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CS – 470

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<div align="center">CS 470 Final Reflection</div>

YouTube link: https://www.youtube.com/watch?v=yJvGb9xdIvY

This course has taught me a lot about how to use the different cloud computing services on AWS, as well as how to use Docker. I had never used either of these tools before this course, and now I feel like I can comfortably use them to create a simple website. I learned about frontend and backend security, as well as how to implement simple methods such as put, get, delete, etc. I also had learned a lot through my troubleshooting of issues that I ran into. I think having this diverse experience, both in ordinary MEAN stack development (from CS-465) as well as through a cloud computing service, I am now more marketable as a developer. This broad experience has helped me decide that I want to continue pursuing full stack development within AWS, especially because I learned a lot about the different benefits of using a cloud computing service compared to what is available to me through regular hardware. My main strength as a developer right now is that I am open to learning a variety of skills. I think having broad experience in multiple different languages and IDE's is crucial to being a good developer, because it can bring outside perspectives in as opposed to being tunnel-visioned in one thing or skill. Right now, I am prepared to take on the role of junior developer, mostly because I know there is still a lot for me to learn, especially while on the job. This experience is something that can only be gained through time, and I am prepared to train under multiple people to learn what works for them, so that I can better understand what will work for me.

I've mentioned it before, but I think one of the greatest benefits of microservices or

serverless is the fact that it is scalable. If I had to make the decisions, I would say that I would handle scale and cost by comparing the trends of usage in past months to better decide on what we need to be prepared to pay in the future. Many people understand that although there isn't a surefire way to accurately predict the costs of usage when going serverless, it is still the better option because it is based off actual usage rather than a base fee. Containers are likely more predictable in terms of cost, but serverless can be the way to go if you know what to expect from your customer base.

There are many pros and cons when it comes to expansion. Of course, we need to think about if the increase in usage really calls for more developers to join the team. Realistically understanding what you and your team can do without burning yourselves out is important. If you find yourself feeling overwhelmed, perhaps expanding is the right way to go. Of course, this is going to cost more money, because you are taking on another member onto your team, but relieving that stress is going to produce better results in the end, because everyone will feel better tasked and more well rested when getting to work. You will also be adding on new perspectives, which could increase the security of your program as well.

When it comes to elasticity and pay-for-service play and their roles in decision making for planned future growth, you really must understand the trends of your company. This goes back to figuring out what you expect from your userbase. Do you think your traffic is constantly growing? If so, then it is worth paying a bit more for new developers to join your team to better run your program. If you've had a constant downward trend, then growth isn't the best option right now, and you'll fall back into only paying what you use.