Configuring Android Studio

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Configuration: the Game Gets Tough

Install JAVA SDK
Install sdkman! or brew
Install Gradle
Install Android Studio
Install Emulator
Set Environment Variables
Set Bash Variables
Enable Developer Mode on Your Android Phone

https://cordova.apache.org/docs/en/latest/guide/platforms/android/index.html

Install JAVA SDK

What does SDK means? **S**oftware **D**evelopment **K**it
It is a package that contains all the software tools to create new application in a given programming language.
JAVA SDK is required for the development of Android Apps

Go to:
https://www.oracle.com/java/technologies/javase-downloads.html

find latest version of JAVA, and click on **J**DK download (yes, J is for JAVA).

If may ask you to register to Oracle (it's free)

Set JAVA Variables

Mac/Linux (and Windows Git Bash)

Open a terminal and edit/create the file named `.bashrc` inside of your home directory (terminal commands below)

```
cd
vim .bashrc
```

Path for Mac could be:
`/Library/Java/JavaVirtualMachines/jdk1.8.0_221.jdk/`

Numbers must match the version on your machine

Add the following lines:

```
export PATH=$PATH:"c/Program\ Files/Java/jdk1.8.0_221/bin/"
# Some guides on the Internet suggest to add this folder too,
# but it may cause Cordova builds to fail. If so just comment it out:
# export JAVA_HOME="c:/Program\ Files/Java/jdk1.8.0_221/"
```

Windows

Open Add JAVA to the PATH environment variables and create the JAVA_HOME directory as above. Follow this tutorial:

https://javatutorial.net/set-java-home-windows-10

Testing JAVA

Close and reopen the terminal/Git Bash

Type

java -version

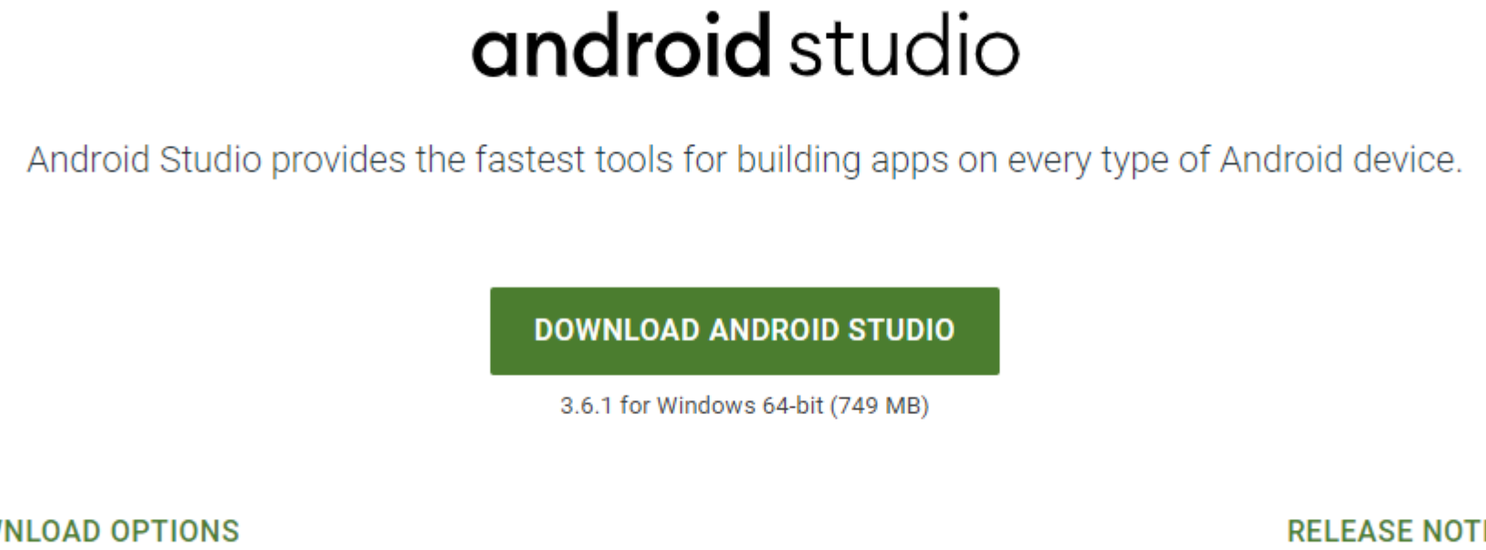
java version "1.8.0_221"
Java(TM) SE Runtime Environment (build 1.8.0_221-b11)
Java HotSpot(TM) 64-Bit Server VM (build 25.221-b11, mixed mode)

javac -version

javac 1.8.0_221

Android Studio

You need to download several GBs of data.
Make sure you have a fast and reliable Internet connection, otherwise the installer may fail unreliably and some packages may be installed and others not.

