ESET 269 Summer 2020 Lab 4 – Digital Output & Input, Timer

The lab will **not** use the Lab Template. A new MSP432 project must be setup in Keil.

Code 1: If a user presses and holds button S1, only the blue LED on port 2 pin 2 turns on. If a user presses and holds button S2, only the green LED on port 2 pin 1 turns on. If user presses and holds both S1 & S2 buttons, only the red LED on port 2 pin 0 turns on. If none of the buttons are pressed, the red LED on port 1 pin 0 will blink at a rate of 0.5 seconds. This means the LED will be on 0.250 seconds and off 0.250 seconds. Use the SysTick timer to set the delay.

In addition, the following must be applied to the code:

- Use a function to initialize all Digital I/O pins. (i.e. set the SEL, DIR, REN, etc. registers). The reading of the buttons and turning on and off the LEDs does not need to be a function.
- Use a function to implement the delay. The initial setting of the SysTick control register does not need to be a function.

It is **not** required to put code into separate .h and .c files for this lab.