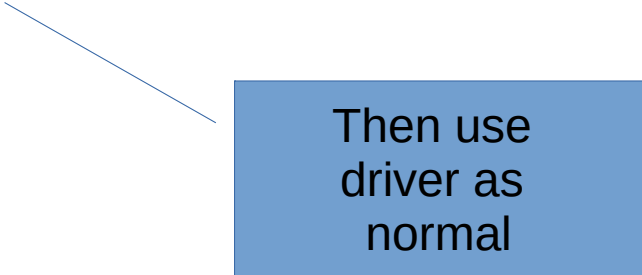
<http://compendiumdev.co.uk>

# Connect with WebDriver

```
DesiredCapabilities capabilities = new DesiredCapabilities();

// the device name can be seen when you do "adb devices"
capabilities.setCapability("deviceName", "4gh5620461ba9f35");
capabilities.setCapability("platformName", Platform.ANDROID);
capabilities.setCapability("app", "Chrome");

try {
    // add url to environment variables to avoid releasing with source
    String appiumURL = "http://127.0.0.1:4723/wd/hub";
    driver = new RemoteWebDriver(
        new URL(appiumURL),
        capabilities);
} catch (MalformedURLException e) {
    e.printStackTrace();
}
```



Then use  
driver as  
normal

# Exercises

- Download and install Android SDK
- Download and install Appium
- Create an AVD with appropriate API level for Appium
- Use your AVD to run the `AndroidTest.java` in
  - `package com.seleniumsimplified.webdriver.mobile`
- Optional – physical device, amend Driver and run Android Suite