

## Part 1:

### 1. What is code review?

- a. Code review is the type of systematic examination of source code where the goal is to identify errors, to improve the code quality, and to ensure adherence to coding standards. This is meant to be a collaborative process where other developers are meant to identify any issues and to improve the code base. The purpose of this is supposed to be for quality reassurance, this is meant to also help developers learn the source code and be able to share different types of knowledge while working collaboratively.

### 2. Why is it an important practice for computer science professionals?

- a. There are different factors that contribute into the importance of this practice:
  - i. Error detection: it can identify bugs and different types of logical errors early throughout the developmental stage.
  - ii. Knowledge sharing: as mentioned before, it can encourage collaboration and help improve the skills of different members as they are exposed to different types of coding approaches.
  - iii. Quality assurance: this would allow the code to follow best practices to make sure it is efficient and is maintainable.

iv. Consistency: this helps maintain a style of coding throughout the project.

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. The following can be considered the best practices for code reviews:

- i. Using checklists/comparing against requirement lists to make sure that all the bases are covered.
- ii. Focus on the actual code, it is important to be critical and objective when it comes to creating an effective code.
- iii. Automated tools, using tools that can guide you with simple errors or enforce coding standards.
- iv. Also continuously checking the code frequently to make sure that any errors are caught, and improvements can be made in smaller portions to avoid any brain crash is crucial.

Part 2:

4. What software have you chosen to use to record your code review?

- a. I would probably use the most popular software when it comes to recording my code review because I have no experience using software for the code review, hence, I would continue to use GitHub,

because I have only used this platform in my other courses and I also have experience with this platform.

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. I think that there are different categories that must be addressed:
    - i. Functionality: it is important to confirm the code actually meets all the requirements and the functions meet the requirements, and it is important to check the validations as well.
    - ii. Readability: ensure that the code is well-formatted and documented and is able to follow consistent and efficient conventions is important.

### **Citations:**

GitLab. (2023). What is a code review? GitLab.

<https://about.gitlab.com/topics/version-control/what-is-code-review/>