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CS470 Reflection

<https://youtu.be/iYQWgoXrTFQ>

**What skills have you learned, developed, or mastered in this course to help you become a more marketable candidate in your career field?**

Learning both about containerization and working with AWS and learning the different parts of having an application hosted on the cloud will be beneficial in whatever career I end up in. Since most development is going serverless and more and more jobs become either remote or hybrid having knowledge of these is extremely important.

**Describe your strengths as a software developer.**

Because of my background in manufacturing and developing work instructions, I am very focused on best practices and ensuring that my work can be picked up by someone who has never talked to me prior and they will be able to both understand what is going on and continue my work. I also am very adaptable and know that being flexible and being able to find solutions to problems that may be outside of convention is important as long as everything is documented and understandable.

**Identify the types of roles you are prepared to assume in a new job.**

Since I am trying to start a new career from scratch and have only gotten a very generalized education in this program I can honestly say that I am quite nervous trying to find a job that I am even remotely qualified for. Adding in the fact that in over 100 applications over the last 8 months, I have had zero opportunities to even interview for a position. I would guess that I am prepared for an entry-level position at best if not just an internship.

**How would you handle scale and error handling?**

With serverless computing the provider, such as AWS, will automatically scale the application based on incoming traffic and provide load-balancing mechanisms. For error handling, I would ensure that all errors would be logged and monitored using the tools that were provided. Using these tools I would make sure that I would get a notification informing me of what error happened and when allowing me to take action as needed.

**How would you predict the cost?**

Since the different service providers all have different pricing models for their services I would familiarize myself with the model that I would be using. This would help reduce the chances of an unknown cost coming up during production. From there I would analyze the application's usage patterns and estimate the different functions and how much they would be used to get an idea of the cost. I would also continuously monitor the application looking for any optimizations that could be implemented to help reduce future costs.

**What is more cost predictable, containers or serverless?**

Typically serverless computing is often more predictable for cost due to its pay-per-use pricing model and simplified infrastructure management.

**Explain several pros and cons that would be deciding factors in plans for expansion.**

Cloud services allow for easy scalability, they follow a pay-as-you-go pricing model making them more cost efficient, and they provide the flexibility to adapt to changing business needs and market conditions rapidly.

Cloud services can increase security concerns as you will be entrusting sensitive data and business-critical applications to third-party cloud providers. Once you adopt a specific cloud service or platform you may be locked into that service making it hard to migrate to alternative providers.

**What roles do elasticity and pay-for-service play in decision making for planned future growth?**

Elasticity and pay-for-service play critical roles in decision making for planned future growth by enabling businesses to scale infrastructure and resources dynamically, optimize costs, and maintain flexibility and agility and response to changing market conditions.