

Final Project – Android Application

Date Assigned: Thursday, January 18, 2018

Date Due: Tuesday, January 23, 2018

Points: 100

For this final project, you need to find a group of 2-3 to create a graphical animation application using the Android API. On Tuesday, each group will present their application, talk about what each person did, teach us a new Android topic you learned on the project, and answer any questions from the class. You must be present for each group's **ENTIRE** presentation including your own. You will lose 10% for each presentation missed. If you miss your own presentation, you will lose 50%.

Application Specifics

Your application is to be a graphical animation game (unless otherwise approved by me) and:

1. use Sprites in a significant way
2. be large enough for each person to write an adequate amount of object-oriented code
3. have a significant amount of animation
4. allow the user to interact (Touch Screen, Accelerometer) with the application as time passes
5. use polymorphism in a meaningful way
6. there must be a win / loss feature ... so something time or point based

The easiest application to write is some kind of game. Possible game ideas include:

1. Snake (<http://www.snakeonline.net/>)
2. Dots <http://qz.com/82987/the-ultimate-dots-strategy-guide/>
3. BlackJack (<http://www.addictinggames.com/puzzle-games/blackjack.jsp>)
4. Maze (<http://www.gamesolo.com/flash-game/maze.html>)

Other ideas could be some kind of graphical application (simulation/tool/database) used in Biology, Chemistry, Physics, ...

There cannot be any RPG-type games as I cannot grade those types of games in a reasonable amount of time.

I need to know the groups by the beginning of Friday's class.

By the end of Friday, January 19, 2018 5pm, each group must email me your project idea and a basic specification of the project. Make sure your project has enough content for the number of individuals in your group. If there is not enough content, I will ask for more. I would like the design of your project no later than Saturday, January 20, 2018 5pm.

On the day the final project is due, each group will present their Android application and explain what each individual did. I will give you more details about the final presentation later on. The class will be able to ask questions of each group. You are to load up your application on at least one phone and the tablet in the lab.

Goals for Final Project:

1. Implement a sophisticated Android project in teams
2. Work efficiently and effectively in small groups
3. Create better designs so that group members can interface code easily
4. Reinforce all of the Java/Android concepts learned in a graphical environment
5. Use a real API in program development implementing a few things you haven't been taught

If you want me to make a group folder on grace, I just need to know who is in the group by 5pm today.

To complete this final project you must:

1. Create a project called your group name & application (e.g. G1Snake). You can reuse code from existing projects. All code is to be original (i.e. created by individuals in your group, not copied from any other source). If there is open source software you would like to use, you can run the idea by me FIRST. I must OK each piece of open source software to be used in a project. Using open source software will not count as code implemented.
2. Every piece of code in the solution is to be completely and correctly documented including any code from my sample in class code. You are free to use any code from the Sprites Example as long as the code is properly documented and the author is sited.
3. Your code is to be written using the class development tools. A project with a correctly working version of your application is to be placed in the CS260-01 Drop Box by 1:00PM on the day in which the final project is due. Create a folder called your group name & application (e.g. g1blackjack) that contains all project source code. A stapled hard copy of all code must be placed on the instructor's desk by 1:00PM on the day the final project is due.

4. THERE IS NO LATE GRACE PERIOD FOR THIS FINAL PROJECT!!!!