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Enhancement One: Software Design and Engineering Narrative

The artifact I have chosen for this milestone is the ProjectTwoDashboard.ipynb file from CS-340, Client-Server Development, which acts as a dashboard and user interface which the user may use to access the project’s database. This project is a software application I assembled in a previous course, which I will be improving during my current class. I plan to use this artifact for the first enhancement milestone of my final project for CS-499.

The enhancements I have chosen for this artifact are to redesign the user interface using UI/UX principles for the software design and engineering enhancement, and implement more security functions to prevent errors and vulnerabilities from cropping up. In addition to these enhancements, I also need to install the supporting files and debug the program so that I can set up the program to generate a new duplicate of the original database. To improve the user interface for my first enhancement, I have been following UI/UX principles such as keeping the UI simple and easy to understand, making sure the important information is at the forefront (top) of the page, and establishing visual hierarchy for the various parts of the dashboard layout.

For my software design and engineering enhancement, I moved the Grazioso Salvare company logo to the top left corner, moved the title to the same level and added an extra line with the project’s name, and shifted the graphs upwards so that they would be visible when the dashboard first loaded. With these changes, the UI for the project became much more efficient and straightforward, with the most important and informative parts of the dashboard at the forefront and near the top of the page, establishing a strong visual hierarchy. I believe that this enhancement has accomplished the main goal I have set for it, and achieved the course outcome for software design and engineering.