**C++ Project Reflection**

The first takeaway from this project was how even though C++ and Java are similar, implementations in java seem easier than C++. My solution involved storing the information of the various csv files in unordered maps with keys of string and values of lists of my classes’ types. The classes were: Airports, Routes, Airlines, Node, BFS, and Main. The problem was the node class since my implementation was a breadth first search. Due to this a pointer was needed for the parent member of the Node class as it was of type node. When all my maps had their information stored correctly, next was implementing the breadth first search.

Direct translation from the previous java project worked for quite a few of the classes and it was no different here. The node class consisted of a state which was of type Airport, a parent which was of type Node, actions which was of type Routes and path cost of type integer. The BFS is meant to go transverse the Airport map using the Routes map as actions and finally retrieve the path from the start to the destination.

Due to not starting early enough and C++ being a new language to me. I encountered bugs I could not solve in a timely manner. These problems were the program only working with direct flights and not outputting a file. My inexperience with pointers also contributed to this.