Professional Self-Assessment

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Discuss how completing your coursework throughout the program and developing the ePortfolio has helped you showcase your strengths, shape your professional goals and values, and prepare to enter or become more employable in the computer science field.

The coursework during my program has expressed my abilities to pick up on many different topics at once. My coursework involved C, C++, Java, Python, and HTML languages while teaching me their strengths, usages and how to use them together. All the while outside of coursework I have picked up on game development and C# as a hobby. These have opened me up to a multitude of paths to take while also crafting me into a worker who can fill many different roles.

Use specific examples from your program and include examples outside of the artifacts included in your ePortfolio.

The one of the most important skills I have learned to do was in my Software Testing, Automation, and Quality Assurance course where I learned to create and test software with unit tests. This is something that I have used in Unity to better test for bugs in places that is hard to playtest in saving me time and effort.

Address the following topics: collaborating in a team environment, communicating with stakeholders, data structures and algorithms, software engineering and database, and security. This section should function as an overall introduction to your skills, not a discussion of the artifacts.

Collaborating with teammates is skill I have built over my academic career. I lead a team to collaborate and build a 3d platforming in my Digital Game Development. Since the course was online, I learned how to communicate and work with people using source control tools and communication software like discord.

Software is designed with goals in mind, the way you decide these goals is by discussing with clients about what they want. Communication with stakeholders is all about accurately understanding their desires and conveying your limitations. Turning their wants and needs into digestible plans for the rest of the team to build on is a skill practiced in my coursework as well. Full Stack Development 1 was a course where I made web app using criteria I had to get from an interview. I had to read through the words of a stakeholder and make my own plans moving forward.

Data structures and algorithms was something I found useful when creating enemy AI in video games. I have played around with using behavior trees and state machines both of which are

common data structures I have run into in computer science. I have had success with state machines before and want to find other ways to apply these data structures to make better games.

While building games I find myself struggling with how to save data. I always want to approach it with remote databases. Having a remote store of the data is good for the player since they can access it from other devices unlike local stores of data. I also always enjoy creating the API's to talk to databases remotely. I think it has to do with the simplify of the actions. Since most database functionality can be summarized as PUT, GET, DELETE, and UPDATE it is not as stressful as the rest of software development.

Each database I have worked with has had some level of security on the data it holds. When storing player data, I would always encrypt the password the player givens and store that instead. The system for encryption and decryption would have to stay on the server side of things so people could get access to it by datamining.

Summarize and introduce how your artifacts fit together and inform the portfolio as a whole.

This summary will help demonstrate the full range of your computer science talents and abilities.

This section should introduce your audience to the technical artifacts that follow the professional self-assessment.

The artifact I used to show my skills is a game I made in a week. This game was done as a challenge. One week start to finish to make a game that would compete against others. The game being made in one week is a show of my rapid prototyping skills a skill every programmer needs. Then these enhancements to the game will further display a skill of refining a prototype. I will be fixing issues I had left in due to the rushed nature of prototyping and I will be add new features on to the prototype.