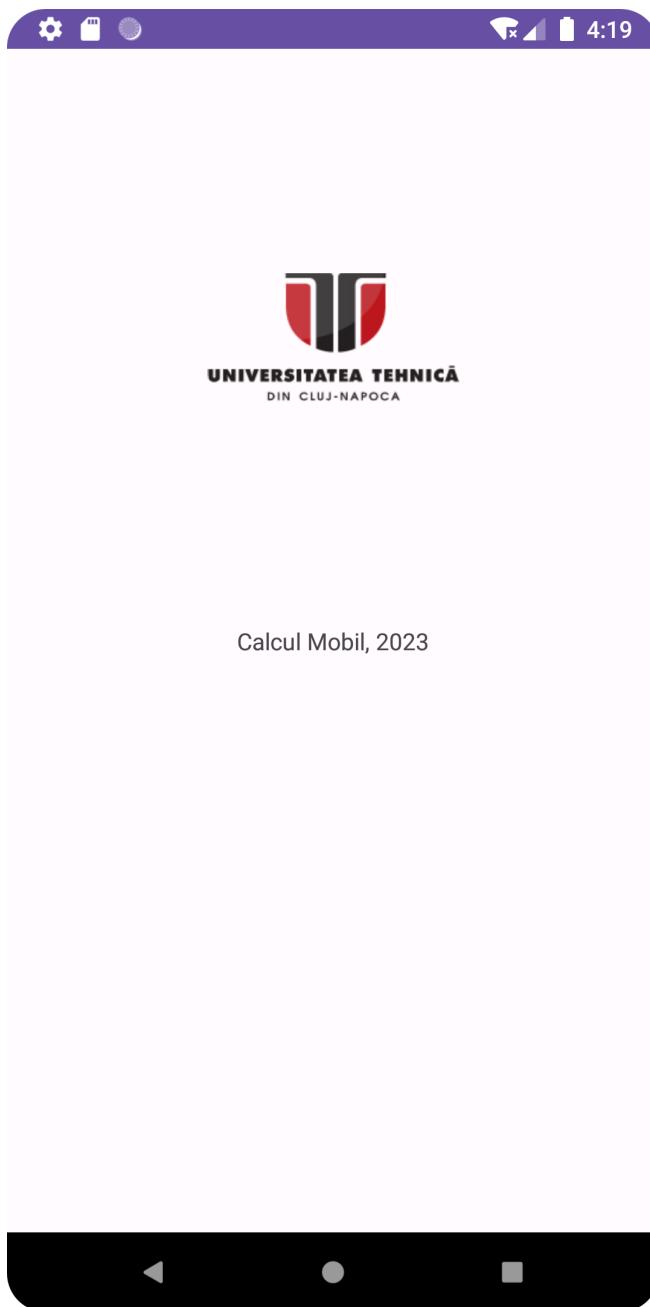


# L01 Android Studio

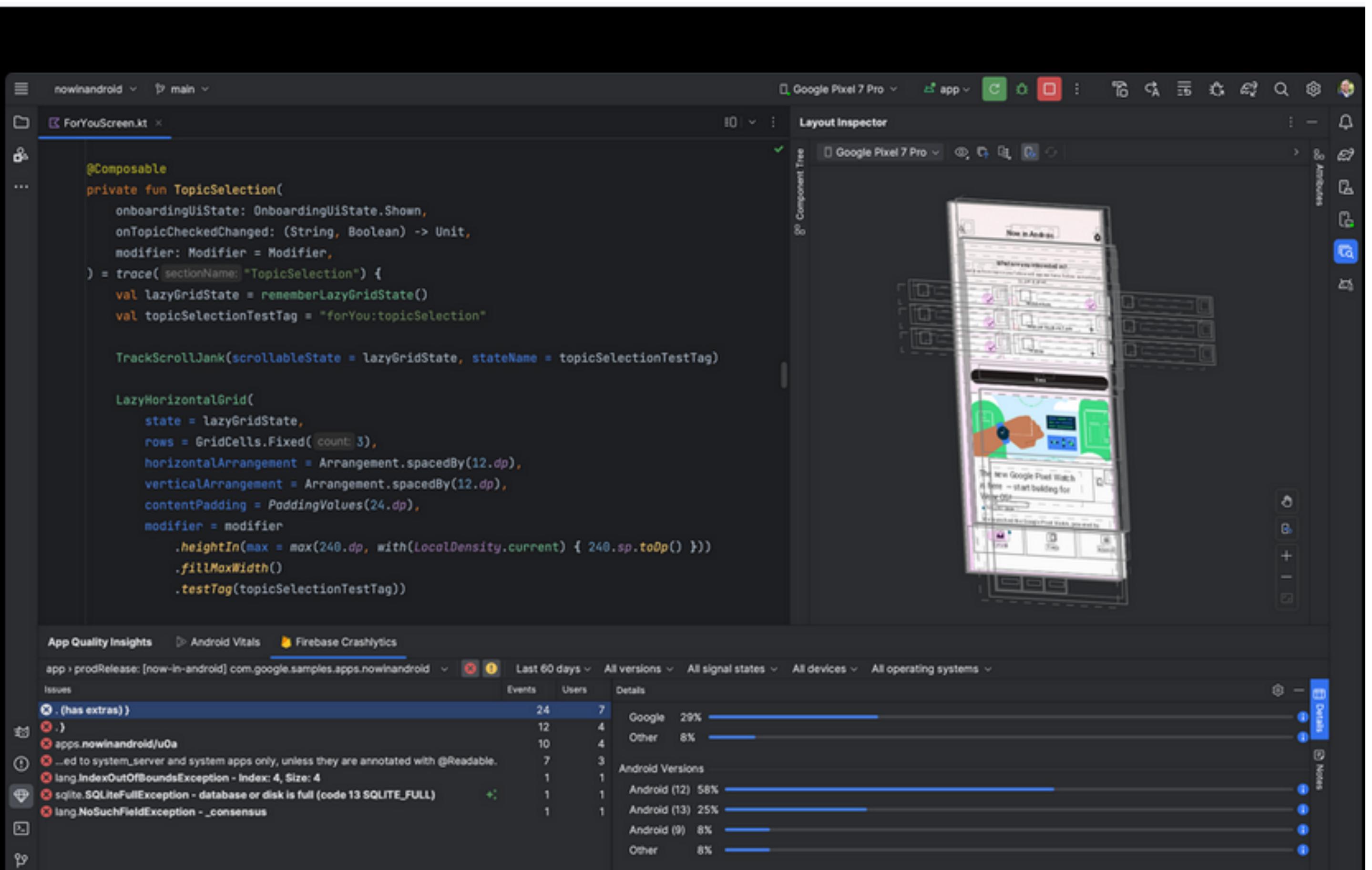


# Android Studio

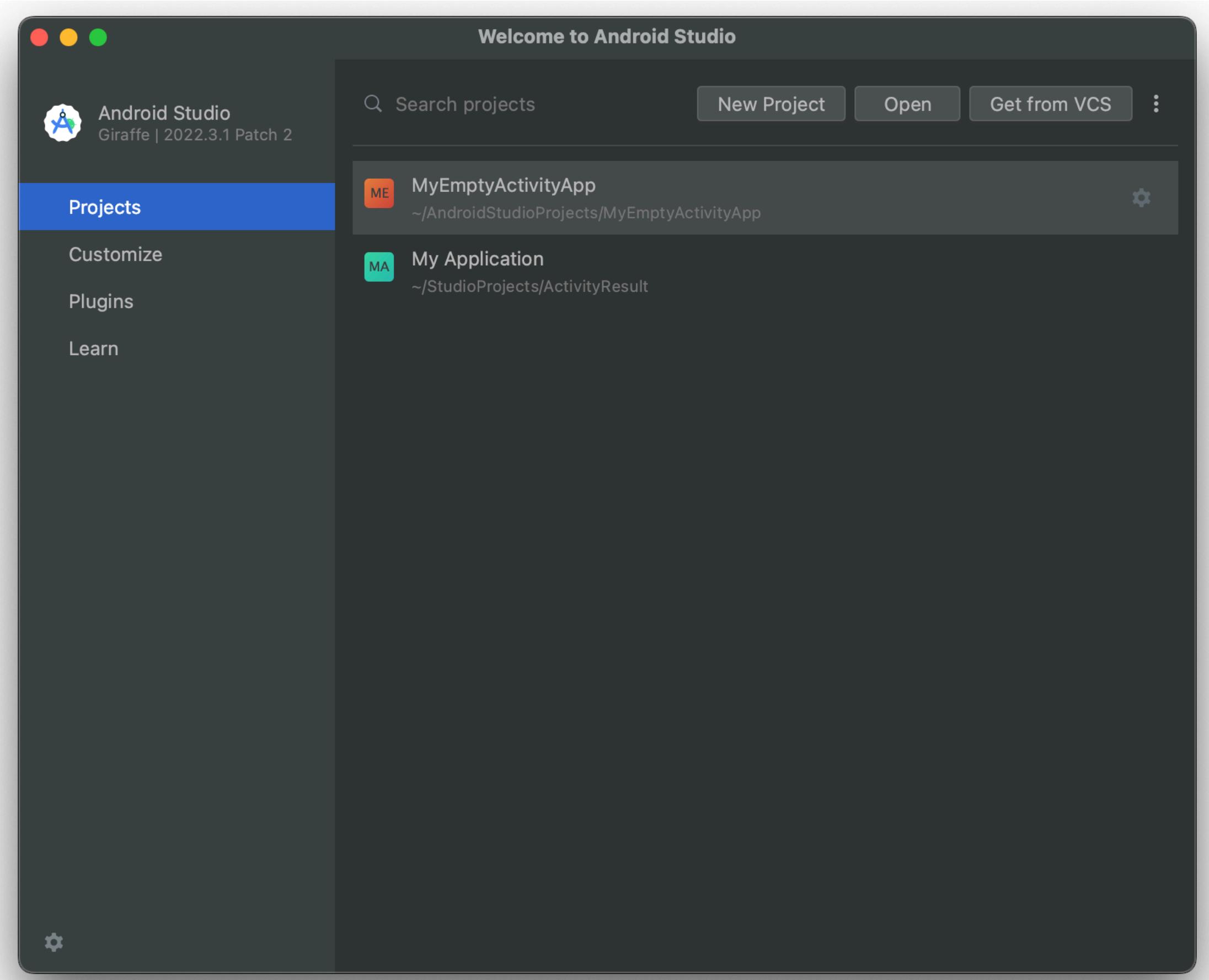
