2-1 Journal: What Makes a Productive Code Review?

Part 1:

- 1. What is code review?
 - a. Code review is the procedure of inspecting any code with the overall goal of identifying any existing errors, improving code quality as a whole, and ensuring compliance with any coding standards. It can involve having peers or someone reliable when it comes to personal projects inspect the written code to ensure that it is correct, efficient, and secure before it gets released.
 - b. This process can be done either during development or after as a form of ensuring code quality and security. One way to refer to this activity is a code quality assurance technique. At SNHU, I have only taken this approach a few times as most of the time our projects are done relatively alone. However, I have found that whenever I get proper code review, my code comes out more secure and more reliable.
- 2. Why is it an important practice for computer science professionals?
 - a. Similar to code review, unit testing is a security practice that any programmer can use to improve their code functionality, ensure that all parts of the code are working correctly, and to check for any vulnerabilities.
 - b. Another code practice for professionals is the use of assertions as a code security assurance tool. By integrating the use of assertions into the development of our code, we are capable of making sure that each part of our code works as intended. Here at SNHU, there have been multiple classes and projects in which assertions and unit testing have been extensively useful in improving my code quality.
- 3. What are some code review best practices that you read about in the resources that are crucial to include in a code review? Include when a code review should occur in the development process with a rationale as to why.
 - a. Depending on the coding process, the code review could be either during development as a means of improving the code before release, or directly before completion for finishing touches. Personally, I have tried to use code review as a process both during and after to fully use it to the best extent. In the resources, I have come to realize that documentation is one of the most important parts of code review and should be used throughout the entire process.

Part 2:

- 4. What software have you chosen to use to record your code review?
 - a. For screen capture purposes, I will use OBS to record my screen while I talk and walk through each category of the code review. This will allow me to walk

- through visually the words that I am talking about and explain myself with any pseudocode if I need to.
- 5. Describe your approach to creating an outline or writing a script for your code review for each of the three categories that you will be reviewing based on the rubric as well as the code review checklist.
 - a. Firstly, I will begin by creating a template based on the existing checklist. Once this checklist is filled out with the necessary information, I will make a script and based my video around this script. I will add any information that I find to be important and while I do not plan on following the script 1:1, I will try to include all of the important information so I can refer back to it in the code review video.