



Google Developers

STUDY
JAMS



STUDYJAMS

SESSÃO 01 – CONFIGURAÇÃO DO AMBIENTE E FERRAMENTAS



JORDAN SILVA

DESENVOLVEDOR ANDROID NAS HORAS VAGAS
PESQUISADOR NA UFMG
CODE FOR FOOD

@JORDANSILVA



FELIPE ARIMATÉIA

ENGENHEIRO DE SOFTWARE MOBILE NA CI&T
SWAT TEAM
I LOVE CODE

@TWITERDOARI

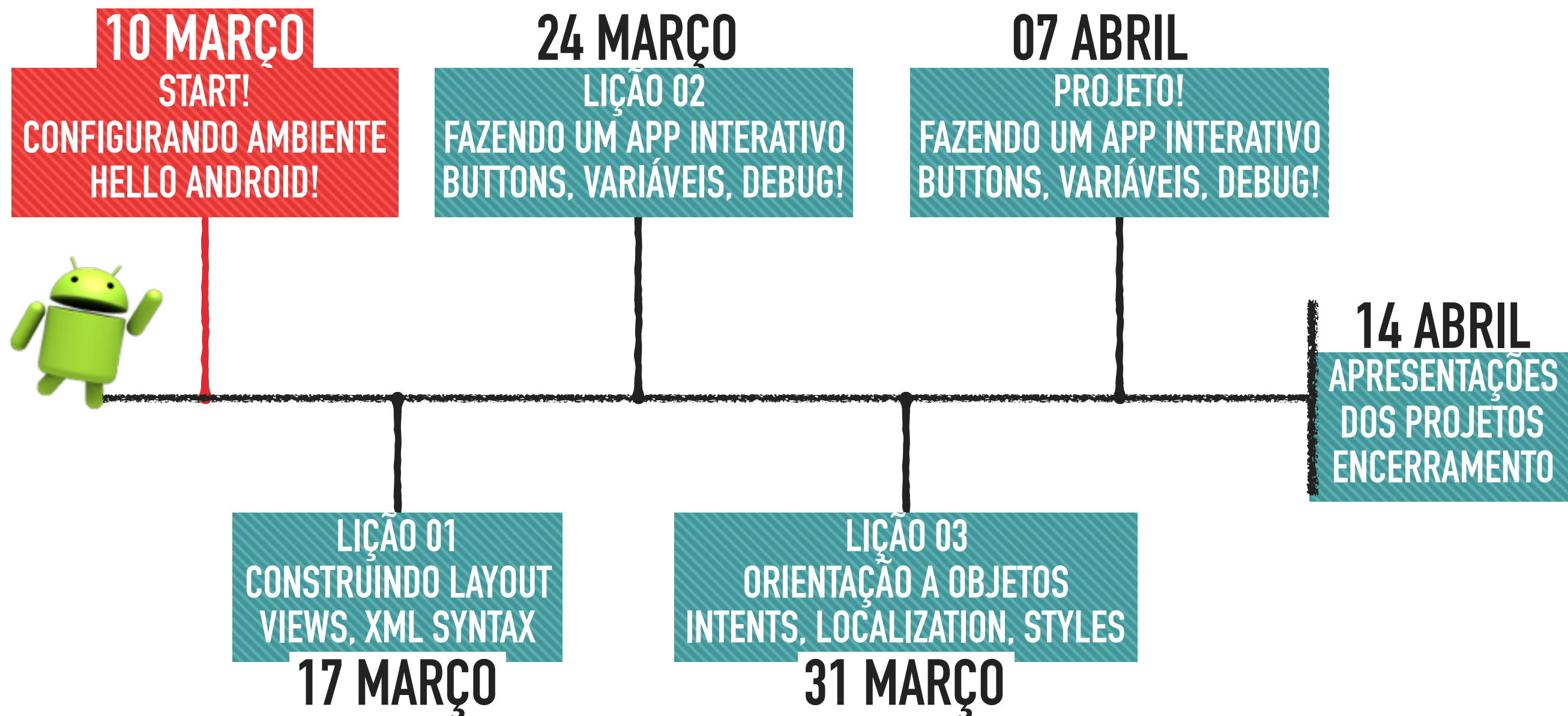
ANTES DE COMEÇAR, ALGUNS LINKS!

- ▶ <http://developerstudyjams.com/>
- ▶ <http://www.udacity.com/>
- ▶ <https://www.udacity.com/account/affiliate/GoogleStudyJams>
- ▶ <http://www.gdgbh.org/>
- ▶ <https://gdgbh.slack.com/>

O QUE PRECISO
PARA COMEÇAR?



COMPLETE TODAS AS ETAPAS!





ANDROID STUDIO

INSTALANDO O ANDROID STUDIO

- ▶ 1. INSTALAR O JAVA DEVELOPMENT KIT
- ▶ 2. INSTALAR O ANDROID STUDIO



INSTALANDO O JDK

- ▶ 1. INSTALAR O **J**AVA **D**EVELOPMENT **K**IT
 - ▶ VERIFIQUE NO SEU TERMINAL SE JÁ POSSUI ALGUMA VERSÃO JAVA INSTALADA
 - ▶ comando: *java -version*

```
Last login: Thu Mar 10 12:50:46 on ttys000
[[jordansilva@Gaia ~]$ java -version
java version "1.8.0_73"
Java(TM) SE Runtime Environment (build 1.8.0_73-b02)
Java HotSpot(TM) 64-Bit Server VM (build 25.73-b02, mixed mode)
[[jordansilva@Gaia ~]$
```

INSTALANDO O JDK

- ▶ 1. INSTALAR O JAVA DEVELOPMENT KIT
 - ▶ Google It: "jdk 8 download"
 - ▶ <http://www.oracle.com/technetwork/java/javase/downloads/index.html>
 - ▶ APÓS A INSTALAÇÃO VERIFIQUE NO TERMINAL A VERSÃO INSTALADA

INSTALANDO O ANDROID STUDIO

- ▶ 1. INSTALAR O JAVA DEVELOPMENT KIT ✓
- ▶ 2. INSTALAR O ANDROID STUDIO
 - ▶ Google It: "Android Studio"
 - ▶ <http://developer.android.com/intl/pt-br/sdk/index.html>

VARIÁVEIS DE AMBIENTE (WINDOWS)

▶ JAVA

JAVA_HOME = C:\Program Files\Java\jdk1.7.0_79

PATH = ;%JAVA_HOME%\bin; *(acrescentar na variável PATH)*

▶ ANDROID

ANDROID_HOME = <*diretorio_android_sdk*>

PATH = ;%ANDROID_HOME%\tools;%ANDROID_HOME%\platform-tools *(acrescentar na variável PATH)*

VARIÁVEIS DE AMBIENTE (MAC OS X)

