Jefferson Parker

CS521 – Spring 1

Final Project Submission

My final project is a distance calculator that uses the Haversine formula to calculate distances between airports. The data is from the Open Flights airport database (<https://openflights.org/data.html>). In brief, the program:

1. Loads available airport data (filtering for those without three letter IATA codes or comma induced parsing errors)
2. Randomly selects 20 airports for the user to choose a departure and destination airport.
3. Asks the user to select two of the airports from 2.
4. Calculates the distance between the selected airports.

It is useful mainly for entertainment value, but it is easy to imagine extending it to a more complete user interface to search for a real departure and destination location to make a useful calculator.

HOW TO RUN:

First, the two accessory class files AirportException.py and Airports.py must be opened and executed. I don’t know if this is a local issue, a Spyder IDE issue or me being stupid but the program will not import them otherwise. I did enclose this issue in a try-except block with instruction to run these files first as they will not import as is in my execution.

After the custom classes are run, they can be imported by running the script as is. Just run the program, the data will load and enter the requested information when prompted.