CS 470 Final Reflection

Name: Matthew Rix

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YouTube Link: https://youtu.be/9rBKc1Bwj-M

- **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?**
      I think the skills of being able to integrate and configure multiple tools like S3 buckets, Lambda functions, and API Gateways for one of the most popular serverless cloud providers in the market is a very in demand skill set. Many companies are looking to upgrade and integrate their legacy systems to a more cost-effective approach like cloud computing and finding people who can do that effectively is difficult to do.
    - **Describe your strengths as a software developer.**
      My strengths as a software Engineer are primarily in DevOps. This means I am practiced and adept at setting up and configuring host computers, the software tools they employ, and configuring all other forms of software tools needed to effectively deploy production code.
    - **Identify the types of roles you are prepared to assume in a new job.**
      Seeing as I am currently employed as a Software Engineer in the Production Support Group (DevOps) I would say that I am prepared to assume that role in a new job. That being said, I do have programming skills that I can use in a developer role primarily as a backend engineer dealing with data management and backend data requests.
- **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?*
          Scale problems are very situation specific, for example if the application you're working on is hosted with a serverless cloud platform then scaling usually happens without input from the user and is handled by the cloud provider. In so far as the scaling problem with privately managed resources that's more of question that involves variables like traffic projections and which resources that traffic will be using so that the load balancer can direct traffic efficiently.
        - *How would you predict the cost?*
          Most of the cloud tools provide cost calculators based on projected traffic.
        - *What is more cost predictable, containers or serverless?*
          Serverless is far more cost predictable since the service providers normally have calculator that help you to determine the amount of resources you will be using.

- **Explain several pros and cons that would be deciding factors in plans for expansion.**
  Some of the pros for expansion would be more available resources for handling incoming traffic to your application and a more secured application environment but that is about where the pros end if the servers are privately managed. If a company is hosting on their own servers the cons include setting up, configuring, and maintaining those servers, having to update the servers when they become deprecated, and having server resources go under utilized during times of low traffic.
- **What roles do elasticity and pay-for-service play in decision making for planned future growth?**
  When planning for future growth it is paramount to consider not only the up-front costs, but the long-term cost and man hours required to meet your goal. Elasticity and pay-for-service models have some upfront cost in integrating the application int that service, but you see a lot more savings in the backend when considering how little the need is in maintaining server resources and adjusting for that growth.