Self-Assessment

Throughout my work in the Computer Science program as a whole, I have learned some valuable skills that will enable me to further my career as a result. The coursework I have completed have only strengthen those skills that I have picked up along the way. They have given me more useful knowledge of the types of applications and procedures would be used in a professional setting. In the many courses I have taken over the program, many of them have helped develop these skills that I will need. In an Object-Oriented Design class, I was part of a team environment project that built a Space Invader type game where we all took separate parts of the project to work on, then combined them to make one working program. In my Computer Platform Technologies course, I developed a proposal that was to be presented to the stakeholders of a company on the needed infrastructure of a small office network. My work in multiple courses has focus on software engineering, data structures, and algorithms. I’ve developed programs working with the agile methodology that included a travel booking system, a university enrollment program, and retail inventory system. All are examples of the knowledge I’ve learned throughout my educational experience.

Security is another area where I’ve learned from my courses. In developing the different projects throughout my courses, I’ve had to test them through different phases to make sure that there were no vulnerabilities or design errors in the code. In designing projects, I made sure that parts of the program were encapsulated to prevent only specific code to access them. The category with the most experience I’ve had during the Computer Science program has been with databases. The very first program I started in was an Oracle Database Design and Development course. I’ve learned how to develop a database system from scratch multiple times and maintain it, specifically a retail database for a lawn and garden business to track their products as well as their sales. Most of the work I do now revolves around developing databases for different aspects of the company I currently work for. One of the most important aspects of this is the development of queries to pull out specific data that is needed for reporting purposes.

The three artifacts included in my portfolio all overlap in the main categories they were developed for: Software Design, Algorithm and Data Structures, and Database. All three were designed to function for different aspects of a retail business. All three artifacts are database programs, so the main data behind the programming is all maintained in tables and queries in the database. They all ended up blending together the three main categories so the artifacts demonstrate a combination of the beforementioned skills. Artifact one is a program to track catering orders and is the main example of the software design category, although not limited to that one. It consists of multiple forms that the user navigates through to enter orders, adjust existing orders, track payments, and print reports. Artifact two is a program to track sections of a retail store and consists of not only displaying those sections but performing an analysis on the number of sections in each category as well. Artifact three is an inventory program that displays quarter inventory amounts and compares them to past quarter and other stores. The data that is displayed is all pulled from the tables in the database and uses algorithms to display the correct calculations. All three of these artifacts demonstrate the skills I have learned throughout my Computer Science career and reflect my abilities that will enable me to develop my career.