Hands-on setup guide (Windows)

1. Pre-requisites

- **Git** If required check this link to install it : Download Git

To check open a Git Bash Terminal and type : `git --version`

Note: All provided command will have to be issued in the Git Bash Terminal.

Note: We will call `<Archive directory>` the directory where are the provided archives into the `Hands-on`. This directory is coming from the USB pen and should be copied for instance on the Desktop or the Home directory. So when you will read : `cd <Archive directory>` you will understand `cd ~/Desktop` or `cd ~/Bureau` or `cd ~` depending where you've copied the `Hands-on` directory from the USB pen.

2. Create `c:\Hands-on` directory

`mkdir /c/Hands-on`

To check open a Git Bash Terminal and type : `ls /c/Hands-on`

2.1 Install Android SDKs

Unzip provided archive into your directory `c:\Hands-on` :

Open a Git Bash Terminal and type :

```
cd <Archive directory>
unzip ./Hands-on/Windows/Android.zip -d /c/Hands-on/
```

To check open a Git Bash Terminal and type : `ls /c/Hands-on/Android` and you should see `Sdk` and `Plugins` directories.

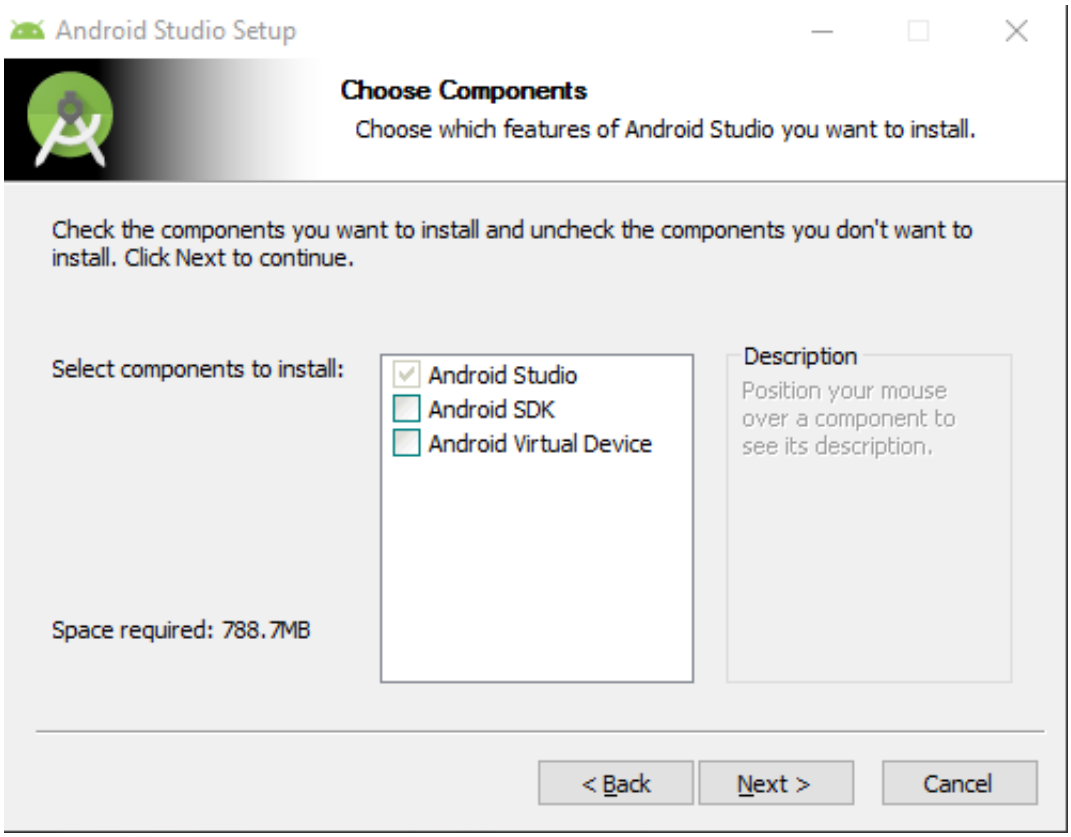
2.2 Install Android Studio

Install provided archive into your directory `c:\Hands-on` :

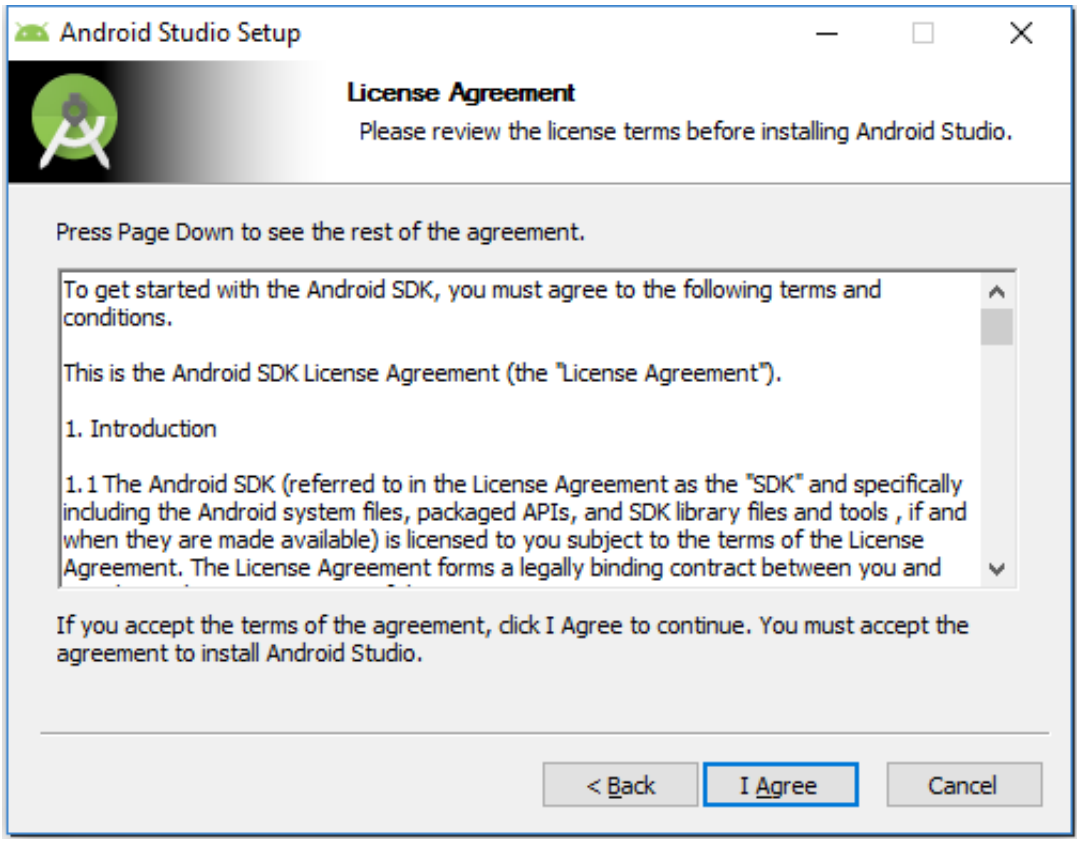
Double click on
`<Archive directory>\Hands-on\Windows\android-studio-bundle-145.3537739-windows.exe`

You will see the following window :

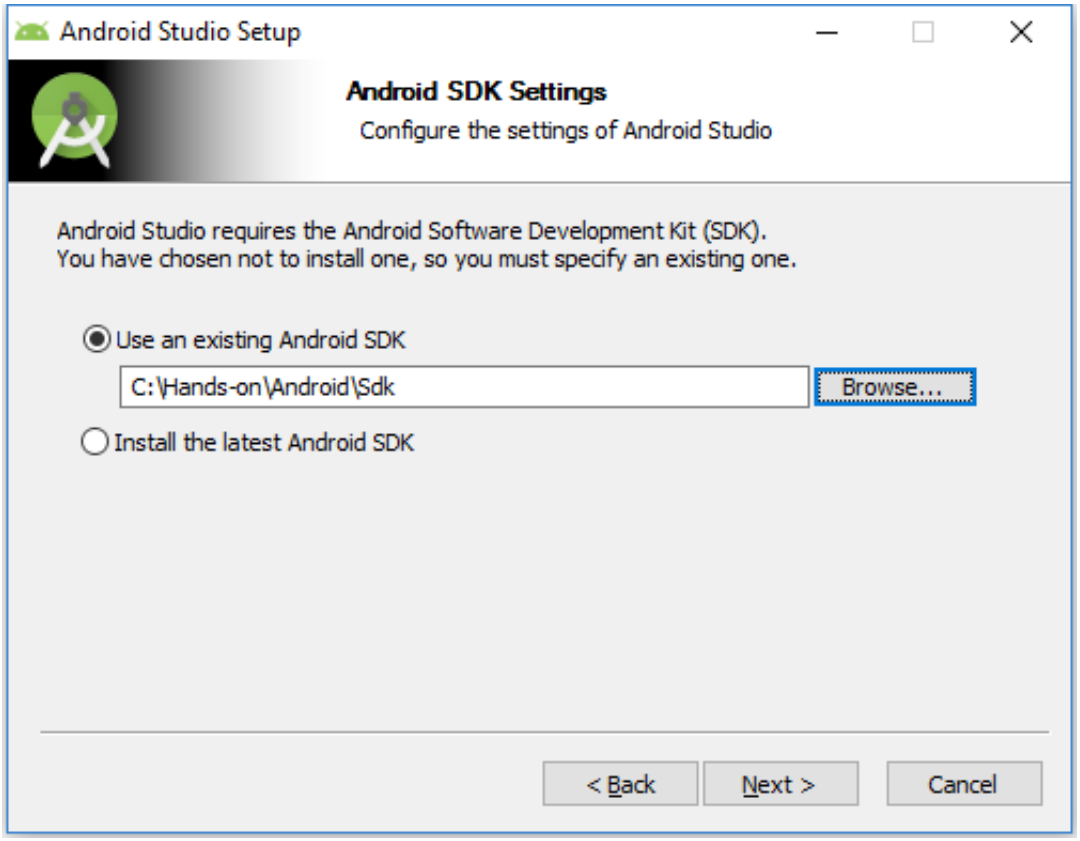
- Click `Next`
- Uncheck `Android SDK`
- Uncheck `Android Virtual Device`



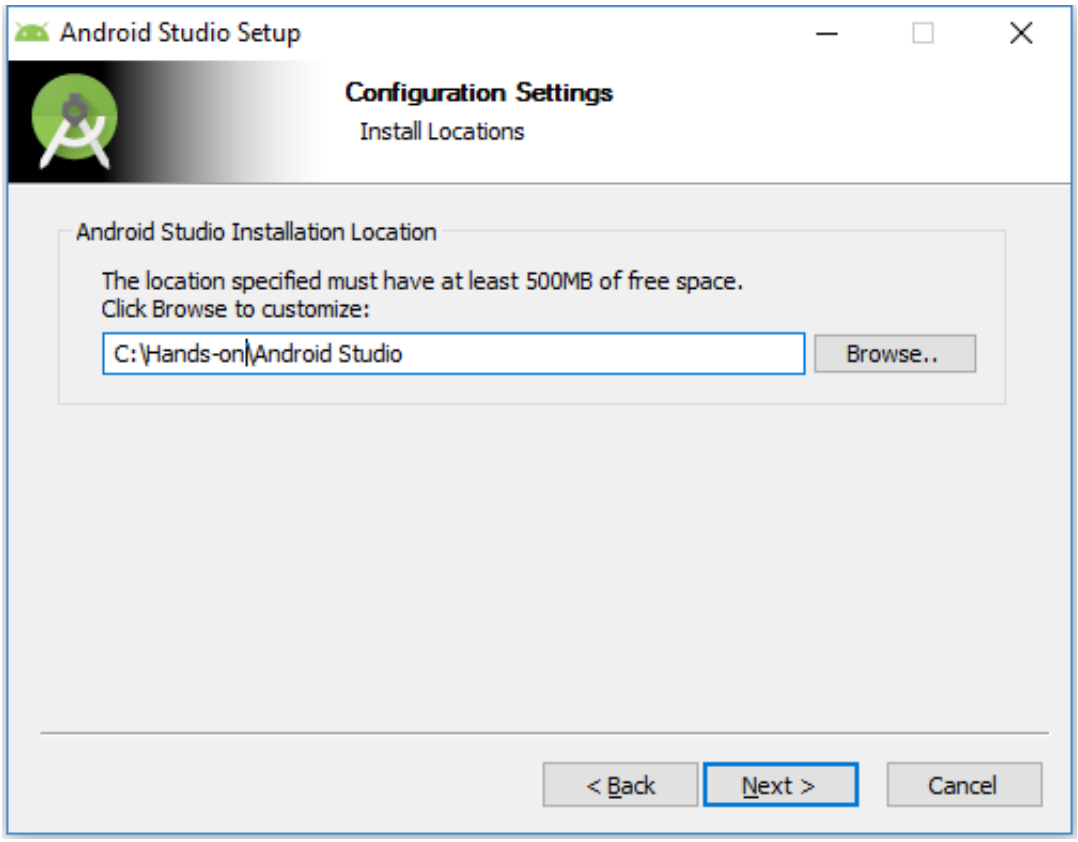
- Click `Next`



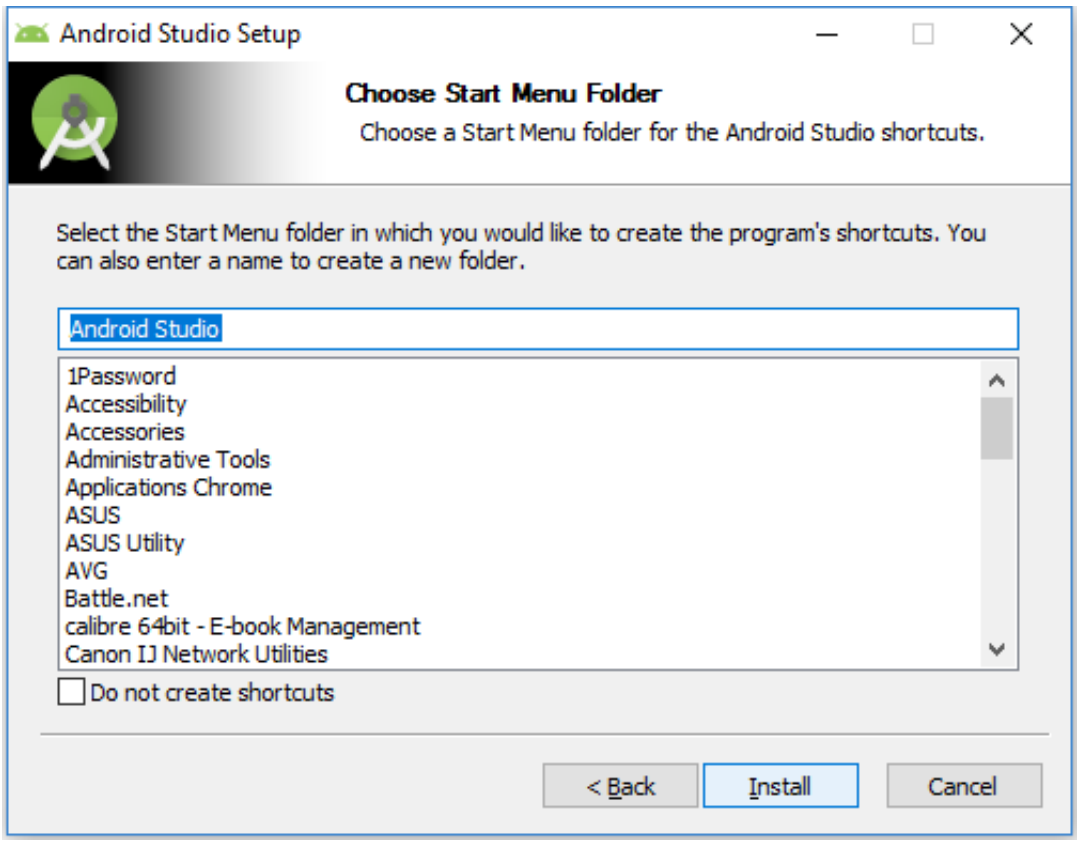
- Click `I Agree`
- Set existing Android SDK path to : `c:\Hands-on\Android\Sdk`



