Table

Description automatically generatedGraphical user interface, text, application, table

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Tools:

MongoDB in conjunction with a CRUD Python script allowed me to create this dashboard. MongoDB was used to import a CSV document that was 1000 entries large. Using MongoDB, I was able to restrict access to the database as well as easily sort and find entries with simple commands. By pairing this database with a simple CRUD Python script, I was able to hardcode commands that could be called to perform inquiries.

I used dash commands to create the interface. The dash table function is what provides the commands to sort and display the information in an organized table. Dash also provides the commands to make radio buttons and the callbacks that are needed to make those buttons function.

References:

<https://dash.plotly.com/dash-core-components/dropdown>

Steps:

Over the course of a few weeks, we worked to create this project. We started by creating a MongoDB database and importing a CSV file into it. From there, we worked on adding authentication to it so that certain users can edit the database. We then created a CRUD Python script to allow the shell to call simple commands to perform actions. From there, it was just creating a frontend that looked good, sorted stuff with the user's interests in mind, and displayed information correctly.

Challenges:

During this assignment, I struggled with learning the database functions. I have not had much experience with shell commands and was a learning curve for me. Some of the design functions were difficult as dash is close to HTML but still more like Python. I overcame all these challenges by referencing reading material on each operation and taking it one step at a time.