▶ JAVA

```
export JAVA_HOME=$(/usr/libexec/java_home -v 1.8)
```

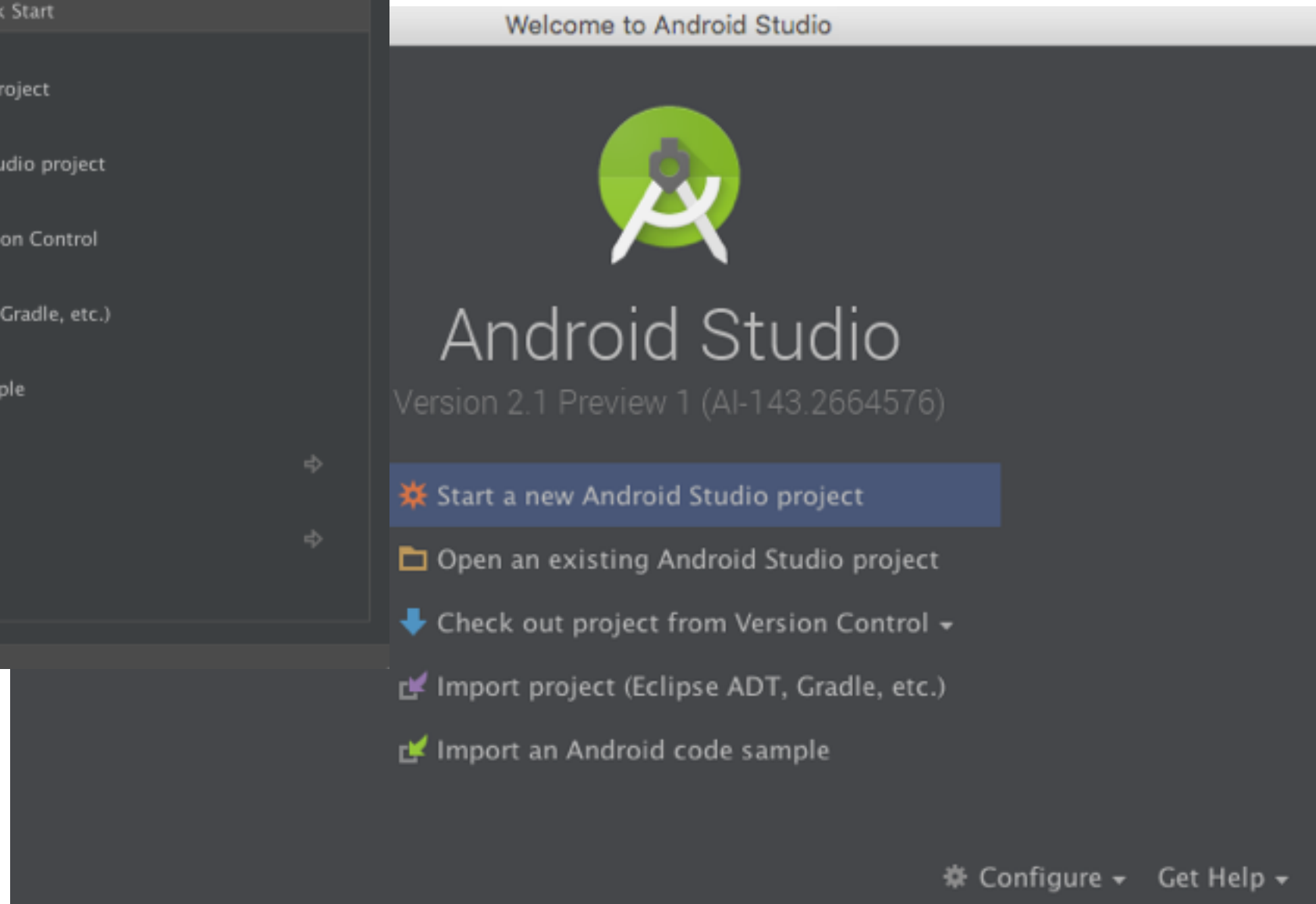
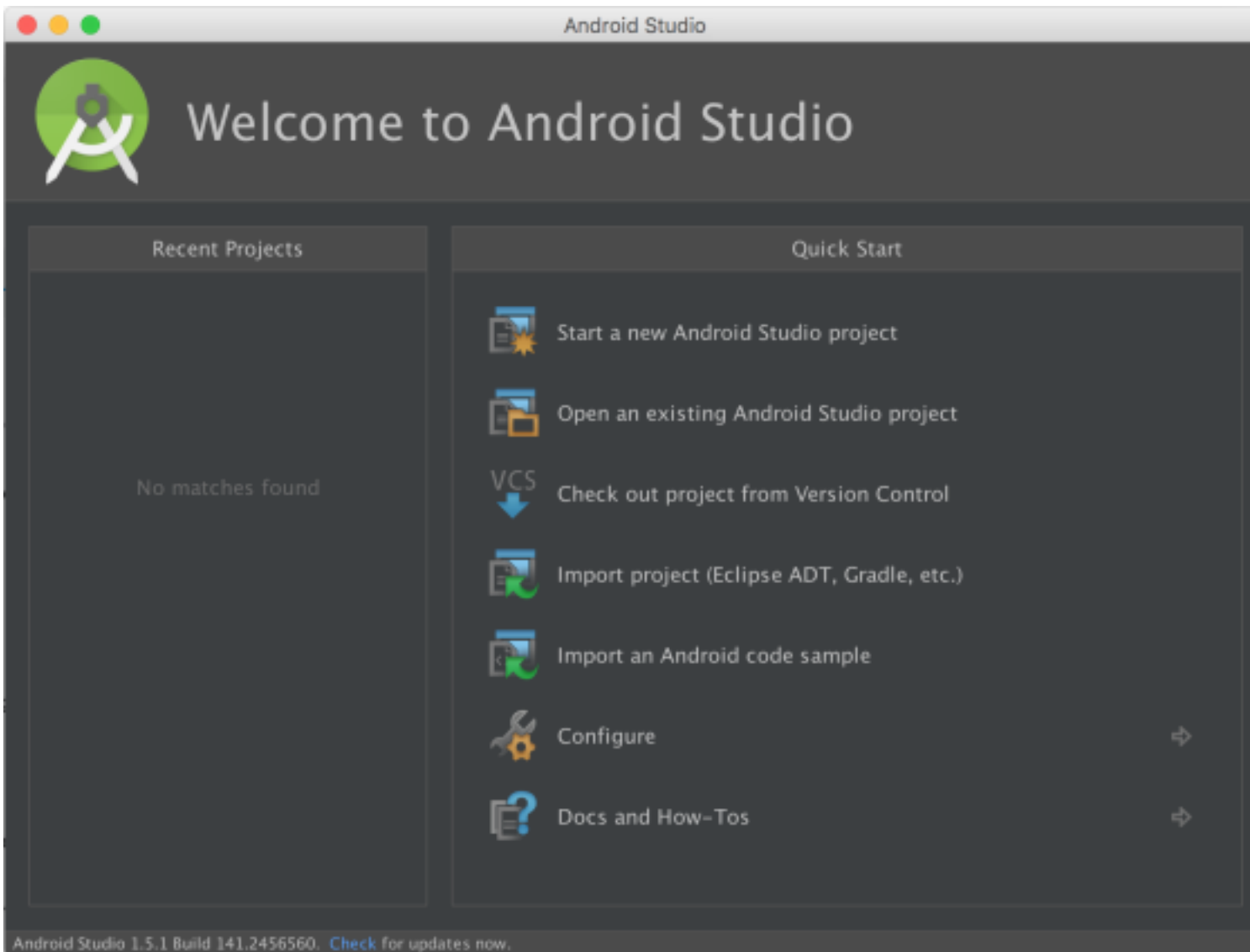
```
export PATH=${JAVA_HOME}/bin:$PATH
```

▶ ANDROID

```
export ANDROID_HOME=/Users/<user>/Library/Android/sdk
```

```
export PATH=$PATH:$ANDROID_HOME/tools:  
$ANDROID_HOME/platform-tools
```


WELCOME TO ANDROID STUDIO



HELP



**ACESSAR DOCUMENTAÇÃO E
REFERÊNCIA DE ATALHOS**

CONFIGURAÇÕES E PREFERÊNCIAS

SDK MANAGER
PREFERÊNCIAS
VERIFICAR ATUALIZAÇÕES



CÓDIGOS DE EXEMPLOS



SUPORTE PARA OUTRAS IDEs



The screenshot shows the Android Studio welcome screen. At the top is the Android Studio logo and the text 'Android Studio Version 2.1 Preview 1 (AI-143.2664576)'. Below this are five options: 'Start a new Android Studio project', 'Open an existing Android Studio project', 'Check out project from Version Control', 'Import project (Eclipse ADT, Gradle, etc.)', and 'Import an Android code sample'. A red arrow points to the 'Import project (Eclipse ADT, Gradle, etc.)' option. To the right, a smaller inset shows a zoomed-in view of the same options, with a red arrow pointing to the 'Import project (Eclipse ADT, Gradle, etc.)' option. At the bottom right of the main screen are 'Configure' and 'Get Help' links.

MIGRE SEUS PROJETOS PARA O ANDROID STUDIO

CONTROLE DE VERSÃO



Android Studio
Version 2.1 Preview 1 (AI-143.2664576)

- Start a new Android Studio project
- Open an existing Android Studio project
- Check out project from Version Control
- Import project (Eclipse ADT, Gradle, etc.)
- Import an Android code sample

