CS 470 Final Reflection

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This course has been instrumental in shaping my path towards achieving my professional goals. Through CS 470, I've acquired a strong set of skills that significantly enhance my marketability in the field. Specifically, I've learned to proficiently apply cloud-based development principles and best practices in application development. This expertise not only demonstrates my technical skill but also showcases my ability to adapt to modern development paradigms.

As a software developer, my strengths lie in my thorough approach to problem-solving and my skill for effectively communicating complex technical concepts. The hands-on experience gained in this course has improved my ability to work independently while ensuring efficient project execution and delivery.

With the skills and experiences developed from this course, I'm prepared to assume various roles in a new job, ranging from full stack developer to cloud architect. My adaptability enables me to contribute effectively across the software development lifecycle, from conceptualization to deployment and beyond.

Synthesizing my knowledge of cloud services, I've created a strategic plan for the future growth of my web application. Implementation of microservices or serverless architectures offers opportunities for efficiency gains in management and scalability. To handle scale and error handling effectively, I would adopt a microservices architecture, leveraging containerization. Predicting costs involves careful monitoring of resource utilization and leveraging tools for cost

estimation. While containers offer more predictability in cost, serverless architectures provide scalability benefits with reduced operational overhead.

One advantage of expansion is increased market reach and customer base, potentially leading to greater revenue generation. Additionally, expansion can increase brand visibility and competitiveness in the market, fostering long-term growth and sustainability. However, expansion also comes with challenges, such as increased infrastructure complexity and operational overhead. Moreover, expansion involves financial implications, including upfront investment in infrastructure and ongoing operational costs. Balancing these pros and cons is crucial in formulating a comprehensive expansion strategy that maximizes opportunities while mitigating risks. Elasticity and pay-for-service models play key roles in decision-making, offering flexibility in resource allocation and cost optimization based on demand fluctuations.