Development

1st Week:

Our first week, we focused primarily on research and setting up our environment. We pushed a decent number of CS225 objects to our folder, did some basic organization, and created classes we knew we would need going forward. We also wrote some pseudocode to add some structure and sense to our newly created directory. We also delegated research and some initial coding around in our group, hoping to have the primary data structures set up in time for the check-in. That said, we do not have overly ambitious goals this week as it is thanksgiving.

2nd Week:

Going into our second week, we started the implementation of our code, fully implementing the graph generation with help from the *graph, edge, and nimlearner files from* lab_ml, encompassing it in a class that has numerous helper functions. Those of most importance are the 'finding shortest route' via Dijkstra's for shortest path via a number of nodes and distance calculators. We hope to find the shortest path via geographic distance. Our main intention moving forward is implementing our graphic interface and rigorous test cases to double check our current code.

3rd Week:

This week made up the bulk of our work so far, completing nearly all of the functions we set out to implement in our GOALS page. We have also set up numerous test cases for our application and made many fixes accordingly, mainly to our data extraction and population. As of the moment we are writing this, the only distinct code we have to write extra is for user interface, which we have decided will best be accomplished by command line arguments, likely in the form ./[EXE] [type of shortest route (distance or stops)] [first airport] [second airport]; this will spit out the shortest route by distance or number of stops on both a PNG and in the iostream.

4th Week:

As this is the last week, we are finished with all essential functionality. Our code now has a fully functioning command line argument interface, with several helpful prompts coded in our main.cpp to make using our application clear. All the test cases we coded are passing, and using our full database data set appears to work exactly as intended. The image output is also functioning well. The only changes we hope to make from now to deadline are small optimizations, in both appearance/interface and runtime -- if possible.