TO: Dr. Winikus

FROM: Jayaprakash Ginjupalli

Subject: project 2 midpoint 1 report memo

Date: October 15, 2022

PURPOSE: The purpose for doing this project is to explore the design and implementation of a bare metal system with a combination lock/security system. The project has been broken into three phases named stage1, stage 2, and stage 3. The content will explain the progress made, a summary, updates, constraint or questions, and the plan for the next week of work.

SUMMARY:

I have broken down the project into three stages in stage 1, I created a program in the bare-metal mode in Mbed that will print my name to the serial monitor which will help me in stage 2. In addition, I also wrote a code to blink an externally connected LED periodically with the bitwise control so that was useful for me when I enter any number in stage 2 the LED will blink indicating the number is registered. As I already created a program for external LED blinking and printing the result to the serial monitor, I worked on my matrix keypad. I created a matrix keypad that takes the input a person entered from the keypad and verifies the code with the database and returns if it is unlocked or locked on the LCD.

UPDATE ON PROGRESS:

So far, I created a program in a bare metal mode in Mbed that will print lock/unlock based on the input given to the keypad. I also created a program that makes an external LED blink every time a value is entered into the matrix keypad.

CONCERNS:

My only concern is when I am coding for the keypad, I am getting random errors and I cannot take the inputs I am not sure if it is something I did wrong, or if my keypad is at fault. For example, if I try to enter 1 input it gives random output like a continuous output.

RECOMMENDATION:

- 1) I will exchange my code and readme file with my peer assigned to me.
- 2) Then I will review their material and send them their feedback

- 3) After I get my peer review evaluation, I will make changes as suggested in my peer review
- 4) Moving on I will give a demo to a TA in my recitation and ask for any additional feedback
- 5) If everything is all right, I will submit my edited code on NOV 4th.