Configure Get Help



Start a new Android Studio project

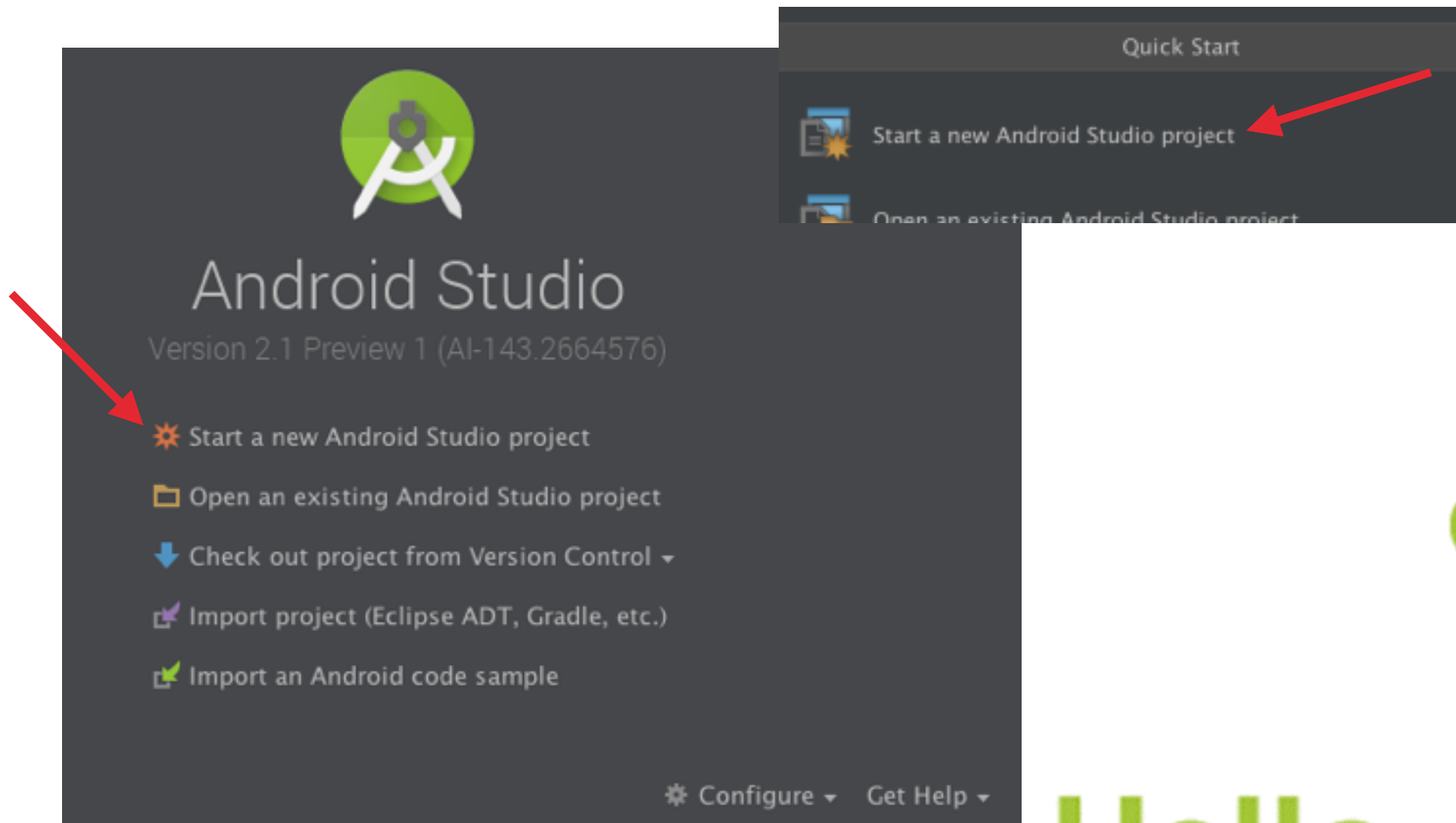
Open an existing Android Studio project

VCS Check out project from Version Control

CONTROLE DE VERSÃO GIT & GITHUB



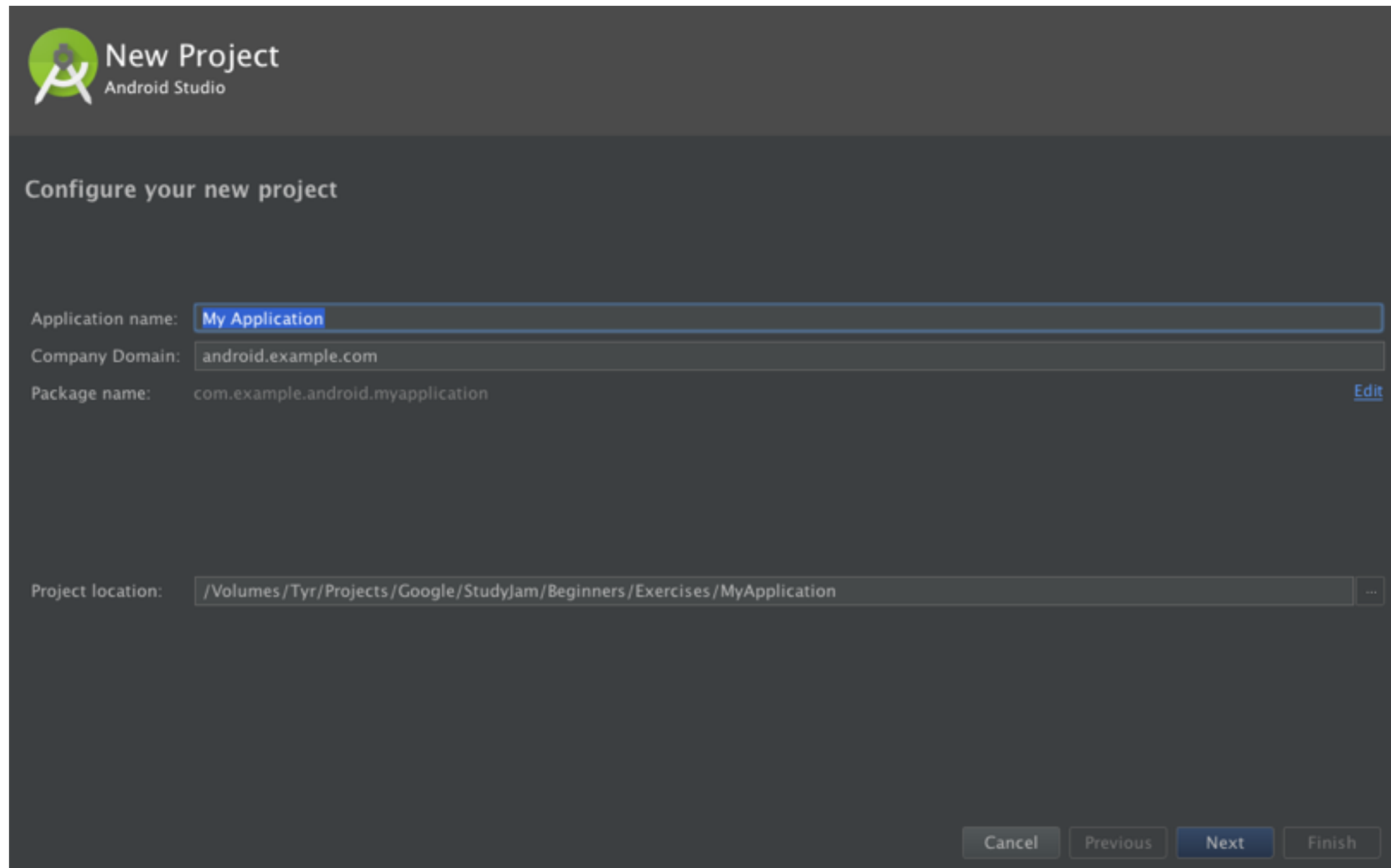
VAMOS COMEÇAR!




Hello,
Android!



O PRIMEIRO PROJETO!



 **New Project**
Android Studio

Configure your new project

Application name:

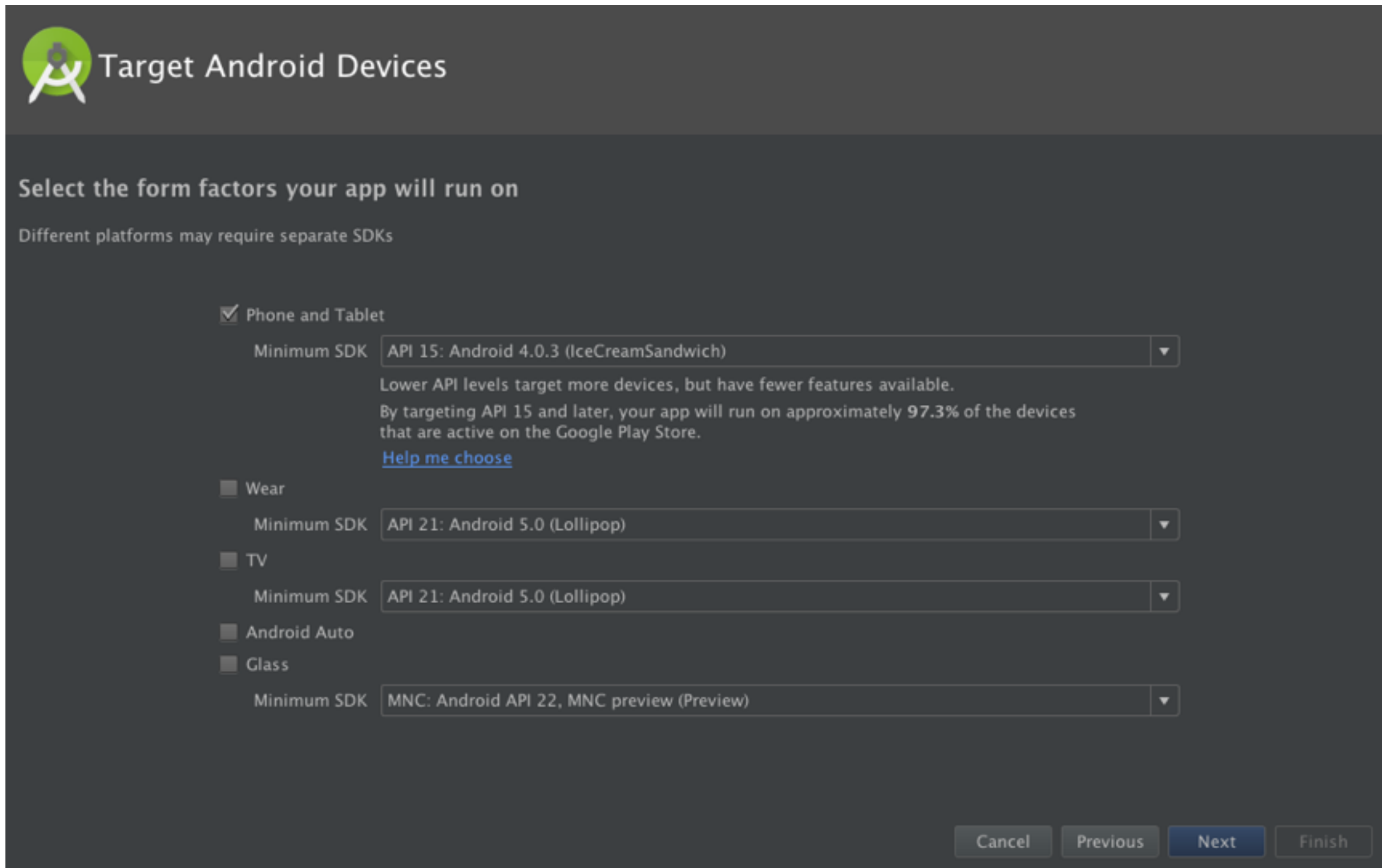
Company Domain:


Package name: [Edit](#)

Project location: ...

Android!

O PRIMEIRO PROJETO!



 Target Android Devices

Select the form factors your app will run on

Different platforms may require separate SDKs

☒ Phone and Tablet

Minimum SDK API 15: Android 4.0.3 (IceCreamSandwich)

Lower API levels target more devices, but have fewer features available.
By targeting API 15 and later, your app will run on approximately 97.3% of the devices that are active on the Google Play Store.
[Help me choose](#)

☐ Wear

Minimum SDK API 21: Android 5.0 (Lollipop)

☐ TV

Minimum SDK API 21: Android 5.0 (Lollipop)

