Deadline, 9:00 a.m. on Wednesday, 12/11. (One hour before the last class session.)

Your final project is just like one of the other lab assignments except that you choose the topic. In addition, there is a "demo" instead of a lab report, you have an additional week of time, and group work is allowed. Except for choosing the topic, you are not expected to start work on the project until after Assignment #4.

Overall Requirements:

- Your final project is meant to be equivalent in effort to the other lab assignments in this class. You may form a team of **up to three** people for this project, but adding team members does not reduce the required amount of work. **Each** member must contribute the effort of one assignment. Team members do not need to be in the same lab section.
- Your project can be an extension of any existing assignment except assignment #1.
- Your project must involve some **original programming** that you do (e.g., this could be in Scratch, Processing, or something else you propose to teach yourself). You **cannot** meet this requirement with a markup language (HTML, XML, RSS, or CSS) or a graphics format like SVG.
- It is OK and encouraged for your project to **include code written by others**, properly credited.
- Your project must introduce **some new material** not covered in existing assignments.
- Your project idea must be approved in advance by the instructors (but it is OK to change your project topic later on as you learn more).

Technical Requirements:

- The project must be usable – it must be clear what it is, how to use it, and what it does. This may involve writing instructions, documentation, a help system, or a tutorial.
- (This should go without saying but:) code must be correct and must execute without errors. For example, if you use HTML 5 your HTML must pass HTML 5 validation.
- Code must be readable, maintainable, and well-commented. We need to be able to understand it.

What Must Be Turned In:

1. **The finished product**. You will determine what counts as a finished product when you propose the project, and you will determine how you turn it in. For example, you could turn in a URL.
2. **Materials you used to make the project**. A ZIP file containing the source code of all programs / Web pages as well as copies of any ORIGINAL images or multimedia you created. This needs to be turned in by uploading to ensure the project was completed before the deadline.
3. **A brief log of your labor.** This shows how you spent your time on this project. For instance, if you decide to employ a script, program, or library written by someone else this is encouraged, but it means you did not program that part of your project. We should be able to understand what work **you** did. If you have a team: each person must turn in a log to specify who did what part of the group project in detail. Note: Deciding on your topic and researching possible topics **does count as work** on the project. **(No more than 1 page.)**
4. **A written reflection.** The equivalent of a reflection essay, but since you proposed the project, you decide the topic. This may be co-authored by all team members if you wish**. (At least 750 words.)**
5. **The demo**. You must demo your project in person during the last class period for this course.