Enhancement 1 Narrative

CS 499: Computer Science Capstone

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For all of my enhancements I used the base of my CS 340: Advanced programing concepts project as my artifact. I worked off of each previous enhnacment to create a full stack application out of it. The original artifact was a python program written in jupyter notebook which takes a large amount of data in mongoDB and presents it to the user as a table, map, and piechart. It also included options to filter the data for specific purposes. I created this artifact about ten months ago.

I believe this artifact was very simple when built in python with some added libraries so I knew that moving it over to javascript would show both my ability to reverse engineer how the software works and translate it to a different language but also how I can overcome the differences between those languages to give the user the same or improved experience. With this I also displayed my skill in utilizing well founded techniques to solve a computing problem.

In the process of this enhancement I learned a lot about how different languages can be utilized for the same goal and how that process can be tough. Even something as simple as a table can be completely different between languages or even just between different libraries within a language. I found that what is simple in one language, like a piechart using python are astronomically tougher in another language like javascript. By the end of this enhancement I felt that I had achieved one of the course outcomes by using well founded and innovative techniques and tools to solve a computing problem.