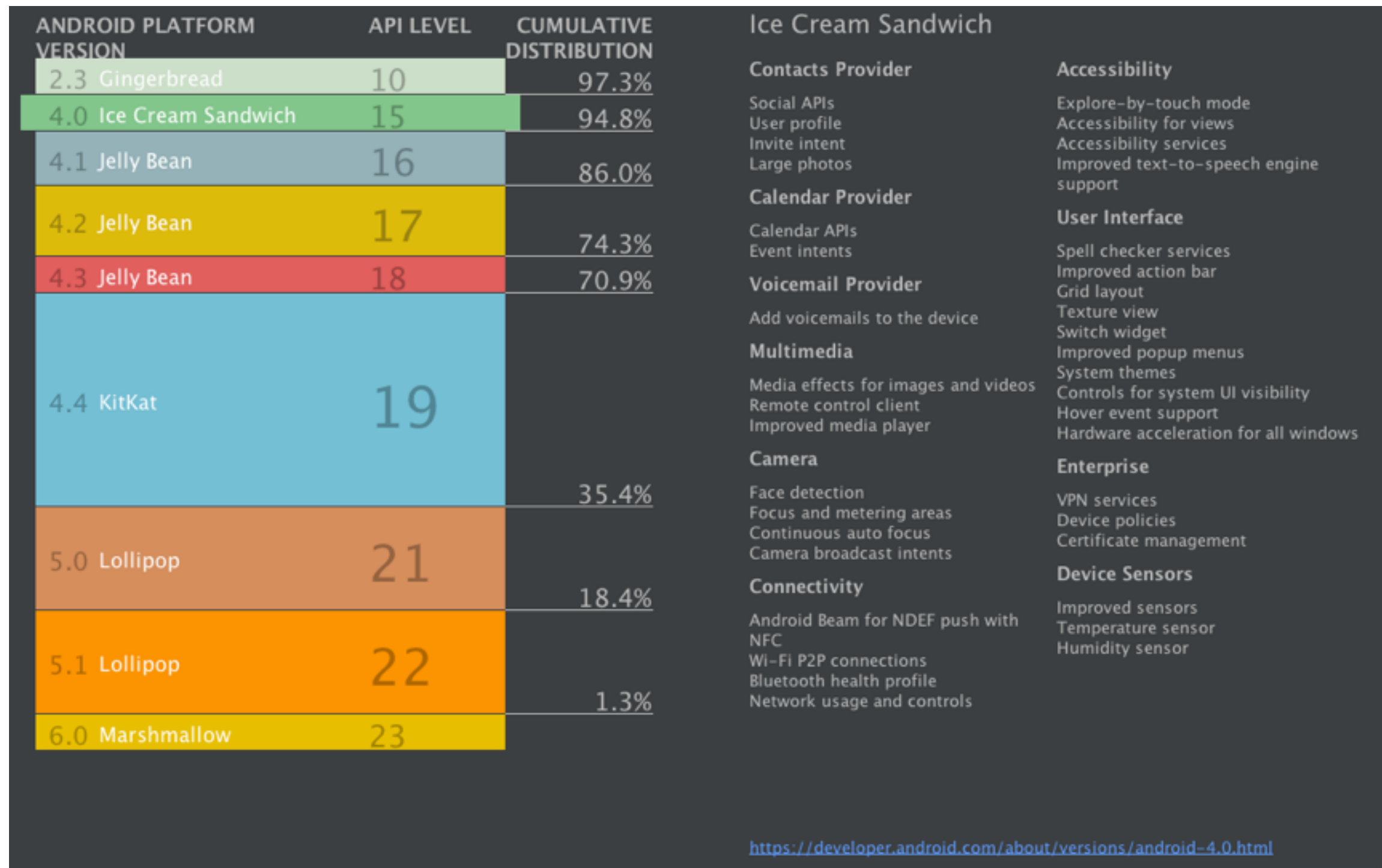
☐ Android Auto

☐ Glass

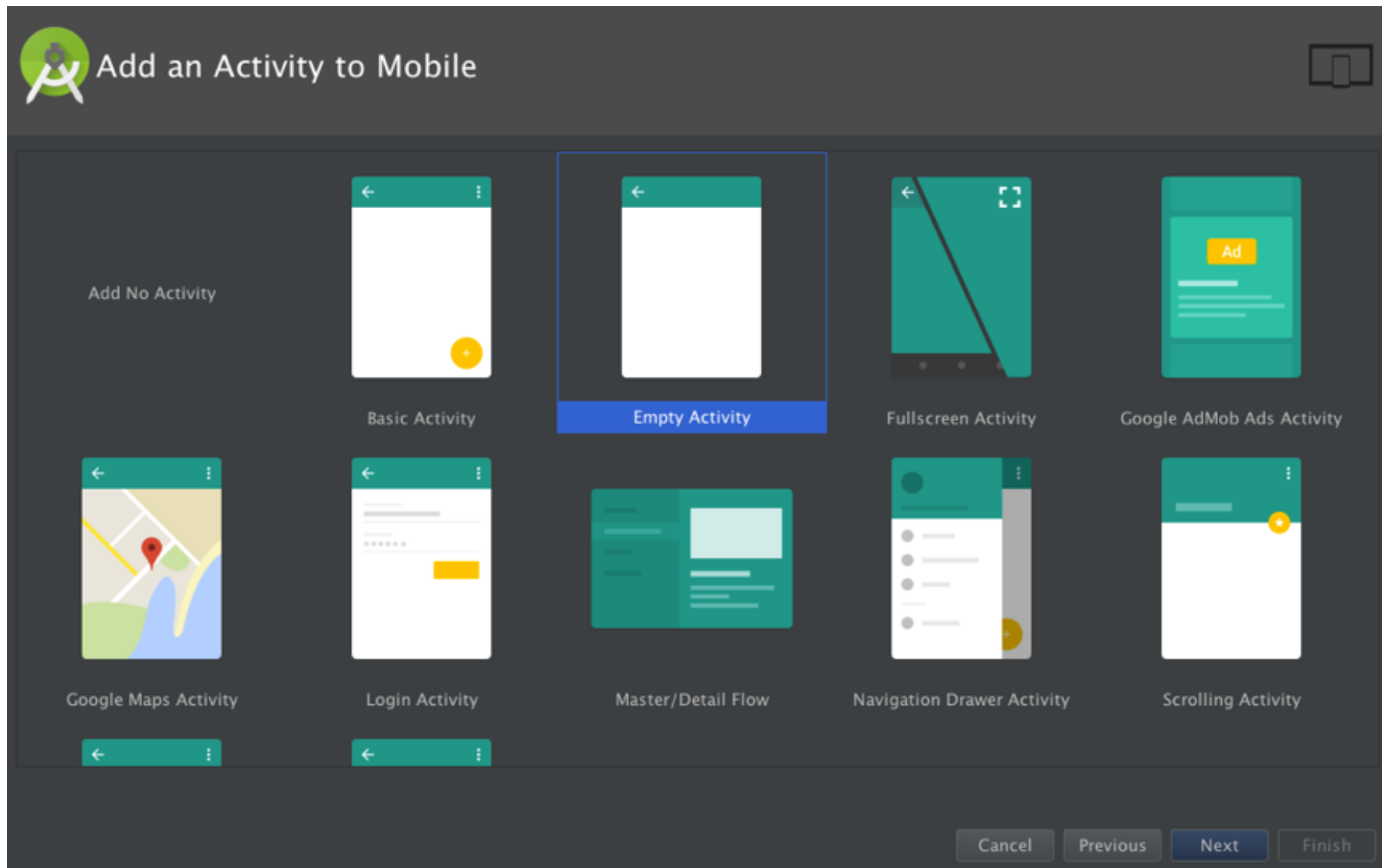
Minimum SDK MNC: Android API 22, MNC preview (Preview)

Cancel Previous Next Finish

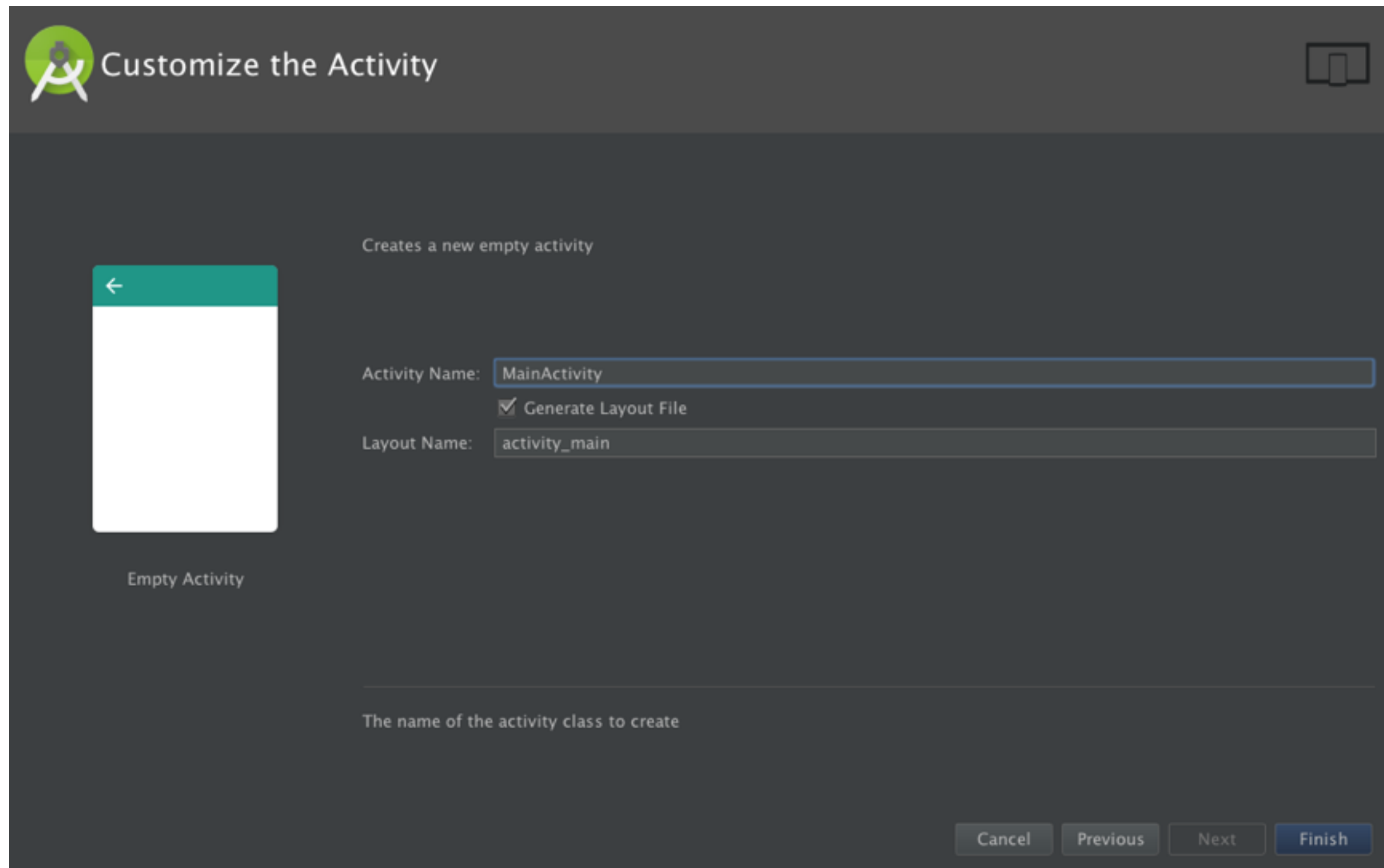
O PRIMEIRO PROJETO!





O PRIMEIRO PROJETO!




O PRIMEIRO PROJETO!



