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12/15/2023

CS-470
8-1 Assignment: Final Reflection

https://youtu.be/UuObigKh2pM

This course helped me hone my skills in full-stack development by introducing me to the concepts of containerization and the process taken to migrate an application to the AWS cloud environment. These skills will not directly apply to my chosen career field as I will be moving into a mechatronics position with a focus on machinery control rather than a web development position. These skills may be relevant to my future career and will make me a better candidate if I ever need to work with a piece of machinery that needs to perform some sort of data logging or analysis via a cloud-based application. Considering current trends and the IoT sphere of influence I believe that this may be likely to happen, so I am glad to have had the opportunity to learn about and work with these systems now.

As a software developer, I believe my greatest strengths are in troubleshooting code and documentation review. I was able to hone these skills during an assembly language course and I feel that having a better appreciation for what is happening behind the scenes made working through the tutorials from this class much easier.

I feel that moving into a new job I am most prepared for roles related to process controls or data management. I feel that the coding experience and computer system knowledge I have gained throughout this program of study and my background in electronics repair have given me a much better understanding of the possibilities of computer-controlled processes and how they are created. The data-specific and network aspects of this program have also provided great insight into the benefits of structured data collection and the possible uses for data that I may have otherwise considered unimportant.

In the future when designing and managing a web application I will need to consider the idea of utilizing either a microservice or serverless architecture. Both options offer significant advantages over a traditional self-hosted monolithic application. For starters, both options offer much greater flexibility when scaling as microservices can be scaled individually and serverless providers offer pay-by-use models and trend-tracking data that make predicting costs much easier. Additionally, microservices exist in isolation from each other so that if a fatal error occurs in one service the others may remain unaffected. Serverless systems have the advantage of built-in support networks and because they are often maintained by a third party, they may be less prone to errors and contain access to built-in redundant storage.