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?

Writing code that is maintainable, readable, and adaptable should be the goal of everyone including the clients. Maintainable, meaning there is wide-range coordination from the organization serving the code. Readable, meaning anyone with basic knowledge can follow your ‘plan’ (‘spell’-for the magic the plan seems to the unaware). Adaptable, where you can reuse your code to save time which is always money. Our class taught us these goals are achieved by writing in modules. The chunks of CRUD Python code were well written, easy to read, and reusable code and it was how we connected the dashboard widgets to the database in Project Two. I think of the many children coding games that have puzzle like pieces you connect to make a program work. They are well written code modules that teach the concept of code modules intuitively. In the future any of the code from the CRUD Python could be used to organize any database. I may not use my code, but I am daily using the State’s system which from a computer science student’s view is impressive. I now work in four connected databases regularly and I know there are other state databases that can also interact with permission.

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?

Approaching any problem, you must first understand what the solution could look like before you take action. This means you need to know what the person wants you to fix or create. Sometimes you may have to rely on your intuition to suss out what the person wants or other times they may spell it out in complex expectations. Since I am new to databases and coding in general, I would rely on the information of peers, research, and knowledge I have yet to learn before I would tell anyone I was able to do a job beyond my current experience. I see great value in building reusable modules, and I will pursue relevant certificates demonstrating my experience for future clients.

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?

An online description caught my attention in its clarity of purpose describing the job of computer scientist. It said their purpose is in developing new products or solving practical computing problems, conducting research involving experimentation and modeling, and working as part of a research team with programmers, IT professionals, and mechanical, electrical, or software engineers to solve problems and create new products. Working for any company where you solved computing problems is a valuable thing in our society. Computers run homes, businesses, and assist in all of it. With the assistance of computers time is saved even with our complaining about rebooting or dealing with ‘issues’. Time is saved from a person writing and rewriting and rewriting lists to adjust to additions or deletions. Communication is improved by not using a phone to call or waiting on a letter to be received and returned. There is no part of the computer in our society that is not helpful if used fairly and respectfully. ‘Used’ is the important part of the equation. The question asks if your work would ‘help’, and the answer is ‘yes if the intent is to help’. Computer Scientists need to be ethical in their work because they hold a tool to hurt or aid.

*Computer Science job description*. (2022, May 23). Recruiting Resources: How to Recruit and Hire Better. Retrieved October 22, 2022, from https://resources.workable.com/computer-scientist-job-description