- Configure installation directoriy to : `c:\Hands-on\Android Studio` for Android Studio

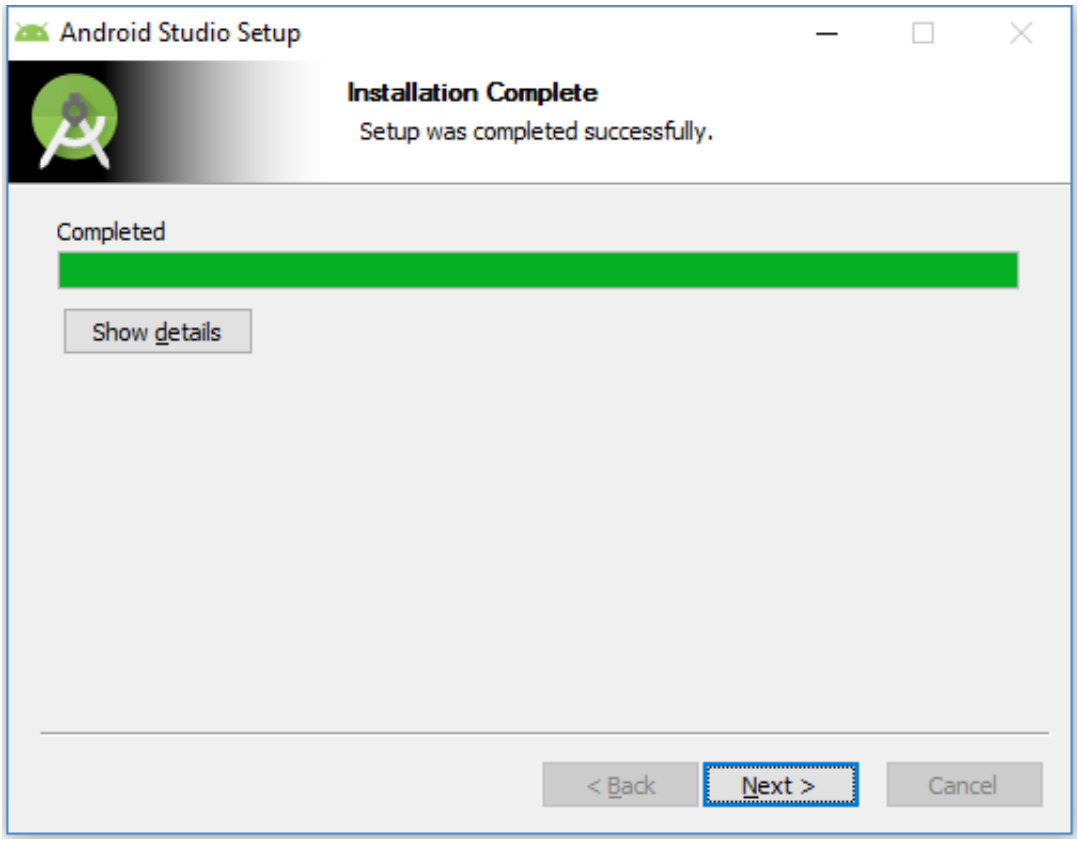


- Click `Next`

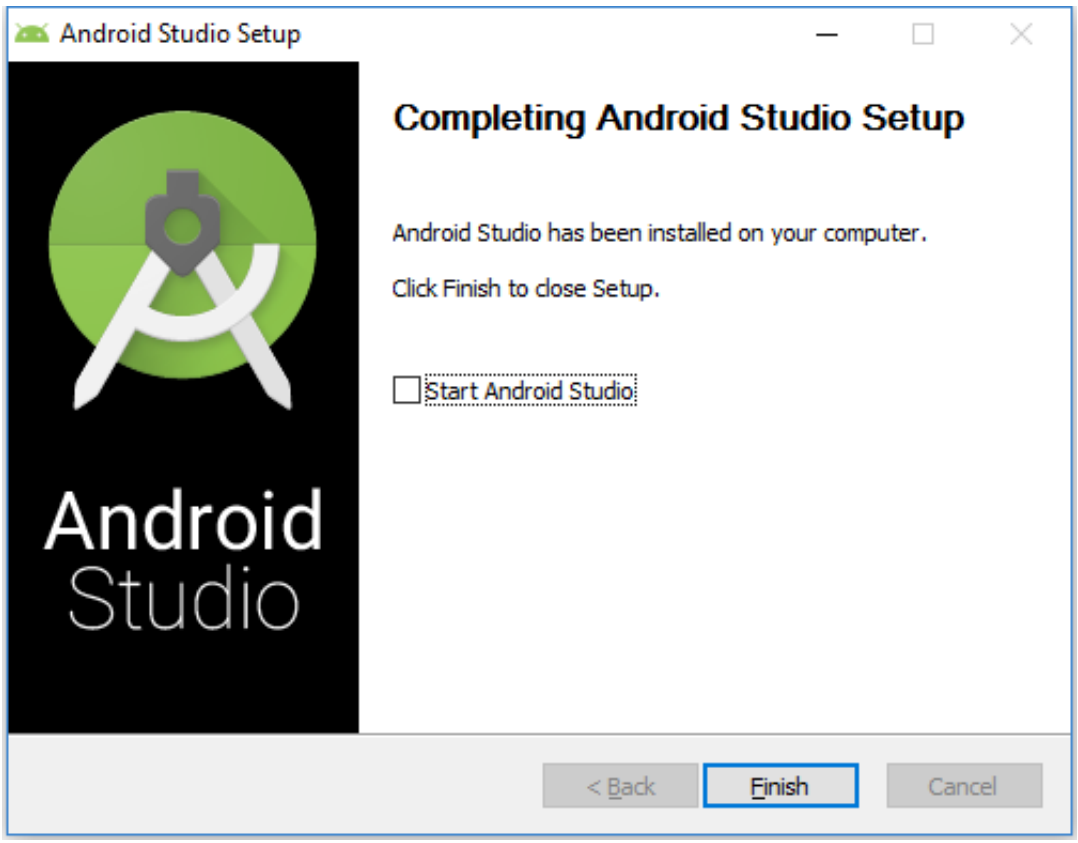


- Click `Install`

Wait for the installation finish.



- Click `Next`



- Uncheck `Start Android Studio`
- Click `Next`

2.3 Hands-on project

Unzip provided archive into your directory `c:\Hands-on` :

Open a Git Bash Terminal and type :

```
cd <Archive directory>
unzip ./Hands-on/Windows/2017-handson-kotlinAndroid.zip -d /c/Hands-on/
```

To check open a Git Bash Terminal and type :

```
cd /c/Hands-on/2017-handson-kotlinAndroid
git lg
```

you should read :

```
* 9b50a75 (origin/solution, solution) Exercise 2.5 : Kotlin & Rx
* a911fe9 Exercise 2.4 : Lambda
* a7911d8 Exercise 2.3 : Function extensions
* 8112ad2 Exercise 2.2 : Kotlin extensions
* acbd955 Exercise 2.1 : Prepare MainActivity
* 5e9f1f6 (tag: End-Part1) Exercise 1.4 : Lateinit & Companion Object
* 1d67724 Exercise 1.3 : Collections
* 15a64ab Exercise 1.2 : When
* 76f22bc Exercise 1.1 : Data class kotlin
* 9003149 (HEAD -> master, origin/master, origin/HEAD) Mode offline (#1)
* 24d0724 Initial commit
```

Create your working branch:

```
git checkout -b mywork
git lg
```

you should read :

```
* 9b50a75 (origin/solution, solution) Exercise 2.5 : Kotlin & Rx
* a911fe9 Exercise 2.4 : Lambda
* a7911d8 Exercise 2.3 : Function extensions
* 8112ad2 Exercise 2.2 : Kotlin extensions
* acbd955 Exercise 2.1 : Prepare MainActivity
* 5e9f1f6 (tag: End-Part1) Exercise 1.4 : Lateinit & Companion Object
* 1d67724 Exercise 1.3 : Collections
* 15a64ab Exercise 1.2 : When
* 76f22bc Exercise 1.1 : Data class kotlin
* 9003149 (HEAD -> mywork, origin/master, origin/HEAD, master) Mode offline (#1)
* 24d0724 Initial commit
```

3. Install Gradle cache

/!\ Warning: Due to Gradle open issue (Gradle's cache stores the native OS absolute path), you have to create exactly the same directory ! /!

Unzip provided archive into your directory `C:\Hands-on` :

Open a Git Bash Terminal and type :

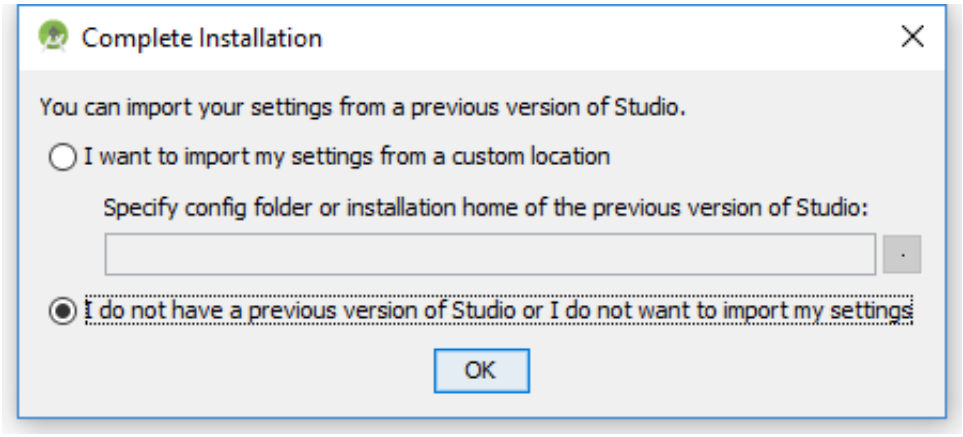
```
cd <Archive directory>
unzip ./Hands-on/Windows/gradle.zip -d /c/Hands-on/
```

To check open a Terminal and type : `ls /c/Hands-on/gradle` and you should see `gradle` directories.

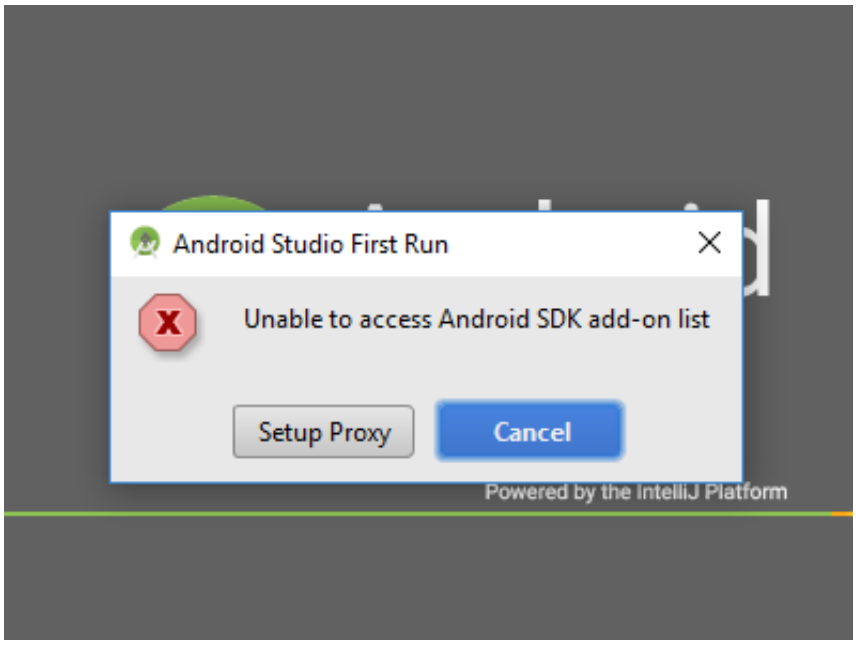
4. Complete Android Studio offline setup

