TO: Dr. Winikus
FROM: Bruno Sato
Subject: CSE 321 Project 3 Midpoint
Date: November 17, 2022

PURPOSE:
The purpose of this memo is to document and explain the progress made during the CSE 321 Project 3. 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 will be inspired on a fire alarm. The goal of this project is to activate a fire alarm properly and efficiently, giving the user feedback on when the fire alarm is about to be activated. To accomplish this, the project will simulate a fire alarm with a DHT11 sensor, an LED, and Buzzer. The LED will light up whenever the DHT11 reaches a certain "high, but not worrisome", temperature. And when the alarm is activated after it reaches a temperature considered dangerous, the LED will now blink, and the Buzzer will turn on.

UPDATE ON PROGRESS:
As for now, the code file has been created and materials from the Bill of Materials have already been gathered and ready to use.

CONCERNS:
The primary concern about this project is fulfill all the implementation requirements, which consist of a watchdog timer; a synchronization technique; 1 bitwise driver configuration; a critical section; a thread; and 1 interrupt. There are considerations of changing the topic of the project in case some of the requirements are not completed. In addition to that, another big concern is correctly implement the peripherals chosen for the project; this is a concern because two of the peripherals' functionality have not been taught in class. Finally, the last concern would be to achieve the desired implementation in time.

RECOMMENDATION:
The next steps of the project should be focused on understanding the functionality of the 2 new peripherals, and search for the necessary libraries for each of them. In addition, a detailed plan should be created in order to see if the requirements will be fulfilled with the current project plan; and if not, adjust the goals of the project, or even its topic, accordingly.