 Customize the Activity 

Creates a new empty activity



Empty Activity

Activity Name:

☒ Generate Layout File

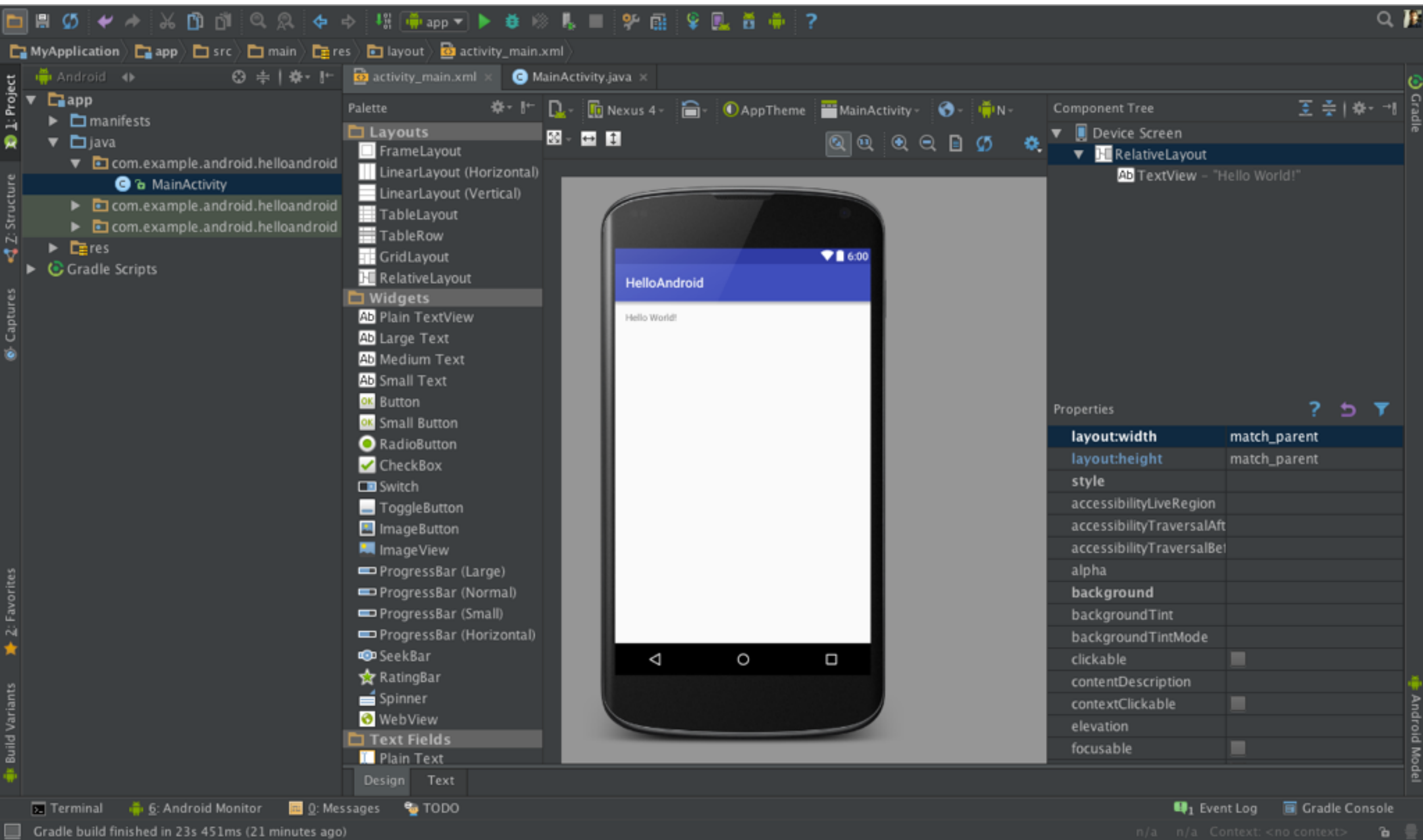
Layout Name:

The name of the activity class to create



INTEGRATE DEVELOPMENT ENVIRONMENT

ANDROID STUDY JAMS: CONFIGURAÇÃO DO AMBIENTE E FERRAMENTAS



MENU

Android Studio File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window

**COMANDOS E OPÇÕES
PARA CUSTOMIZAR O SEU
WORKSPACE.**

TOOLBAR (BARRA DE FERRAMENTAS)



CONTÉM FERRAMENTAS PARA
ACESSO AO **AVD**, **SDK MANAGER**,
EXECUTAR O APP, ENTRE OUTRAS.

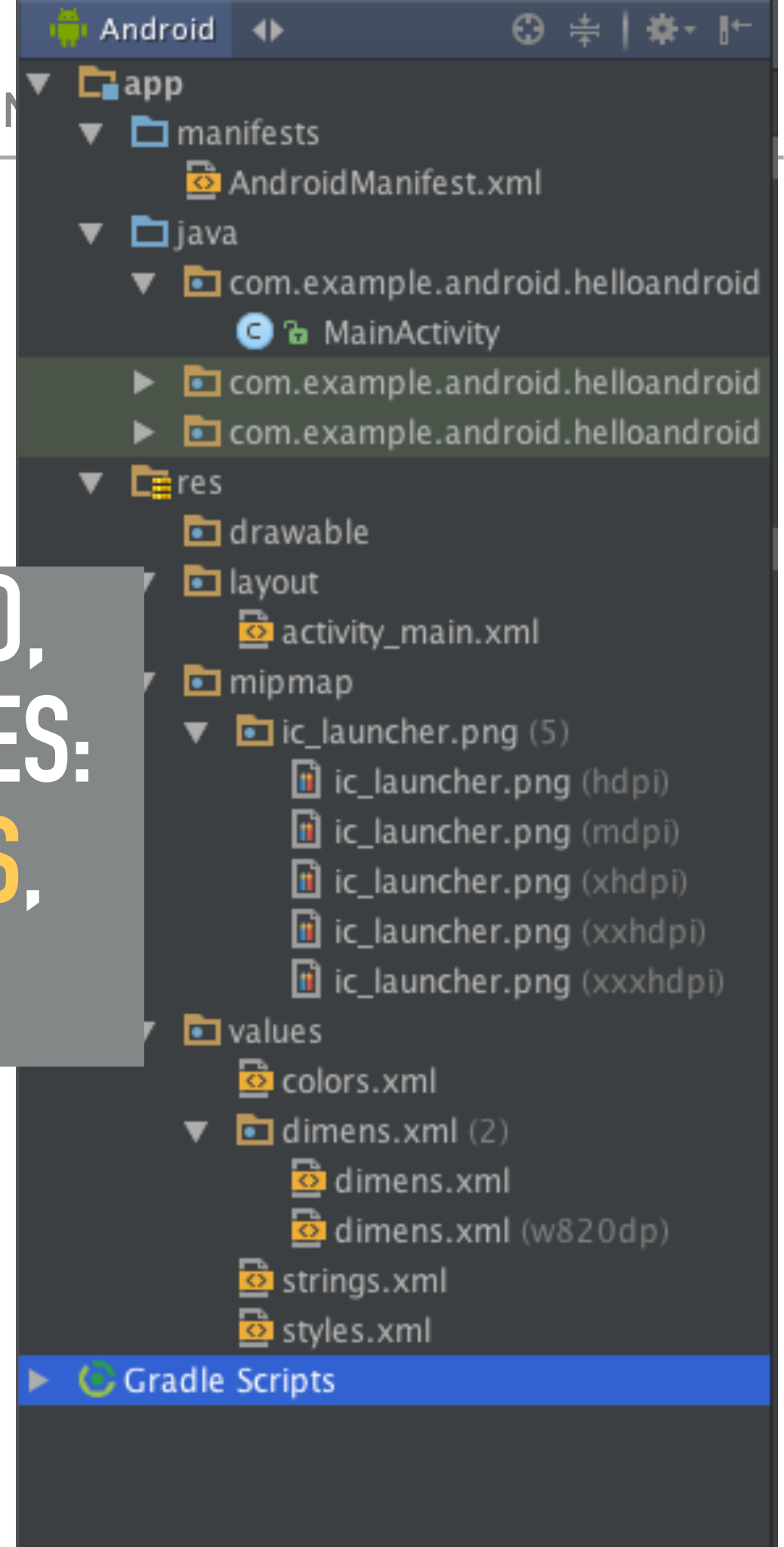
PROJECT PATH (ÁRVORE DE NAVEGAÇÃO DO PROJETO)



EXIBE A HIERARQUIA DE PASTAS DO PROJETO ANDROID.

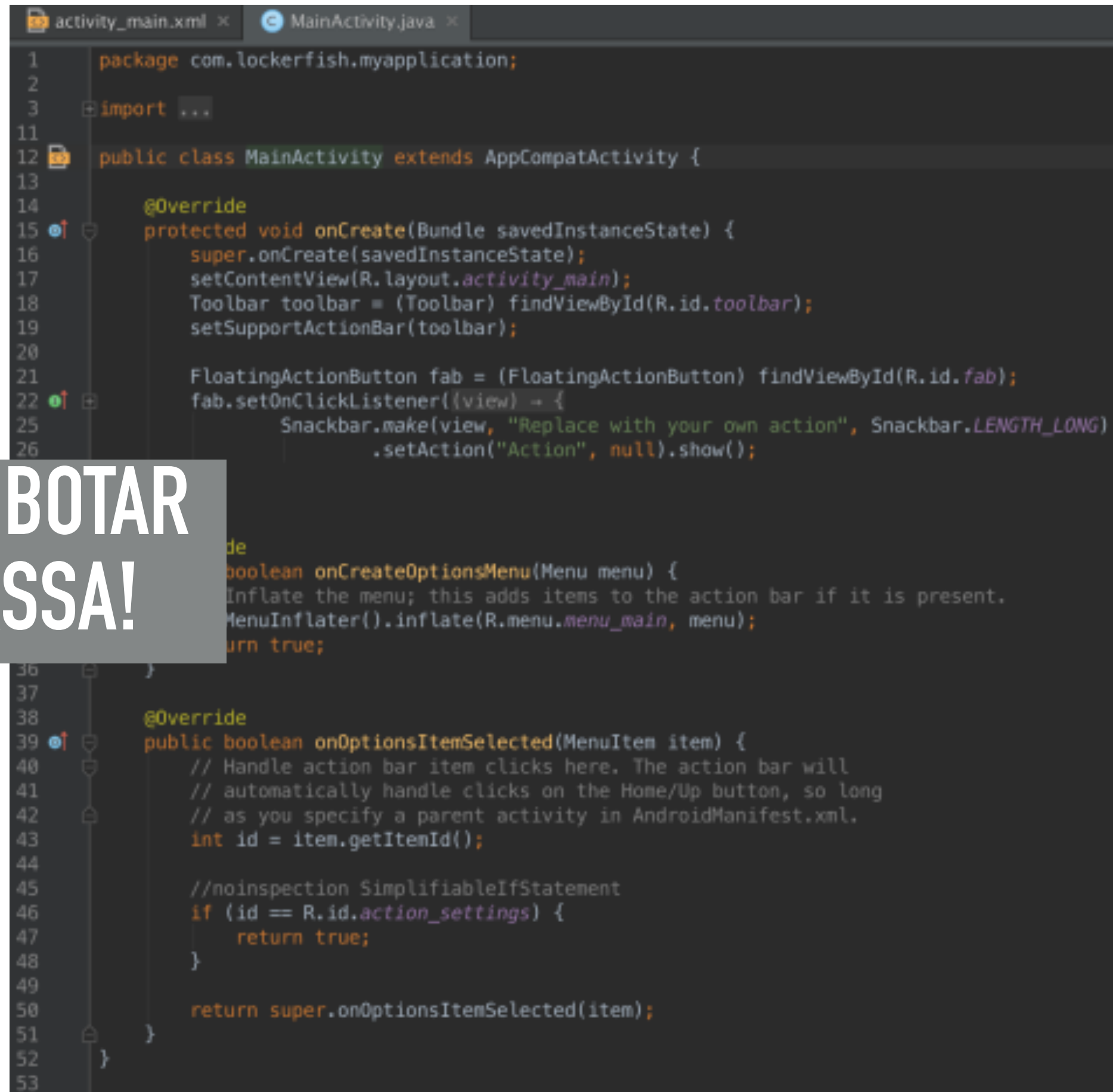
PROJECT PANEL

EXIBE A ESTRUTURA DO PROJETO,
PERMITE REALIZAR VÁRIAS AÇÕES:
ADICIONAR ACTIVITIES, IMAGENS,
NAVEGAR ENTRE OS ARQUIVOS.



