**TEAM C++ ASSIGNMENT REFLECTION**

For someone who had quite a hard time learning java, this was very much a challenge for me.

It took my teammate and I several hours just to make sense of the syntax to start writing actual code. The only thing that made the possible execution of this project is the fact that we had our previous code to refer to and did not have to implement everything from scratch(the time spent on the project made us feel we eventually implemented from scratch).

For the project, I handled the search algorithm to be used which was the uniform cost search. The search algorithm is to compute the optimal distance from a location to its destination. The implementation was daunting since I had to constantly make searches of java equivalents in c++. For the search, I wrote a generic problem class which represents any problem to be solved by searching. It includes an initial state or the city and goal state or the destination. I also wrote a node class which takes a state (airport ID), parent (previous node), action and path cost (cost of reaching the node).

I also worked on implementing the Haversine formula which was easier since I had prior knowledge of the concept from the previous java implementation.

The most challenging aspect of the project was trying to debug a semantic error that cost me a night. Surprisingly, I made a mistake with a variable name in a header file and c++ was telling me stories in the terminal after every execution.  
Through this project, I have learnt a lot and solved many problems. I went through hard times (very hard times), my code broke my machine a few times and got depressed. I learned several concepts in c++ including vectors, unordered maps, handling exceptions, and others.