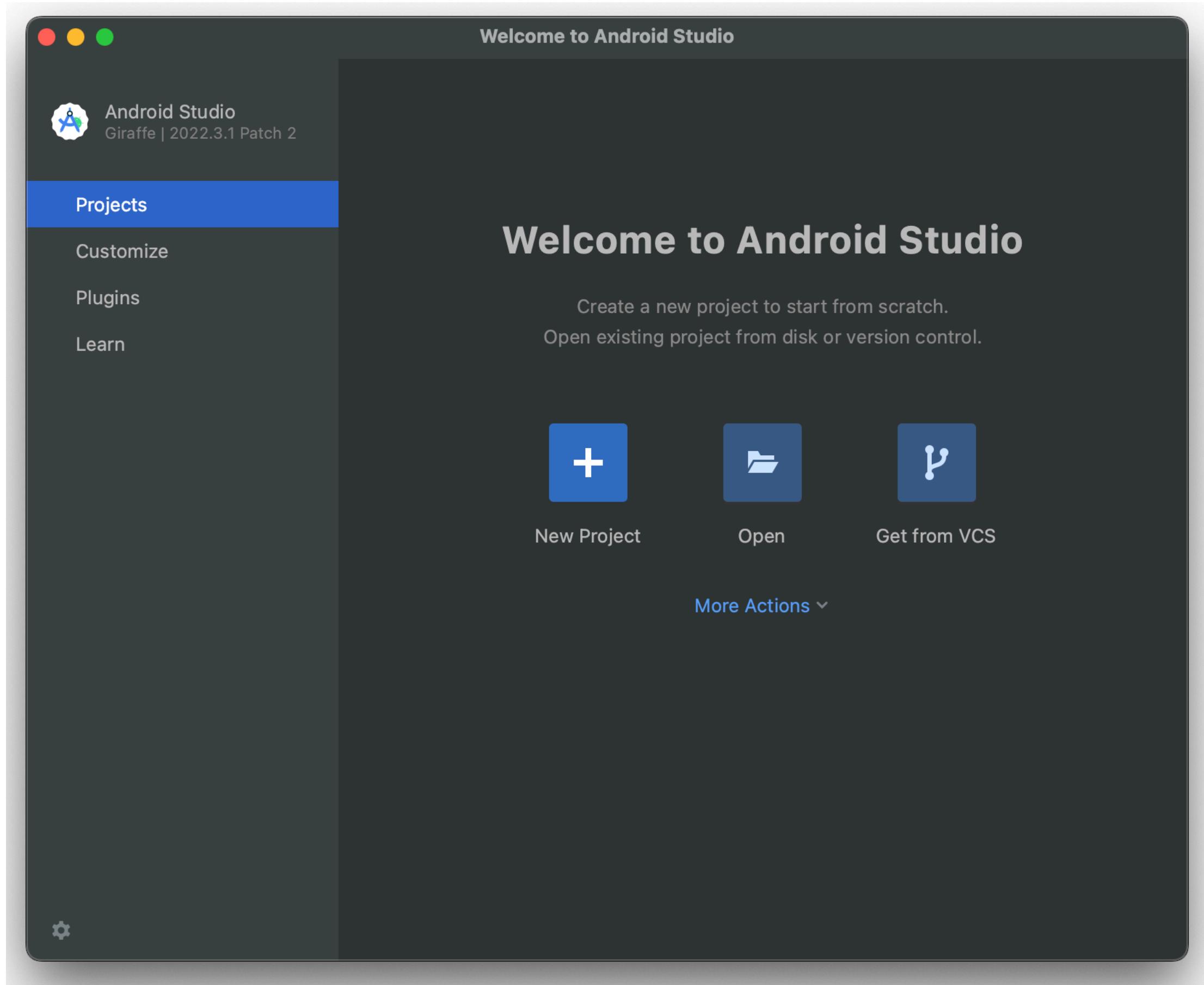
Get the official Integrated Development Environment (IDE) for Android app development.