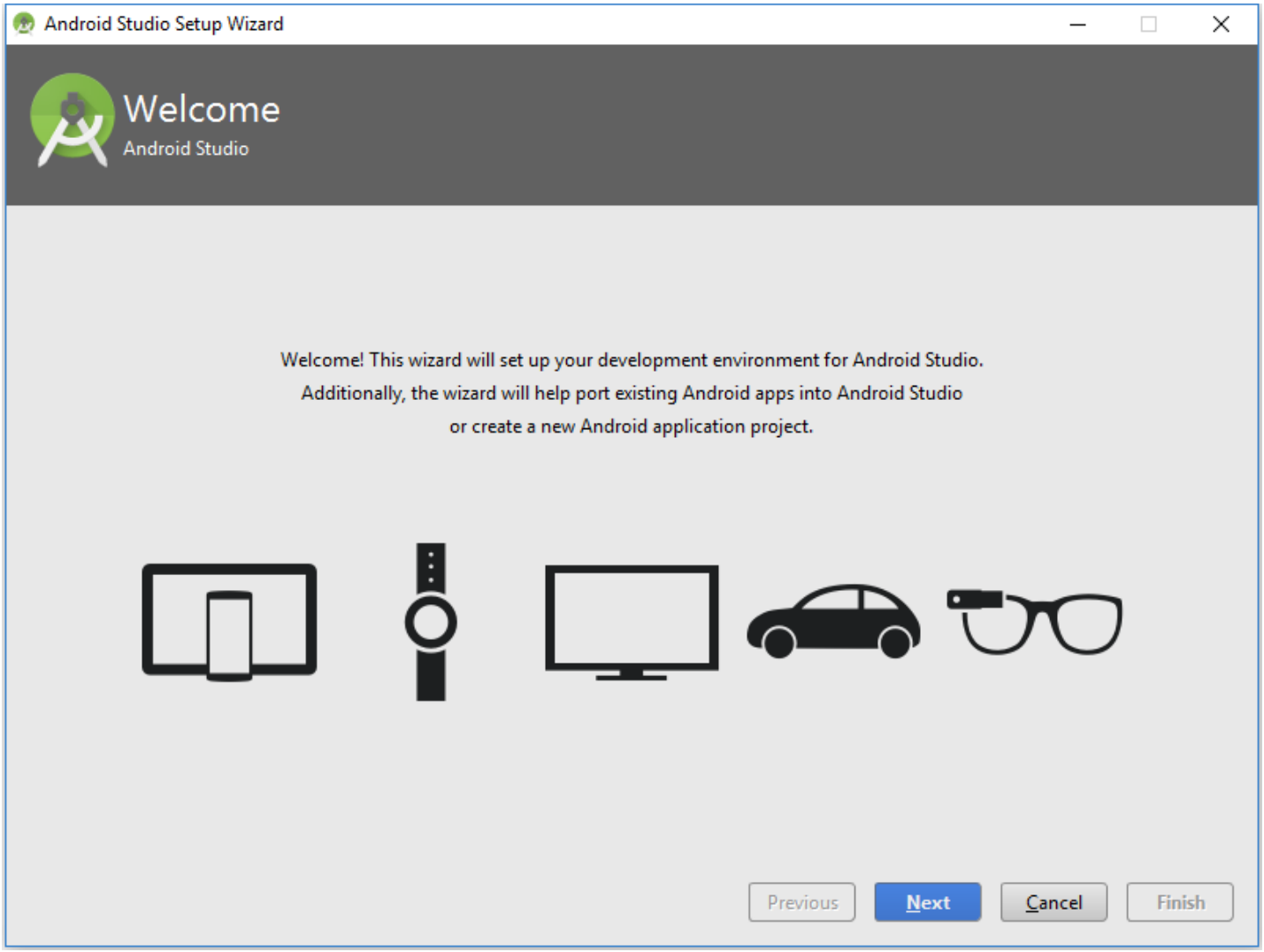
Double click on Android Studio `c:\Hands-on\Android Studio\bin\studio64.exe`

You will see...

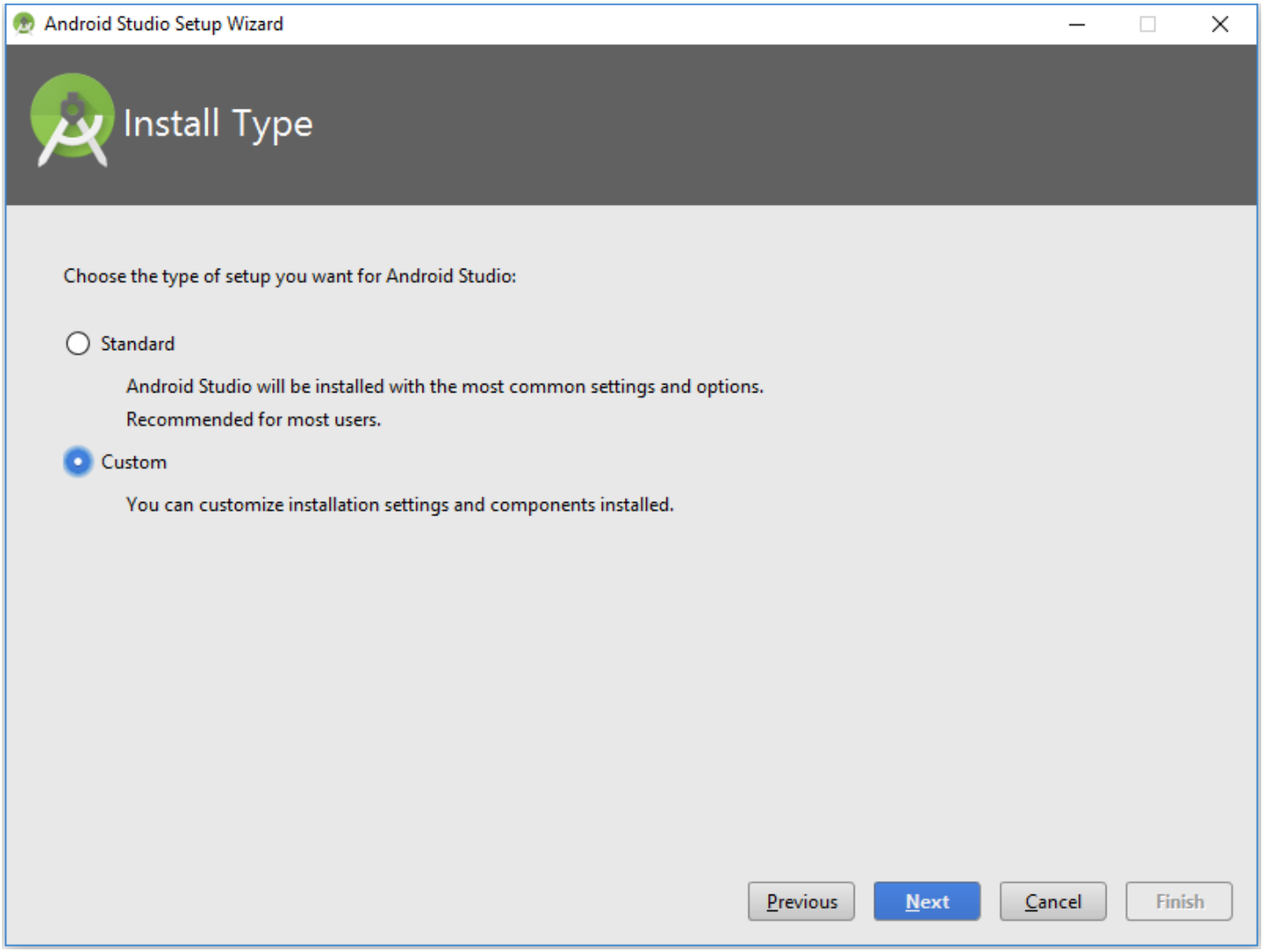


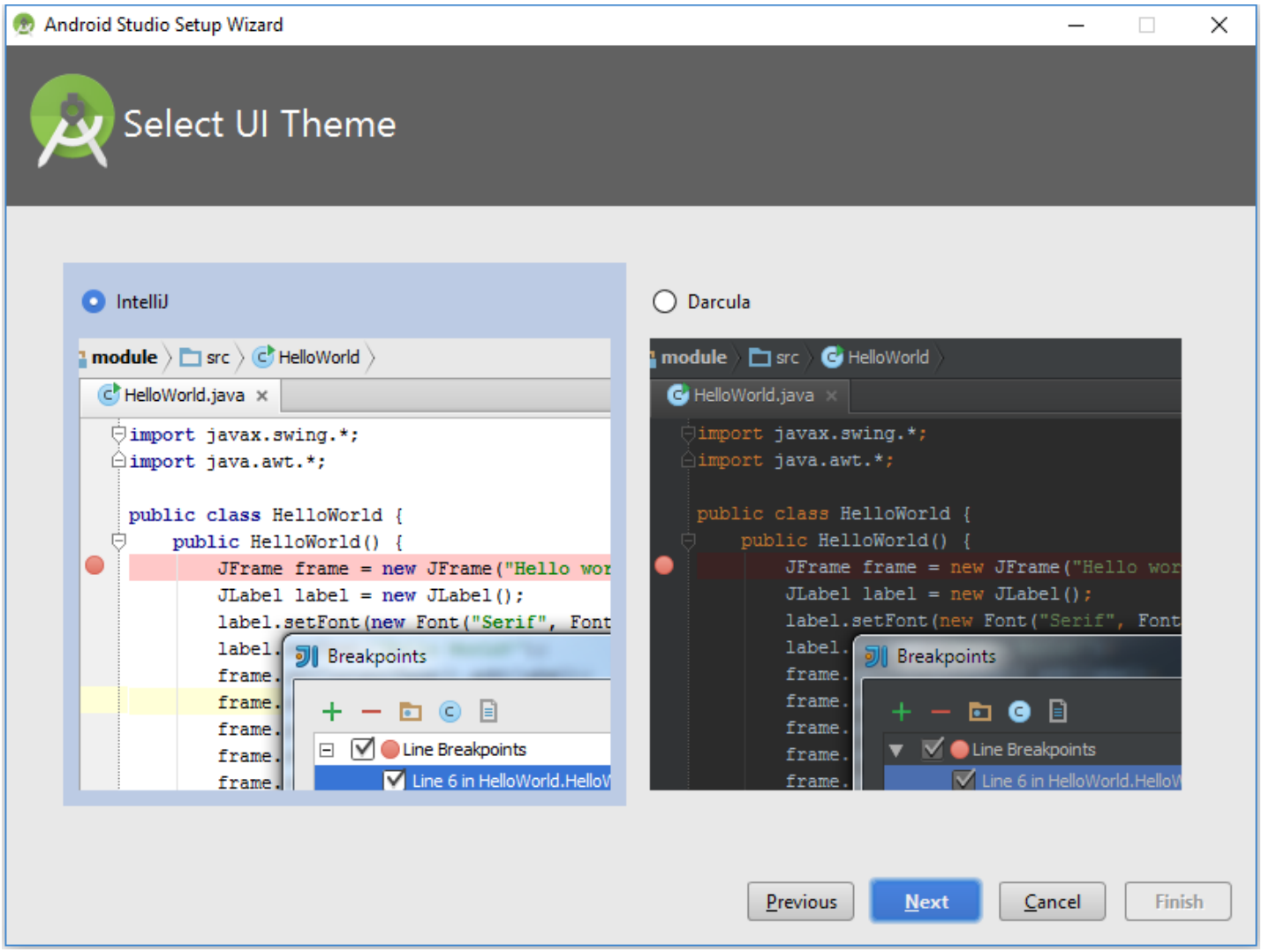
Just ignore the message and click on `Cancel`



