CS-470 Final Reflection

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https://www.youtube.com/watch?v=kPjWALH-5js

Experiences and Strengths

Over the course of this term, I have learned a lot about creating full stack applications with AWS in mind. AWS is a fantastic system for creating full stack web applications and being able to take advantage of Amazons various services is a very useful skill for this kind of development. I expect that I will be able to use a lot of the services, such as S3 and Lambda for many personal and professional projects in the future.

As for my personal skills, I feel as though my real strength is being able to understand how systems connect at a higher level. Being able to connect two services together is a useful skill to use but understanding how the entire network is supposed to function is also incredibly valuable.

This class has prepared me for a few interesting roles. First, along with full stack 1 and this class, I should be well on my way to assuming full-stack development positions along with more general software development roles. I am currently looking into roles involving database management and design, along with roles involving front-end web design and the creation of web apps and the migration of applications to AWS.

Planning for Growth

AWS is a great service to use when creating a full stack application. It has some great tools and services that make scaling more efficient, helps keep a large project organized, and allows for very decent security practices.

Because of the way the AWS services are laid out, the structure of a project is much easier to understand then on a local server. You don't have to dig through files to find the one script you need to change, its just conveniently in a list of lambda functions. As such, bugs can be ironed out fairly easily when compared to a local server. This also allows serverless projects to be more predictable. Along with the ability to almost every aspect of the project as you develop it, and it makes for an extremely reliable and predictable system to build a full stack application on.

As for the costs of a project, all you need to do to find the cost of running a serverless project is how many users you expect to have. While accurately figuring out this information is difficult, it is worth it for the peace of mind knowing that your server will automatically expand along with the server load. Amazon also offers the ability to cap the server load at a specific cost, so that a sudden serge doesn't take you to the cleaners. So, in essence, the cost of a project is whatever you budget for.

Finding out whether or not expanding a project is a good idea or not is a difficult task. On the one hand, expanding the application scope could increase the user demand for a project, and expanding the servers for a project could allow more users on at once. On the other hand, expanding the scope of a project can be complicated and may not go as planned, leading to delays and lost productivity. As for expanding a local server for increased capacity, buying parts and new server racks can be really expensive, not to mention the costs for someone to set up the server and maintain it. AWS offers some solutions to both of these issues. AWS makes

expanding the scope of a project easier by making the development of a project simpler. Also, because AWS is so elastic and allows for flexible pricing, the load can adjust flexibly, which saves you money when server load goes down, and automatically ramps up the capacity when the load goes up.