
TO: Dr. Winikus
FROM: Bruno Sato
Subject: CSE 321 Project 2 Stage 2 Progress
Date: October 13, 2022

PURPOSE:

The purpose of this memo is to document and explain the progress made during the CSE 321 Project 2. This memo will contain a summary of the project, a journal on the progress made throughout the project, a section of concerns that came up during the completion of the project, and recommendations for the next steps to be taken.

SUMMARY:

This project requires a lock/unlock functionality using a 4 digit code. For that, a matrix keypad will be used to input the digits into the Nucleo, which will then manipulate the information received and output the desired behavior to the LCD, which will display the mode (lock or unlocked). In addition, an LED should be added to the circuit to indicate every time an user presses a button on the keypad.

UPDATE ON PROGRESS:

The project planning has been finished. In the planning there are five key sections: 1- summary of instructions; 2- Hardware planning; 3- Software planning; 4- Implementation step by step; 5- Revision of the project.

In addition, the coding file has been created and initialized based on the template done in project 1.

CONCERNS:

Enabling and exchanging information from the matrix keypad to the Nucleo, and from the Nucleo to the Breadboard should not be a problem, since we have already done similar circuits in class. However, the information from the Nucleo to the LCD, and the Interrupt implementation might be the biggest challenge of this project.

RECOMMENDATION:

The next steps of the project should be focused on building a functional keypad-nucleo-LED circuit. After that, the focus should be on clearly understanding how to correctly implement the LCD aspect of the circuit, as well as the instructions to be written in the code. Moreover, the Interrupt implementation must be done as soon as possible, since it will be a key factor in the functionality of the project.