

## **CS-470 Final Reflection**

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**Presentation Video Link:** <https://www.youtube.com/watch?v=kvnoSfsHyIQ>

### **Experiences and Strengths**

This document is a final reflection on my experiences with this course and how it may help me in with my career goals in the future. One of the biggest take-aways from this course for me would be learning about containers. I feel this is probably the most useful tool that I could apply to my current situation. We are currently looking to develop a new host computer system for our program. This system utilizes a real-time operating system and is the heart of the simulator. I believe that containers may play a role in how this update is delivered and having knowledge of that is vital. In that development I hope to utilize the skills I have gained in my four years with this program. I believe a good developer works in collaboration with his/her team. It is important to have excellent communication skills and understand how to use them. Working in a iterative manner and developing complex systems in that manner is crucial. I believe in testing often and taking the time to ensure the final product meets customer expectations.

### **Planning for Growth**

This course focuses on full stack development in a serverless, cloud-based, environment. I have come to appreciate the usefulness of cloud-based development. This can be a very efficient and cost-saving method to deploy applications. Having a team that is proficient in a cloud service like Amazon's AWS will allow organizations the freedom to develop and manage their systems without the need for major investments in infrastructure and the personnel to manage it. Scaling

your application is handled on a need's basis. The more storage or throughput you need, the more you can get without the need for more hardware. AWS handles this for you. Security is embedded and only requires set up for user roles and policies giving users permissions to do only what is determined necessary by the operator.

Given the pay-as-you-go payment scheme, budgeting for operational cost should be fairly straight forward. Some consideration would have to be made for an unexpected increase in user traffic as that could send costs higher. However, this expense would likely be much lower than maintaining localized infrastructure for hosting. However, having localized infrastructure using a containerized system could be a more predictable way of managing costs as those numbers would be relatively stable. With serverless, it is likely that there could be surges in cost due to high use volumes and this can be hard to predict other than normal cycles based on the type of service provided. All-in-all, the serverless model is growing in popularity and seems to be the way of the future.