## Dino Kapic

3/3/2024

CS 470 Final Reflection

https://youtu.be/-qgq\_\_j1fCk

The most important thing I have learned in this course is utilizing AWS. What I originally thought to be a mountain of a system is a lot more manageable when broken down per parts as done in this course. I had no experience in it, and now I feel that I can learn to utilize it. Educating myself through the course can be considered a great benefit.

My strength as a developer can be considered my relentlessness. While I may not know much about a system starting, I am confident in my ability to learn.

I'm not sure about the new roles I am prepared to assume in a new job as I'm currently working in another field, but I do believe I can manage most introductory and junior roles in development and security.

Microservices may be considered small, but services provided by Amazon for example allow a growth model that can expand rapidly as needed, while some costs are fixed, you do have the added benefit of knowing if your traffic or data increases, you don't have to worry about allocating services yourself, and the microservice will handle it. Amazon is also very open about its cost ratio, so calculating the cost and prediction depending on scale would not be hard.

The first pro in an expansion plan would be an increase in revenue, and of course, an increase in a customer base, whether it be a paid or freemium model.

The con would be the increased cost in such an expansion, while revenue increases, so does the cost, and balancing such an expansion may be hard depending on how steep of an increase happens. This can be alleviated by managing the expansion in smaller steps, but it also causes a possible stagnation in growth if a limit is placed.

Elasticity and pay-for-service allow for a controlled expansion with known costs for future growth. The elasticity is great as you're not managing the servers yourself, so the cost of machines and man-hours to manage it can be nullified.