

Michael Bauer  
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CS 470 Final Reflection  
<https://youtu.be/hrrFzWvvJLc>

**Experiences and Strengths:** Explain how this course will help you in reaching your professional goals.

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

There were no skills mastered during this course and I feel you can learn new skills or improve upon skills you have. The skills I learned involved using new tools and services. I was able to learn how AWS services work, to include Lambda functions, S3, and API gateways. I was able to develop my skills of patience when learning new things, debugging, and doing further research as to why or how something works.

- Describe your strengths as a software developer.

My strengths as a software developer involve analyzing problems, being able to critically think, being able to learn new ideas quickly, and my need to understand how and why different parts work together.

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

I am prepared to assume entry level roles to mid-level roles. I feel I have enough experience to go into an entry level role without any issues even if I have to learn a new tool or idea. I am confident that I will be able to jump right in and get to work. I am prepared to enter mid-level roles and put in the work to learn everything that I may not know and further my experience. We grow from pushing ourselves to our current limit, this allows us to extend that limit.

**Planning for Growth:** Synthesize the knowledge you have gathered about cloud services.

- Identify various ways that microservices or serverless may be used to produce efficiencies of management and scale in your web application in the future. Consider the following:
  - How would you handle scale and error handling?
  - How would you predict the cost?
  - What is more cost predictable, containers or serverless?

To handle scale, meaning scalability, I would use aspects of the serverless that allows for autoscaling. This may not always be the best choice and different variables need to be looked at

before choosing. In both serverless and microservices errors are easier to narrow down since generally speaking the application is broken up into smaller parts. To predict cost, I would look at what our average usage is and what our peak usage is. This will help to give a rough idea of operating costs. There are different calculators or equations that can also be used. Containers are easier to predict because they do not depend on the usage from the users which fluctuate.

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

The pros include allowing for further growth in multiple areas. Can utilize new tools or services, which can help streamline things and make it easier to keep expanding in the future. The cons include higher cost because of more storage/resources. Lack of personnel or knowledge to execute the expansion. Possible downtime to execute the expansion.

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

They play huge roles since elasticity allows for growth and scaling. Elasticity makes it so you are almost future-proofing for the growth. Pay-for-service goes right along with elasticity since it keeps costs down. You only pay for the usage but it allows for that scaling and growth without the possibility of wasting resources or storage.