**ECE160B - Programming Languages for Electrical Engineers**

**Spring 2018**

**Final Project Proposals**

**Due 03/24/18 11:59PM**

**(on github)**

The goal of this class is to learn programming skills to apply them to real world applications. As you know, knowing how to program is being standard in industry. In this final project, you are to propose an application that you will program in C++ and you will present the project to the class in a pitch-like manner.

**Some examples of final projects are:**

* Games - checkers, chess, scrabble, mazes
* Basic Social Platform - a forum for questions, a basic form of reddit
* Basic AI to Answer Questions - an automatic help desk
* Android/iOS apps - you can create an app and incorporate C/C++ into it

**Specify the following for your proposal:**

* Who are you working with? (you may work in teams of up to 3)
* What are the exact requirements for your project?
  + e.g. What is the input and the output of the entire project? If it’s a game, what does the game do?
  + Be very specific as to what you want to build for your final project.
* How will your project will use C++?
* How will your project will use C++ classes along with its features?
* What other other technologies/languages, if any, are you using as part of the project? (e.g. android studio, CSS/javascript for UIs, openGL for graphics, etc.)

**Final project grades are broken down as follows:**

* 45% program output
  + Does the program compile?
  + Are there any apparent bugs with your program?
  + Does the program run as proposed?
* 45% program quality
  + Do you have enough comments in your code?
  + Did you break up your program into enough files (with a makefile included)?
  + Does your code follow best practices? (good variable names, proper indentation, etc.)
* 10% presentation
  + Does your live demo work?
  + Was the presentation clear and coherent?
  + Why do we care about your project?

Final Projects are due on the day of the final. The presentations will also take place on the day of the final - either before or after the final exam.