Open Flights

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Introduction

- This project is designed to find the shortest path between two locations by using the data on the distance between two airports.
- We implemented **BFS** and **Dijkstra's** algorithm to achieve our goal.
- In addition, we utilized **PageRank** to build a list of the most important airports in the world.
- By finding the most important airports in the world, we want to know what are some common characteristics these airports share.

Steps

- Parse datasets and store in vectors
- Build the graph with the vectors
- Use BFS to traverse the data matrix
- Finish PageRank with the data matrix
- In the process of traversing, utilize dijkstra's algorithm to find the shortest path

Demo

Conclusion

- We successfully implemented all the algorithms needed to find the shortest path
- Results are accurate
- We built a useable user interface to enable users to explore the shortest path between two locations.
- We've learned a lot from this project. We have an extra chance to practice BFS, graph building, and dijkstra's algorithm. In addition, we learned teamwork and collaboration.