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CS 499

Journal: Code Review

Reviewing code is the process of taking source code and examining it for bugs, quality, and whether it follows industry standards. “Code review is a systematic examination of computer source code, intended to find and fix mistakes, as well as improve code quality, readability, and maintainability” (Bosu et al., 2013). Typically reviewing code is peer to peer process, for this course I’ll be revieing my own code.

The process of reviewing code is important in computer science because it improves the quality of code produced. Reviewing code helps to find bugs and reduce the number of errors. It also is a learning experience, reviewing code gives the opportunity to see ways that others code. This leads to sharing and collaboration within teams, promoting a positive work experience. Code reviews “promote knowledge sharing and collaboration among team members” (Bacchelli & Bird, 2013).

Some of the best practices for reviewing code involve having a plan, the scope and frequency of the code being reviewed, and tools used to aid programmers. Starting with a plan ensures that all possibilities for bugs, errors, and vulnerabilities will be reviewed. Staying focused on smaller sections of code at a time ensures that issues are less likely to be overlooked. It is a good practice to review code as the program is being developed to avoid major issues and headaches towards the end of development. Code should be reviewed when integrating new features and before making merges.

For recording my code review I have chosen to use OBS Studio. It’s a tool I have used in the past and feel comfortable using. It will provide me with what is needed to meet the requirements of the assignment.

My approach to creating an outline is to use the categories from the rubric and the code review checklist. I will use the outline created to write the script for the video review. For each category I will focus on explaining the functionality of the code pertaining to that category. I will show the code and spend time focusing on the purpose of the code. I will then move to analyzing the code with the code review checklist. This will allow me to highlight the areas that are in need of improvements. Highlighting these areas will allow me to more easily select what enhancements to make. Now that areas have been found for enhancing, I will be able to explain how I plan to implement them. This will involve describing what skills are necessary to complete the enhancements and how the pertain to the course outcomes. The outline will allow me to cover all the requirements for the assignment and give a detailed account of what I plan to achieve.

Works Cited

A. Bosu, J. C. Carver, C. Bird, J. Orbeck and C. Chockley, "Process Aspects and Social Dynamics of Contemporary Code Review: Insights from Open Source Development and Industrial Practice at Microsoft," in IEEE Transactions on Software Engineering, vol. 43, no. 1, pp. 56-75, 1 Jan. 2017, doi: 10.1109/TSE.2016.2576451.

Bacchelli, A., & Bird, C. (2013). Expectations, outcomes, and challenges of modern code review. https://sback.it/publications/icse2013.pdf