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CS 470 Final Reflection

<https://youtu.be/zprdwkHrhp0>

Going through CS470 has assisted in deepening my skills as a software developer. I have been able to further cement many concepts including serverless application and converting standard applications to them and container tools like Docker. This class will hopefully prepare me for a role as a software engineer once I am finished with my degree.

Through AWS, serverless and micro services provide a means to handle efficiency within the application. Using lambda and step functions as an example, they can make error handling easy. Scale concerns are very simply addressed via auto scaling, an AWS system, allowing for automatic adjustments on services like DynamoDB and EC2.

AWS has a feature known as AWS Pricing Calculator, which provides engineers with an ability to calculate cost of an AWS account. Using a serverless architecture, the pricing calculator allows predictability for cost. Auto Scaling may change overall cost as more compute power requires additional cost. Generally, for small to medium sized application, serverless services are more affordable, but highly depends on what the application is doing in the code.

For deciding factors in application expansion plans, there are many pros and cons. Understanding the market share as well as cost-benefit analysis should be done to further understand if it is feasible to make those expansions. Capital spend is one of the largest negative for expansion. Time to building also may bring problems, as this may require hiring additional headcount to complete, as well as having logistics for developers to communicate for building the expansion. For serverless architecture, automatic resource allocation allows to ramp up and down based on demand. So, only resources that are being used will be charged. This gives the business a means to grow in the future.