

Project A

CS 150 with Dr. Sam Schwartz

Due: Sunday, February 22 at 11:59pm via Canvas Upload (Proposal)
Friday, March 6 during class (Presentation)
Sunday, March 8 at 11:59pm via Canvas Upload (Code)

1 Purpose

The purpose of this project is to encourage us to engage in curiosity-driven creation in a manner which showcases and develops our object oriented programming skills.

2 Tasks

Part A – Create a proposal

This is a major multi week project. It should be hefty in scope – commensurate to multiple homework assignments.

You are free to design this project to do whatever you wish, so long as it meets the following specifications:

- The project will involve a GUI written using Java's Swing library.
- The project's architecture will be MVC oriented.
- The project will entertain or help solve a real problem for a specific user profile. (E.g., college students, soccer moms, CEOs, whatever.) This user should not be another programmer. Assume the user has no coding ability whatsoever.

You are to submit a multi-page proposal outlining your project. This proposal should have:

- A description of the problem your app solves or the kind of game/entertainment your app provides.
- An identification of the type of user your app serves.
- Low fidelity mockups of the user interfaces (MS paint sketches are fine)
- An outlining of the classes you will use to create this project. A list of filenames suffice.
- A timeline of when you will write these classes before the presentation day deadline. Procrastinating to the last minute is not acceptable. This is to be a large enough project that it will take multiple days to implement.

It is expected that your final project will differ somewhat from your proposal as requirements change and new ideas for code structuring come to mind. Nevertheless, it is also true that failing to plan is planning to fail. The purpose of this task is to help you build a plan and identify your project's purpose.

You are to upload this proposal as a PDF document by the deadline to the appropriate spot in Canvas. Dr. Schwartz will provide written feedback via Canvas comment on any changes required. If there are no comments, assume your project is approved as proposed.

Part B – Showcase your project

In class you will present your work to your peers. Optionally, consider uploading this project to GitHub and make a mention of it on your portfolio website.

As part of the presentation/demo, you should also provide documentation/onboarding so the user understands how to get your app working for them.

Part C – Upload your project to Canvas

Upload your code as a .zip file by the deadline. Also include screenshots of your working program.

3 Grading Criteria

In general I am looking for the elements of validity, readability, and fluency in all code-based assignments. (See more below.)

I tend to dock 5ish points off for each error (although smaller or larger quantities like -1pt or -10pts exist based on the magnitude of the error), and will provide free-form feedback detailing why any points were missed in the comments on Canvas.

Please note that I do not get notifications about replies to my comments on Canvas, so if you have any questions please reach out to me directly.

Validity

Student presented their work in class.

Student submitted files which implemented the tasks correctly and handled possible errors gracefully.

Moreover, the student submitted screenshot(s) displaying the code's output.

Readability

The deliverable used professional English and typesetting throughout, and had all methods annotated with JavaDoc.

Fluency

The deliverable was executed in such a way that an experienced practitioner would not find the deliverable “weird-in-a-bad-way” or unduly jarring.