* How do you write programs that are maintainable, readable, and adaptable? Especially consider your work on the CRUD Python module from Project One, which you used to connect the dashboard widgets to the database in Project Two. What were the advantages of working in this way? How else could you use this CRUD Python module in the future?

When creating programs that are maintainable, I make sure the functionality created within that code is kept current and continuously debugged. This allows my code to be modular and reusable for future projects. Readability is one of the most important considerations when developing my programs. Having my code properly structured and having detailed comments within the code gives other developers a better understanding of what my code is doing. Adaptability and maintaining code go hand and hand. In Project One, I created CRUD functionality that was then adapted and used for my Project Two dashboard. The advantages of these concepts are to create a modular workflow, which will increase the production of programs and create applications that can be debugged and fixed more easily.

* How do you approach a problem as a computer scientist? Consider how you approached the database or dashboard requirements that Grazioso Salvare requested. How did your approach to this project differ from previous assignments in other courses? What techniques or strategies would you use in the future to create databases to meet other client requests?

My approach as a computer scientist begins with me asking myself, “What is the desired outcome I’m trying to achieve”? With this question in mind, I will determine the best path to solve this problem and what tools would be required. With this into consideration, I would begin developing test cases to achieve the best outcome for my problem. Based on the results from these test cases, I am able to implement them and debug the application. This is the first time I have created a database and dashboard, the experience I had was a unique one, so there is no previous assignment to compare it to. Utilizing the CRUD module is something I would definitely reuse in the future when working with databases. The adaptability of the module made the majority of this course easy to deal with.

* What do computer scientists do, and why does it matter? How would your work on this type of project help a company, like Grazioso Salvare, to do their work better?

Computer scientists in short develop solutions for problems. Whether it is utilizing data, developing new software, or analyzing data to find trends, these technical skills are used to create solutions for organizations. This matters because computers have changed how the world operates on a daily basis. A lot of things would have to be done manually by humans with an increased chance of error without computers and computer scientists. The work I have done on this project benefits companies like Grazioso Salvare because it allows users to find data faster. Within this project, I was tasked with finding specific kinds of dog breeds, age ranges, and sex of dogs from a database of thousands of entries. Without this project, accomplishing these tasks manually would be extremely inefficient. So, by having this project, Grazioso Salvare is able to do their work more efficiently and it also increases the expandability of the company.