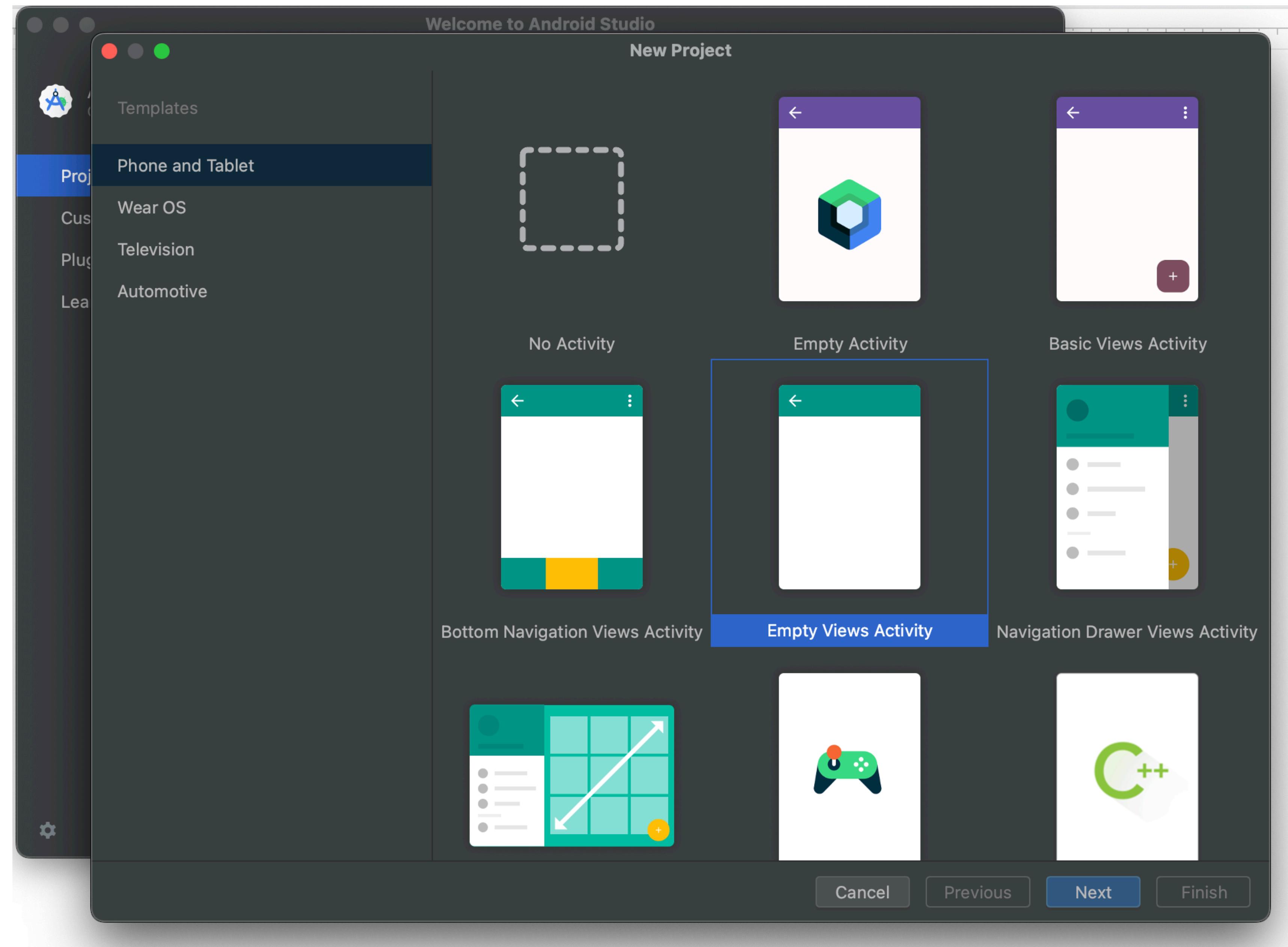
[Download Android Studio Giraffe](#) 

