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CS 470 Final Reflection

<https://www.youtube.com/watch?v=Q2g5IMBfpdY>

Experiences and Strengths

During this course I learned more about working with AWS services. I was able to learn with hands on experience how to use some of the serverless tools provided through AWS to create the full stack application. My strengths as a software developer shine through with my ability to follow directions and figure things out. During this course, it was my first-time using AWS, Docker Compose, and DynamoDB. It brought me out of my comfort zone, and I was able to learn quickly without falling behind in the course material. This course helped me to prepare for a position as a full stack software engineer and a cloud software engineer.

Planning for Growth

AWS has multiple serverless tools to help with scaling and error handling. AWS Lambda and Step Functions can handle error handling. Tools like EC2 and DynamoDB are great for scalability and capacity adjustments. Since AWS uses a pay-for-service, they provide a tool to help with calculating the cost. AWS Pricing Calculator can help with costs based on different uses. However, if the application gets unpredictably utilized or underutilized, it will not be as accurate. Serverless can be the more cost predictable in comparison to containers, however, it ultimately is dependent on the specific use which will end up being the most cost effective.

Pros and cons when deciding factors in plans for expansion depend on the specific project. For example, expanding from hardware to cloud services could help reduce costs and increase scalability. The company would not have to spend costs on hardware upgrades or managing their own servers when using cloud services. Pay-for-service can be both a pro and a con depending

on how often the application gets used. If it is highly utilized it could end up being less cost effective since it would be handling a larger amount of usage. However, with elasticity, it would fluctuate based on usage in real time.