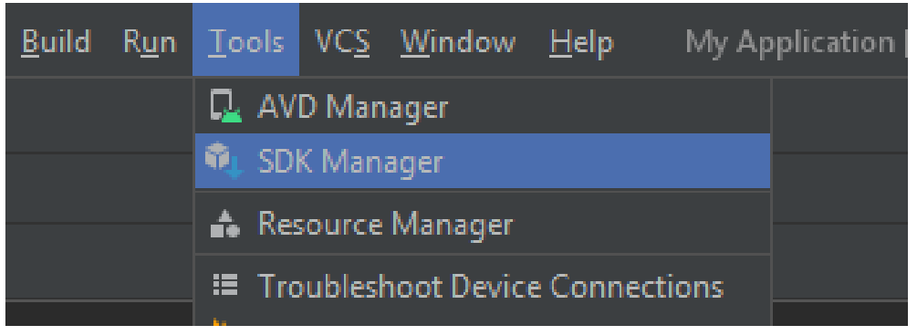


https://developer.android.com/studio/

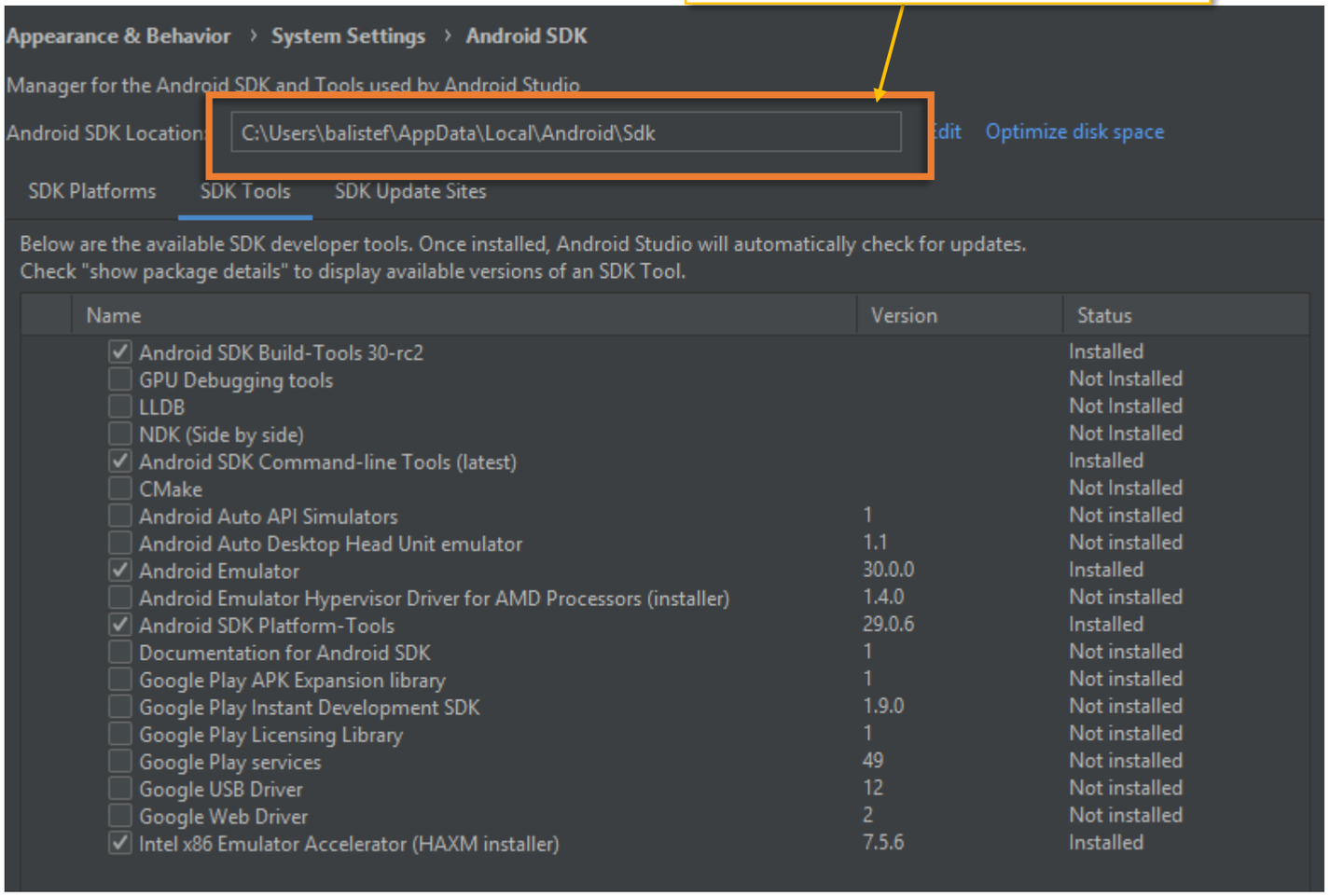
Cross-Platform guide: https://www.androidcentral.com/installing-android-sdk-windows-mac-and-linux-tutorial

