

DUE : May 10

No outer body for cooler

Motors: No analogWrite, instead speedpin to Vcc or high speed

implement your own ISR: ? interrupt service routine with button (DISABLED State)

(GPIO, ADC, Timers, UART) Targeted

Code:

6 TOTAL states . . . massive switch

LABS REF:

7 = ADC - convert / use analog

6 = LCD / KEYPAD - display for proj, maybe use keypad for debug

5 = UART - Replaces serial library - (huge demonstration) (echo code)

4 = TIMER shenanigans.

3= GPIO - (worked but barely inlab lol)

2 = Decoder thing

1 = intro / press button

Lab 8 = ISR

Physical: 3 Small, 2 large bread, 1 for each physical part

Motor / blade - dont blow it up, use sep psu

Temp/humidity sens – You may use the Arduino library for this sensor.

<https://www.arduino.cc/reference/en/libraries/dht-sensor-library/>

The real-time clock module must be used for event reporting.– You may use the Arduino library for the clock

<https://www.arduino.cc/reference/en/libraries/time/>

The LCD display must be used for the required messages (defined below).– You may use the Arduino library for the LCD

<https://www.arduino.cc/reference/en/libraries/liquidcrystal/>

The vent direction control must be implemented using the stepper motor. You can use either buttons or a potentiometer to control the direction of the vent

– You may use the Arduino libraries for the stepper motor

<https://www.arduino.cc/reference/en/libraries/stepper/>

Water level monitoring must use the water level sensor from the kit. Threshold detection can use either an interrupt from the comparator or via a sample using the ADC. – You may NOT use the ADC library to perform the sampling (lab 7 thing)