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Presentation: https://www.youtube.com/watch?v=nIoXtlbICyI

CS 470 Final Reflection

Now that I have completed Full Stack Development II, the skills that I have used will help me in reaching my professional goals. Full Stack development is a very popular skillset that I often see listed on various job boards for various companies. My strengths of being a nimble learner, having a strong work ethic, and knowing when to ask for help combined with my blossoming skills in development could bring value to any team. I aspire to work in the development field using my technical savvy in any way possible. As of now, that has presented itself in different ways for me, as I have completed a SWE internship, UAT internships, and have worked alongside EPMs to facilitate larger projects.

Regardless of which path I find myself on in the technology industry, I would like to always have the knowledge of coding and development to underscore my other abilities - whether I am the one writing code or not. There are many non-technical people who have found themselves in technical-adjacent roles, even to the point of leading technical teams. I see the value of differing perspectives and experiences, so that does not inspire any negative feelings. However, I would like to always offer my background of having done the work, understanding the work, and even the ability to *do* the work with the rest of my team as a selling point for candidacy.

To plan for growth of my web application in the future, I would continue to use microservices and serverless features to help manage efficiently and scale. Because microservices help to compartmentalize services and add layers of independence between them, it holds the benefit of being easier to scale and handle. When bugs are detected, they are easier to analyze and fix due to the independent nature of microservices which in turn does not affect any other part of the application as a whole. However, even though these features make it easier to expand, there are still cons to consider, such as the time needed to migrate your web application, any initial costs for setup, and lack of general control over both hardware and software configuration.

Depending on how I would achieve growth, I would predict the cost by analyzing whether the tools needed follow a pay-for-service model. Elasticity describes the ability for your application to scale up or down in the moment based on current traffic, and the pay-for-service model only charges you for the resources you have consumed, not what you are estimated to consume. Because elasticity and pay-for-service work hand in hand, I would find it more financially responsible to use services that follow those models. Averaging the current traffic my application gets and leaving a margin dedicated to increased traffic would help me to predict the cost range of my application should we follow the pay-for-service model. If I were to use containers, predicting the price may look a little differently, as containers are typically charged in a monthly fashion rather than in a pay-for-service model. At least with containers, I would have a steady idea as to how much to allocate as it is more predictable in pricing.

All in all, just as there are many factors to consider when thinking of how to grow your application, there are also many factors to consider when thinking of how to achieve your professional goals. This class has helped to marry the two together for me, as I have grown more comfortable with Full Stack development and the opportunities it opens up for me.