CS 470 Final Reflection

Johnathan Phillips

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Presentation Video Link: https://youtu.be/rK_BgdWdI7I

As I approach graduation here at Southern New Hampshire University, I'm filled with a sense of pride and excitement for the future. Completing CS 470 has been a milestone in my journey, marking the final step toward achieving my degree. This course didn't just teach me about cloud computing, it gave me hands-on experience with real-world tools, solidified my strengths as a developer, and ignited a passion for cloud-based solutions that I'm eager to carry forward in my career.

Working on the final project — a full-stack web application migrated to a cloud-native environment — felt like a culmination of everything I've learned. I had the chance to dive into containerization using Docker, orchestrating multiple containers to ensure smooth communication between the frontend and backend. Configuring Docker Compose for streamlined deployment and scalability taught me just how valuable consistency and efficiency are when managing applications in the cloud. This experience has prepared me for the kind of challenges I might face in the field, and it feels rewarding to see how far I've come since I first began my studies.

The introduction to serverless solutions was one of the highlights of the course. Using AWS Lambda, I was amazed by how much could be accomplished without the need for traditional server management. It was eye-opening to see the power of writing self-scaling backend logic that charged only for the time it actually runs. AWS S3 and DynamoDB further

enhanced my understanding of scalability, providing me with robust storage solutions that are flexible enough to grow alongside any application. These skills have become central to my understanding of cloud architecture and will be vital in my future work.

Reflecting on this journey, I can see how much I've grown not only in technical skill but also in confidence. I used to wonder if I was adaptable enough for a field that changes so quickly, but this project has proven that I can take on new challenges, learn complex tools, and apply them effectively. I feel prepared for roles like Cloud Developer, DevOps Engineer, or Backend Developer — positions that will allow me to leverage my new skills in cloud infrastructure, microservices, and automated deployment.

Planning for future growth in this project allowed me to think about scalability and cost management, which has become quite important to me as I look toward my career. I realized how microservices and serverless architectures can make applications more manageable and cost-effective, especially as they scale. AWS Lambda's auto-scaling capabilities allow for seamless adaptation to changing demands. Understanding the differences between containers and serverless models taught me to be mindful of costs: while containers offer predictable expenses, serverless functions can be more economical for applications with variable traffic. Balancing elasticity and pay-for-service models in a growth plan is not only a technical decision but a strategic one, helping ensure that applications grow sustainably.

More than anything, the work I've done in this course has made me excited for what's next. The skills I've developed, the problems I've solved, and the moments of clarity I've had along the way all make graduation feel that much more meaningful. As I step into the professional world, I feel equipped and inspired to make the most of what I've learned. I'm

excited not only to start my career but to continue learning, growing, and contributing in a field that's as dynamic and rewarding as computer science.