SDK Manager (from Android Studio)

Install additional packages through the interface



Take note of this location



Make sure you those packages installed
Check the SDK location (highlighted)

Set Android SDK Variables

Mac/Linux (and Windows Git Bash)

```
export PATH=$PATH:"~/AppData/Local/Android/Sdk/cmdline-tools/latest/bin/"
export PATH=$PATH:"~/AppData/Local/Android/Sdk/build-tools/30.0.3/"
## Emulator must be before tools:
export PATH=$PATH:"~/AppData/Local/Android/Sdk/emulator/"
export PATH=$PATH:"~/AppData/Local/Android/Sdk/platform-tools/"

export ANDROID_HOME=~/AppData/Local/Android/Sdk/
export ANDROID_SDK_ROOT=~/AppData/Local/Android/Sdk/
```

Numbers must match the version on your machine

Windows

Replicate above setup setting environment variables. Follow this tutorial:

https://javatutorial.net/set-java-home-windows-10

Gradle

https://gradle.org/

It is recommended to install Gradle using SDKMAN or HomeBrew: https://gradle.org/install/

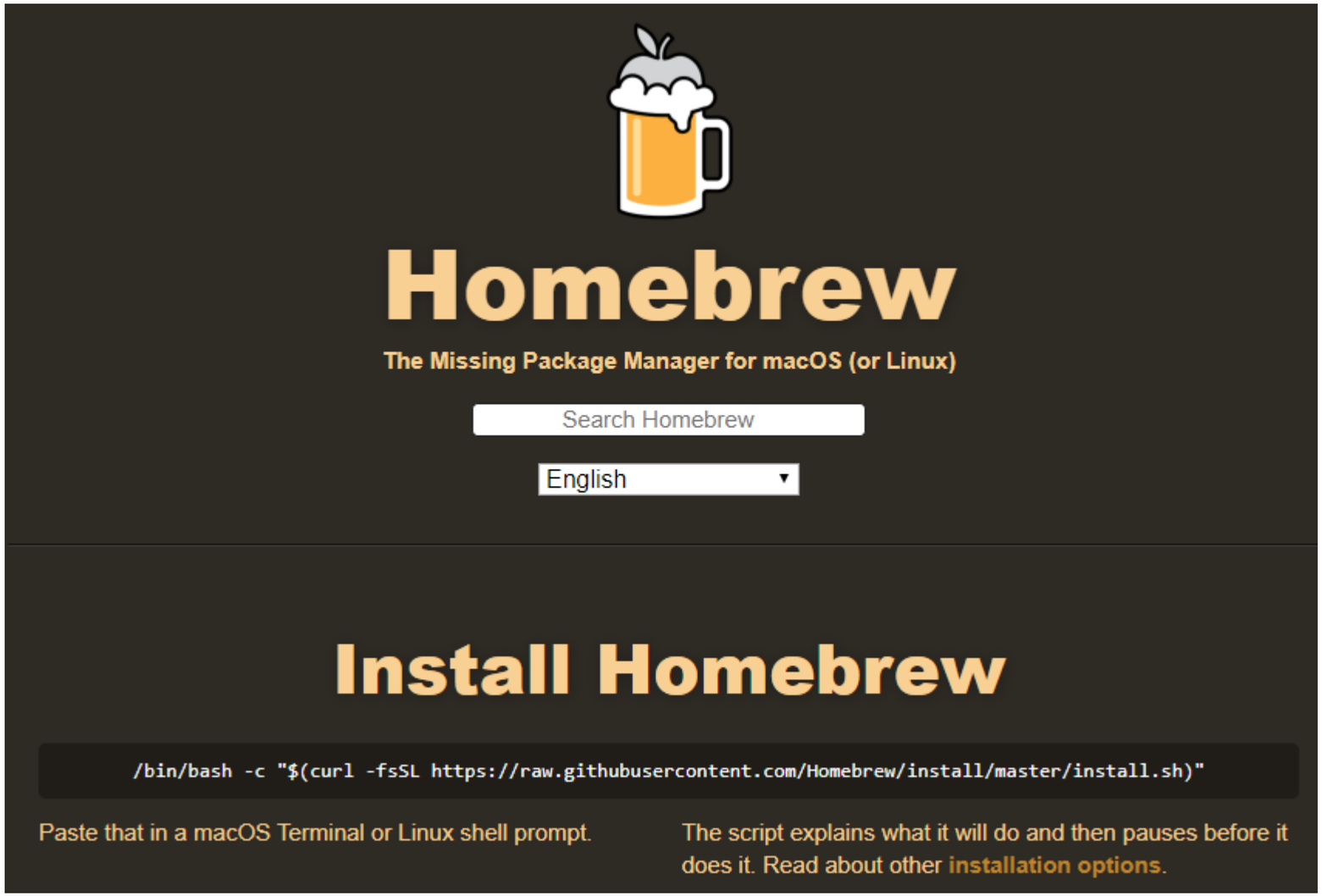
SDKMAN! (Win)

