ECE-231 grading rubric for Lab Assignment #8.2. Spring 2024 Version 1.2

Students are required to submit their own individually-prepared source code file in addition to their video. Videos will not be graded unless source code is submitted.

The video should demonstrate the following:

- 1. When a momentary push-button switch is pressed, display the temperature in degrees C. When the button is not pressed, display the temp in degrees F (or vice-versa).
- 2. Display the temperature to 3 significant figures with a precision of 0.1 degrees, followed by the letter C or F. For example, with an ambient room temperature of 70.0 degrees F, or 21.1 degrees C, your display should read 70.0F or 21.1C, depending on the position of the pushbutton switch.
- 3. Your thermometer only needs to display temperatures in the range from 32.0F to 99.9F and 0C to 37.7C (This eliminates the need to display a sign or add a 5th digit to the display.)

Grading Rubric:

10 Points. Video demonstrates 1 and 2 above; The temperature should be reasonable (within ~10 degrees) but accuracy is not important.

7 Points. Video demonstrates temperature but the display does not show 3 significant figures followed by the letter C or F.

5 Points. The display shows only Celcius but not Farehneit or vice-versa.

2 or 3 Points. Student appears to have made a reasonable effort on the project, but temperature is not visible on the display.

Once this score is calculated, deduct 20% per day late penalty. Anything that is submitted up to 24 hours late is assessed 20% late penalty; 24- 48 hours is to be assessed a 40% late penalty, etc..

This is version 1.2. Updated 4/10/24 by D. McLaughlin