FILE EDITOR

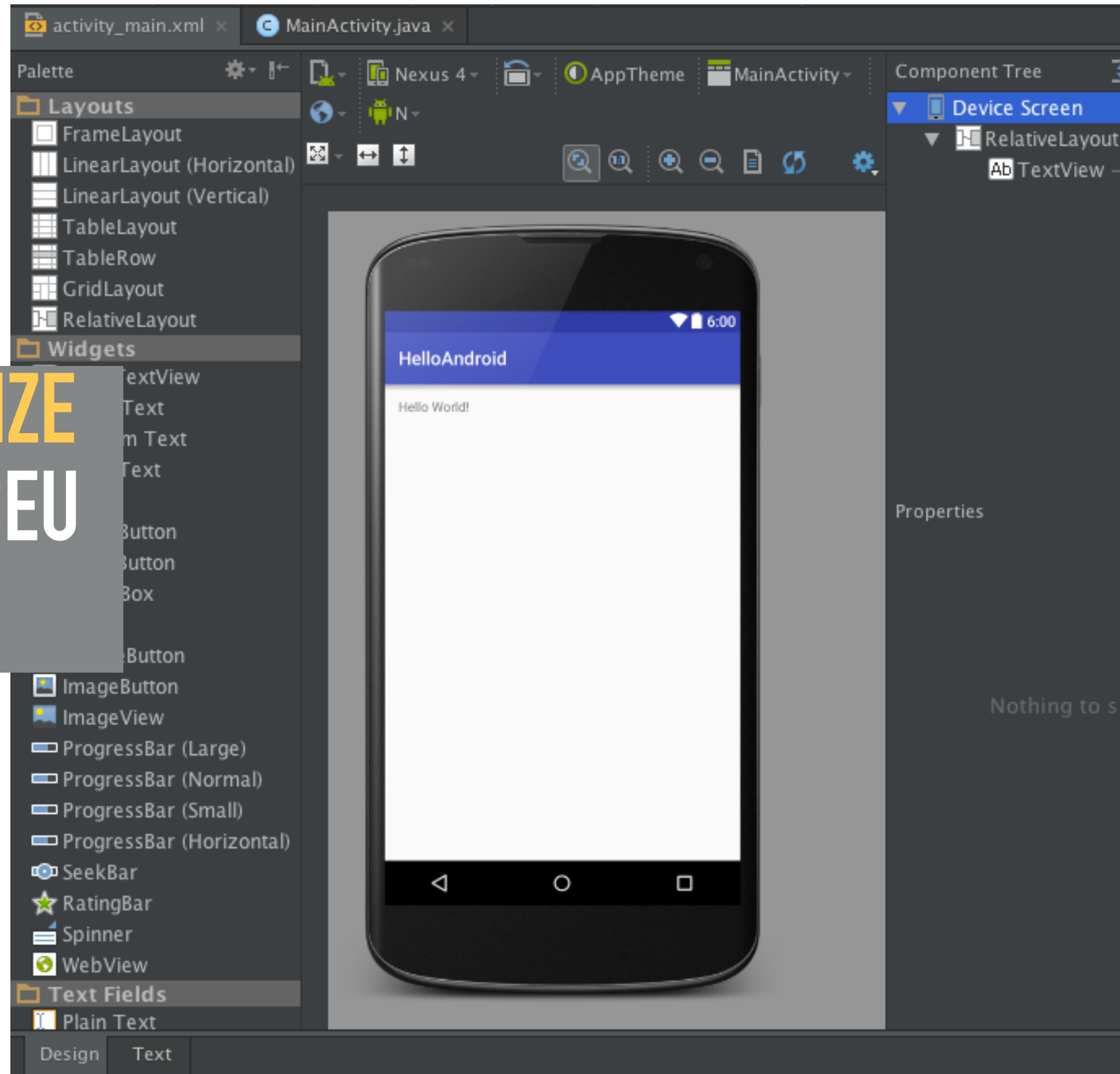
ONDE VAMOS BOTAR
A MÃO NA MASSA!

A screenshot of the Android Studio IDE showing the MainActivity.java file. The editor has a dark theme. The top bar shows two tabs: 'activity_main.xml' and 'MainActivity.java'. The code is as follows:

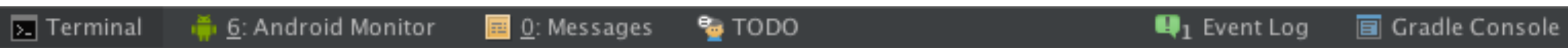
```
1 package com.lockerfish.myapplication;
2
3 import ...
4
11
12 public class MainActivity extends AppCompatActivity {
13
14     @Override
15     protected void onCreate(Bundle savedInstanceState) {
16         super.onCreate(savedInstanceState);
17         setContentView(R.layout.activity_main);
18         Toolbar toolbar = (Toolbar) findViewById(R.id.toolbar);
19         setSupportActionBar(toolbar);
20
21         FloatingActionButton fab = (FloatingActionButton) findViewById(R.id.fab);
22         fab.setOnClickListener(new View.OnClickListener() {
23             @Override
24             public void onClick(View view) {
25                 Snackbar.make(view, "Replace with your own action", Snackbar.LENGTH_LONG)
26                     .setAction("Action", null).show();
27             }
28         });
29
30         // Inflate the menu; this adds items to the action bar if it is present.
31         getMenuInflater().inflate(R.menu.menu_main, this);
32     }
33
34     @Override
35     public boolean onOptionsItemSelected(MenuItem item) {
36         // Handle action bar item clicks here. The action bar will
37         // automatically handle clicks on the Home/Up button, so long
38         // as you specify a parent activity in AndroidManifest.xml.
39         int id = item.getItemId();
40
41         //noinspection SimplifiableIfStatement
42         if (id == R.id.action_settings) {
43             return true;
44         }
45
46         return super.onOptionsItemSelected(item);
47     }
48 }
```

LAYOUT EDITOR

CRIE E VISUALIZE
O DESIGN DO SEU
APP AQUI.



STATUS BAR



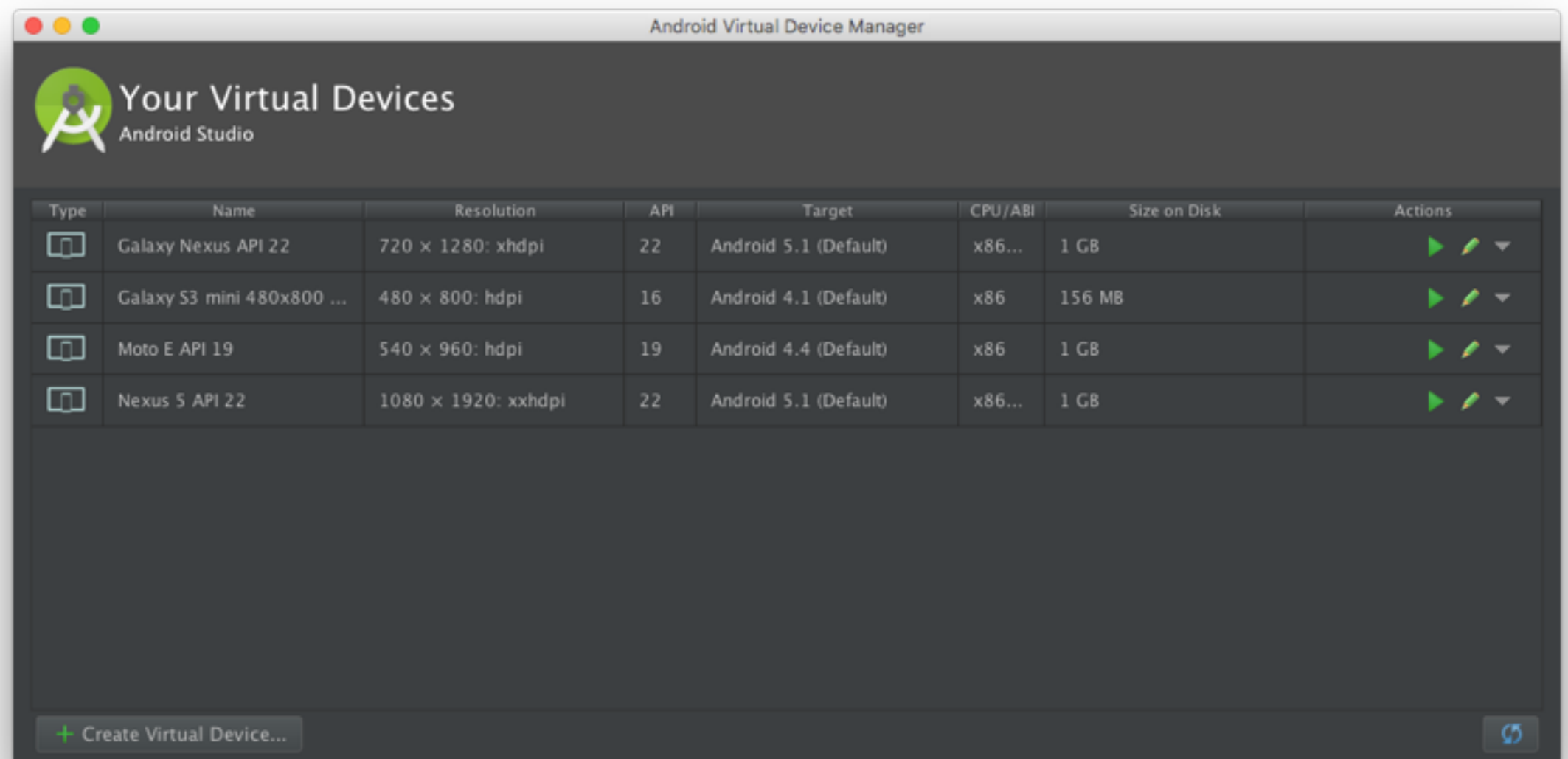
**VAI SER O SEU COMPANHEIRO
NAS HORAS MAIS DIFÍCEIS.
STATUS DE ATUALIZAÇÃO,
ERROS, DEBUG.**

