CS148: Final Project

This assignment consists of three parts: a progress report (Part 1), a short presentation (Part 2), and a write-up (Part 3). Please note the following due dates:

Part 1:	Thursday, August 7th at 23:59
Part 2:	Thursday, August 14th [in class]
Part 3:	Saturday, August 16th at 12:00

Unlike the assignments, absolutely no late work will be accepted for the final project.

Your project will be graded out of 100 points. Each student will receive a completed copy of the rubric along with their final grade. Please read the rubric; it contains a full description of what you need to do in order to earn full credit on each portion of the assignment.

Part 1: Peer Feedback and Progress Report [15 points] Due Thursday, August 7th at 23:59

This part is a brief checkpoint to make sure that you are making progress towards producing your final image. Your writing need not be polished, and bullet lists are fine. You should turn in the following items for full credit:

- 1. Your feedback on the progress of 2 other projects. For efficiency, we suggest you organize into groups of three projects, so that you can meet all at once 1. You should set aside about one hour for this (20 minutes per project) and take notes on your discussion. You may need to do a little research to provide helpful comments! Concisely summarize your feedback, and send it to your classmate(s) in addition to submitting it for credit.
- 2. A 1-2 paragraph summary of your progress so far. This should include how the feedback you received has shaped your plans leading up to the deadline. If your goals have changed, how so and why? Please include relevant inspirational/goal images, links to resources you've found, etc.

Optional: One additional feedback session for a for a third member of the class who needs a little extra help getting their project rolling². This may be less formal: debugging sessions, design feedback, etc. are fine, but please write up what you did and why it was of help.

¹ The Gates 3B wing contains a common area with tables and white board that you may find convenient.

² This opportunity is intended both as a small boost for students who may have struggled on the assignments, and for students who get a little stuck and may benefit from some extra input on their project. Win-win! Contact the course staff if you fall into either category and we'll do our best to pair you up.

Part 2: In-class presentation, Thursday August 14th [40 points] or: Weds. August 13th (Evening session for remote students. See Piazza.)

Important: any slides, images, or demo videos you wish to use during your presentation are due to the course staff *no later than 11:00 am* on the day of the presentations³. At a minimum, you should include two slides: (1) a slide containing the project's title and the names of every group member, and (2) a slide of your final image. PDF format only, please.

Presentations will be graded on the following criteria:

- 1. *Clarity*. You should be able to communicate what you did, why you thought it was interesting, and which parts were difficult.
- 2. Style. The talk should be polished and professional, and use visual aids well.
- 3. Technical achievement. Each judge will rate the project in terms of its technical difficulty. Projects in obscure areas or implementing technical papers will receive higher marks; those that are straightforward extensions of a homework, or are in topic areas with many available resources will receive lower marks.
- 4. Aesthetic contribution. Each judge will rate the quality of the final image, animation, or demo. Features to be considered include: composition, color palette, use of textures, and ability to communicate shape, as applicable.

A time limit for the presentations will be strictly enforced. This length will be determined when we know how many projects are to be presented, and will be in the range of 4 - 7 minutes.

³ No later than 5:30 pm on the day of the evening session.

Part 3: Write-up & Codebase [45 points] Due Saturday, August 16th at 12:00

The purpose of the write-up is to provide you with the opportunity to describe, more thoroughly, your process in selecting your topic, and why you made the choices you did along the way. This need not be an extensive document, but it should be sufficiently detailed to communicate the challenges you faced and how you dealt with them. If you were not able to achieve all your goals, this is where you can reflect on what prevented you from doing so. If you worked in a small group, please submit a single write-up via a representative. In addition to the things listed below, it should contain a breakdown of what each team member did⁴.

What to turn in:

- A copy of your final image (animation, demo video, etc)
- All code necessary for the production of that image (zip and submit online)
- Your write-up

Write-ups should be no longer than 2,500 words (6 pages) and should be turned in either via hard copy to Gates 372 (preferred), or uploaded along with your zip'ed codebase. Be warned that access to Gates is restricted after 7pm and on weekends!

The grading criteria is as follows:

- 1. Context. Your write-up should provide more detail on what you've learned about your project area. How does it relate to other areas of graphics, CS, or beyond? To your own interests beyond the class? If you implemented an older algorithm, what is the historical relevance? What more recent methods are you aware of? We want to know why you thought your topic was cool!
- 2. Ambitiousness, creativity. This criteria will reward students who select a risky or unknown topic, as well as those who had a particularly creative idea for a cool image.
- 3. *Process*. The write-up should describe intermediate stages your project went through, along with any images you produced along the way (if relevant).
- 4. Accomplishment. You will be graded on how well you actually did at achieving your goals. When you needed help, were you successfully able to seek it out?
- 5. *References*. All resources used should be properly cited, including outside software libraries you utilized. Did you build your project starting from a class assignment? If so, which one?
- 6. Writing quality. Your writing should be organized, easy to follow, and typo-free.
- 7. *Code quality*. Code should be well-factored, easy to understand, and demonstrate reasonable software engineering skills.

More details may be found in the rubric.

⁴ If for any reason you feel the members of your team should be graded separately, please make an appointment to speak with the instructor privately. We will be happy to accommodate you.