CSE 20212: Fundamentals of Computing II
Dr. Scott Emrich

Semester Programming Project Information

The semester project in CSE20212 is to be performed in groups of size 2 – 4 people. Expectations will be adjusted slightly based on team size.

For this course project, you will be asked to develop a program that performs an interesting and nontrivial task using tools and skills developed in CSE 20211 and 20212. Examples of such tasks might be a game, a tool that performs an interesting task, etc. Please don't be constrained by these examples; you are encouraged to use your creativity, make it cool and most importantly have fun doing it!

If you developed a project in CSE20211 and wish to extend it, please let the Professor Scott know prior to the first due date below.

Requirements
1. Adhere to all deadlines listed below. Any deadline not met will result in a grade reduction of 25% of possible points for that item per day late **(no exceptions)**.
2. Employ some elements of software engineering practice including:

- **Mandatory**: document each team meeting (the date and time of the meeting, who was present, what was discussed, what was decided, what tasks were defined and who was assigned to each task)
- **Mandatory**: *log time spent on the project!!*
- **Mandatory**: use an open source software repository such as Bitbucket or Github. Required documentation for such an open source project should be included, as well as sufficient commenting to aid your instructor and TAs in grading. Many students also will share this with recruiters, so assume at least one person will look at the code outside the Fundamentals II staff.

Deadlines

- (10 points) February 17, 2016: a 1-page project proposal, emailed to Professor Emrich (**not** emailed to the TAs, **not** placed in the dropbox). The proposal should name the team members, describe the software to be developed, outline the solution and list any concerns or special needs. **You should consider this a proposed contract.**
- February 19, 2016 or earlier: Feedback will be delivered on the proposal. **You should consider acceptance of your proposed contract an agreement to deliver what you have proposed by the end of the semester**.
- (5 points per report x 3 reports) March 16, April 1, April 20: progress reports should be emailed to Professor Emrich, including the complete time log and reports on meetings since the last progress report. **Even if nothing happened, you need to submit a progress report saying nothing happened**; you should also explain why nothing happened.
- (20 points) Week of April 20: project demos in the scheduled lab sections. **Every individual must demonstrate something related to his or her team project in lab.**

Projects are expected to be nearly complete at this stage but could benefit from additional testing. TAs will provide help on what needs to be done prior to submission and labs will be opened the following week (4/25) for finishing up.

- (20 points) OOP Week! (4/18-4/25) Each team will be expected to generate a two-five slide PowerPoint presentation that lists the team members, briefly describes the developed project, and specifies what elements of object oriented programming was used and how it helped the project. These presentations will be done in class and must include at least one UML diagram.
- (85 points; includes grade on code) April 27 (last day of class): Final project reports due via email to Professor Emrich. The project report should contain a user manual for the software that describes how to run it.
- (25 points) April 29 (Friday after classes end): Release Party! We'll have food!
- (10 points) May 2: Individual reports due via email to Professor Emrich. Each team member should describe their contribution to the project and assess the performance of each of their team members.