

Due dates:

Turn in idea/group members: Oct 28

Turn in diagrams: Nov 11

Presentation day: Dec 4

Note: you should pick a Team Name (when presenting I will be using it) and you must show a demo of your program (pictures would be accepted if you feel the program doesn't work as you would like BUT you still have to demo the program with me to get a grade)

You will be picking a real-world problem/scenario and implementing it using object-oriented principles. You will be using GUIs.

- You should not pick a problem/scenario that is too simple or too complex
- I am purposely leaving this prompt open to interpretation because I do not want to limit your creativity when picking a topic and how you execute the project
 - The process you will go through when deciding how to share code with group members, research a topic or figure out how you can actually achieve your project goals in code is part of the learning experience
 - I will just give general guidance for this and leave the rest up to you

Each group should consist of four members (if the class total does not allow for this, I will allow for a group of a different size OR add leftover students into one of the groups of four). If you end up losing a group member (a student dropped the class for example), I will take this into consideration.

I want to emphasize: if you are having issues with group members not working, please discuss this with me. There will be a peer review at the end.

Steps:

- 1) Pick a real-world problem/scenario. Note that it should not be too simple or too complex.
 - i. You must have it **approved** by me **BEFORE the date given above at 11:59** (5 point deduction for every day later than this).
 - a. **IF YOU ARE NOT ABLE TO FIND A GROUP, SEND ME AN EMAIL (DO THIS BEFORE THE ABOVE DUE DATE)**
 - b. **IF YOUR GROUP IS INCOMPLETE (MISSING MEMBERS) SEND ME AN EMAIL (DO THIS BEFORE THE ABOVE DUE DATE)**
 - ii. No group can have the same problem (or the same problem as a group from my previous class).
 - iii. Send me an email with a small paragraph stating the problem you picked and group members before this date. *I advise you to email me earlier to make sure I approve it (I may say something is not acceptable and it will be counted late until I approve it).*

2) Make class/activity diagrams, code and presentation.

- i. You will submit (by email) an activity diagram and class diagram by **BEFORE the date given above at 11:59** (5 point deduction for every day later than this). *I advise you to email me earlier to make sure I approve them (I may say something is not acceptable and it will be counted late until I approve it).*
- ii. Notes about the code:
 - a. GUIs must be used
 - b. You must use header files and a makefile-do not put everything in one file-**AUTOMATIC 0**
- iii. Your presentation should be a short overview of your project and include:
 - a. A small introduction to the problem.
 - b. What part of the project each person did.
 - c. How you approached the problem and how it would have differed if you didn't use an object-oriented approach.
 - d. How your code works to solve the problem. Code should be no shorter than 500 lines (I may ask questions during this part).
 - e. Diagrams (class and activity).
 - a. If you changed your diagrams after you submitted it to me, you should state why
- iv. Each presentation should be no longer than 5 minutes. I will keep a timer and take off a point off for each minute over. All group members should talk at some point.
- v. **MAKE SURE THAT YOUR PRESENTATION/PROGRAM DEMO WORKS WITH THE PROJECTOR AND COMPUTER IN CLASS. YOU SHOULD CHECK THAT YOUR MACHINE WORKS AT SOME POINT BEFORE THE ACTUAL PRESENTATION. AUTOMATIC 50 POINTS OFF IF THIS HAPPENS.**
- vi. You must submit your code and presentation by 11:59 the day before the presentation day (see above/syllabus for the this semester's presentation day). Make sure to mention what each group member actually contributed to the project. You are not allowed to make changes after this time. **AUTOMATIC 0 POINTS IF YOU DO NOT DO THIS.**

3) I will post a sign-up sheet later in the semester for the order of presentations.

4) You are not allowed to skip the day you are not presenting, leave early or leave after you present. **AUTOMATIC 0 POINTS IF YOU DO THIS.**

- 5) After all presentations are completed, you (each student) will vote on the top presentation/project. You are **NOT** allowed to vote for your own project. **The teammates of the presentation that receives the highest number of votes will get 5 points added to their final grade.**