ANDROID STUDY JAMS: CONFIGURAÇÃO DO AMBIENTE E FERRAMENTAS

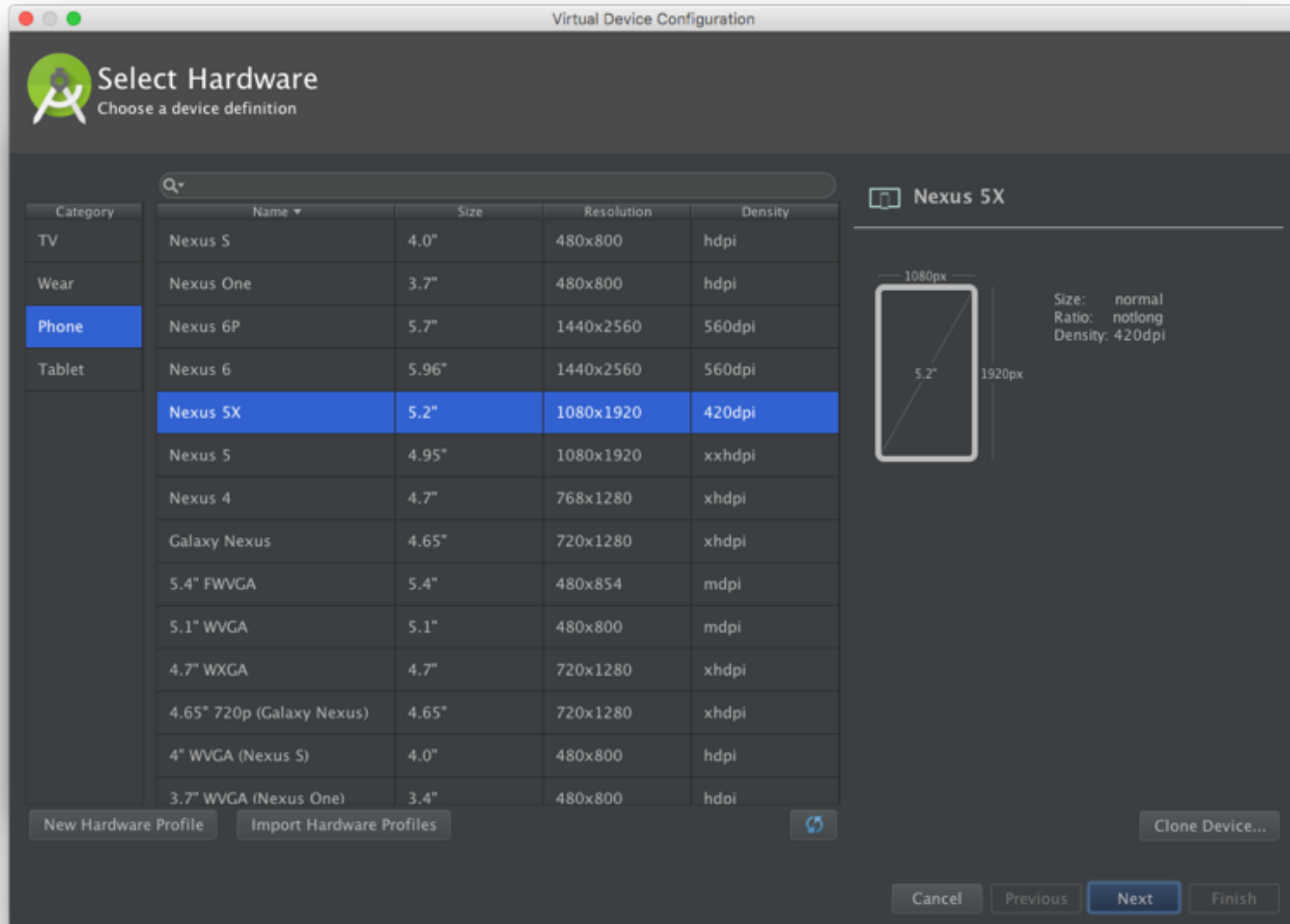
EMULADOR



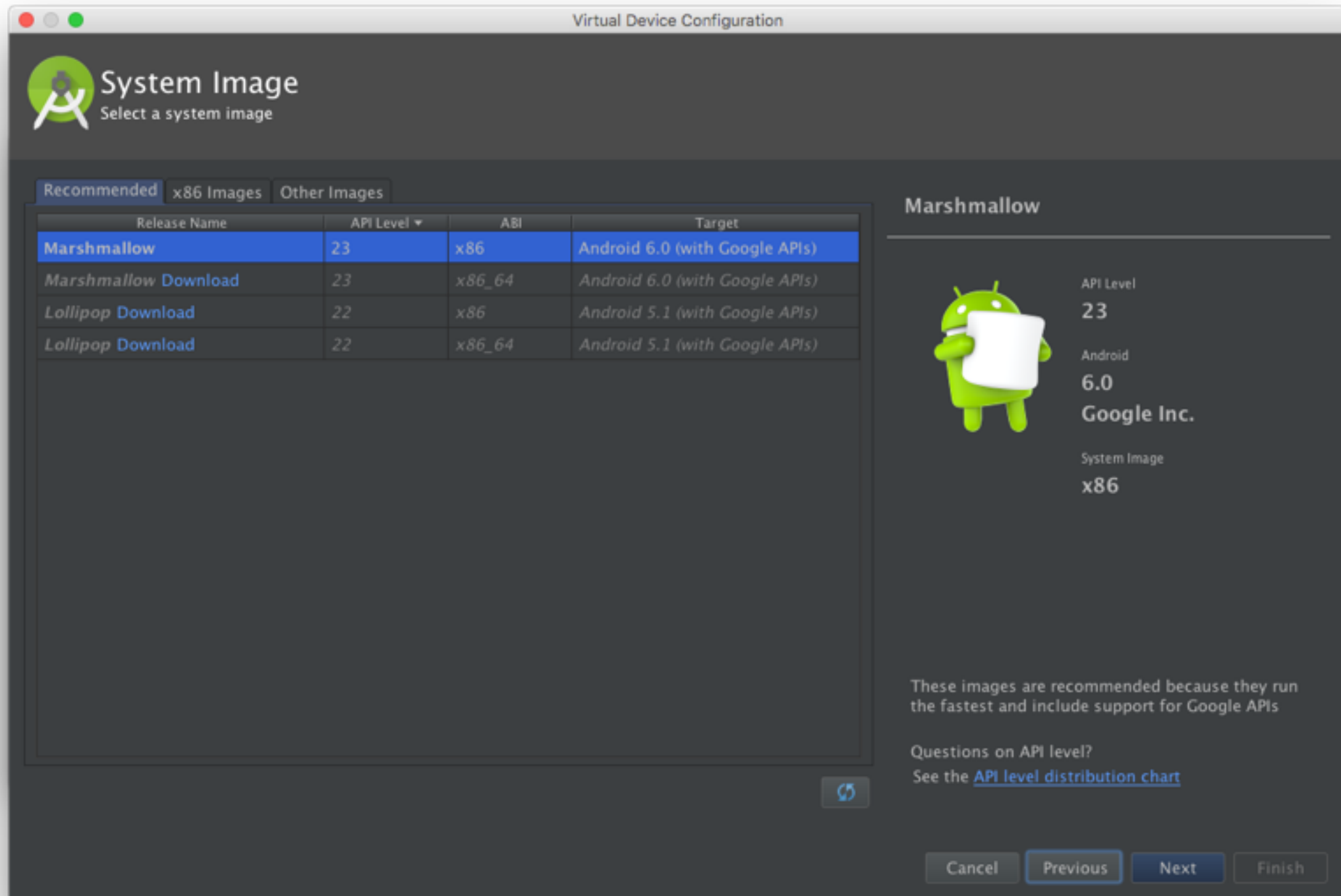
AVD MANAGER



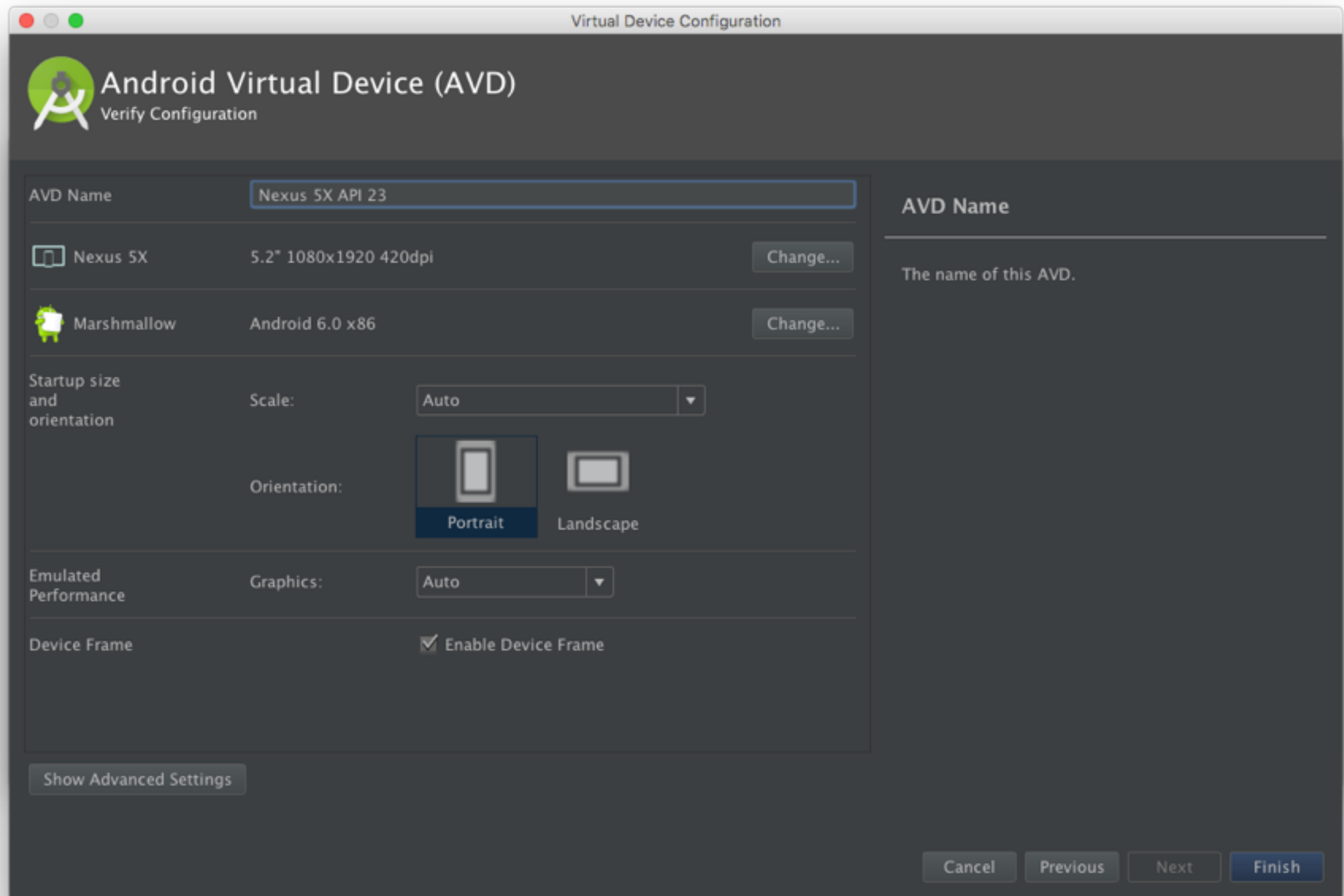
EMULADOR – SELECT HARDWARE



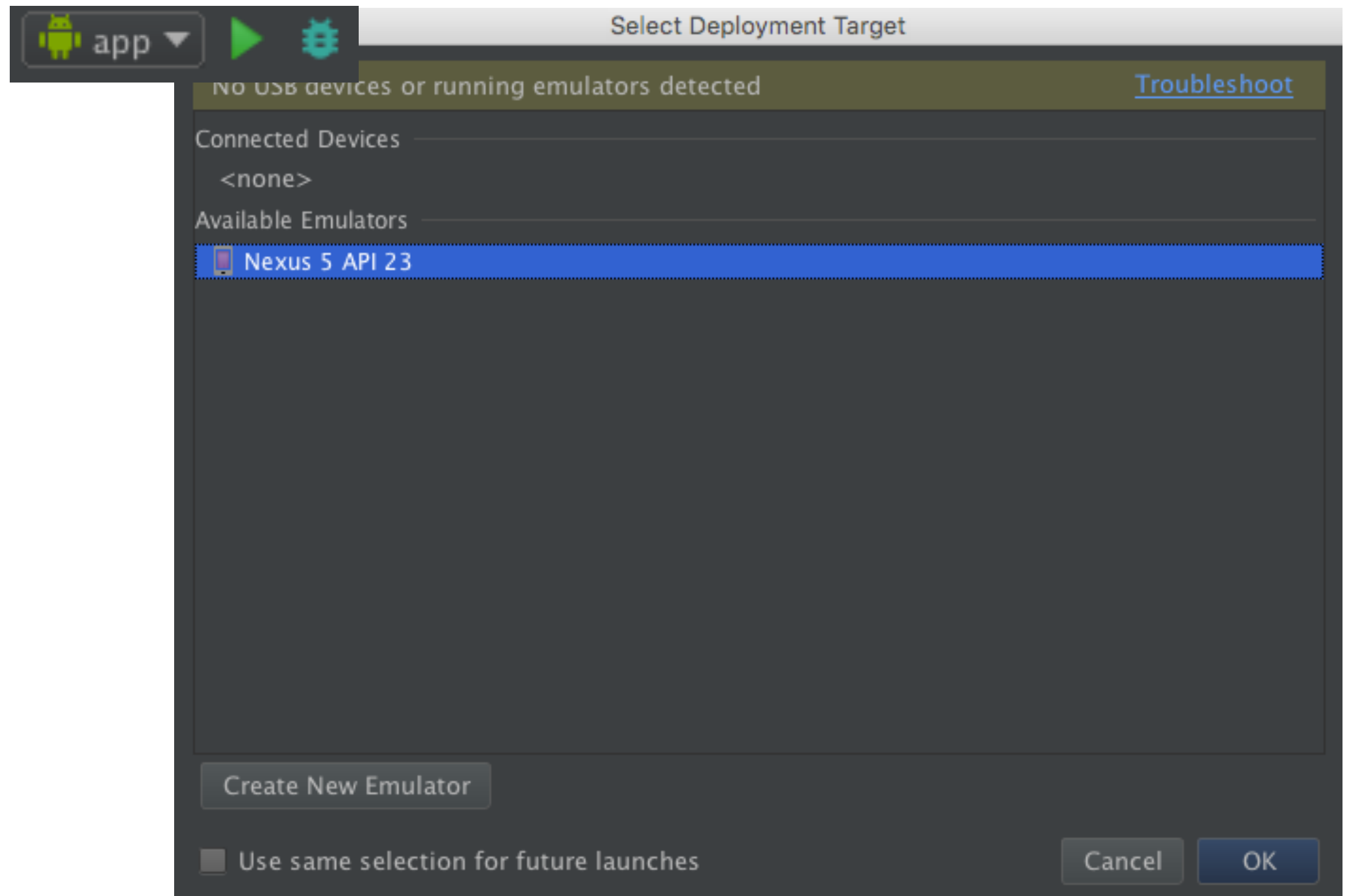
EMULADOR – SELECT SYSTEM IMAGE



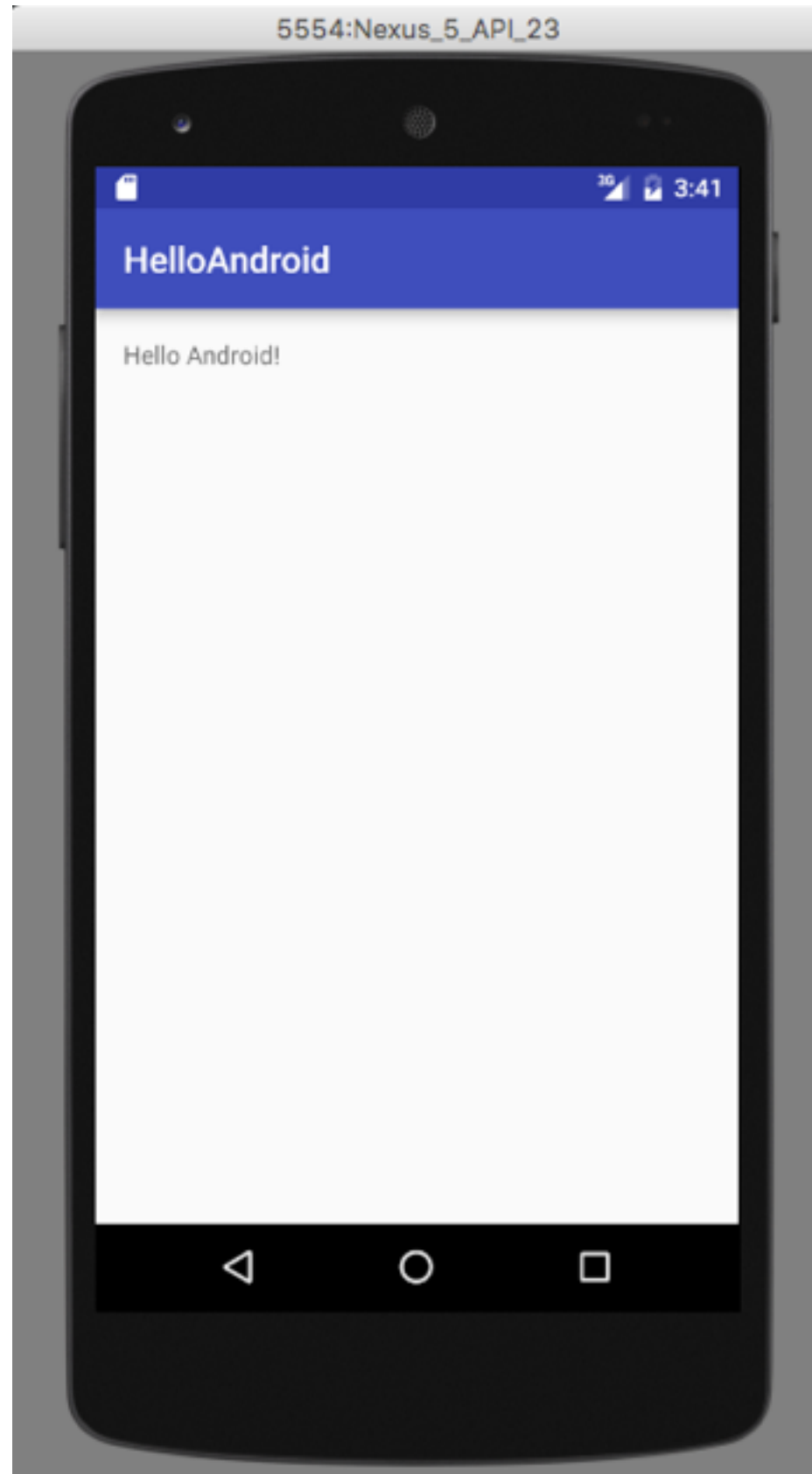
EMULADOR – CONFIGURATION



LET'S PLAY!



LET'S PLAY!



LINKS ÚTEIS

- ▶ INSTALANDO O ANDROID STUDIO

<https://goo.gl/wqBBTr>

- ▶ VOCABULÁRIO ANDROID

<https://goo.gl/dV7clj>

- ▶ UDACITY GOOGLE STUDY JAM

<https://www.udacity.com/account/affiliate/GoogleStudyJams>

<https://goo.gl/dhwwY5> (Android Development For Beginners)

- ▶ TWITTERS: @JORDANSILVA E @TWITTERDOARI

- ▶ SLACK: [GDGBH.SLACK.COM](https://gdgbh.slack.com) #devstudyjam