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24 August, 2024

CS 470

Professor Alam

<div align="center">CS 470 Final Reflection</div>

<div align="center">https://www.youtube.com/watch?v=tpJaLcxbZ5Q</div>

- **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?

    - Learning full stack is by in large a very important skill to have and something that will ultimately mean I am more marketable! Even with the technological issues aside, I learned a lot of these important things and intend to move forward fixing these issues on my own so I can practice and build a portfolio.

  - Describe your strengths as a software developer.

    - I think my strengths lie largely in my ability to adapt and my knowledge of when to walk away from a project for even five minutes. These two things are important traits to have when it comes to software development as being able to adapt quickly and knowing when you need to get a fresh set of eyes on code are imperative.

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

    - The world is my oyster in this regard! I'm prepared to assume just about any role I qualify for, but specifically I've got an interest in roles like security analyst, webmaster,

UI/UX Designer, and the list goes on! The question really is probably what roles I wouldn't be prepared to assume when it comes to a new job as a software engineer.

- **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?

      - Microservices and serverless tools provide strategies for dealing with efficiency across the board. I'd handle errors utilizing Lambdas and Step functions and scale concerns would probably be handled via AWS Auto Scaling. This allows automatic capacity adjustments, which are based upon EC2 and DynamoDB instances.

    - How would you predict the cost?

      - I'd utilize AWS Pricing Calculator to predict the cost. This enables us in a serverless architecture to predict to a reasonable degree what the project will cost as we go.

    - What is more cost predictable, containers or serverless?

      - Generally, serverless is going to be more predictable in terms of cost thanks to these tools that allow a level of examination into what all will cost for the project and an automated calculation of those potential costs.

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

  - Pros

    - Higher revenue

    - Better organization with future success in mind.

- Cons

  - Capital Expenditure

  - The time to form a new infrastructure, hire/train new staff, and network management or office space logistics may also be a deterrent to expansion.

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

  - Elasticity plays a role in expansion via "right size" resource use by scaling up or down the needed resources an application needs with regard to demand. Which then complements the pay-for-service model as you only pay for the services you use and you are only using what you need thanks to Elasticity in play. These both lead way to preparing a business for successful future growth.