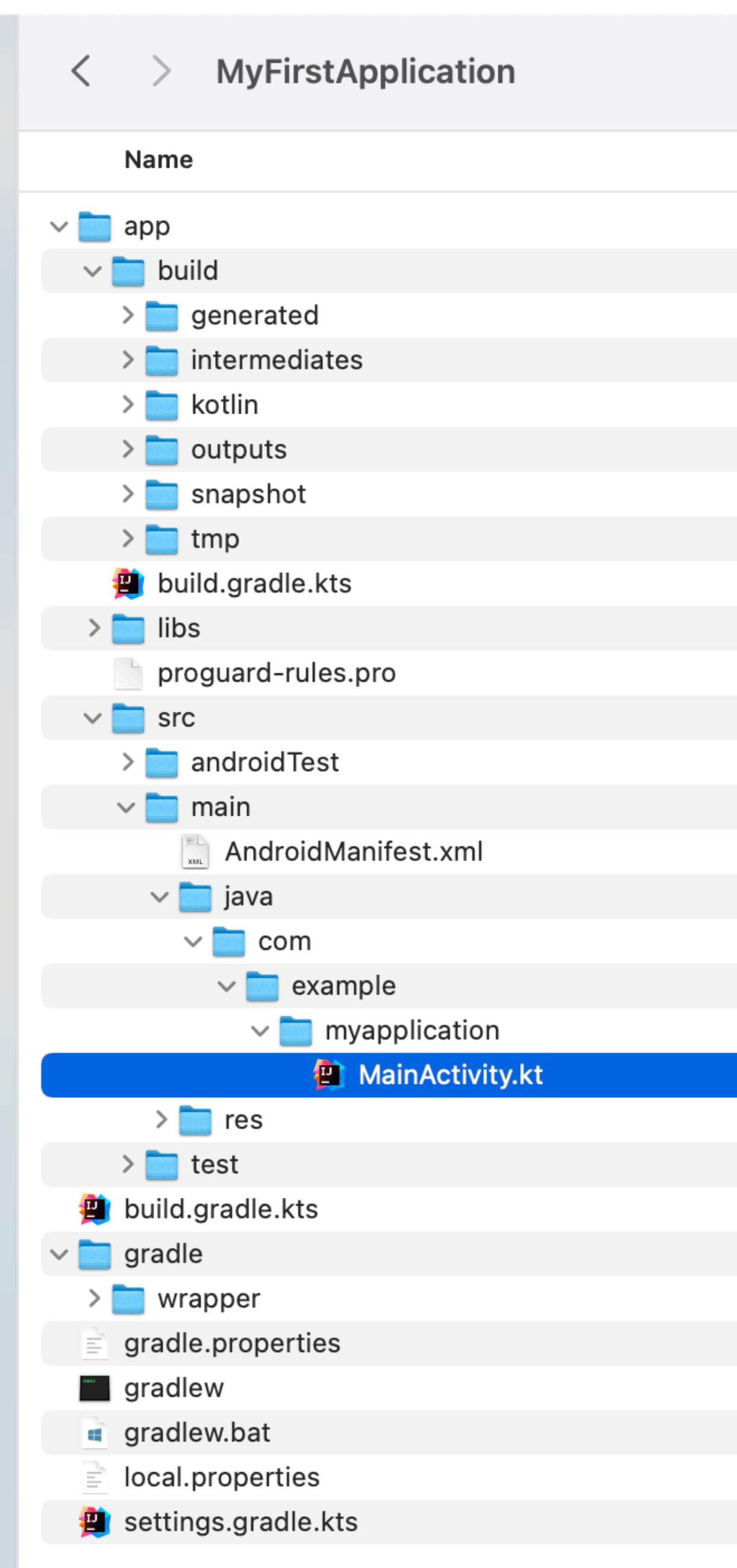
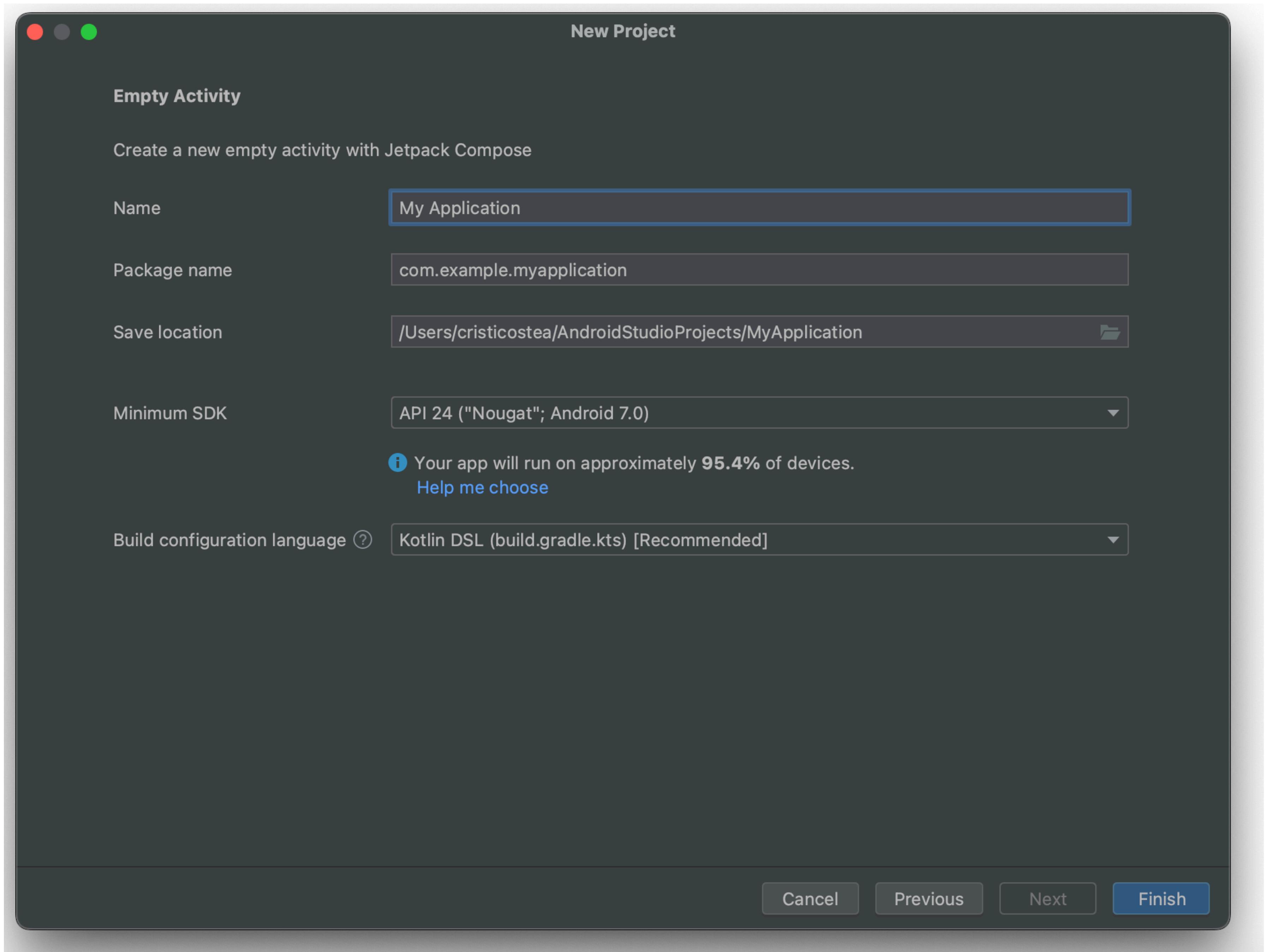
[Read release notes](#) 



