SYSC4907 Sensor Based Access Control Project Update

Craig Shorrocks 100887781
Jessica Morris 100882290
Richard Perryman 100887250

December 4, 2016

Supervisors: Shikharesh Majumdar and Chung-Horng Lung

1 Abstract

This report outlines the work that has been done so far on the Sensor Based Access Control System (SBACS). There are three main components to the system: the hardware and software that manages the lock units, the server which stores information about the system, and the software that handles user interations with the server and lock units.

At this time, most of the work on the lock unit technology as well as the server has been completed. The majority of the remaining work to be done is on the access points, in particular, a web application to run administrative or user tasks has only been planned.

Aside from this missing element, we are mostly on track compared to our schedule from our initial proposal. We are in the middle of preliminary integration testing, and intend to have the system fully functional by the end of December. From there, we can work on refining the design of the system, testing the system, and handling the other course requirements like the rinal report.

2 Hardware

3 Server

4 Access Points

There were meant to be two main access points to the SBACS system: a phone application as well as a web portal. Both systems allow users to manage their various identities and the locks that they associate them with. Both also expose administrative capabilities for service providers. The phone application also had to provide a way for NFC to be used with locks associated with the user.

The phone application currently does not authenticate users, but otherwise can perform all of the required actions. The authentication implementation needs to be worked on in conjunction with the server adding the notion of sessions or something similar. The web application currently doesn't exist, but should largely mimic the phone application in design.

5 Conclusion