

CPEN 475/575 - Project 1_Slots

Deliverables:

Please clean your Android Studio project and then zip the containing directory. Please work individually on this assignment.

Testing

I will compile and test your application on an emulated google Pixel running API 29.

Gradle

Please use the following parameters in your build.gradle file:

compileSdkVersion 32

minSdkVersion 23

targetSdkVersion 29

Provided

An apk to demo the program. An apk is like an executable zip file. Open it from the course website on your phone or device and you should be able to install it provided your system meets the applications minimum requirements. (You may have to enable installations from Google Drive) I've tested it on the above emulated Pixel running API 29.

The drawables you will need See the resource.zip file

Constants.java please use

Description

You are to generate a slot machine app display application. Once started the user will be presented with a GUI similar to the following;

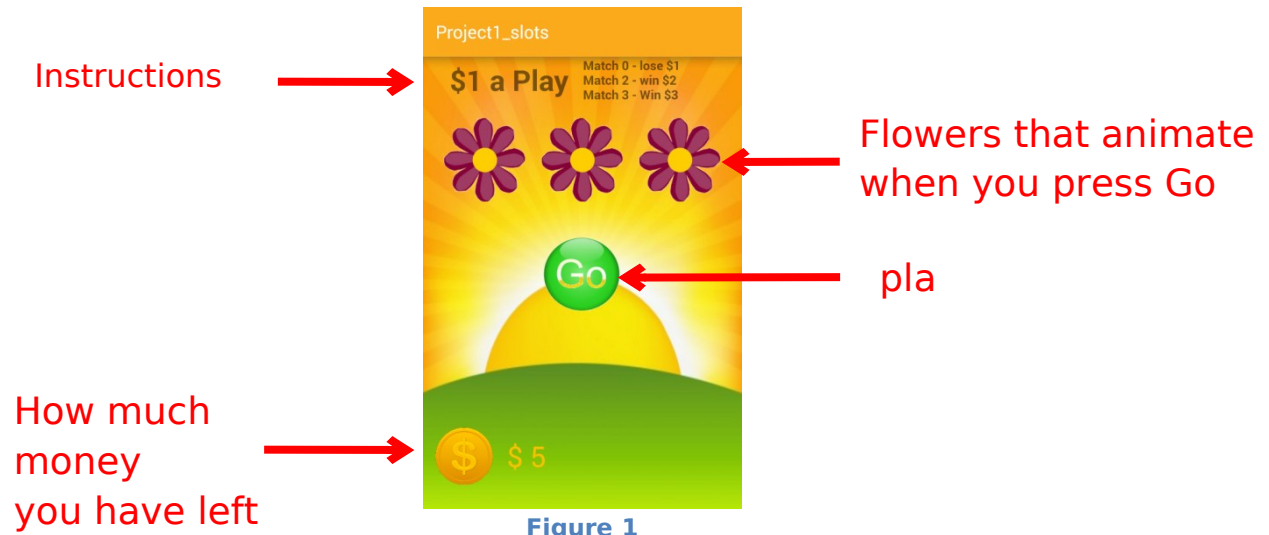


Figure 1

When started it looks similar to figure 1. It costs a dollar every time the user clicks the green Go button. When the user presses Go button, all flowers will spin around and then stop. When they stop they will be randomly reset to 1 of 3 colors. If they match the user earns dollars (see above instructions)

As soon as the user presses Go a reset button will appear in the lower right corner as in figure 2. Pressing this button will reset the game to figure 1.

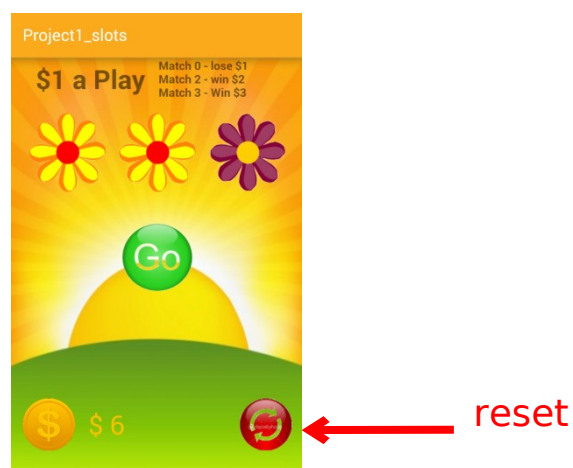


Figure 2

Notice that the amount of money the user has goes up or down according to the number of times the Go button pressed and winnings. If the user runs out of money, the Go button should disappear and the user must hit the reset button to start over. See Figure 3 for what this looks like.



Figure 3

Project icon

Is named `icon.png` Should go in drawable folder, set it in the manifest.

Info

The flowers you see above are .png files that go in the drawable folder `F1,f2,f3`. They have been made transparent so that you can see through part of them.

The temp flower that all three flowers turn into before they are animated is `tmp.png`. When the animation is over each flower is assigned a random color.

The Gold coin(`dol.png`), Reset(`reset1.png`) and Go (`go.png`) buttons are all Imageviews. The gold coin is not clickable, the others are (android:onClick handler in XML is the easiest).

The background (`flowers3.png`) is set in the parent layout using the following

:

```
android:background="@drawable/flowers3"
android:scaleType="fitXY"
```

:

How can I make transparent Icons?

I used <http://www191.lunapic.com/editor/> Upload a file, Edit->Transparent. Choose a transparent color by clicking on it and then save it locally as a png file.

What about strings?

Please pull them all from strings.xml in the values folder.

What about Colors?

Please pull them all from a colors.xml in the values folder.

What layouts do I use?

The layout will likely be the hardest part of this project. I used a combination of linear and relative layouts but you can also use constraint layout.

Do I have to handle rotations?

No,

Grading

Gradle is correct

Layout is correct

Flowers animated correctly

Transparent icons correct

Go and Reset work properly

Money is tracked properly

Application icon is set

Provided constants used correctly