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Module 6 Journal

Two technologies that have caught my attention are cloud computing and augmented reality (AR). Cloud computing refers to the delivery of computing services such as servers, storage, databases, networking, software, and more over the internet. It allows for scalable resources and remote data access, which is a game-changer in modern software development. Augmented reality, on the other hand, blends digital content with the real world, allowing users to experience enhanced versions of their physical environments using AR-enabled devices like smartphones, tablets, or AR glasses.

In terms of career impact, cloud computing is already central to many organizations and is something I’ve worked with, especially when handling data storage and application hosting. Mastery of cloud platforms like AWS or Azure can significantly boost my job prospects. AR is equally compelling because it opens the door to creative front-end development opportunities—something I’ve grown more passionate about. For humans and communities, cloud computing improves access to resources globally, enabling remote work, scalable business tools, and better data security. AR, meanwhile, can revolutionize education, healthcare, and retail by delivering immersive and interactive experiences. So far, I’ve achieved several course outcomes, including applying algorithmic principles, practicing secure software development, and using third-party tools like passlib for authentication. Remaining goals include deeper enhancements in AR or mobile-first development to further showcase my front-end design skills.

**Part Two – Status Checkpoints**

* **Software design and engineering**: I have completed a code review and enhancements on an OpenGL C++ application from my graphics course. I implemented clean design principles, added modular components, and improved user interaction logic.
* **Algorithms and data structures**: I demonstrated proficiency using efficient regex-based search algorithms and managed filtering logic through well-structured dictionaries. I also evaluated trade-offs in design for maintainability.
* **Databases**: I’ve integrated MongoDB into my dashboard project, created secure user authentication with hashed passwords, and managed CRUD operations across collections. I’ve also focused on structuring data flow to enhance both security and performance.