

CS225 Final Project Goals

1. DataSet:

a. Open Flight route data set

i. Routes.dat

ii. format:

Airline	2-letter (IATA) or 3-letter (ICAO) code of the airline.
Airline ID	Unique OpenFlights identifier for airline (see Airline).
Source airport	3-letter (IATA) or 4-letter (ICAO) code of the source airport.
Source airport ID	Unique OpenFlights identifier for source airport (see Airport)
Destination airport	3-letter (IATA) or 4-letter (ICAO) code of the destination airport.
Destination airport ID	Unique OpenFlights identifier for destination airport (see Airport)
Codeshare	"Y" if this flight is a codeshare (that is, not operated by <i>Airline</i> , but another carrier), empty otherwise.
Stops	Number of stops on this flight ("0" for direct)
Equipment	3-letter codes for plane type(s) generally used on this flight, separated by spaces

The data is UTF-8 encoded. The special value \N is used for "NULL" to indicate that no value is available, and is understood automatically by MySQL if imported.

Notes:

- Routes are directional: if an airline operates services from A to B and from B to A, both A-B and B-A are listed separately.
- Routes where one carrier operates both its own and codeshare flights are listed only once.

Sample entries

```
BA,1355,SIN,3316,LHR,507,,0,744 777
BA,1355,SIN,3316,MEL,3339,Y,0,744
TOM,5013,ACE,1055,BFS,465,,0,320
```

iii. <https://openflights.org/data.html>

2. Traversals:

a. BFS

i. <https://www.geeksforgeeks.org/breadth-first-search-or-bfs-for-a-graph/>

3. Covered Algorithms:

a. Dijkstra's Algorithm

i. <https://www.geeksforgeeks.org/dijkstras-shortest-path-algorithm-greedy-algo-7/>

4. Complex or uncovered options:

a. Force-directed graph drawing

i. (https://en.wikipedia.org/wiki/Force-directed_graph_drawing)