Professional Self-Assessment
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Completing my coursework throughout the Computer Science program and developing this ePortfolio has been a transformative experience that has helped me showcase my strengths, refine my professional goals and values, and prepare to enter the field as a capable and employable computer scientist. This process gave me a cohesive view of my skills in software design, algorithms, databases, and security, while also improving my ability to communicate effectively and work collaboratively.

Throughout the program, I gained extensive experience collaborating in team environments. In several courses, including CS-360 (Mobile Architecture and Programming) and CS-340 (Client/ Server Development), I worked on projects that required dividing responsibilities, sharing code through GitHub, and conducting informal code reviews with peers. These experiences taught me to use version control effectively and to understand the importance of clear, maintainable code when others rely on my contributions.

Communicating with stakeholders was another critical skill I developed. I learned to translate technical progress into actionable insights for both technical and non-technical audiences. In my capstone work, I wrote enhancement narratives and maintained progress journals that documented my reasoning, challenges, and solutions in plain language. This skill ensures I can confidently report project status and advocate for technical decisions in professional settings.

My coursework gave me strong proficiency in data structures and algorithms, which I applied directly in my capstone artifact, the EventTrackerApp. The enhancement for algorithms and data structures replaced linear ArrayList iterations with a PriorityQueue and HashMap to optimize event lookups and scheduling conflict detection. This experience reinforced the importance of efficiency and complexity considerations, which are critical in developing scalable applications.

I also strengthened my software engineering and database skills through iterative projects. In my final enhancement, I implemented SQLite database normalization, optimized queries, and CSV export features, demonstrating my ability to integrate data persistence with practical user functionality. By combining these enhancements with MVVM refactoring and Material Design principles, I delivered a maintainable and user-friendly mobile application that meets professional standards.

Finally, my program emphasized security and secure coding practices. In CS-305 and CS-320, I learned to identify potential vulnerabilities, follow secure authentication patterns, and mitigate risks in software design. While the EventTrackerApp operates as an offline application, my development process included input validation, thoughtful data handling, and consideration for future scalability with user authentication.

The artifacts in my ePortfolio fit together as a cohesive demonstration of my capabilities. Each enhancement builds upon the original EventTrackerApp to showcase my growth in three areas:

- Software Engineering and Design: MVVM architecture, AI-based event name suggestions, Material Design updates.
- Algorithms and Data Structures: PriorityQueue and HashMap implementation for efficient scheduling and conflict detection.
- Databases: SQLite normalization, optimized queries, and CSV export for data portability.

Together, these artifacts reflect a full range of computer science skills, from conceptual design to efficient algorithms, reliable data management, and user-centered implementation. This ePortfolio represents not only the work I have completed but also the professional values I carry forward: clarity, efficiency, usability, and continuous learning. I am now prepared to enter the computer science field with the confidence that I can contribute meaningful, secure, and maintainable solutions.