Andre Burton CS 470 Final Reflection 24 June 2024

Experiences and Strengths

SNHU CS 470 (Full Stack Development II) has taught me a handful of new skills which will help me in my future professional and personal goals. During this course I learned the importance of cloud computing, serverless cloud-based systems, how the transfer from a full stack to cloud application would work, how to use and set up amazons AWS, DynamoDB, and so much more. This information and skills will help to make me a more marketable candidate by showing my knowledge in cloud-based systems, how to transfer a server web application to a serverless cloud-based application, and so much more to deal with amazon AWS and web applications. Through these specific skills I have learned I have also grown on existing skills I have had which included critical thinking skills, diligence, and overall application setup and delivery.

Through this course and all the course, I have taken through SNHU I have grown in many strengths from different software languages such as python, cc++, Java, JavaScript, and more to different and supporting IDE's. Some more skills that I have grown in are problem solving, critical thinking, strong research skills, and now skills in serverless web development, amazon AWS, and much more. With any growth though I will always push to learn more and grow my expertise in all avenues of software development.

After everything I have seen and learned I have concluded that I look forward to all roles that have to do with software development. It seems that every course I took had me more interested in that specific aspect of software development. Out of all the courses I have taken though the ones that stood out the most included 2D/3D graphic development, embedded system development, full stack development, UI/UX design development, Mobile application development, reverse software engineering, and software security. I look forward to finally settling into one of these aspects and growing to become an expert in that specific field.

Planning for Growth

When it comes to developing, web-based applications preparing for both growth and costs are important aspects in the initial stages of development. This is why a serverless design is an effective way to go because as users and the application grows the design will scale with it. This means that the companies get the exact amount of power and storage they only pay for what they use. This serverless design also means no huge upfront cost, no ongoing maintenance costs, and if a server goes down, they will still have access to their information. The alternative to this would be a server-based design that has large upfront costs, does not scale as the company will need to add servers to keep up, they will need

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people to set up and maintain the servers. The worst part is if the server crashes, they may not be backup servers to account for the lost information. With all the benefits to serverless the question might be why everyone does not transfer over, and the reason is there is secret information out there that companies may not want the serverless managing companies to have and this would be the only exception. Predicting costs with a serverless design can be as easy as seeing your current usage and calling the company for pricing to get a good picture of costs. This comes to the roles of elasticity and pay-for-service for planned future growth. The wonderful thing is due to how elasticity will grow and shrink with the company which is great. The pay-for-service on the other hand will be easier to keep track of as the price goes up with usage and if a company is keeping track of there users and associated costs the growth should not be a factor due to the easy and transparency of serverless costs.

In conclusion, I have learned so many different skills and look forward to all potential in software there is out there. Serverless design specifically amazon AWS provides a great model to allow companies to worry about less physical items and more about here actual product. It comes with elasticity and will grow with the company as well as a transparent and easy to keep track of cost layout. Many companies should be looking at moving to this new serverless design if they have not already done so.

URL Link to a presentation on migrating from full-stack to cloud-native web application using AWS microservice.

CS 470 Project Two Presentation Andre Burton (youtube.com)