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CS-499

Professor Bryant

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Milestone 4: Enhancement Three: Databases

The database enhancement will also include the previously mentioned source project. With such a open plane for integrations, I believe a database enhancement on this project allows me to have full creative and technical abilities.

For this week's enhancement, I had included an SQLite component to my python code. This enhancement allows the user to track their high scores when playing the game. To achieve this, I have developed a timer to the game that will track how long it takes the player to complete a play through. Once the player completes the game, they will have the chance to input their name and see a list of the top ten high scores, which is stored in a small and simple database.

Throughout this capstone, I challenged myself to improve my database architecture and implementation skills. I believe that course outcome 4 was shown through this enhancement, because of these implementations. A scoreboard can be easily accomplished by a simple array of strings or dictionaries. However, in the spirit of implementing computer solutions that will deliver value, through a database option here, I am keeping scaling in mind. Scaling is a large factor to consider during the design and architecture phase of developing software. Through its implementation here, we are allowing players to have room for any substantial number of completions of the game that they might have.

In addition to this course outcome, the 5th course outcome is also set in stone during this enhancement. Throughout this capstone, I have ensured to follow all Python best coding guidelines and references for any implementations of graphics, variables, memory calls and even the database implementation. To mitigate flaws, I needed to ensure that connections were properly terminated, and unexpected actions could not occur through proper error handling.