- **Contributors**:
    - Aurora Hodar—I worked on this project alone.
- **Design Decisions:**
    - I used a custom struct for VertexData while going through Dijkstra's which worked well to keep track of distances and parents.
    - I decided to use the priority queue class already in c++ and the map class for c++ 'dictionaries' which worked reasonably well. I had to go back to Project 5 to remember how to use comparators but that ended up being one of the easier things overall.
    - I struggled a lot to figure out how to decrease the distance for a piece of VertexData already in the min pq Q, so in the end I changed Dijkstra's algorithm to instead ignore any repeat vertices such that only the value with the least distance is seen (as they are popped from Q first).
- **Group Challenges:**
    - N/A
- **Individual Reflection:**
    - I struggled a lot in the start to keep track of the different pieces of data added in this project compared to project 7. In the end I understand it a lot better now, but I didn't have time to go back and rewrite my code to make more sense, so the amount of maps and vectors is excessive and not really easy to navigate.
- **Running the Code:**
    - I ran out of time and wasn't able to finish figuring out the user input, so as of right now to run the code you have to execute "./studentTests < [filename]" such as "./studentTests < denison-1.out" or "./studentTests < easySampleData.out" for the simpler testing file I used. There is also then no way to choose start and target nodes from the command line and this currently still has to be done by manually editing the studentTests.cpp file.
- **Known Issues:**
    - Doubles don't print out to the full length and instead stop at 6 digits.
    - My Dijkstra's algorithm takes as input the id for the start and target node rather than the respected coordinates for them.
    - As explained in **Running the Code**, my program is missing the specifications regarding user input and control interface, as I ran out of time and struggled to figure out how to implement this.
    - My program is just decently bloated with a lot of extra code and or unnecessarily complicated vectors that I'd rather have removed and made more intuitive.
- **Additional Information:**
    - I feel very confused about the requirements for user input because I don't think it's ever really something that we've learnt? It felt really disconnected from what the majority of the work for this project was, which I think I did reasonably well (making the actual graph and performing Dijkstra's) but I was struggling to find anything that clearly explained how to do the requirements of user interface.