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







## Project

## Resource Manager

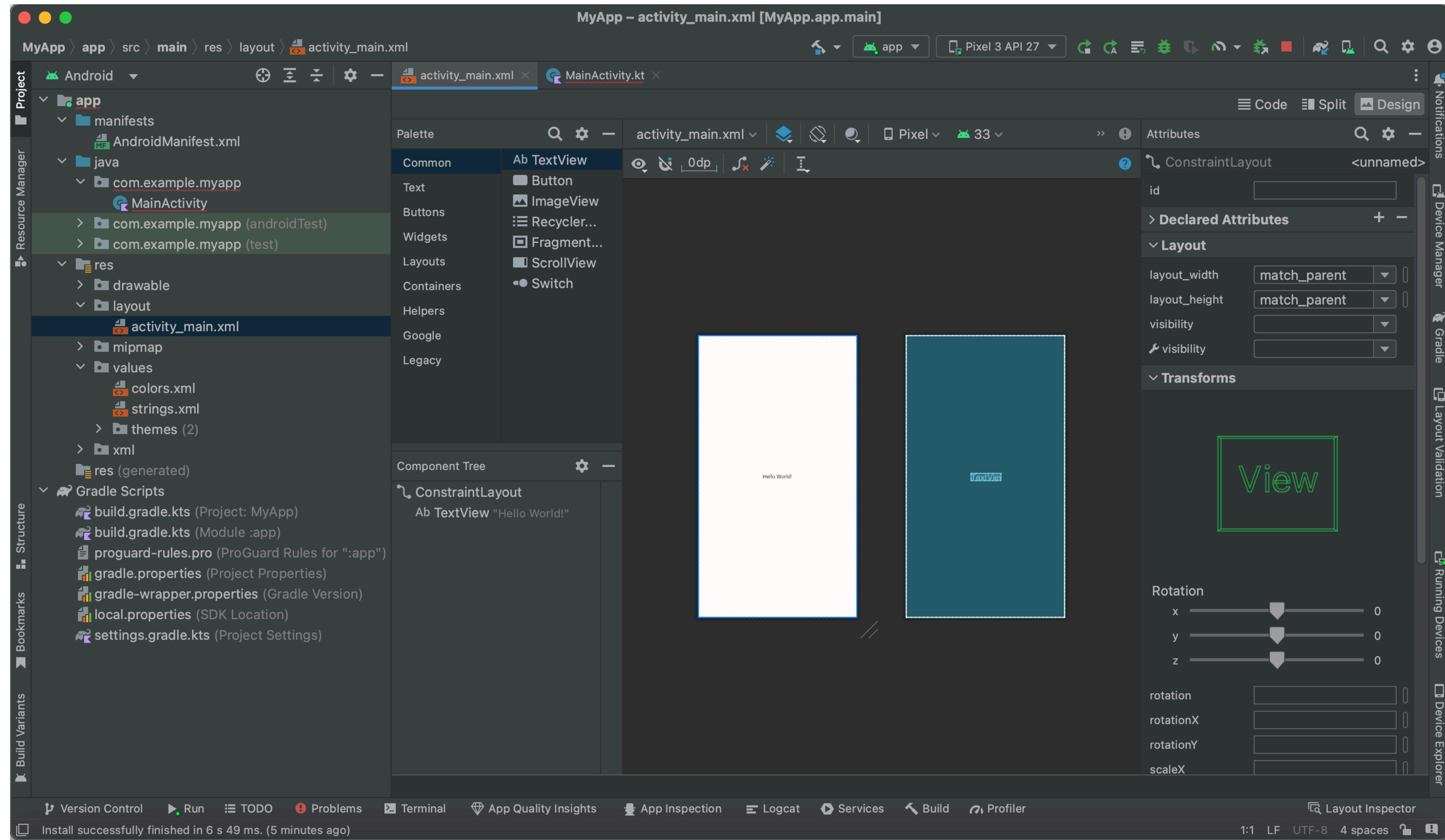
## Structure

## Bookmarks

## Build Variants

## Layout Inspector

# layout: code vs. design mode



## MyApp – activity\_main.xml [MyApp.app.main]

MyApp > app > src > main > res > layout > activity\_main.xml

MainActivity.kt x activity\_main.xml x

Code Split Design

Running Devices: Pixel 3 API 27

Notifications Device Manager Gradle Layout Validation Running Devices Device Explorer

Project Resource Manager Structure Bookmarks Build Variants

Run: app

Version Control Run TODO Problems Terminal App Quality Insights App Inspection Logcat Services Build Profiler Layout Inspector

Hardcoded string "Hello, World!", should use '@string' resource

1 <?xml version="1.0" encoding="utf-8"?>

2 <LinearLayout

3     xmlns:android="http://schemas.android.com/apk/res/android"

4     xmlns:app="http://schemas.android.com/apk/res-auto"

5     xmlns:tools="http://schemas.android.com/tools"

6     android:layout\_width="match\_parent"

7     android:layout\_height="match\_parent"

8     android:orientation="vertical"

9     android:gravity="center"

10    tools:context=".MainActivity">

11

12    <TextView

13      android:id="@+id/text\_view\_id"

14      android:layout\_width="wrap\_content"

15      android:layout\_height="wrap\_content"

16      android:text="Hello, World!"