The Software Development Kit Manager

SDKMAN! is a tool for managing parallel versions of multiple **Software Development Kits** on most Unix based systems. It provides a convenient Command Line Interface (CLI) and API for installing, switching, removing and listing Candidates. Formerly known as **GVM** the **Groovy enVironment Manager**, it was inspired by the very useful RVM and rbenv tools, used at large by the Ruby community.

https://sdkman.io/

Homebrew (Mac)



https://brew.sh/

Set Gradle Variables

Mac/Linux (and Windows Git Bash)

SDKMan/Homebrew usually automatically edits .bashrc to look like this:

```
#THIS MUST BE AT THE END OF THE FILE FOR SDKMAN TO WORK!!!
export SDKMAN_DIR="/c/Users/username/.sdkman"
[[ -s "/c/Users/username/.sdkman/bin/sdkman-init.sh" ]] && source
"/c/Users/username/.sdkman/bin/sdkman-init.sh"
```

Windows

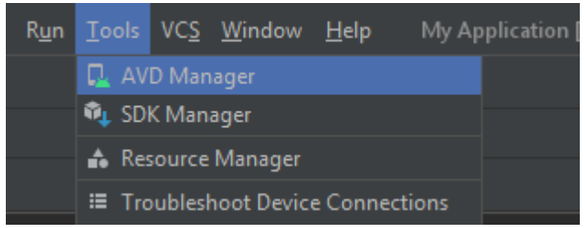
Add Gradle to the PATH environment variable. Follow this tutorial:

