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Reflection On ICP Individual project

It was both tough and thrilling for me to develop this project. Working on this project allowed me to learn a great deal. The project's focus was on leveraging data from an organization called openflight to determine the best route a flight should have traveled from its starting point to its final destination.

I had to look through the available datasets for this project in order to establish a reliable path between the two locations. I must employ a search algorithm due to the nature of the issue in order to present this valid route. After researching a few other search algorithms, I ultimately decided to choose Breadth-First Search since it was a more dependable search method for my case than A\*, Depth-First Search, and uniform cost search.

Breadth-First Search (BFS) is an algorithm for searching a tree data structure for a node that satisfies a given property. Before going on to the nodes at the next depth level, it begins at the root of the tree and investigates every node there. Extra memory, often a queue, is required to keep track of the child nodes that were met but not yet investigated in order to be able to trace the path from the beginning point to the goal. In order to identify legitimate and functional routes between two cities, I utilized a hash set to record the airport's data (its ID with its other attributes).