Enhancement Three: Databases

Ryan Summers

Southern New Hampshire University

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Professor Gene Bryant

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For Enhancement Three: Databases, I used a project from CS: 340 Advanced Programming Concepts. The original work on this project was done in June 2024. The project was intended to teach students how to write queries to MongoDB. The original quires were designed to create, read, update, and delete single entries. The program was enhanced by adding new functions such as creating multiple entries at once, updating multiple entries at once, deleting multiple entries at once, and counting the total entries in the database. After adding these 4 new functions, I added in line comments per industry standards.

I chose this project so I could demonstrate 2 course outcomes. The first outcome met is employing strategies for building collaborative environments that enable diverse audiences to support organizational decision-making in the field of computer science, I did this by adding in line comments that described each method. Adding these allows others to view the code and quickly understand what it does. This is a Python program. Even if someone is not familiar with Python will be able to look at the code and decide if functions should be added or removed. The program itself also allows users to sort through a large database with ease. I am also able to show another course outcome with this project. By using the same style and organization of the original program, I am (4) demonstrating an ability to use well-founded and innovative techniques, skills, and tools in computing practices for the purpose of implementing computer solutions that deliver value and accomplish industry-specific goals. I have produced clear, clean, and modular enhanced code. I did not have to rework the entire code base. This adds value by not spending as much time on the project. Less time spent means it costs less to produce, adding value.

I have met the planned course outcomes for this project. I learned a valuable lesson doing this enhancement. Comments are just as important as the actual code. There were several things I forgot. I needed to look over my original methods and figure out how to make new, enhanced ones. I also learned that I need to write documentation for my programs. If I had spent an hour or so while working on this project originally, it would have saved me a lot of time.

Works Cited

None/Not applicable