https://javatutorial.net/set-java-home-windows-10

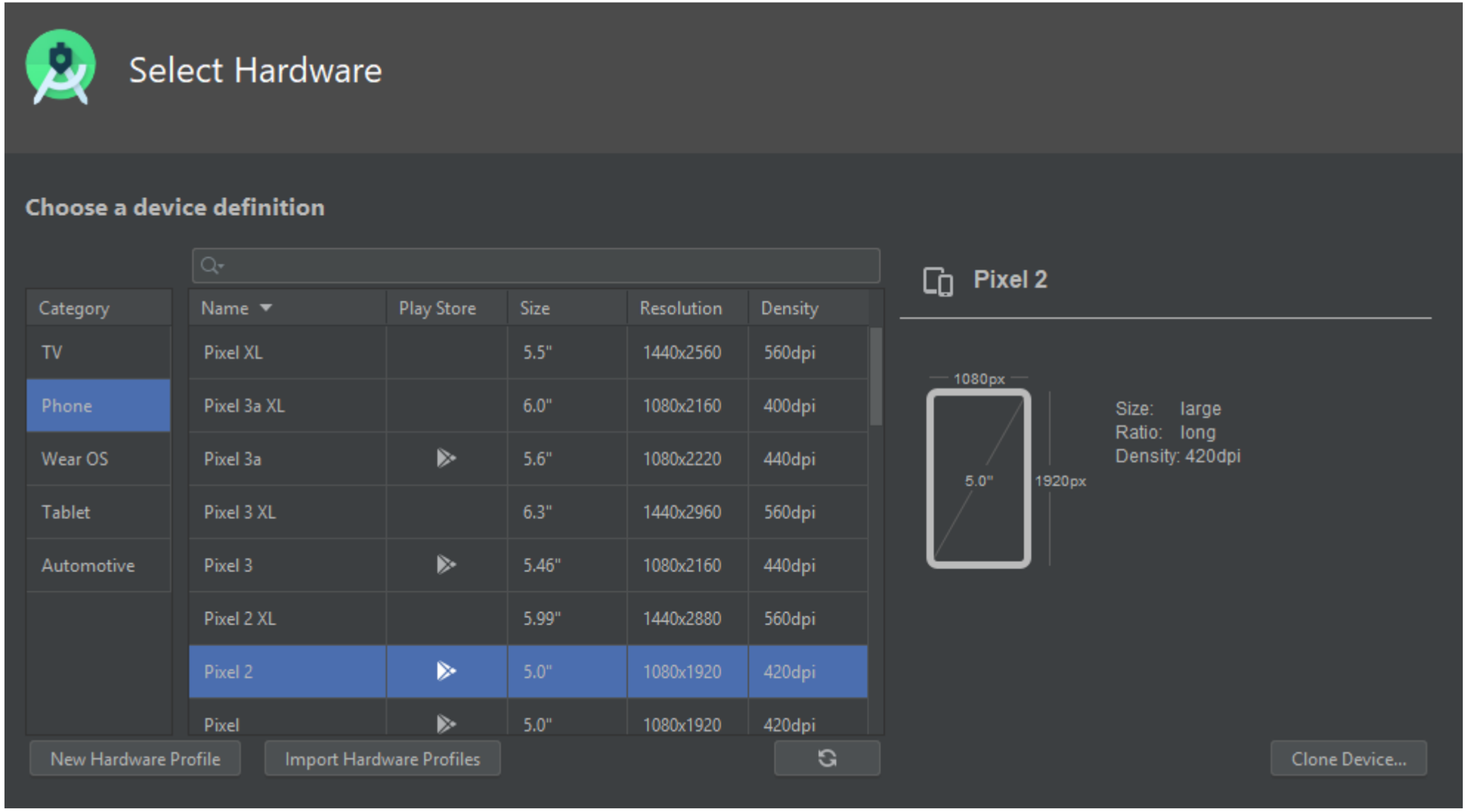
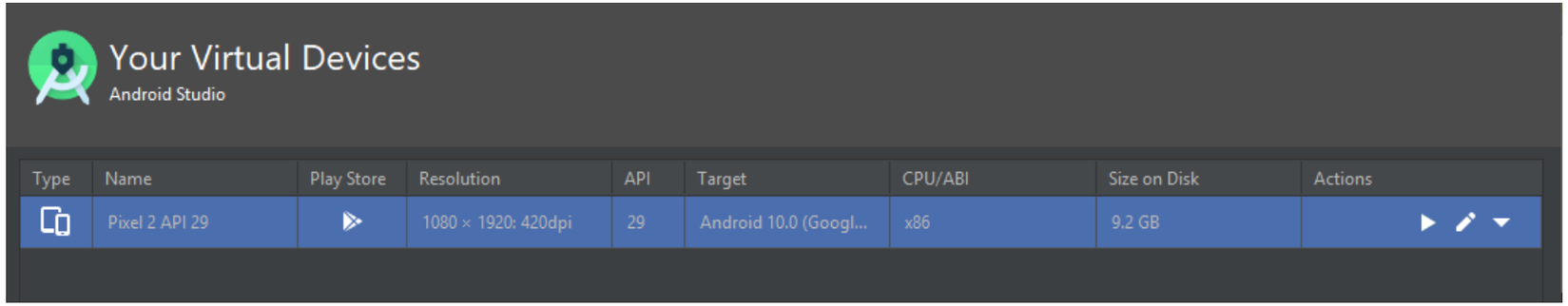
Withs SDKMAN, Gradle is generally installed under:

```
~/.sdkman/candidates/gradle/current/bin
```

Add an Emulated Device on Android Studio



Install…



Add an Emulated Device on Android Studio