

## Final Project – Android Application

**Date Assigned:** Thursday, January 15, 2015

**Date Due:** Wednesday, January 21, 2015

**Points:** 100

For this final project, you will be placed into groups to create a graphical animation application using the Android API. On Wednesday, January 21, each group will present their application, talking about what each person did, teaching us a new Android topic you learned on the project, and answering 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.

### 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

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.

**Groups (G1) BA AJ ER (G2) AB AC (G3) AS VR**

By the end of Thursday, January 15, 2015 5pm, each group must email me a couple (at least two) of project ideas with brief descriptions of each idea.

By the end of Friday, January 16, 2015 5PM you must have decided on your final project idea. Make sure your application has enough content for the number of individuals in your group. If there is not enough content, I will add more.

Divide the work by the number of people in your group as equally as possible. I would like a one page specification of the project. Your specification is to lay out what the project entails

including any Uis, game play, activities, classes, ..., and how the work is going to be divided up. I would like a brief 5 minute meeting with each group before 5PM on Friday.

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

### **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!!!!**