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CS-499

Artifact 2 Narrative

The C++ program in my ePortfolio uses a binary search tree data structure to maintain and quickly retrieve bid information; it was first written in February 2023 for the CS 260 course. I chose this item for my portfolio to demonstrate my expertise in C++ programming and ability to create sorting algorithms within bespoke data structures. This product not only demonstrates my ability to build and deconstruct customized data structures, but also my ability to handle complex logical processes, which are frequently evaluated in technical interviews.

The artifact was improved by incorporating validation methods and a binary search algorithm, which increased the application's performance and usability substantially. These enhancements demonstrate my experience in algorithmic design and data structure optimization, as well as my ability to fine-tune existing codebases to match new needs.

Throughout the improvement process, I learned about the importance of memory management in C++ programming and how it affects application performance. Furthermore, I improved my problem-solving abilities by effectively incorporating new features into the current codebase while maintaining the binary search tree technique's integrity and efficacy. This project provided as a real learning experience, providing me with advanced technical abilities and enhancing my capacity to create strong solutions in software development.