05/07/2020

A5 Report

I was unable to test my application myself, so I had a friend test it around the Amherst area after downloading the APK. One or two layouts are missing from the screenshots as we were unable to properly test every feature. The buttons "My Score" and "Who's Close" functioned as expected, relying strictly on Bluetooth to calculate & present a score or to notify the user about their surroundings. I had plans to incorporate location activity levels using an android API, however, I ran into issues with this and discussed with the Professor how the activity levels are relative to the location and its size. Therefore, a small store that is relatively packed will show higher activity levels than a larger store with the same number of guests. It would be difficult to gauge this and incorporate so the Professor and I agreed to pivot away from this feature. However, it could possibly be worked upon in the future.

"My Activity" currently shows the user their location and presents some advice accordingly. Currently it only checks to see if the user is in any popular grocery store by checking the Feature Name of the current address acquired from their current location. Otherwise they are treated as potentially in public and also given advice, accordingly. There were some issues testing this as my friend and I found that many grocery stores in the Hadley area did not contain proper Feature Names for their locations. However, locations were presented mostly accurately with some discrepancies due to difficulties pinpointing an exact latitude & longitude for a location. In the demo you can see my friend at his apartment on 1 East Pleasant Street, however, the location presented is 233 North Pleasant Street. This address is technically correct when checking his

location via Google Maps. In the future I hope to be able to better pinpoint locations using latitude & longitude.

In the end I was happy with the results acquired from this project but do believe more testing and debugging will be required if it were to become more accurate. I believe it has potential and can be expanded upon in the future.