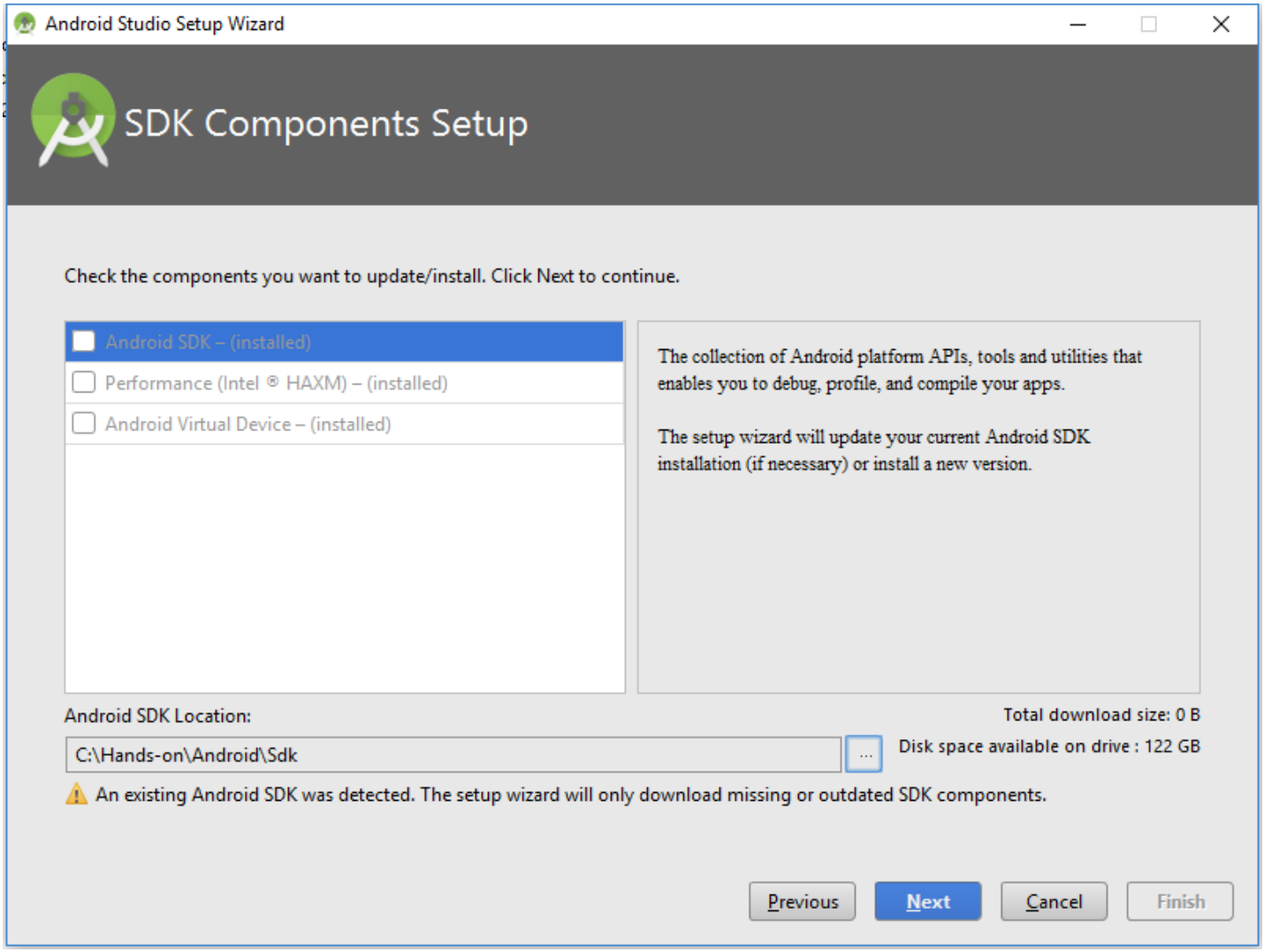


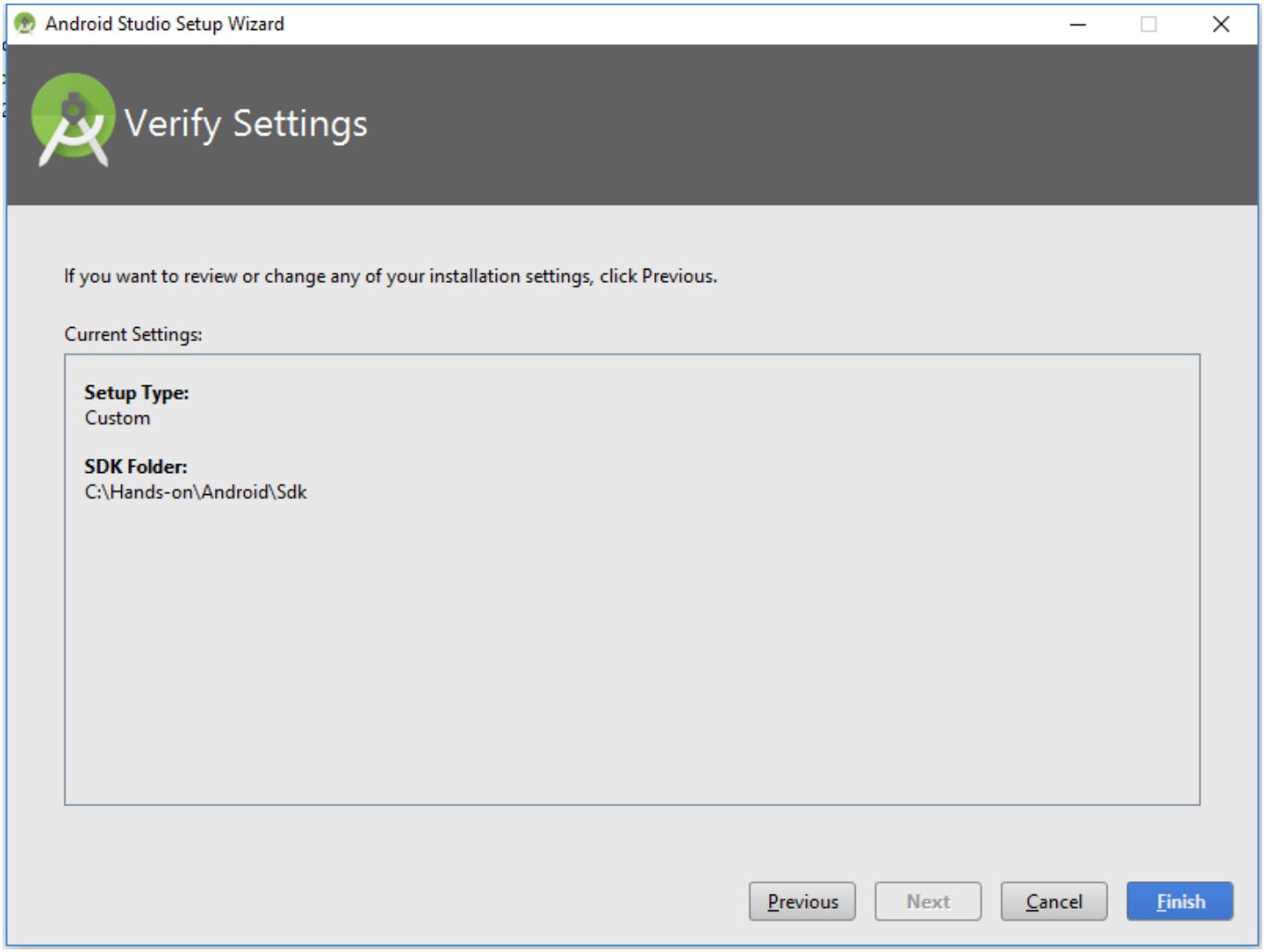
Select `Custom` installation

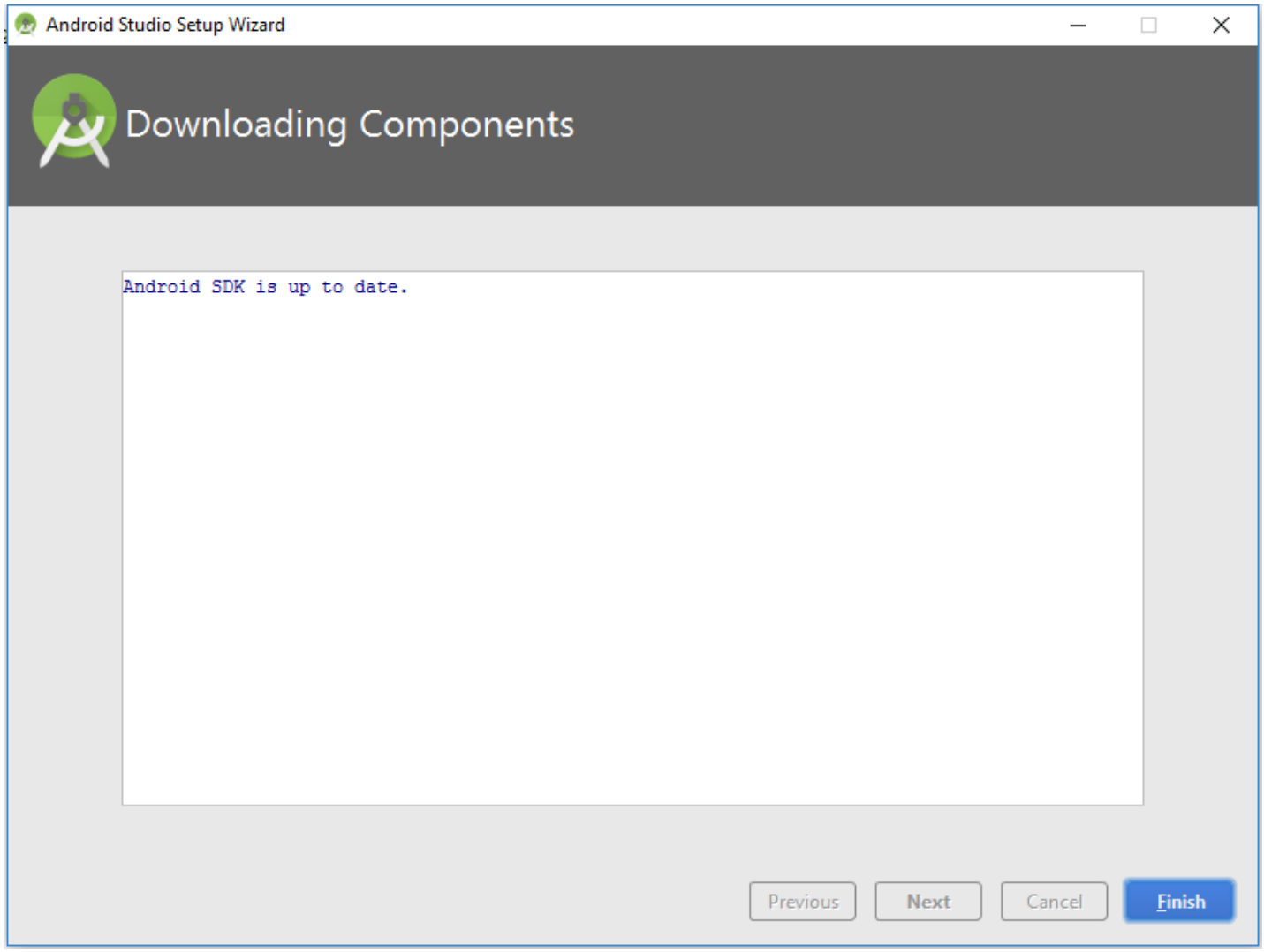

Android Studio Setup Wizard
Install Type
Choose the type of setup you want for Android Studio:
Standard
Android Studio will be installed with the most common settings and options.
Recommended for most users.
Custom
You can customize installation settings and components installed.
Previous
Next
Cancel
Finish

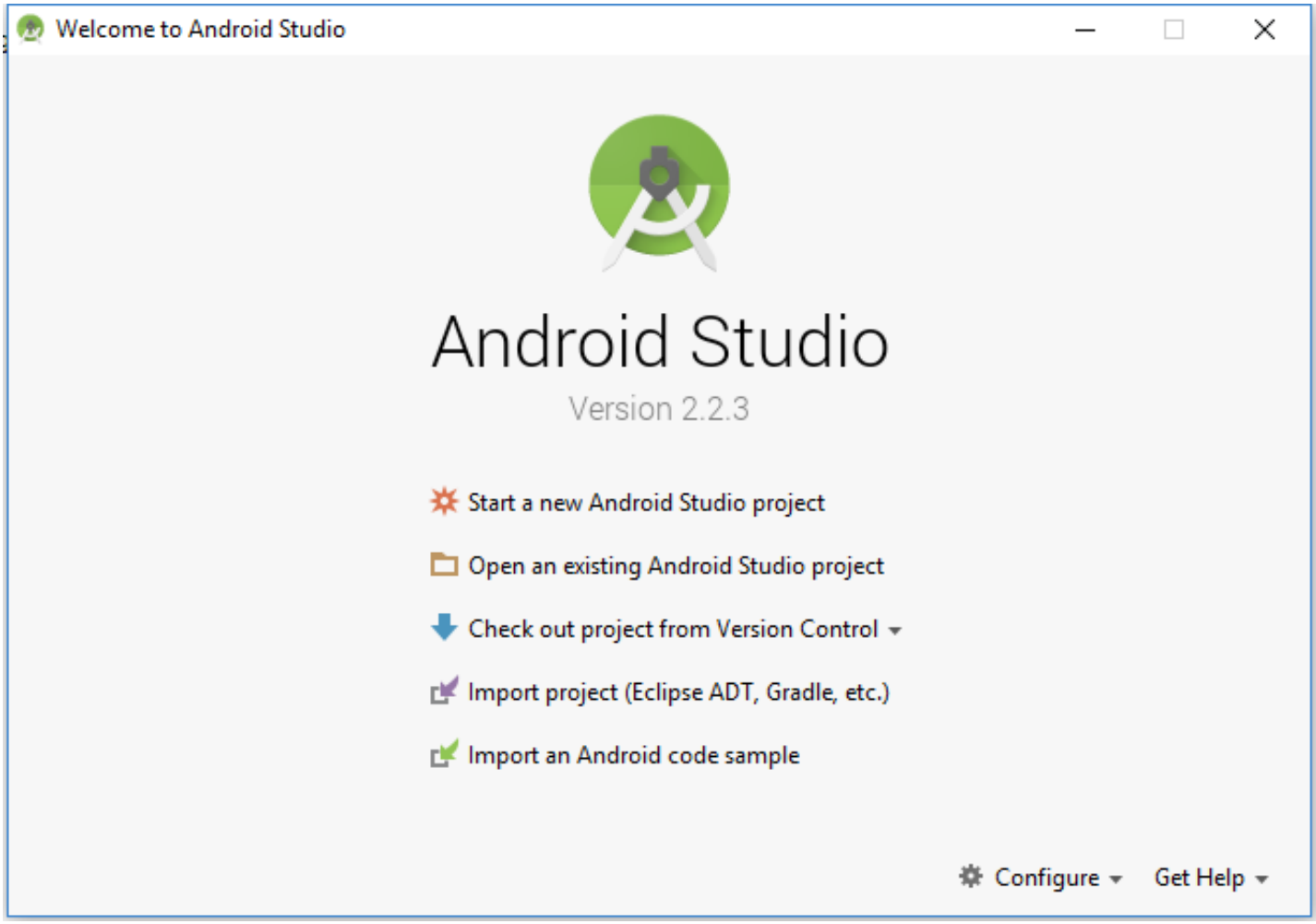


Update Android SDK location and set the path defined in chap. 2 above. Should be the absolute path of : `c:\Hands-on\Android\Sdk`

