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CS 499 – Milestone 1 – Code Review Journal

**Part 1:**

Code review is the process of systematically examining someone else’s (or even your own) code to identify bugs, improve readability, and ensure the code aligns with the project’s standards and goals. It’s a critical quality assurance practice that helps developers maintain clean, efficient, and secure code. Code reviews are also an opportunity for team learning and collaboration, allowing developers to share knowledge and improve consistency across a codebase.

Code review is important because it helps catch issues early, improves maintainability, and enforces coding standards. According to the resources provided in this module, best practices for code review include focusing on one change at a time, using checklists to guide feedback, being respectful and constructive with comments, and avoiding overly large reviews. Code reviews should occur after a functional piece of code has been written and before it is merged into the main branch. This timing ensures that errors or bad practices are caught before they affect other parts of the application, reducing rework and long-term technical debt.

**Part 2:**

I have chosen to use **OBS Studio** (Open Broadcaster Software) to record my code review. It allows me to record both screen and audio clearly and gives me control over editing, resolution, and file format. This makes it a great tool for presenting each category of my code enhancement in a professional and organized way.

To prepare for the code review, I’m creating an outline for each of the three enhancement categories: Software Engineering and Design, Algorithms and Data Structures, and Databases. For each category, I plan to highlight the original code structure, describe the reasoning behind my enhancements, and then show the updated code and how it improved the project. I’m also using the code review checklist to guide what I cover, such as code clarity, adherence to best practices, proper use of algorithms or schema structures, and maintainability. The script will help me stay concise and focused while still covering everything needed to meet the rubric requirements.