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CS 470 Final Reflection

[CS470MOD7 (youtube.com)](https://www.youtube.com/watch?v=iPA50Xdlgkw)

The CS 470 course has helped me in reaching my professional goals by teaching me the skills needed to use AWS architecture to create and deploy a full stack application to the cloud. I have learned how to test code, design security features in AWS, and deploy and use the different interacting infrastructure of AWS. My main strength as a software developer would be that I am eager to learn and improve. Feedback and critique to me is something that is needed so I can be better at what I do, so I always want to get that, and I am not afraid to make a mistake. I am prepared to assume the role of a backend developer at a new job, as that is the side of software that I have the most liking to, but I would step into any role needed as well.

Microservices and serverless can be used to produce a great many efficiencies in the web application made in the future. Scaling issues would be solved through at first auto scaling in EC2, by creating scaling policies per requests and loads. Lambda as well could be employed even further as the application grows since it is independent per request. AWS has many built in features to help with error handling like CloudWatch, which allows for automated responses to errors. Data will always be backed up in AWS, and for security IAM policies will always be used.

When it comes to cost and predicting the costs for these services, I believe surveys and test runs must be utilized so there is a general idea of what will be the scale of cost over time. Cost predictability for containers and servers varies depending on the uses you have for each. Containers need to be used for steady workloads you know you will have, while serverless is better for sur of the moment workloads as they scale automatically, and serverless does not incur charges when idle.

The pros and cons of expansion all fall to money. Money is the only thing that would prevent expansion of the site, as we need money to hire more team members in the event, they are needed to help expand the site and run it, and also money to fuel the expansion using AWS architecture. Elasticity and pay for service play large roles in the decision for future growth, as these two principles always must be honored when developing and using the cloud. Through these two principles do you achieve what is a good application and usage of the cloud.