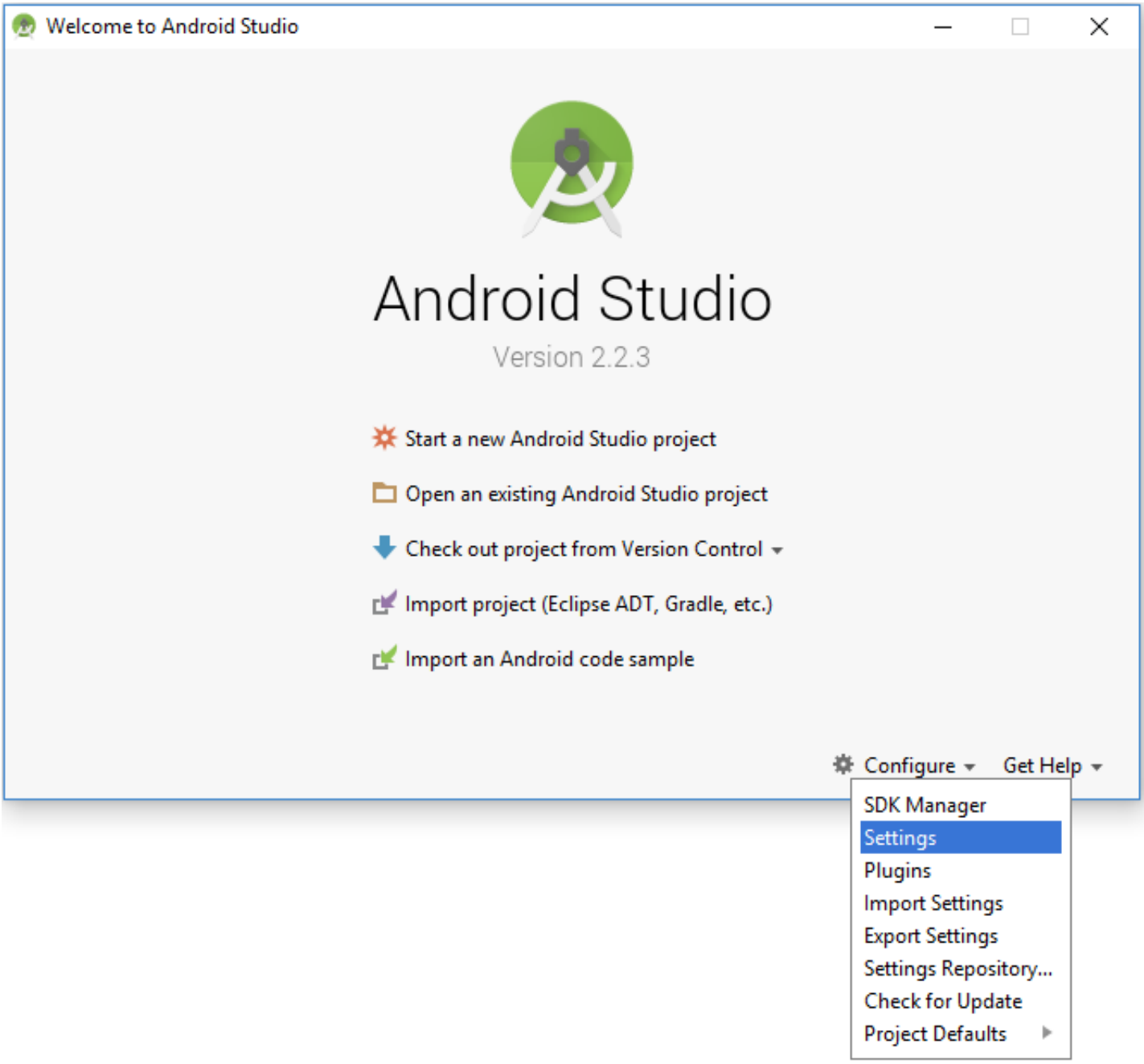

Android Studio Setup Wizard
SDK Components Setup
Check the components you want to update/install. Click Next to continue.
Android SDK – (installed)
Performance (Intel ® HAXM) – (installed)
Android Virtual Device – (installed)
The collection of Android platform APIs, tools and utilities that enables you to debug, profile, and compile your apps.
The setup wizard will update your current Android SDK installation (if necessary) or install a new version.
Android SDK Location:
Total download size: 0 B
C:\Hands-on\Android\Sdk
...
Disk space available on drive : 122 GB
An existing Android SDK was detected. The setup wizard will only download missing or outdated SDK components.
Previous
Next
Cancel
Finish


Android Studio Setup Wizard
Verify Settings
If you want to review or change any of your installation settings, click Previous.
Current Settings:
Setup Type:
Custom
SDK Folder:
C:\Hands-on\Android\Sdk
Previous
Next
Cancel
Finish

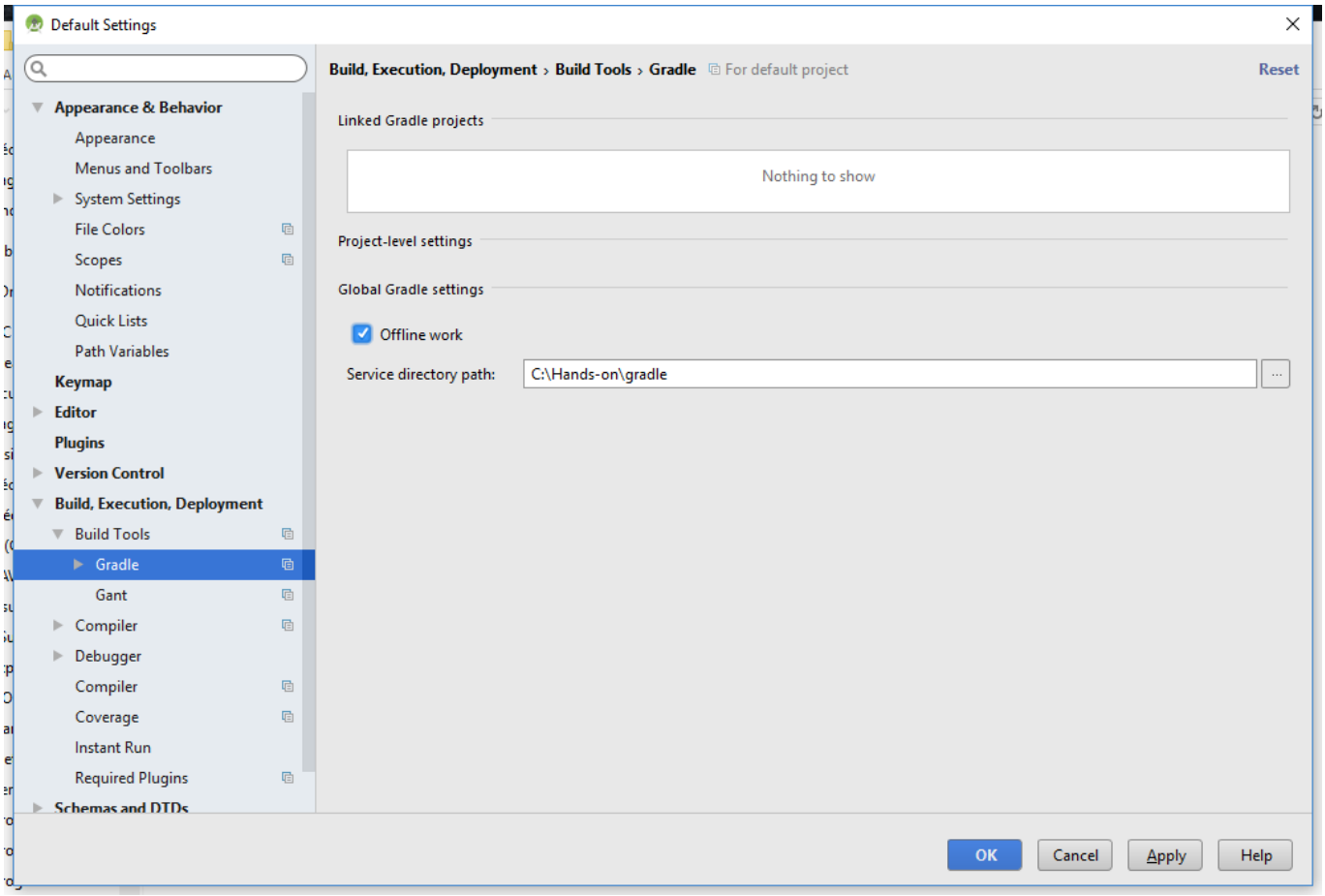

Android Studio Setup Wizard
Downloading Components
Android SDK is up to date.
Previous
Next
Cancel
Finish



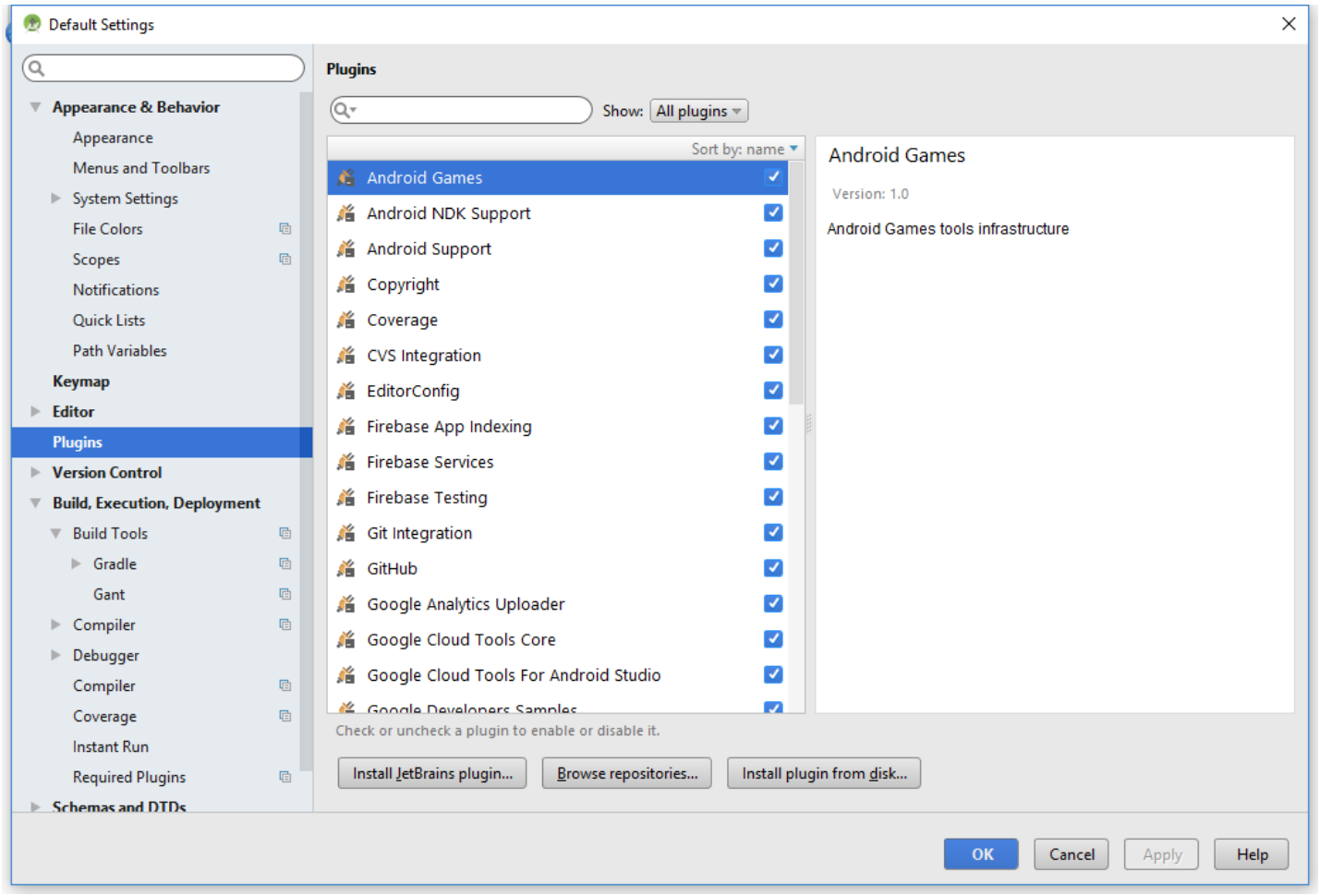
Open `configure` menu and select `Settings`



- Select `Build, Execution, Deployment | Gradle`
- Check `Offline work`
- Set service directory path to : `c:\Hands-on\gradle`
- Then Click on `Apply` button

