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<https://youtu.be/gNgh3u01M-c>

CS 470 Final Reflection

Participating in CS 470 has significantly enriched my skill set and prepared me to excel in my chosen career path. The course has enabled me to master various essential skills that make me a more marketable candidate in the software development field. I've learned the intricacies of full stack web application development, honed my proficiency in building APIs, and gained expertise in cloud-based architectures. The hands-on experience of developing, testing, and documenting a complete web application has instilled in me the ability to tackle complex projects with confidence.

My strengths as a software developer lie in my robust problem-solving skills, meticulous attention to detail, and strong communication abilities. Throughout CS 470, I've consistently demonstrated these qualities by designing efficient and effective solutions to real-world challenges. My adaptability shines as I quickly learn new technologies and concepts, enabling me to contribute seamlessly to multidisciplinary teams. With a keen eye for optimization, I ensure that my code is not only functional but also performant and maintainable.

In terms of the roles I'm prepared to assume in a new job, I am well-equipped to take on positions as a full stack developer, software engineer, or cloud solutions architect. My comprehensive understanding of both front-end and back-end development, coupled with my

grasp of cloud services, empowers me to contribute across the entire software development lifecycle.

Synthesizing my knowledge about cloud services, I recognize the potential for future growth in my web application. Microservices or serverless architectures offer compelling solutions for efficiency and scalability. By breaking down my application into microservices, I can achieve enhanced management and scalability. Each microservice can be developed, deployed, and maintained independently, streamlining development processes and optimizing resource allocation.

In handling scale and error handling, I would employ auto-scaling mechanisms that automatically adjust resources based on demand. Additionally, I'd implement proper monitoring and logging tools to identify and address errors in real-time. To predict costs, I would consider monitoring usage metrics and utilizing cloud provider cost estimation tools, ensuring I stay within budget constraints.

Comparing containers to serverless, containers offer more control and customization but require more management effort. On the other hand, serverless provides automatic scaling and abstracts away infrastructure management, making it more cost-effective for specific use cases.

Pros and cons would play pivotal roles in expansion plans. For example, the advantages of microservices, such as flexibility and faster deployment, should be weighed against potential complexities in managing a distributed system. Elasticity and pay-for-service models drive informed decisions by offering the ability to scale resources up or down as needed while paying only for what's consumed.

In conclusion, CS 470 has equipped me with the tools to excel in my career. My skills in full stack development, cloud architectures, and problem-solving, along with my forward-thinking approach to cloud services and growth planning, position me to drive innovation and efficiency in the software development field.