Self Assessment (Spring Semester)

JP Burger

Part A:

In our senior design project, I took on the challenge of applying my past experiences and education to create a robust mobile application that could effectively track and visualize a user's fitness progress. Building on the programming foundations laid in CS3003 Programming Languages and CS2028C Data Structures, I helped design and implement the core UI functionalities of our fitness tracking application using Flutter. This was my first experience with Flutter, which required a steep learning curve, similar to my initial encounter with Angular during my internship at Zotec Partners.

Through this project, I enhanced my ability to write clean, maintainable code and to adapt quickly to new technologies, which were critical in developing a cross-platform application that was both functional and user-friendly. Throughout the project, I encountered several obstacles, mainly stemming from working with a new SDK, Flutter. Drawing from my system validation internship at Medpace, I emphasized thorough testing and validation of the application to prevent potential issues post-deployment. One of the key successes of this project was the effective implementation of AI recommendations for workout plans, which was well-received in user feedback for its personalized approach and innovation. My journey through this project not only solidified my technical competencies in software development and system testing but also taught me valuable lessons in teamwork, perseverance, and the iterative nature of the engineering design process.