Brandan Gianni Honors Thesis 402 September 7, 2021

## SECOND STATUS REPORT UPDATE

## What did you do in the past week?

- I've been primarily just working on the Adjacency Graph to work on the xcode application. The link that you did send me was very good with demonstrating the algorithm surrounding how to implement Dijkstra's algorithm on Swift. However, the actual implementation of the algorithm needed MUCH more underlying code to work. So to actually GET Dijkstra's algorithm to work, I needed to implement a heap, a queue, a linked list, and a lot of stuff. But I actually got the function to finally WORK, which I feel happy about!
- I did initialize CMPedometer, although no real code of value is attached to it to make it spit out information, it IS initialized!
- I put in comments in the code to what I personally saw important, just so it's easier for myself to understand and not have to read through an entire block of code to reintegrate myself with my project, it actually does help a lot more.
- I wasn't able to get the python code running, so I just settled on drawing out a floor plan on paper and taking a picture of it. The floor plan is rather similar between each floor so it should be almost identical

## What did you accomplish/struggle with?

- After the events of Hurricane Ida, I had to be evacuated from North Hall and I didn't bring my computer during that time, and with everything that happened literally in the course of couple of days for me I kind of checked out until around this weekend where I was able to sit down and really work on this again. So apologies, I know it's just been a lot for everyone, and I hope that you are doing alright:)
- In terms of the Adjacency Graph, there are some cases on the same floor where all of the steps are laid out from room to room, like a transition from 506 to 509, when travelling between different floors or after an extended distance the print function I have in Directions to print out the path starts to take some liberties and exclude some points on the way to the destination. There's just glitches with the actual adjacency graph I have to work out. I also hardwired the testing into the code itself so I've been switching the test cases when I can.
- I was a complete idiot when initially testing out my graph and realized that I forgot to put connectors between each floor with the stairs and the elevators, so THAT's something funny I feel like I need to put in for myself.

## What are you planning on doing the following week?

- Work on the glitches in the Directions page and ensure that the entire path is laid out when traversing paths. Try multiple scenarios and ensure that the paths are being followed and that every single step is being printed out.
- Try to attach the vertices into the actual layout of the application so when you press a button a vertex is immediately passed on, which would be easier to transfer information.

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