

Paul Kim

CS 499

Software Design and Engineering Enhancement

For my ePortfolio, I have chosen to showcase my Inventory App, a project developed during my CS 360 course: Mobile Architecture & Programming. This application is designed to efficiently manage and track inventory items within a warehouse, utilizing SQLite databases to store both inventory data and user credentials. I selected this artifact as it exemplifies my expertise in both front-end and back-end development. Nevertheless, I wish to make further enhancements to refine and advance this artifact.

On the front-end, I meticulously designed and implemented the user interface, creating intuitive and aesthetically pleasing layouts to facilitate seamless inventory management. On the back-end, I engineered the core functionalities, including class structures, CRUD operations, and essential algorithms, ensuring robust app performance.

The enhancements that I've made for this category involved refining its formatting and structure, augmenting documentation and comments, and incorporating exception handling to address potential errors. I also optimized the app's performance by streamlining functions, eliminating redundancies, and removing obsolete variables and functions, though I retained some commented-out elements for potential future use.

Initially, I had considered a different artifact for this course objective. However, I ultimately chose the Inventory App for all three key categories: Software design and engineering, Algorithms and data structure, and Databases due to its comprehensive alignment with the course objectives and its demonstration of my overall growth in software development.

This project has taught me the value of meticulous organization and thorough documentation. It has reinforced the importance of continuously tracking functionalities, refining structure, and motivates me to constantly make improvements in both code and application design.