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CS 470 Final Reflection

CS-470-T3364 Full Stack Development II 23EW3

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https://youtu.be/v4bjmBombnE

Above is the Link to the presentation video.

- **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?**
    - **Describe your strengths as a software developer.**
    - **Identify the types of roles you are prepared to assume in a new job.**

In CS-470-T3364 Full Stack Development II 23EW3, I learned how to build docker files through docker desktop. I learned how to implement AWS services and resources, like Lambda functions , API Gateway, IAM roles, Policies, and utilizing GET, Post, Put, and Delete ,methods when building a full stack application. In Cs 470, I developed the skill to write code to connect the database (backend) endpoints to the frontend endpoints. Additionally, I learned how to populate the database, perform queries on the data to view results, configure IAM security to ensure there is no public access to the database, but it is accessible by the Lambda, as well as, explain the S3 storage file system and its different characteristics, and understand buckets and objects.

As a software developer my strengths is taken my time and working with complex code to find the solution to a error or problem. I have evolved as a software developer and will continue to grow and evolve. In a new job, I am looking to assume the role of UI/UX designer, scrum master, lead software developer, and full stack web developer.

- **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?**

Scaling is handled through the AWS web services. There are multiple software and components of the AWS web services, like API Gateway, IAM roles, Lambda functions, and buckets and containers to scale web applications. Figuring out what is more cost predictable between containers and serverless architecture, rises a few questions to ask like. What utility are we getting out of the platform? What utility do I need for my DevOps teams and my operation teams? Can my operations teams handle service failures? One thing to note is that while using serverless architecture a developer will need to hold everything he/she deploys even if when leaning on somebody else to run the code. The cost can be predicted based on what the project is and what the requirements are for the full stack web application.

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

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

When planning for expansion this would mean expanding storage of data. Some important things to consider is what type of information will we be securing. Also, what types of tools will we need to expand the business. Also, since we are expanding the information we will need to expand the security we use for the system. Pay-for-service means also paying for additional information security. The more storage a person will need the more security they will need for their information.

Cloud elasticity is the action to increase or decrease architecture resources and services dynamically as necessary to adapt to work task modifications in an autonomic manner, maximizing the use of resources. Elasticity can save money on architecture development. Cloud elasticity is a great support for scale-out solutions (horizontal scaling) and growth, that allows for resources and services to be precisely added or deleted when necessary.