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Link to YouTube presentation: https://youtu.be/1ZoAPPd-afc
CS 470

8-1 Assignment: Final Reflection

Experiences and Strengths:

During this course I learned a great deal of new skills that make me a more marketable candidate as a software developer. I learned how to use AWS to create a cloud-based website that allowed users to access a list of questions and when a question was selected, be taken to a new page showing the answer. The website also allows users to post new questions and answers. I also learned how to make the same website using Docker instead to create a containerized version that also functioned in the cloud.

My strengths as a software developer are my ability to follow and decode the logic of source code provided to me, learn new skills either by research or instruction, and my ability to troubleshoot problems using error messages and research. Throughout my schooling I have received countless starting code that needed me to add new code to or add new functionality to complete the program. This type of learning forced me to develop skills in researching how to do things inside a program, utilize instructions to determine what was wanted from me, and troubleshoot countless problems that would arise from using old code that had code that was no longer supported, an environment that did not match the original that was used, and errors in my added code.

I think that I would be most prepared to assume the role of a junior developer, but I also have some experience in testing and UI/UX from my various classes that had me assume many different roles. I have even done tasks like creating development requirements from mock meetings with clients as well as conducting my own questionnaires for gathering use cases and requirements for programs.

Planning for Growth:

Planning for growth for the angular application can be done in many different ways. I think that for any kind of scaling AWS is the way to go. Their pay- for-service model allows for reasonable rates that do not waste resources, it automatically scales both up and down to meet the needs of the program, and offers things like AWS step functions and x-ray for error handling. Pay- for-service is a less predictable cost model compared to something like containers, but I think that the elasticity and the different storage options offered by S3 make it the better choice. You can also use AWS pricing calculator to predict costs and AWS cost explorer to help you predict the cost and analyze past costs to gain better insight into what the future billing will look like.

The pros to using AWS in terms of expansion are that the auto scaling and pay-for-service means that no resources are wasted, and the program will be able to keep up with increased demand. There is also a near 0 downtime, security features and options with IAM roles. and multiple

storage options for data to help reduce costs. The cons to using this is that you give up control over the scaling, are locked into using another company to function, and your pricing is less predictable. With these listed out I think that AWS is the best option for expanding a web-based application and its pros far outweigh its cons.