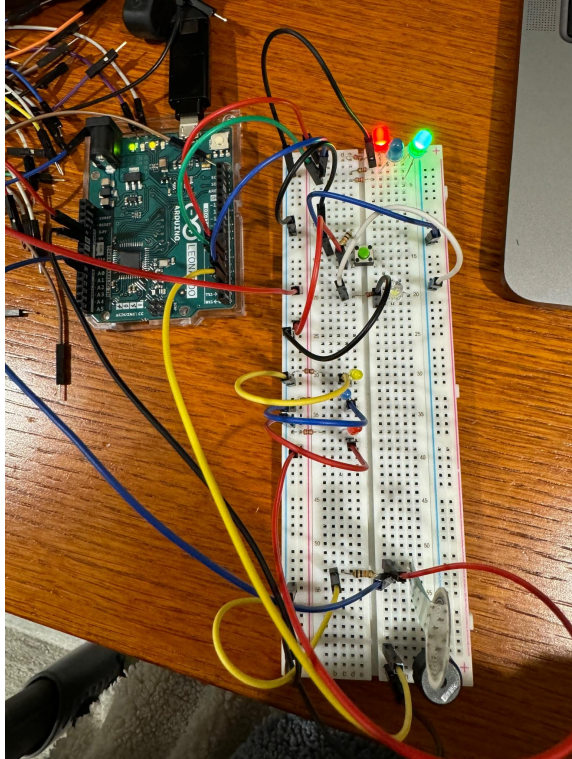


CSEP 590 Ubiquitous Computing

A1 Midpoint

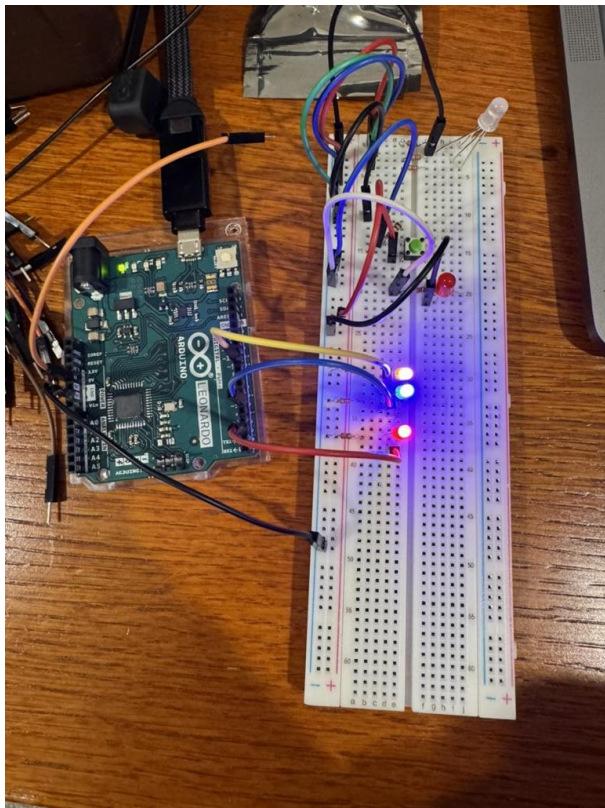
Rahul Surti

Crossfading LED

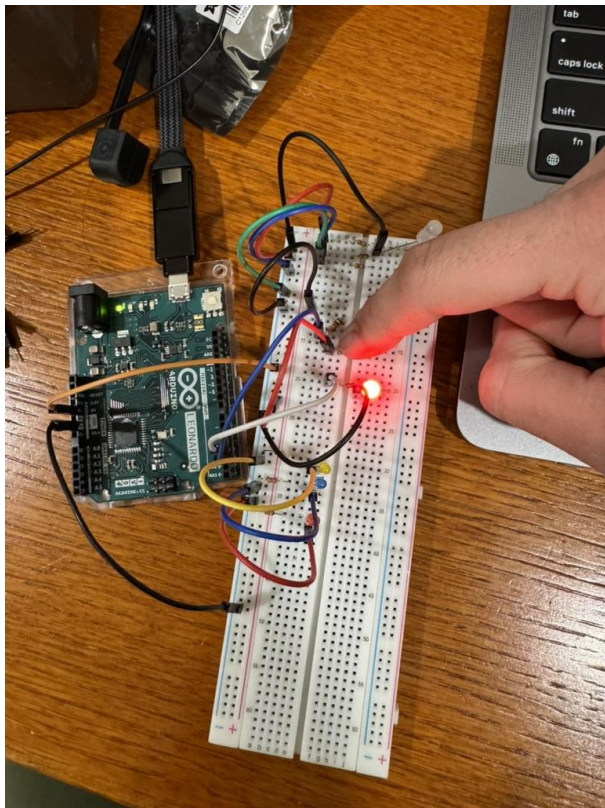


*I used 3 individual LEDs because the behavior of the RGB LED was inconsistent with what was expected. ~~The red component reacted as if it was an anode led, and the blue and green reacted as if it was a cathode led.~~ As discussed in class, the RGB LEDs have a nonstandard pin schema.

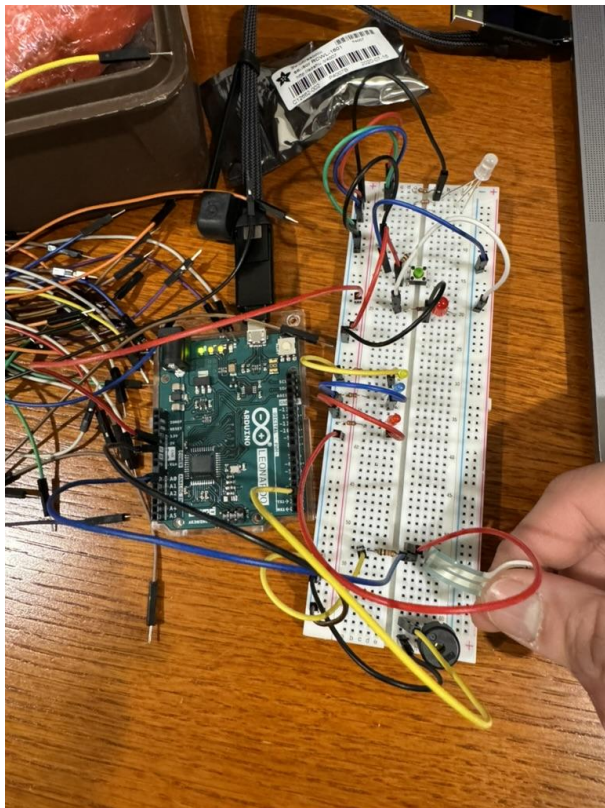
Rate Blinking LED



Debouncing



Force Sensitive Resistor



Questions/Learnings

1. *[Already answered]* Why was the behavior of the RGB led not as expected? What was the faulty component, if any? Was it the led? The Arduino? The breadboard?
 - a. I worked through some of these questions myself by debugging individual components. I was able to determine it was not the breadboard or the arduino by experimenting with single color LEDs and getting the expected results. I was able to determine the RBG led had some weird behavior where the red color acted as if it was a cathode led, and blue and green acted as if it was an anode. In class we discovered that the RBG led had a nonstandard pin format, which explains the behavior. This fault was actually a major learning point in this activity because it allowed me to use both hardware and software debugging techniques, which I'm sure I'll need to use in later projects.

Questions/Learnings Continued

2. Another major learning point was the act of building the circuit and programming the arduino itself. Going through the motions of ensuring the circuit follows the diagram, double checking all components were wired correctly, and catching simple mistakes were great primer for more complicated assignments.
3. Finally, seeing example code and writing basic programs for simple circuits was helpful to familiarize myself with syntax and techniques typically used in Arduino programming.