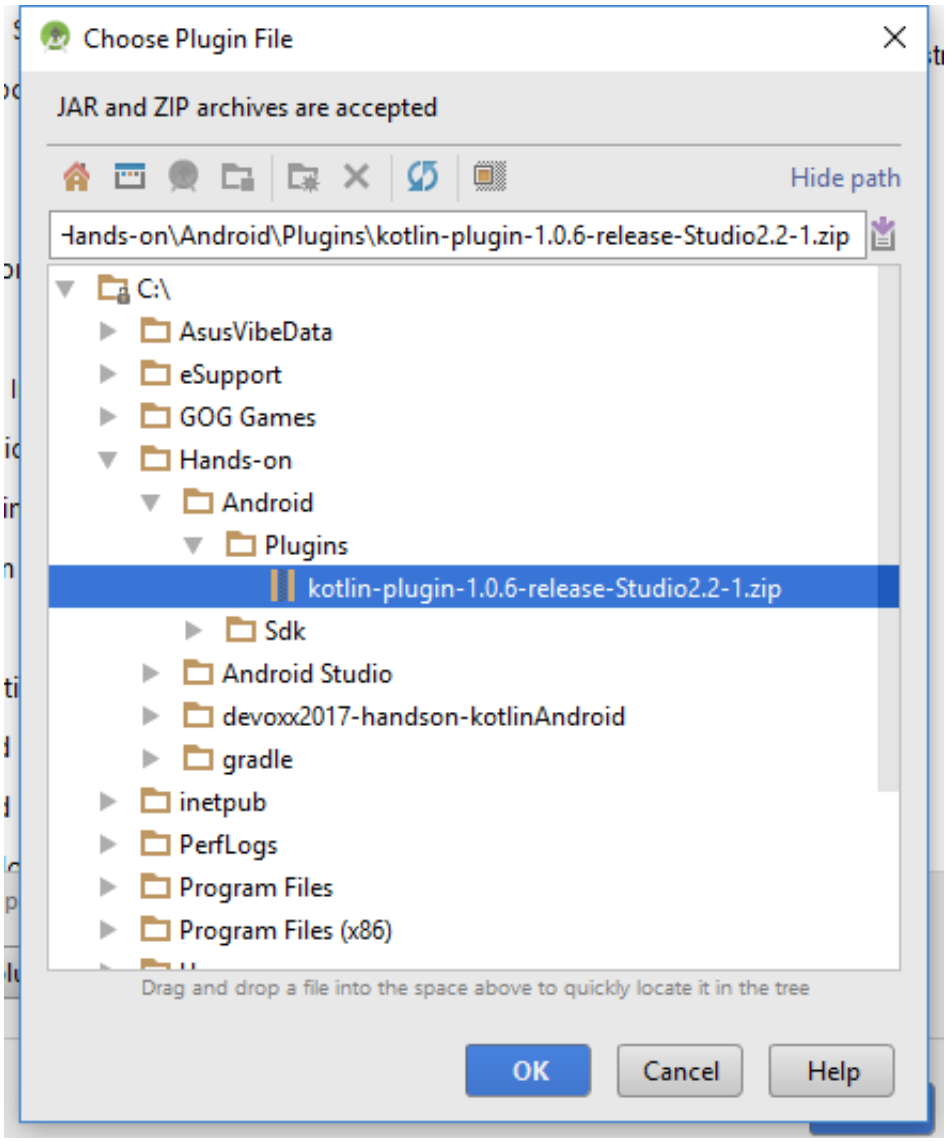


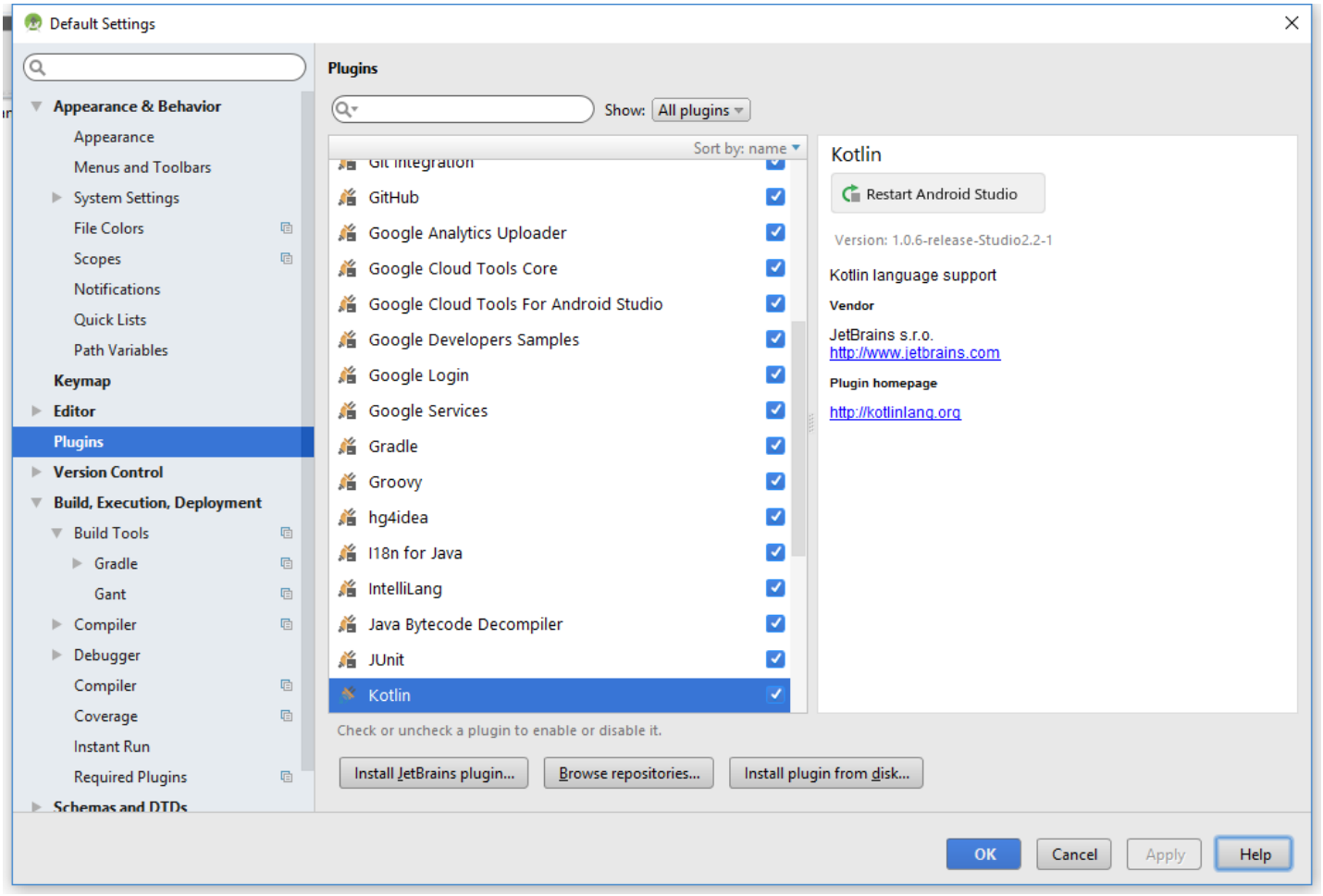
- Select `Plugins`
- Click on `Install plugin from disk...` button



Kotlin 1.0.6 plugin is provided along with the Android SDK archive under the `Plugins` directory :

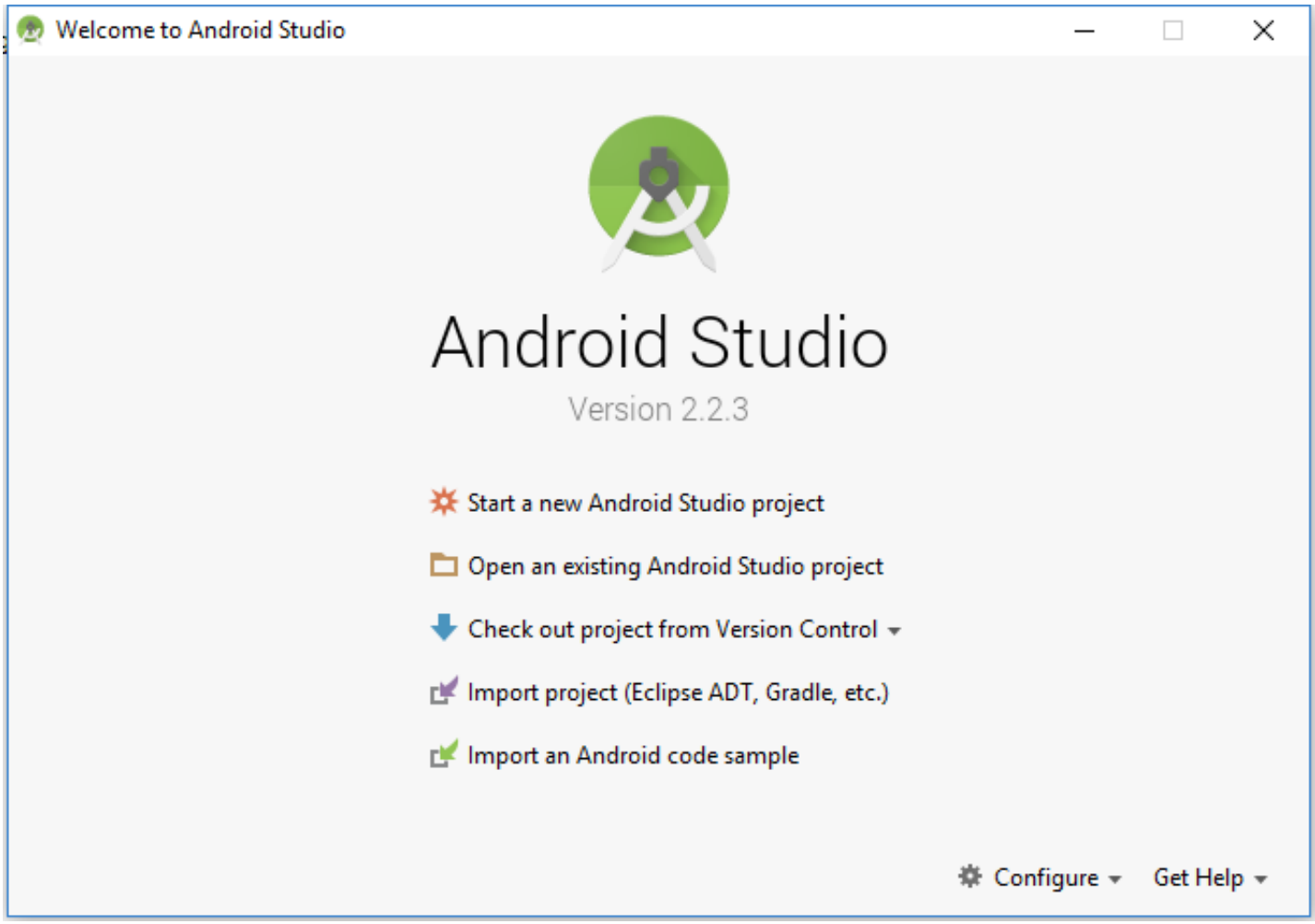
- `c:\Hands-on\Android\Plugins\kotlin-plugin-1.0.6-release-Studio2.2-1.zip`


Choose Plugin File
JAR and ZIP archives are accepted
Hide path
-lands-on\Android\Plugins\kotlin-plugin-1.0.6-release-Studio2.2-1.zip
C:\
AsusVibeData
eSupport
GOG Games
Hands-on
Android
Plugins
kotlin-plugin-1.0.6-release-Studio2.2-1.zip
Sdk
Android Studio
devoxx2017-handson-kotlinAndroid
gradle
inetpub
PerfLogs
Program Files
Program Files (x86)
Drag and drop a file into the space above to quickly locate it in the tree
OK
Cancel
Help



- Then Click on `Apply` button
- Click on `Restart Android Studio` button

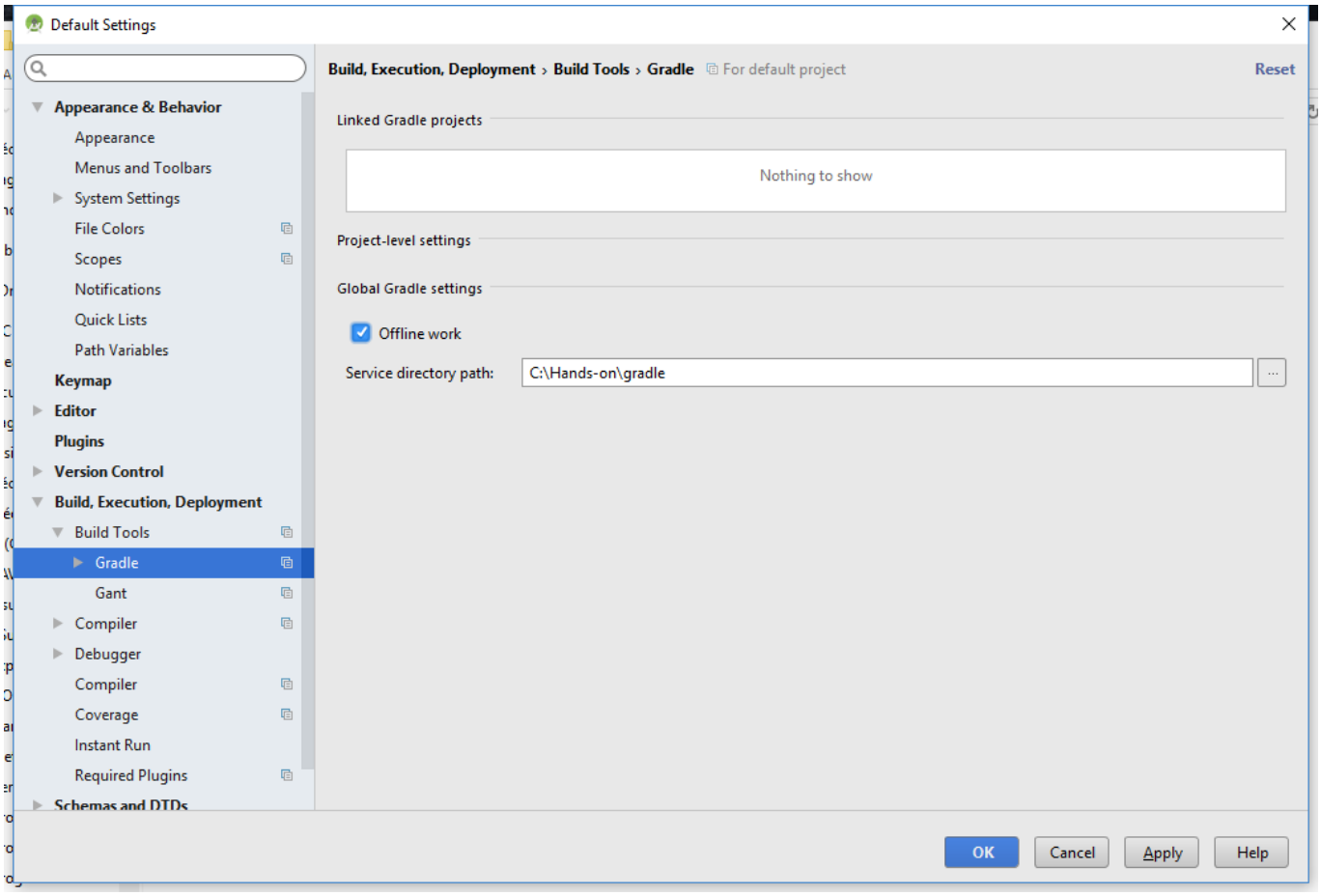
5. Import Hands-on project



- Click `Import project (Eclipse ADT, Gradle, etc.)` and choose `c:\Hands-on\2017-handson-kotlinAndroid` directory
- Click `Add Root`

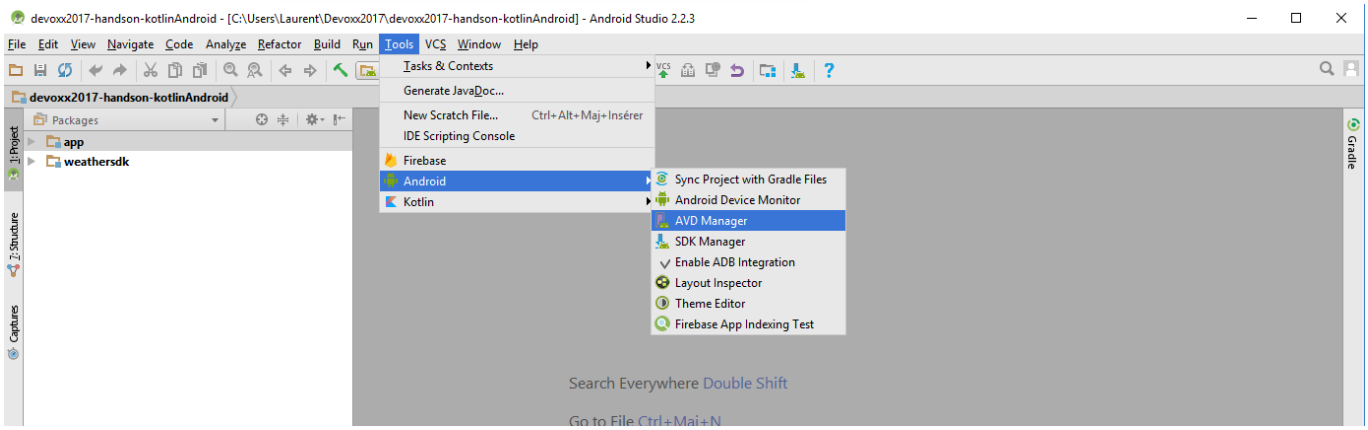
If there is still some errors with Gradle... Double check the following.

