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CS-470: Final Reflection

https://youtu.be/aTFdW4lIEHk

As an employee of a large corporation, I have noticed that many of our local services have slowly changed from being local to existing in the cloud. Home office prefers having oversight into the applications, and the cloud is the best way to monitor all locations. This course will help me reach my professional goals by demonstrating my knowledge of how to move a service to the cloud and obtain a position leading the migration process. I have learned the process of taking an application and moving it to the cloud, which is what my employers are doing right now. They are looking for people with prior knowledge to help them, and this course has supplied me with that knowledge. My strengths as a software developer are my ability to solve problems and attention to detail. I am ready to get a job in software design or analytics. I enjoy reading data and finding patterns. I also like being handed a problem and asked to solve it, so developing software to solve a problem would be enjoyable.

I have learned a few things about cloud services. Scaling applications rely heavily on microservices and serverless architecture. When scaling an application, microservices allow me to break it down into smaller independent services. That makes it easier to scale the individual services based on workload. When the app is broken down into microservices, it allows errors to be isolated effectively. The cost of the project can be provided by creating a cost model that provides accurate pricing on equipment like server infrastructure, storage, and networking. However, going serverless instead of containerization would allow for a more predictable cost as

the pricing can be easily calculated once the resources have been determined. It is important to consider the pros and cons of expansion before deciding to move forward. Expansion allows you to move into more markets and reach more people, increasing profitability. However, it can be a double-edged sword in that those new markets may require changes to the programming to abide by local laws. Expansion could attract investors, allowing you to provide capital for the cost of upgrading. But, there is no guarantee that investors will actually invest, and with that, there may be a lack of cash flow during a new expansion. Growing your reach may lead to increased revenue potential and access to new markets, but not being prepared for the change could lead to legal challenges, higher costs, and unforeseen situations. Elasticity and pay-for-service also play a role in the decision-making process for future growth. Elasticity allows an organization to scale resources up or down on demand dynamically. This improves performance when there are fluctuations in the flow of traffic and ensures stability. Pay-as-you-go allows for the best cost predictability. No long-term commitments are involved, so one can move from one platform to another if needed.