Reflection

As a beginner in programming, using Gen AI tools like ChatGPT and GitHub Copilot helped me navigate through the challenges of learning to code. Throughout this project, I found these tools extremely useful in breaking down complex concepts and offering immediate feedback when I was stuck. For instance, when I wasn’t sure how to structure a function to process user input, ChatGPT provided clear explanations that made the task feel more manageable. This allowed me to build confidence as I moved through the assignment step by step.

However, I realized that while AI tools can offer quick solutions, they don’t always explain the bigger picture. In one case, I used GitHub Copilot to autocomplete some code, but it didn’t fully meet the requirements of my project. This showed me the importance of understanding the code instead of just accepting suggestions blindly. I had to step back and modify the code to ensure it fit with the rest of my application, which was a valuable learning experience in debugging and problem-solving.

Learning programming with Gen AI tools alone feels possible but limited. These tools can help me grasp fundamental concepts and correct errors, but they can’t replace the guidance and context that instructors provide. For example, there were moments in class when the instructor clarified certain topics that AI couldn’t fully explain—like why a specific approach might be better for a particular problem. This human input is essential for truly understanding programming beyond just getting the code to work.

In this assignment, Gen AI tools significantly impacted the quality of my work by helping me write code faster and with fewer errors. I mainly used ChatGPT to figure out how to handle data structures like lists and dictionaries, which I was still getting the hang of. GitHub Copilot was useful for suggesting common patterns and filling in repetitive code, which saved me a lot of time. One challenge I faced, though, was that some of the AI-generated code didn’t fully consider my specific needs, so I had to make adjustments. This experience taught me to use these tools as a starting point rather than a final solution, and to always critically evaluate the code they provide.

Overall, documenting my interactions with AI tools helped me reflect on how they influenced my learning. It made me more aware of when the AI was helpful and when it fell short, guiding me to develop my problem-solving skills alongside using these tools.