17      android:textSize="24sp"/>

18    </LinearLayout>

Hello, World!

# SDK Manager

Settings X

Languages & Frameworks > Android SDK

Manager for the Android SDK and Tools used by the IDE

Android SDK Location: D:\Android\ sdk Edit Optimize disk space

SDK Platforms SDK Tools SDK Update Sites

Each Android SDK Platform package includes the Android platform and sources pertaining to an API level by default. Once installed, the IDE will automatically check for updates. Check "show package details" to display individual SDK components.

	Name	API Level	Revision	Status
<input type="checkbox"/>	Android UpsideDownCakePrivacySandbox Preview	UpsideDownCakePrivacySandbox	2	Not installed
<input checked="" type="checkbox"/>	Android API 34	34	2	Not installed
<input type="checkbox"/>	Android TiramisuPrivacySandbox Preview	TiramisuPrivacySandbox	9	Not installed
<input checked="" type="checkbox"/>	Android 13.0 ("Tiramisu")	33	3	Partially installed
<input type="checkbox"/>	Android 13.0 ("Tiramisu")	33-ext4	1	Not installed
<input type="checkbox"/>	Android 13.0 ("Tiramisu")	33-ext5	1	Not installed
<input type="checkbox"/>	Android 12L ("Sv2")	32	1	Partially installed
<input checked="" type="checkbox"/>	Android 12.0 ("S")	31	1	Installed
<input type="checkbox"/>	Android 11.0 ("R")	30	3	Installed
<input type="checkbox"/>	Android 10.0 ("Q")	29	5	Not installed
<input type="checkbox"/>	Android 9.0 ("Pie")	28	6	Not installed
<input type="checkbox"/>	Android 8.1 ("Oreo")	27	3	Partially installed
<input type="checkbox"/>	Android 8.0 ("Oreo")	26	2	Installed
<input type="checkbox"/>	Android 7.1.1 ("Nougat")	25	3	Not installed
<input type="checkbox"/>	Android 7.0 ("Nougat")	24	2	Not installed
<input type="checkbox"/>	Android 6.0 ("Marshmallow")	23	3	Not installed
<input type="checkbox"/>	Android 5.1 ("Lollipop")	22	2	Not installed
<input checked="" type="checkbox"/>	Android 5.0 ("Lollipop")	21	2	Installed
<input type="checkbox"/>	Android 4.4W ("KitKat Wear")	20	2	Not installed

Hide Obsolete Packages  Show Package Details

?

OK Cancel Apply

# Android Virtual Device AVD Manager

Virtual Device Configuration

Select Hardware

Choose a device definition

Category	Name	Play Store	Size	Resolution	Density
Phone	Resizable (Experimental)		6,0"	1080x23...	420dpi
Tablet	Pixel XL		5,5"	1440x25...	560dpi
Wear OS	Pixel 7 Pro	►	6,71"	1440x31...	560dpi
Desktop	Pixel 7	►	6,31"	1080x24...	420dpi
TV	Pixel 6a	►	6,13"	1080x24...	420dpi
Automotive	Pixel 6 Pro		6,7"	1440x31...	560dpi
	Pixel 6		6,4"	1080x24...	420dpi
	Pixel 5		6,0"	1080x23...	440dpi
	Pixel 4a		5,8"	1080x23...	440dpi
	Pixel 4 XL		6,3"	1440x30...	560dpi

New Hardware Profile Import Hardware Profiles Clone Device... Previous Next Cancel Finish

Device Manager

Virtual Physical

Create Device ?

Device Actions

Pixel 2 API 31 Android 12.0 Google Play | x86\_64 31 1...

Pixel 7 Pro API 34 Android API 34 Google Play | x86\_64 34 5...

Gradle Layout Validation Notifications Device Explorer Running Devices

Pixel 7

1080px 2400px

6,31"

Size: large  
Ratio: long  
Density: 420dpi

# Android Virtual Device

Virtual Device Configuration

### Android Virtual Device (AVD)

Verify Configuration

AVD Name: Pixel XL API 28  
AVD Id: Pixel\_XL\_API\_28

Pixel XL (5.5 1440x2560 560dpi) Change...

Pie (Android 9.0 x86) Change...

Startup orientation: Portrait (selected) Landscape

Camera: Front: Emulated Back: VirtualScene

Network: Speed: Full Latency: None

Emulated Performance: Graphics: Automatic Boot option: Quick boot (selected)  
Cold boot Choose from snapshot (no snapshots)

Multi-Core CPU: 4

Memory and Storage: RAM: 1536 MB VM heap: 384 MB Internal Storage: 800 MB SD card: Studio-managed 512 MB External file No SDCard

Device Frame: Enable Device Frame (checked) Custom skin definition: pixel\_xl\_silver

Keyboard: Enable keyboard input (checked)

