Brandan Gianni Honors Thesis 402 October 4, 2021

## SIXTH STATUS REPORT UPDATE

What did you do this past week

- I started to test out my actual application. The primary purpose of this test was to ensure that not only the pedometer worked with accuracy, but that the Global Positioning System was also accurate enough to detect when an individual is inside of North Hall. Thankfully, the tests proved to be successful.
- I also was able to fix the table and pass vertex data through the different view controllers. Due to this, I no longer have to hard code some of my data, which is very good for testing purposes and for the application itself.
- I officially put in the button to detect whether or not the user is in the building. Utilizing a hidden button, based on the location that you have from the GPS system inside of the iphone, if you are within a certain range, you can access the application. If not, you can't. Simple.

What did you accomplish/struggle with?

- I have to admit, I actually did really struggle a lot with the table until we had our conversation. I initially thought that there needed to be a custom table created to identify the pedometers. However looking at the structure of the vertex, there was a much simpler way to accomplish this, and it made my life a WHOLE lot easier.
- In terms of the pedometer update, there tends to be time between the steps you take and then the actual update isn't real time. It takes a bit of time to update, and tends to skip some steps before updating again. I'm assuming that it takes a bit of time for the pedometer to actually update, so I don't believe this should be an issue.
- Despite the issues initially with getting the GPS to be pinpoint accurate, the accuracy for detecting whether you are in a building as big as North Hall or not should be accurate enough. I set up the application so that once you select begin and you are in North Hall, and GPS inaccuracies should not cause the application to crash.

What are you planning on doing the following week?

- Start to outline my actual thesis: Look at the thesis examples that Dr. Korpan gave me a guideline. As of now, this is starting to become a high priority, and I want to do a good job surrounding this thesis.
- Start to collect data from the application. Traverse different paths to detect accuracy in regards to the pedometer and take data down so you can see how accurate the pedometer is when traversing these paths.
- Try to fix the other table and update it as well so you don't have to hard code data in.