**CS6326 Final Project**

Fall 2017

You will plan and create your final project in phases, as follows:

1. This can be an individual project.
2. Phase 1: Choose a project and submit a plan giving more detail on how you plan to do it. Include in the header your name, the date, the class and section, and the project name. Your plan must include drawings (using a drawing tool or hand-drawn and scanned) of all screens (Activities), a description of the general operation, and external resources such as files or Internet resources used (if any).
3. Phase 2: Final code will be due one week before the end of the semester You will hand in the code through eLearning, then schedule a timeslot with our TA to show your program working.

Remember, **this is primarily a design course.** Therefore, the requirements given below are project ideas, not project specifications. Your job is to come up with a specification that uses the various design concepts we have been studying all semester and apply them, then write a program that meets or exceeds your specification. Hard-coding is almost never a good idea and will almost certainly lose you points in the final program.

Possible project ideas:

1. **Breakout Game**. Bounce a ball off a paddle to break bricks at the top of the screen. The score could be the time it takes to break all of the bricks, or you could be scored on how many bricks you break before losing three lives. There are several variations on this. Some require breaking all of the bricks, some just breaking through the wall. For example, different colored bricks require different numbers of hits to break, and so on. You will use the touchscreen to move the paddle. Use one sensor, such as the accelerometer, to affect game play, but how it affects the game is up to you. Obviously you must pay close attention to the user’s experience of the game. Use a text file to store high scores.
2. **Your own idea.** Come up with an idea for your own project, with the constraints that it must use at least one sensor, must somehow use the touchscreen, and must store data. You must provide a fairly complete description, including screen mock-ups, for your idea to be considered. You will get a yes or no within 3 days after submission, with no appeal. If the answer is no it will be because it does not meet the requirements or is not specified completely enough. You will then have to write the Breakout game. Thus the more detailed it is, the more likely it is to be approved. **If you choose this option, e-mail your initial proposal to me within three days of getting this assignment; do not submit it through eLearning.**

This part will be graded as follows:

100 – Good design and plan. Proceed.

Anything less than 100 but more than 70: Your project needed work but you can proceed after making corrections.

70 – Needs further work as noted in the eLearning comments.