

CMPSC 480
Software Innovation 1
Fall 2019

ASSIGNMENT 6:
Software Project

Point value:	100 pts.
Assigned:	19 September
Code review:	21 November
Due:	5 December

Objective

To refine or develop a project which creates a “showcase” deliverable for your WEB PROJECT and for use as a functional, concrete example during interview or application processes for professional positions.

This assignment is intended to occur simultaneously with the course WEB PROJECT. If you already have a site, you are expected to make modifications to it based on the work completed in the course so far, but may split the working time allowed for the SOFTWARE PROJECT assignment with the WEB PROJECT.

Goals

- To consider self-reflective work completed in this course to understand the role of your work in presenting a professional version of yourself to those interested in who you are and what you do as a computer scientist
- To explore using professional tools (including, but not limited to: GitHub, Travis-CI) to create, maintain, manage, display and share work
- To understand how your work situates itself as either an entrant into the full-time professional or academic world
- To gain or practice a basic understanding of the conventions used in communicating the uniqueness and value of your work

Assignment Activity

Résumés, elevator pitches, and presentations aside, the quality and novelty of your responses to real-world practical or theoretical issues through the discipline of computer science often rests on the more concrete work that you do. Projects generated by your interest in participating in software culture serve as practical, concrete expressions of skills enumerated in professional documents and conversations. Often functioning as a “calling card” and finishing touch for your presentation of your technical identity, projects do what author Austin Kleon argues in his book of the same title: they *show your work*.

This assignment is designed to give you the time and space to consider projects that you are interested in showing to employers, graduate school staff and faculty, and/or the wider public. While somewhat contradictory to the overall *zeitgeist* of this course, it may be that your best work to date isn't necessarily the work you like the most. The opposite is possibly, then, true: the work you like the most may not yet be your best. Take as your charge understanding what makes work presentable and how you can revise or create projects that demonstrate both your skill and interests simultaneously.

Required Deliverables

This project organizes itself around two (2) tracks of which you only need to choose one (1). Regardless of which option you choose, this content must appear as content in your WEB PROJECT.

Code project

- A GitHub repository stored in your personal GitHub account which stores code for a project that:
 1. Follows platform best practices for project documentation (specifically as they pertain to the README.md file, many of which appear in the GitHub Guide [Documenting your projects on GitHub](#))
 2. Contains full and complete source for the program; this includes installation and any needs for deployment
 3. Uses in-line comments or documentation to enhance understanding and code legibility
 4. Organizes itself according to practices like those proposed by [this helpful repository](#)
 5. Observes and implements licensure correctly (respecting Fair Use, other other contemporary conventions around licensing and copyright)
 6. Appears in any combination of languages or scripts, keeping in mind that many different communities institute different kinds of best practices with regards to formatting and syntax
 7. Uses GitHub Flow best practices including branching, merging, and descriptive, professional documentation of process (i.e. commit messages, et al.)

Content project

Students pursuing this track *must meet with the instructor* to ensure that planned projects will fit the following guidelines.

- An organized series of essayistic pieces for public consumption, curriculum modules or other vehicle which:
 1. Addresses or responds to a contemporary topic in the discipline of computer science
 2. Is comprised of multiple distinct documents which thoroughly and completely exhaust the arguments made or lessons created
 3. Are clearly tailored to a specific, well-defined audience
 4. Leverages significant research for which credit and attribution are clearly documented

5. Is presented in a clear manner consistent within materials and (particularly if a web writing project) uniform with WEB PROJECT content
6. Is hosted using a GitHub repository either in your personal account or in the same repository as your WEB PROJECT. (I *highly* recommend keeping this work in a separate repository despite integrating it with your WEB PROJECT.
7. Complies with additional standards developed in consultation with the instructor

Peer Editing and Review

Additional semester assignments will invite your fellow students to read, respond to, and raise issues discovered in your project work. We will use GitHub's native issue-tracking system to perform these reviews. By the due date for this project, you must resolve at least 80% of these issues, to indicate that you are making solid, actionable progress.

Evaluation

This project will be evaluated based on timely and complete submission of all materials adhering to guidelines provided or developed. Incomplete assignments will be evaluated with penalties based on their degree of incompleteness.

A Note on Working Hours

You are welcome to work on this project during any time dedicated to either WEB PROJECT or CODE PROJECT work time. If inexperienced with creating content for the web, I suggest using in-class time to work exclusively on the WEB PROJECT, as you will have the support of both a TL and the instructor during this time.