TO: Dr. Winikus
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Subject:CSE321 project 2 summary and progress
Date: *10/15/21*

PURPOSE:
The purpose of this project is to implement a timer that can be set and counts down. This timer will be set by a keypad and displayed on an LCD.

SUMMARY:
The Purpose of the project is to implement a timer that counts down using the following

- The C programming lanugage
- A Nucleo L4R5ZI
- An LCD for displaying the remaining time
- Several LEDs
- Several jumpers
- A breadboard
- A keypad for controlling in order to generate inputs.

The inputs generated by the keypad will cause an interrupt in the system which corresponds to the button pressed which thereby triggers the relevant function. Once assembled, the timer should be controllable via the A, B and D keys on the keypad, and the LCD should display "Time Remaining" followed by the time when running, or times up when done. An LED that corresponds to each keypad button in use will activate when said button is pressed.

UPDATE ON PROGRESS:
The particulars of keypad usage, and LCD interaction are yet to be nailed down, but a general framework of the various functions has been laid out. Comments describing how the various functions will function have been added. The relevant LCD files have been found, though import statements and file locations for said LCD have not been fully determined.

CONCERNS:
There are concerns related to the usage of the LCD as that was not covered in class which is made more intimidating by its refrences being in an external file. There's also uncertaintiies as to what data type the timer should be. It was also annouced today that global variables can cause problems which will likely lead to a reworking of the code.

RECOMMENDATION:
Documentation for the LCD will be looked over in order to figure out proper interaction. The data type for the time input may be changed from int to something more suitable. Interrupt commands will be added and will trigger their relevant button functions.