Reflective Essay

ICP Final Project: File Processing

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This project write-up outlines the works that went into executing it, challenges faced.

Being given three different files (all having meta-data about flights across the world) to read from and perform some file operations such as drawing out the relationship among all three files and calculating distances between airports, we used the data descriptions about each of the files and performed the required operations on the files accordingly. Each file was manipulated using the concepts of objected oriented design, where classes were created for each file and state variables encapsulated.

After having privatised the field variables, getters and setters were employed to access those variables in each of the files. Each file has not less seven member functions that controlled accessibility to the member variables. All three files were created with the dot(.) h extension because for each, the controlling method, main (method) was not included in any.

After having created setters and getters in each of the files, all three were imported into a new file, pathfinder.cpp for manipulations such as reading and constructions of appropriate data structures such as vector arrays and lists for data handling. At this point, reading from the files was not successful as our experience wasn't enough.

Though reading from the file was not successful, a main file was created to handle all four files in one heap. Thus, Route.h, Airline.h, Airport.h, pathFinder.cpp were imported either implicitly or explicitly into the main.cpp file. And for the fact that, reading from the files wasn't successful, requirements for the project were not met completely. Thus, calculating the distance between the source city of country and the destination city of another country was not achieved.