- Open `File | Prefrences...` menu
- Select `Build, Execution, Deployment | Gradle`
- Check `Offline work`
- Set service directory path to : `c:\Hands-on\gradle`
- Then Click on `Apply` button

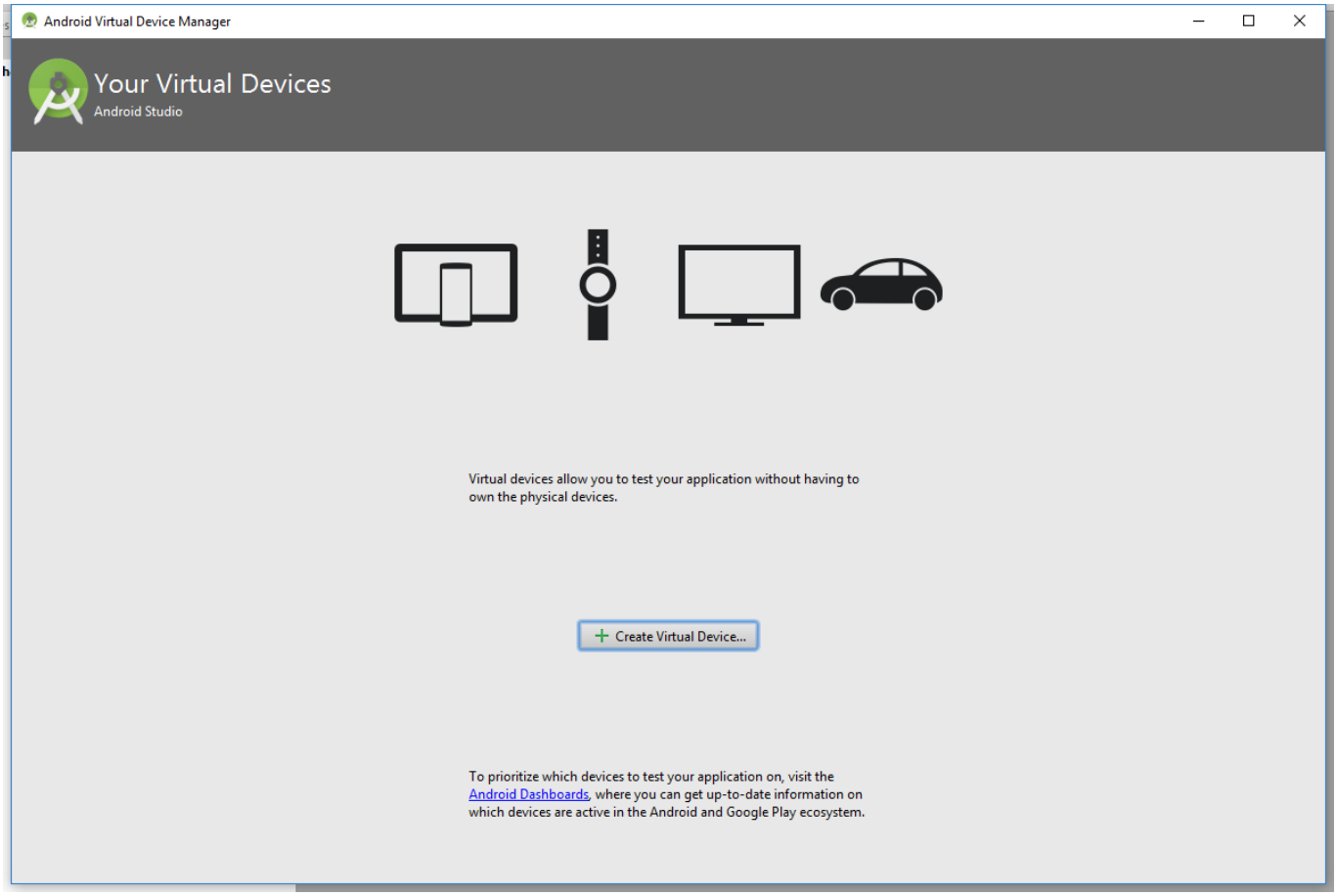


6. Create Virtual Device for Emulator

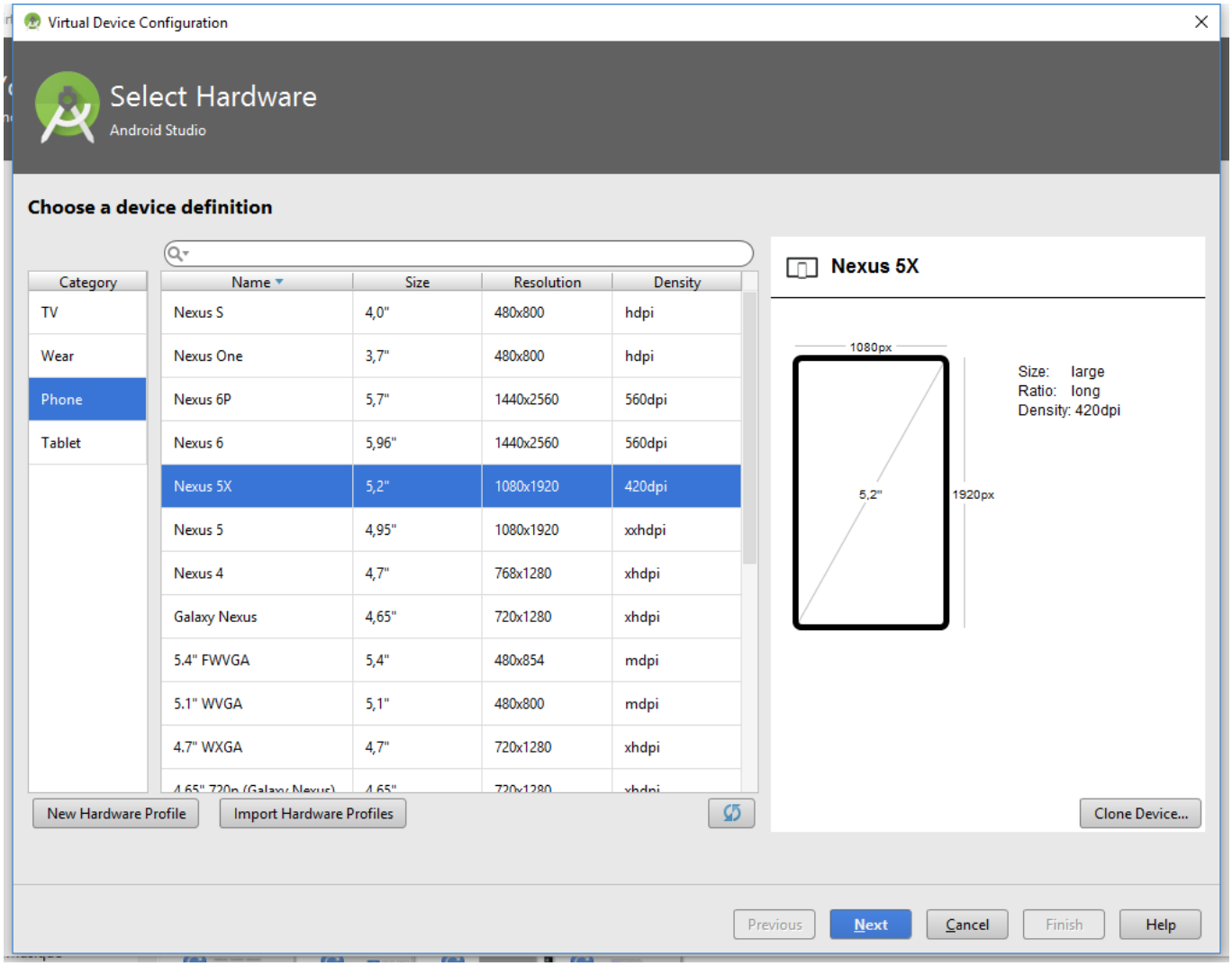
- Click on the menu : `Tools | Android | AVD Manager` :



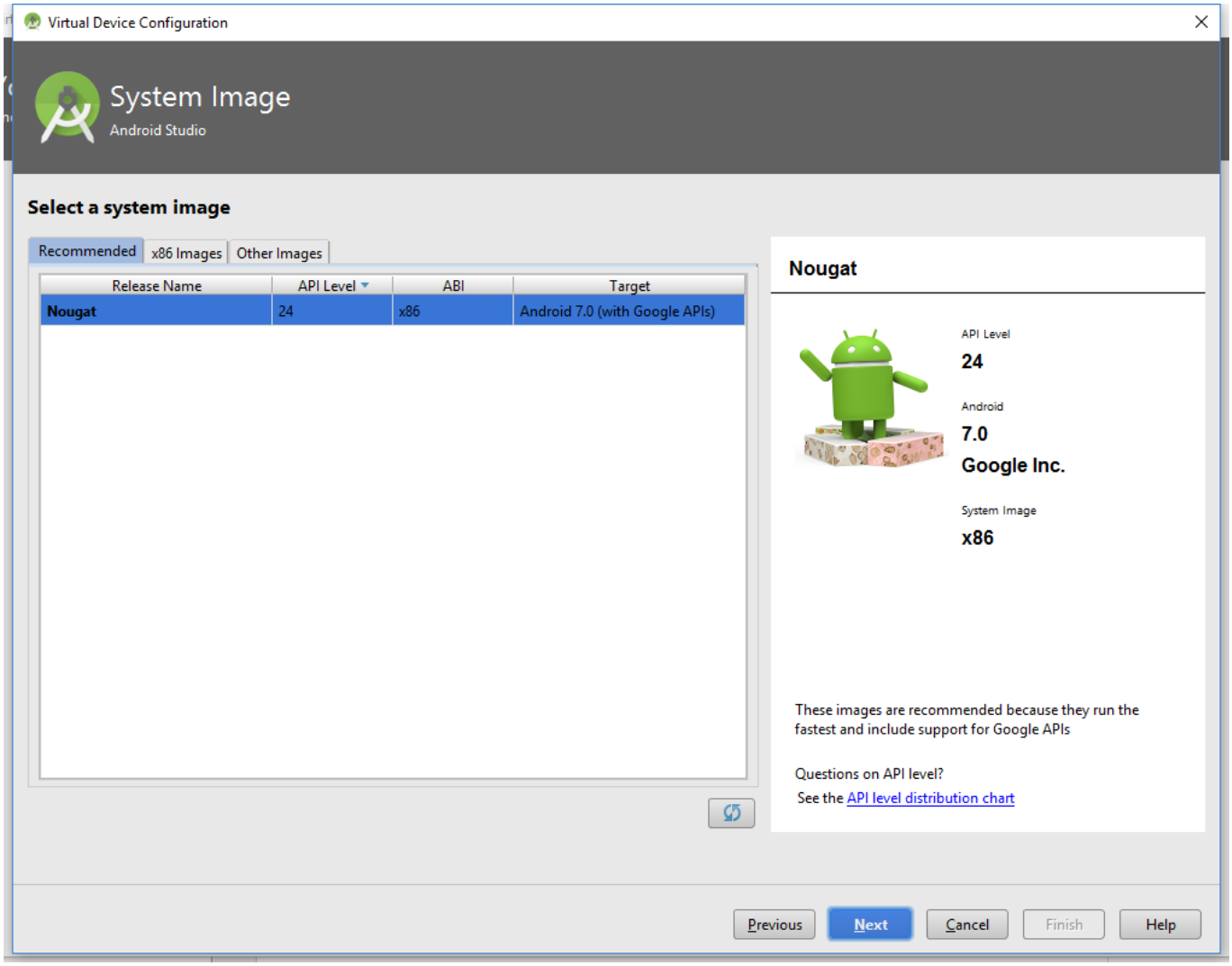
- Click on `Create Virtual Device...` button



