

CS-470 Final Reflection

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Presentation Video Link : <https://youtu.be/QfjcNCCF0vg>

This course will help me reach my professional goals because it has taught me how to make a cloud-based application using Amazon's tools. This will help me develop apps that are cloud based because I will have some experience with these tools. It also gave me knowledge that I can use in the future such as the difference between S3 storage and local storage. As well as why and when it is better to create an application over the cloud. All of this will help me in my journey to becoming a web developer.

It is important when planning for growth to look at all the factors. The best way to handle scale is to have tools that are appropriate for the level of scaling that is needed. This can be done by planning and looking at the possible scaling that will be needed to fit demand for an application. With Amazon Web Service's tools, it is easier to scale because Amazon fulfills the need for many different parts of the application like the backend, API, the database, and more. This means that when looking at how and when to scale, Amazon's tools can give a good insight as to how much it will cost to use these tools at that scale. The best way to try to predict the cost is to try to predict the usage of your application and how much it will need to scale, and then compare that to the amount Amazon would charge for that much usage.

Containers would be more cost predictable because everything that is needed to run the app is within the container while serverless can be changed based on what the users' needs are.

Serverless is still a good way to scale as it takes the need out of supplying and maintaining your own hardware to run the server on.

Pros and cons of scaling would be if it would be beneficial to the company to scale or not. If the company will make less money from up-scaling then it should not. That is the first deciding factor. The other pros would be a larger application/system, a higher chance to earn income due to more users, and a better chance of brand recognition. The cons would be cost/employee power/time/maintenance cost will all be higher. It is important that when up-scaling, the company is making enough money to make sure that it is worth it to cover the costs.

The role that elasticity and pay-for-service play while making a decision about scaling would be their ease of scaling. It would make a company more likely to want to up-scale knowing that they only must pay a set amount of money based on how much they use. Instead of doing it the traditional way of building servers which need to be maintained and can cost a lot more in the long run.