Final Project

You may work solo, with a partner, or in groups of three (no more than that).

Grade: 20 points (equivalent to an exam)

> **Design Document (version 1):** 4 points (5/22 during class)
> **Meeting 1:** 4 points (Week of May 28th)
> **Meeting 2:** 4 points (Week of June 3rd)
> **Final Product (code and document):** 4 points (6/12)
> **Presentation (video):** 4 points (6/12)
> **Total:** 20 points

Due date final product (last GitHub commit) and presentation: Wednesday, June 12th (10:00 pm)

Due date document: Wednesday, June 12th (during class)

Late submissions: If you commit your last version or submit the documents after the due date, you will be penalized 2 points per day.

Example: If you commit or submit your document on Thursday, June 13th, the penalty will be 2 points. If both (code and document) are submitted that Thursday, the penalty will be 4 points.

About the project

- You must create a game (replicate a game that already exist), simulator, image editor or any interesting and challenging project in Processing
- Express your plan in a design document (see design document section). The design document is your first deliverable. All your efforts should be directed to doing this job well; do not code anything until your design doc is ready. It is totally normal that this document changes while you develop your programs. You will submit a revised document during each meeting and a final document when you will submit the final product.
- Add your teammates and the teacher as collaborators.
- You must use branches. If you work solo, you are also required to use branches.
- Commit messages should be meaningful.

Design Document

You must hand in a **PRINTED** version of this document (upload it to GitHub too, so you can have it there as reference). I will **NOT** grade digital documents. The document should be well-organized, clear, and neat (presentation counts for grading). Do not forget to **STAPLE** all your papers. Your document should include the following:

1. Intro

- Period
- Group members names
- Group Name
- Project title

2. Description

- Describe your project
- List and explain functionalities
- Any libraries needed, indicate the name and how you are using it in your project
- Anything else you would like to add about your project

3. UML Diagram

Please review documentation here:

https://developer.ibm.com/articles/the-class-diagram/

4. How does it work?

Explain the steps the user should follow to run and use your project (game, simulator, etc.). For example, if you implemented a game, you should indicate the objective of the game and how to play (keys you need to press or any detail that helps the user figure out what to do when playing your game).

The following section should be added only for the documents that will be submitted for meetings 1 and 2:

5. Functionalities / Issues

- List of current functionalities.
- List of functionalities planned to be done by the next meeting (It is ok if you do not have all the functionalities by the next meeting, but you will have to explain

why you do not have them, what the problems are, and the alternative you found….).
- Explain any issues you found during the project's development and how you solved them.

The following section should be added only for the final document

6. Log

Please describe how each group member participated in the implementation of the project. You may indicate the functionalities implemented by each collaborator.

Final Product

Your code should be uploaded to GitHub by the due date. I will check the GitHub logs to make sure that all group members have contributed to the project by checking their commits.

The final documents should be **PRINTED** and **STAPLED** and handed it during class time.

Presentations

All groups must make a video (10-15 minutes) demonstrating how their projects work, briefly explaining the code, and adding anything else you would like. All members of the group should talk during the presentation.

I will send a form so students can share the location of their videos