Devin Rowland

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PA 2 Reflection Essay

I found this assignment very helpful in learning how to manipulate 2D vectors, as well as improving my familiarity with graphs by implementing the Dijkstra's algorithm. I ran into some difficulties when I was first parsing the .csv file to get the data. The file was not in the correct path for the compiler to read and it wouldn’t read in any data. A second issue I had was spending too much time trying to come up with a way to travel the graph, not realizing it was already given in the “find shortest path” function. After solving these small problems, the assignment went fairly smoothly. There were no issues that I was unable to resolve.

Advice I would give to a future student beginning on this assignment would be to break it into smaller portions and work on it throughout the week. This would be helpful in case they ran into issues that they needed help on. Sometimes the best way to work through a problem is to take a break and come back to it later. Saving it for the last minutes can cause compilation errors and stress that can lead to simple oversights.

My favorite part of this assignment was being able to finally get the code down enough to fill the graph with data and see all the connections. It was rewarding. However, the most challenging part was trying to convert a string value into an integer value after the data was parsed out of the csv file. I was trying to cast the value into an int but after many errors I figured out that I had to use the stoi function to make it work.

Overall the assignment was very beneficial in that it directly related to a real world problem, and we were able to find the shortest pathway from building to building on campus. Having a tangible issue to solve was very motivating. Something that could be improved on this assignment would be to stick to one language so everybody in the class has the chance to collaborate with anybody and aren’t restricted to others who chose the same language for the program.