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CS-470

<https://youtu.be/KgNgPeaQGdc>

### CS 470 Final Reflection

In this class, I've learned many skills that will help me with my ability to become a more viable candidate in the software development field. Learning how to transition from an MEAN stack based website, that was started off as just a simple static website to something that can be hosted on AWS and interact with multiple components such as the S3 Bucket, the API Gateway, and the DynamoDB, all working with the Lambda expressions helped me see the pipeline of how to develop such a website or application. This is important to me as being in web development is something I could potentially see myself doing. There are also other applications that can be hosted on the AWS site other than just websites, so getting exposure to the platform was vital to the development of my software career.

I believe I am strong at adapting to different platforms such as AWS as I'm able to absorb much information through tutorials and looking up best practices or ways to deploy code. This will help me adapt to any type of workplace by being able to study and learn on the fly, something that is critical as you potentially move forward with your career. Not only that, but skill sets are required to change as technology is developed, and there may be other cloud-based workspaces, for instance, that become more popular but have different ways of deploying. Being able to adapt and learn more is critical. I am no master of any one domain yet, but having knowledge of many and produce working code is something that was tested in this class and

many of my others. From web development, cloud-based programming and mobile development, I feel more confident in my development in the past year in programming to be able to take on any of these types of roles.

In cloud services, scaling and error handling as it was shown in AWS taught me the power of using such a service in being able to handle those concerns more easily. All the different modules within AWS have the power to automatically scale based on the demand of the module in question. I will need foresight and proper projections of how much these modules will be used so that you can plan with financial considerations of higher loads. It is vital to understand how to make efficient code that won't overly tax the calls the Lambda expressions are used, or excessive use of the DynamoDB instead of storing something in memory properly for a module. This will help keep costs lower. The metrics also keep track of errors with details, allowing the users who manage the web application the ability to have insights into the issues the cloud service is having with the code that is deployed. This will be critical in ensuring the website is run properly so that there aren't unforeseen issues that crop up, further increasing the cost of running the services.

Containers can be more cost predictable than serverless configurations, since you will know the upfront costs by spinning up as many containers as you require on hardware you've obtained or provisioned. However, the flexibility of a serverless configuration such as AWS makes it so even when demand increases and causes the costs to go up, performance takes minimal hits, if any at all with the proper configurations. It also means there is no future adding additional servers to handle an extended increased demand for the website or applications. If your service might require this sort of elasticity, especially in cases where demand goes up and

down dramatically, it helps to have it be serverless and pay-for-service rather than upfront and consistent costs.