
TO: Dr. Winikus
FROM: Chaktim Wong
Subject: Project 2 – Midpoint Progress
Date: 15 October 2021

PURPOSE:

To give an update on the current work completed for Project 2, communicate any issues that have arisen, and present the steps that will be taken in the future.

SUMMARY:

The project goal is to design a programmable timer using a nucleo, a numpad, an LCD, and LEDs. The focus of the project is on the bare metal methodology of embedded operating system interaction and learning how to setup interrupts and handling bounce. In order to complete the project, knowledge is required on how to program a nucleo, how to set up a circuit with LEDs, how to output to an LCD, and how to read input from a numpad. The project also has to follow the specifications listed in the project description.

UPDATE ON PROGRESS:

Research has been completed on the use of the numpad and LCD. Basic tests have also been done on reading input from the numpad and outputting values to the LCD. Using the results of these tests, a basic plan has been made. Some of this plan has already been implemented and uploaded to GitHub.

CONCERNS:

Currently, the project is on track for completion. Current issues include figuring out the setup for the LCD display.

RECOMMENDATION:

The next steps that will be taken is finishing the implementation of the planned design, completing all of the planned tests, and finishing the documentation and report.