## **CS 470 Final Reflection**

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**Assignment:** CS 470 Final Reflection

**Presentation (YouTube):** https://www.youtube.com/watch?v=DHI3SxiZrpk

This course guided me through building, containerizing, and deploying a full stack web application using the cloud. I designed an Angular single page application backed by a Node/Express API and MongoDB. It is orchestrated locally with Docker Compose and deployed using AWS services. This reflection summarizes the skills I gained, how they relate to my strengths and intended roles, and how I would plan for future growth using the cloud.

CS 470 gave me practical experience with AWS. I designed an SPA, built a secure API, packaged services in containers, and deployed onto the cloud platform. The skills I learned include full stack implementation, security fundamentals, containerization, orchestration, cloud deployment, and finally testing and validation. My strengths as a developer is the understanding of how frontend, backend, data, and deployment fit together. I also always verify flows and emphasize error handling and security. I have experience in creating clear interfaces that are easy to understand and pleasing to look at. Finally, with software development constantly growing and new tools and software being used, I pride myself in the ability to learn and expand my "toolbox" to fix real world problems. The roles I am ready for are Full Stack Developer using a variety of stacks and AWS, Font End Developer, Back End Developer, Mobile Developer, and Software Tester.

To start I would run always on features in containers and move background tasks to serverless. I would scale by letting the cloud add automatically, use a simple front door, cache

data used frequently, and use a managed database. To predict cost I would use various tools like AWS Pricing Calculator and consistently measure usage. In terms of cost predictability I would say containers are more predictable than serverless. This is due to serverless's cost depending on usage which is less predictable than containers where you would pay for a fixed capacity.