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**Professional Self-Assessment**

Looking back on my time in the computer science program, I can clearly see how much I’ve grown both technically and professionally. When I began, I had an interest in technology but only a surface-level understanding of how software, algorithms, and systems come together. Over the course of my degree, I’ve not only developed stronger coding skills but also learned how to approach problems strategically, document my work for others, and think critically about the impact of technology in real-world settings.

One of the biggest takeaways from this program has been learning how to design and enhance software with a professional mindset. Early on, I wrote code just to “get it working.” Now, I understand the importance of clarity, structure, and maintainability. For example, when enhancing my OpenGL 3D scene project, I made targeted improvements to SceneManager.cpp to better organize rendering logic and added professional comments. This showed me how small refinements can make code more efficient and easier for future developers to understand.

Working with algorithms and data structures also expanded my problem-solving ability. Through projects like building task and contact services in Java, and developing reinforcement learning models in Python, I gained hands-on practice in balancing efficiency with correctness. I learned that designing solutions isn’t just about getting the right answer—it’s about considering performance, scalability, and readability. These experiences pushed me to evaluate different approaches and choose the one that best fits the problem.

Databases were another key area of growth. My work with MongoDB in the Grazioso Salvare dashboard taught me how to connect front-end and back-end systems, implement CRUD operations, and use visualization tools like Dash to present data in meaningful ways. Beyond the technical skills, this project helped me appreciate how important it is to communicate information clearly to non-technical users, something that will be vital in any career path I pursue.

Altogether, these experiences have shaped me into a more capable and confident developer. I now approach projects with a mindset that balances technical quality with professional standards. I understand how to document code, design systems with the user in mind, and collaborate effectively by leaving behind work that others can pick up and build on. The program has prepared me for the challenges of the software industry, and I feel ready to take what I’ve learned and apply it toward a career in development.