PA 2 Reflection Essay

I really enjoyed working on this assignment and trying to figure out how to solve mazes using breadth and depth search algorithms. Part of the reason I liked it was because when we learned how to do those search algorithms in class we learned on binary trees. However learning how to perform that algorithm in a 2d environment I feel makes it conceptually much more difficult. This part of the problem was the most challenging aspect for me. At first the only thing that I knew would help was using a for loop and a switch case to control which direction to check first for each maze space. But when I was drawing out what was supposed to happen I would run into the issue that currently the way I had programmed it there was no way to keep track of what spaces had been visited. For some reason the thought of a creating a class to hold that information along with coordinates and maze space designations did not occur to me until I looked at some source code some people had online. It wasn’t until I took the time to chew through what those source codes were doing that I was able to conceptualize the problem and find a coding solution to fix it.

And while its currently very challenging for me to look at someone else’s code and figure out what is going on I enjoy the challenge and feel it helps me learn a lot. It also gives me experience in reading code that I did not make, that way when I apply for future jobs I have some experience to be able to debug other people’s code or can bring myself up to speed on the project. There are a couple things this problem assignment has motivated me to learn as well, which includes: once the exit to the maze is found showing the most optimum route from what was traversed, and learning how to traversed a 3d maze. My suggestion to future students would be to create a class that handles all the characteristics that the maze spaces have. This include coordinates, whether it’s been visited, and what space is located there ie. ‘#’. This keeps your code cleaner and keeps things easier to step through. My only suggestion for improvement for the assignment would be to provide more possible correct outputs for each maze. This way we have something to double check our code against to make sure its functioning correctly.