Hide Advanced Settings

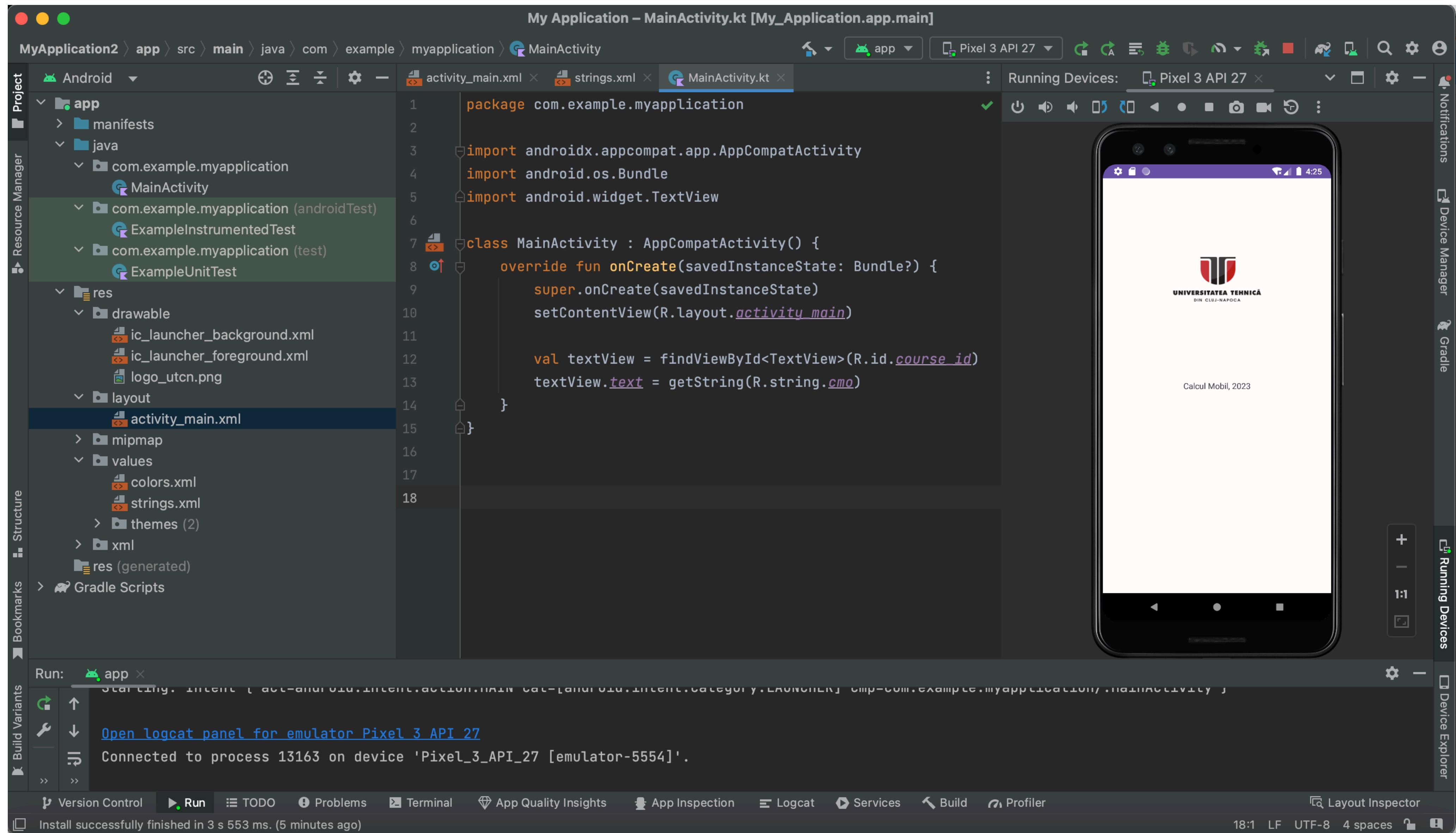
Nothing Selected

Nothing Selected

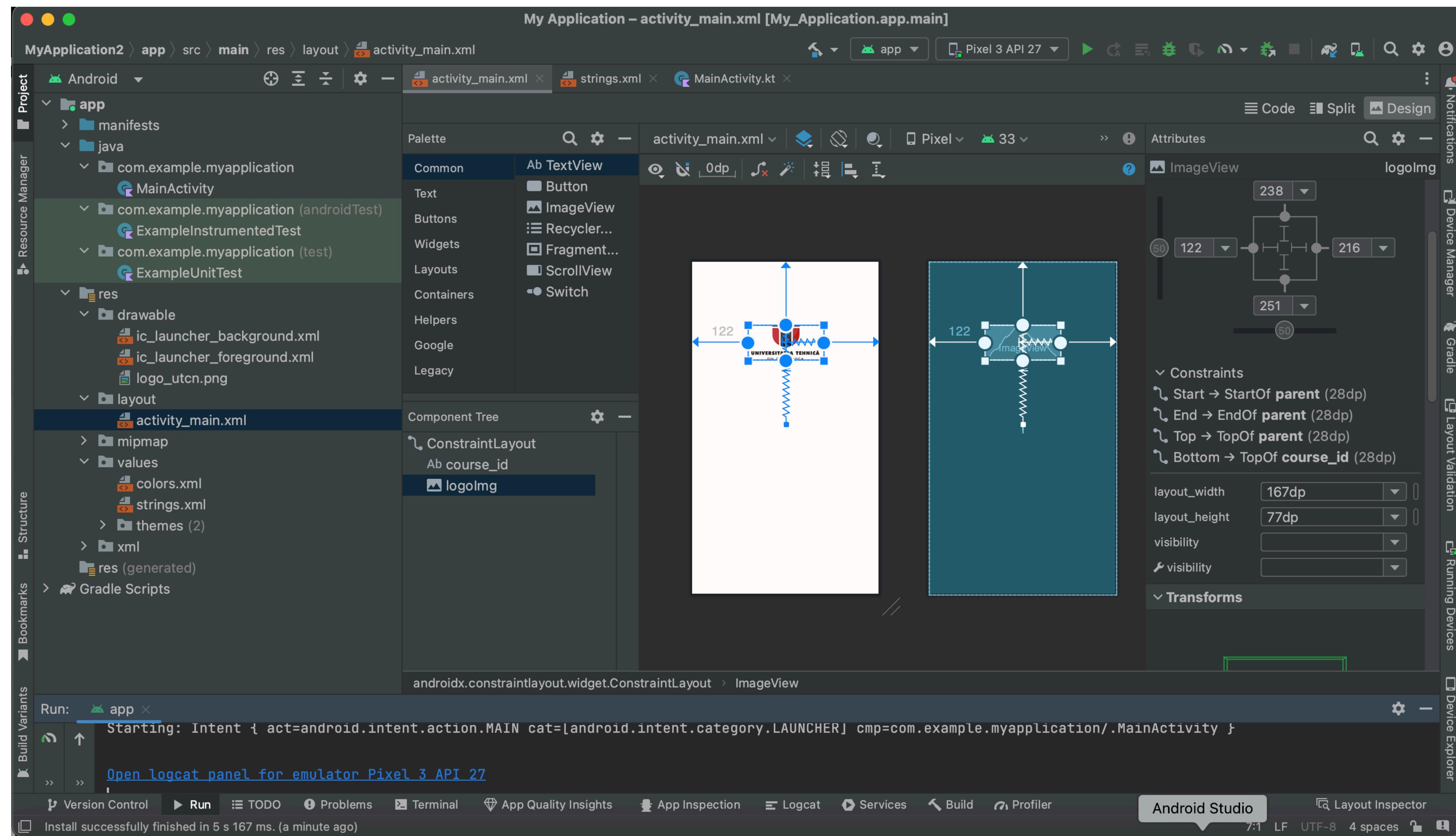
?

