Instructions

Deadlines

You must have turned in your exam by 9:00 AM on Friday, December 16, 2016.

There is a small bonus for handing the exam in early,

- 3 points if turned in by 9:00 AM on Tuesday, December 13,
- 2 points if turned in by 9:00 AM on Wednesday, December 14,
- 1 point if turned in by 9:00 AM on Thursday, December 15.

Timing

This exam is not timed, but is designed to be completed in 180 minutes. You *must* complete the exam in a single sitting, where a single sitting means that you don't talk with anyone else, use any forbidden resources (including using your phone, using your laptop for anything other than approved resources, etc., or put yourself in a spot where you might overhear (accidentally or intentionally) other people talking about CS70 content. Each question on the exam says how many points it is worth; unless stated otherwise, subparts have equal weight.

Mandatory Self-Assessment for Class Participation and Pair Programming

In addition to completing this exam, you must also complete a self-assessment exercise about your wiki and piazza participation and your contributions to pair-programming. For the participation aspects, it will mostly be used to check against our own notes to make sure that your participation grade in the class is calculated correctly. You may not collude with other students in the answers you provide, nor may you discuss your answers in any way until after everyone has finished their exam. The time you take to complete this form does *not* need to be in the same sitting as the rest of the exam.

The survey form can be found at http://tinyurl.com/cs70-f16-survey3

While reading and taking the exam

- Your writing must be legible and your intent clear. Anything that cannot be readily understood will be ignored. **Unless otherwise stated, your answers must be justified.**

- We can only give credit for work that is on the page when you turn in your exam. If you want to change your answer to a question, draw a single line through your old answer and add your new answer.

- We've tried to leave lots of whitespace for you to show your work, but you are allowed to attach extra sheets of paper to the back of the exam to show your work if that would help you.

- If a question is unclear, or you think there may be an error in the writeup, state your assumptions clearly and answer the question under those assumptions.

(*Instructions continue on next page...*)

- You **may use** these materials during the exam:

    - Notes you've taken in class

    - The CS 70 GitHub site, including the wiki (but you may not follow links that lead away from the CS70 GitHub organization)

    - Handouts from class

    - Course textbooks (if you have electronic versions, you may use those; but you might prefer to borrow paper copies)

    - A browser, which you can use **only** to read content in the CS70 Organization on GitHub.

- You may **not** use these materials during the exam:

    - Your midterm or any quiz answers.

    - Any materials not listed above, including: your computer (for anything other than browsing the course GitHub organization). Some of the things that you may **not** use on a computer include: a compiler, a terminal / shell, the `git` command, a browser (to visit anything other than the things listed above, including Piazza), your local clone of any of your repositories.

After you finish the exam

- **Staple your exam** in the bottom right corner.

- Put your exam **back in the envelope** you got it in

- If you have not yet returned your copy of Midterm 1, put it back in the envelope.

- Close the tabs on the envelope.

- As soon as reasonably possible after finishing, **return your exam** to Olin 1269 (Prof. Medero's office) or Olin 1262 (Prof. Melissa's office). If we're not there, you can slide your exam under one of our doors.