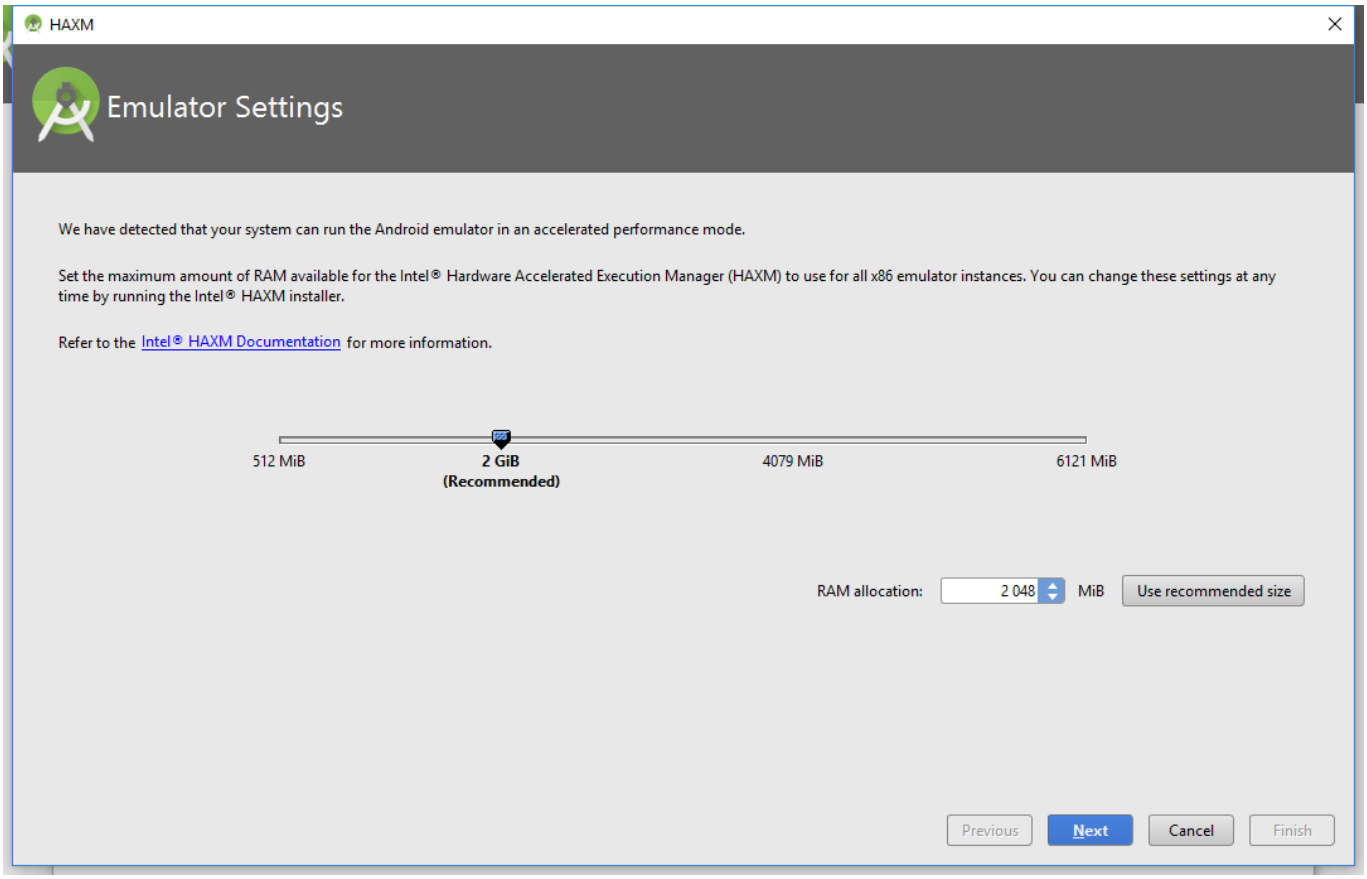
- Select `Nexus 5X`
- Click `Next`

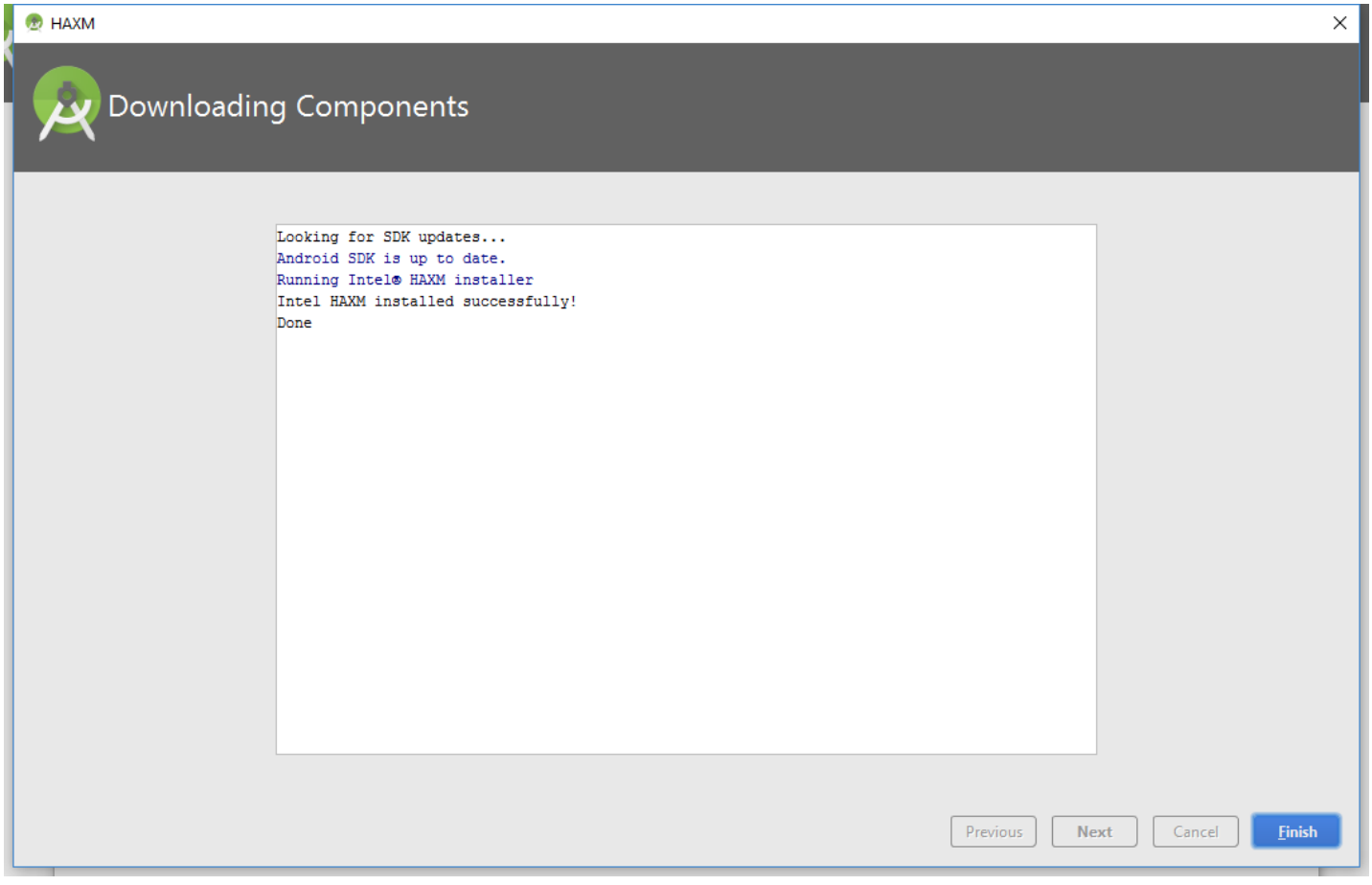

Virtual Device Configuration
Select Hardware
Android Studio
Choose a device definition
Category
TV
Wear
Phone
Tablet
Name
Size
Resolution
Density
Nexus S 4,0" 480x800 hdpi
Nexus One 3,7" 480x800 hdpi
Nexus 6P 5,7" 1440x2560 560dpi
Nexus 6 5,96" 1440x2560 560dpi
Nexus 5X 5,2" 1080x1920 420dpi
Nexus 5 4,95" 1080x1920 xxhdpi
Nexus 4 4,7" 768x1280 xhdpi
Galaxy Nexus 4,65" 720x1280 xhdpi
5.4" FWVGA 5,4" 480x854 mdpi
5.1" WVGA 5,1" 480x800 mdpi
4.7" WXGA 4,7" 720x1280 xhdpi
New Hardware Profile
Import Hardware Profiles
Nexus 5X
1080px
5,2"
1920px
Size: large
Ratio: long
Density: 420dpi
Clone Device...
Previous
Next
Cancel
Finish
Help

- Click `Next`

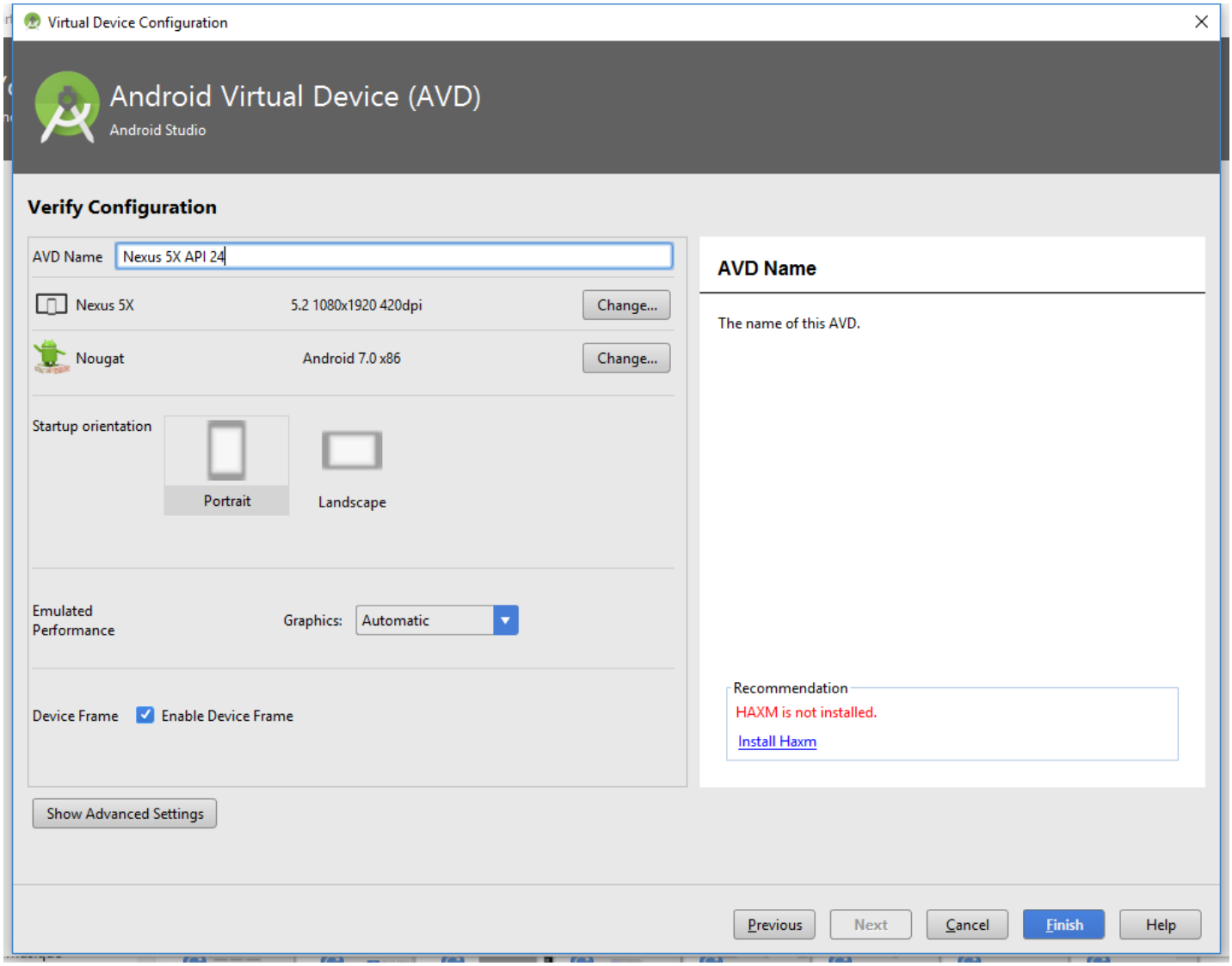


- Click `Install Haxm`

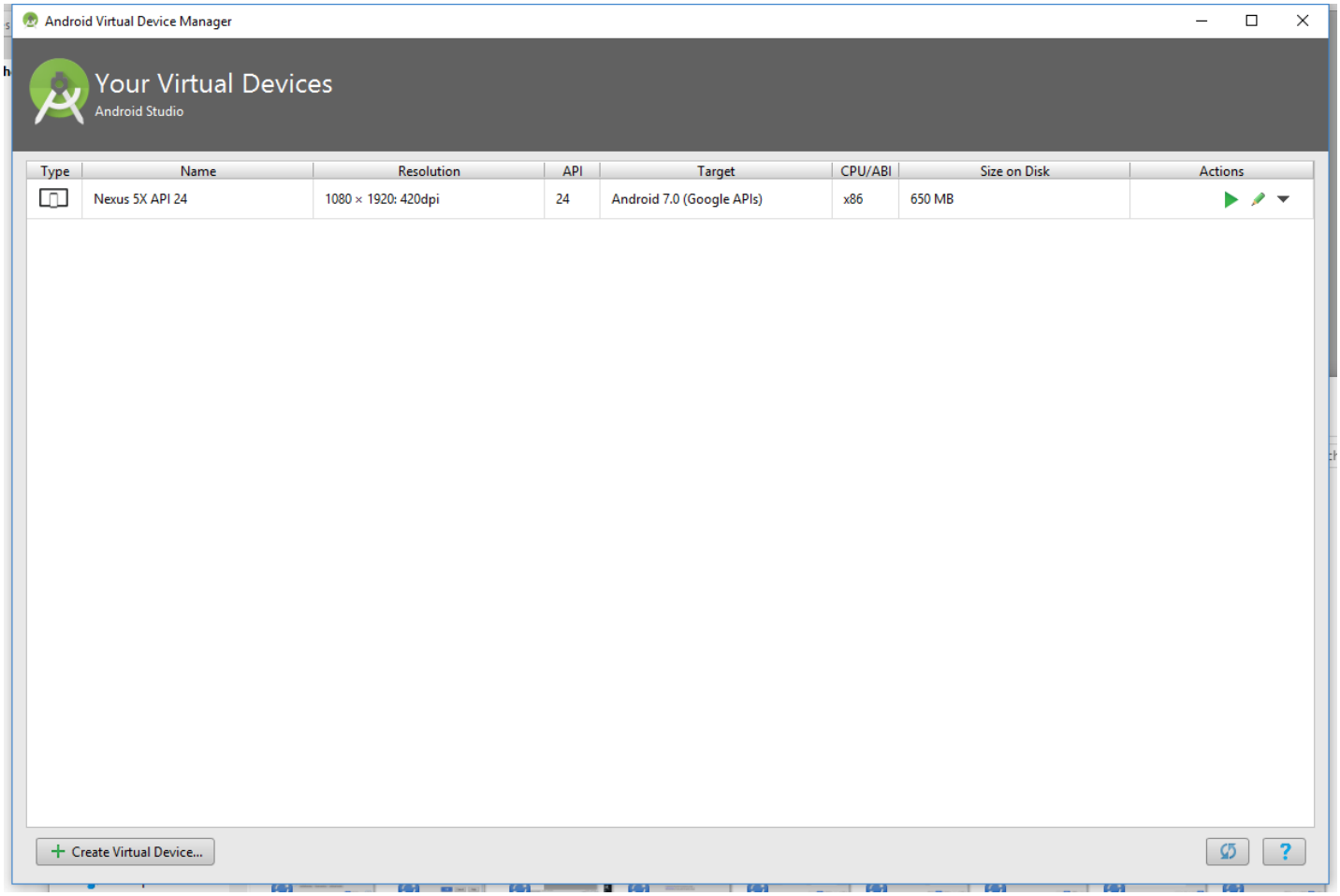




- Click `Finish`



- Click `Finish`


Android Virtual Device Manager
Your Virtual Devices
Android Studio
Type
Name
Resolution
API
Target
CPU/ABI
Size on Disk
Actions
Nexus 5X API 24
1080 × 1920: 420dpi
24
Android 7.0 (Google APIs)
x86
650 MB
Create Virtual Device...