Previous Next Cancel Finish

# TextView, ImageView



# drawable/logo\_utcn.png



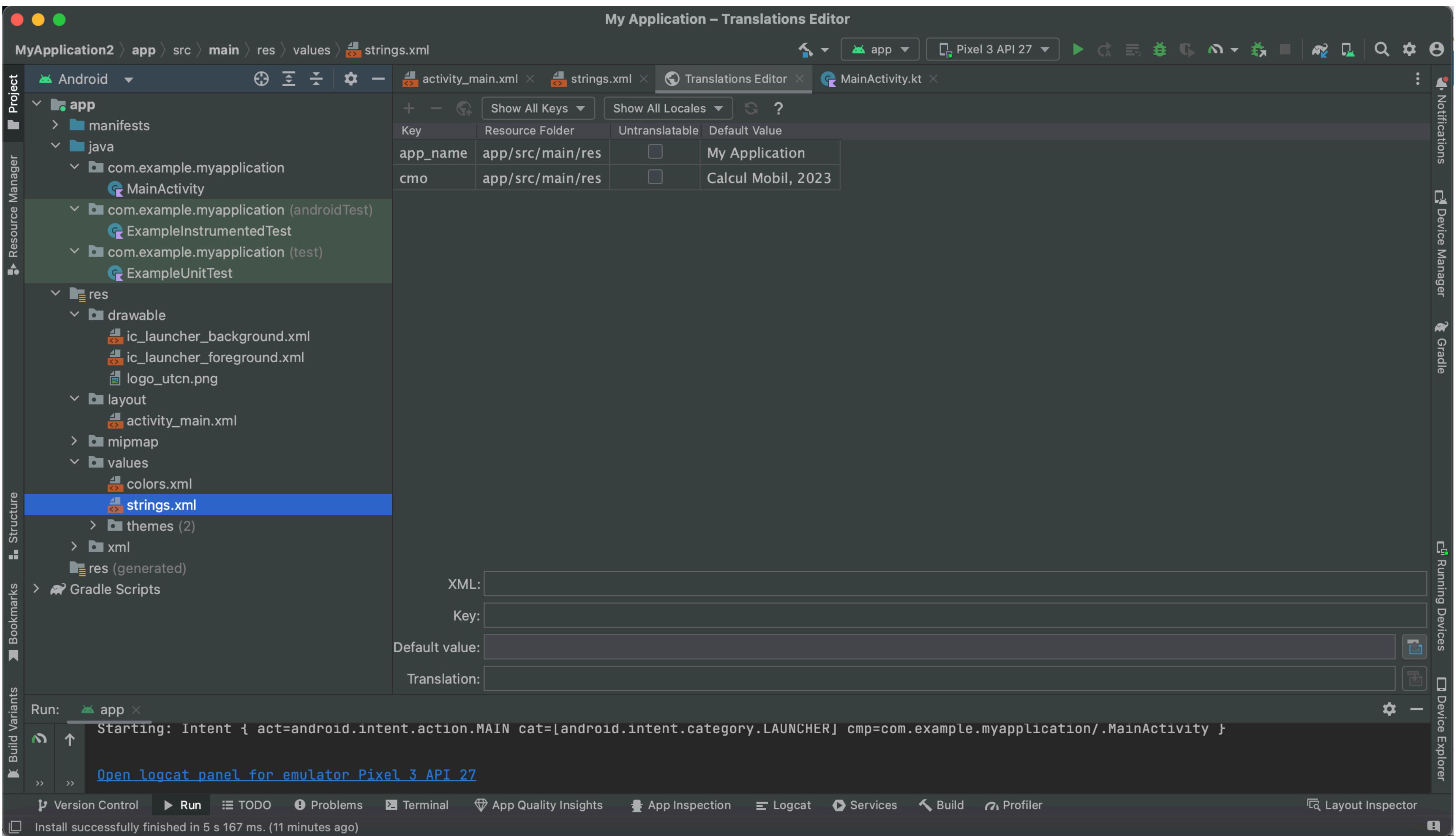
# activity\_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/course_id"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <ImageView
        android:id="@+id/logoImg"
        android:layout_width="167dp"
        android:layout_height="77dp"
        android:layout_margin="28dp"
        android:layout_marginStart="122dp"
        android:layout_marginTop="238dp"
        android:layout_marginEnd="216dp"
        android:layout_marginBottom="251dp"
        android:adjustViewBounds="true"
        android:contentDescription="@string/cmo"
        android:src="@drawable/logo_utcn"
        app:layout_constraintBottom_toTopOf="@+id/course_id"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

# res/string.xml editor





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[\*\*https://developer.android.com/get-started/overview\*\*](https://developer.android.com/get-started/overview)

Calcul Mobil, 2023

[\*\*https://code.tutsplus.com/the-simplest-android-app-hello-world--cms-35175t\*\*](https://code.tutsplus.com/the-simplest-android-app-hello-world--cms-35175t)

