Christopher Dechene

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Assignment: CS 470 Final Reflection

Video link: https://www.youtube.com/watch?v=taqfrxKB3ac

Within CS470 I have learned the process of containerization and software deployment to migrate a web application to a cloud service. These processes are common in web development and understanding them can give me more career opportunities in my future. Software development has many different avenues and web development is one of many fields that are available for developers. The software we worked with in this class such as Docker Desktop, and MongoDB, along with Amazon Web Services has given me more tools to learn and become familiar with. Becoming aware and understanding these tools can help make me more marketable as I look for a new job in this field. I feel that my strengths as a software developer is my desire to learn what I can get my hands on. Being a developer takes a lot of understanding of various software, languages, and tools to work on. I'm always curious and willing to learn something new if it can be beneficial to my work. Another strength I feel that I have is communication, with being a software developer you are working on a team with other developers. You have to be able to work with your team and discuss the process of the project, any new ideas, or problems that may arise with development. I feel that being able to communicate with my team as well as be open to assistance, or just work together with others in general can make be a better developer. In a new job as a developer I will need to be able to become familiar with the code we are working with and assist the other members of the team as needed. Ill have to be able to write basic code for any work with the software and become familiar with new concepts as I continue to work.

For the web application now on the cloud service there is always room for such an application to expand. Using a serverless service such as AWS can help me manage the application more

efficiently. For starters the application is backed up on AWS so should there be any errors older versions of the files can be accessed so I can go back before the error was created. Running code on AWS Lambda allows for development without provisioning or managing servers. As for errors, there is AWS Step Functions. This resource can be used in conjunction with Lambda to create a serverless workflow that support error handling. Step functions allows the developer to handle error handling without modifying the logic of the Lambda functions. This way I can separate the errors and attend to any that appear without affecting the code in the Lambda function, otherwise I could cause more errors in the logic while trying to fix the one that just appeared. The website's cost is also something that needs to be taken into consideration. One upside to using serverless for the site as opposed to keeping it on containers is that serverless is only charged for when the site is running. Right now the site is only running as needed and is expecting low traffic. If the site were to be constantly running with higher traffic then having the site on containers can be more of a cost effective measure. The cost of the site is also currently free given that there is very little data being used. However should I need to exponentially use more data for the site then AWS will only charge me for the data that I need to use. I won't need to purchase any hardware for storing data since all of it is currently on the cloud. Of course I could back up locally but if I were to need more storage then that's more hardware I would need to purchase. Where as for AWS I would just be charged more as the data increases should I reach the data cap.