Reflection on Individual Project

The assignment required that we read and gain data from csv files. The data we gain was to be processed to find the route from one city to another via airports and airlines. The first thing I did was to learn how to read from csv files in the first place. CSV files are comma separated hence to get the strings I needed, my delimiter I picked was the comma “,”.

After reading from the files, I created class per each of the files, where the class instance variables where the fields in the files. Realizing the values I had to return were the airlines, airports and stops, I deleted my airlines class as it did not serve me any purpose. From what I had learnt from reading the sample input file, I read from the “routes” csv file and the “airports” csv file. The data I read from these files, I stored in a HashMap for easy location and indexing of data. For my airports HashMap, my key was a string of city and country to improve uniqueness and store all the possible airports in a city. For my routes HashMap, my key was the start airport IATA code, and the values were route objects of all the destination airports.

Next was performing the search. I decided to use the breadth first search due to its optimality and because I was familiar with it. I got stuck on my breadth first search as it was finding a null object in the values of the key. My hope was to be able to print the paths to the file. Since my search was stopping my solution path could not work. I was unable to pick the right airport from all the airports in the city. My final output is for a specific start and destination airport. To try other paths, destination airports have to be coded in the file unfortunately.

Through this project, I learnt the importance of drawing a comprehensive plan before starting to code. I also learnt it is important to have courage to start the ideas you come up with even if they may seem crazy to you.