

For this project I created a couple files. I created header files such as Graph.h, PriorityQueue.h, Edge.h, Vertex.h. Throughout these files I created variables within these files. I optimized the dijkstra algorithm by creating a priority queue that would use various functions implemented in other files. I used nested for loops and made sure that I could use efficient time. The time I was trying to follow was $O(\log n)$. Here are my results down below if the system does not work.

```
file openedPath: ORD IND MKC DEN SFO LAX
Cost: 629
Traversal time: 95363
Program ended with exit code: 0
```

The project I found most rewarding was project 2 because it really helped with understanding time complexity. Also hash tables visually look less complicated. I found the binary search trees the most frustrating and confusing. It was hard to see what was going on in the project and it just had a lot of components to it.

I feel like I kinda grew as a c++ developer. I honestly think I could have done better. It was just hard to comprehend what was going on within the code.

For future students to understand this better I would say Probably have more lectures that reflect more code on what to do and different routes you could take to solve a portion of the code.