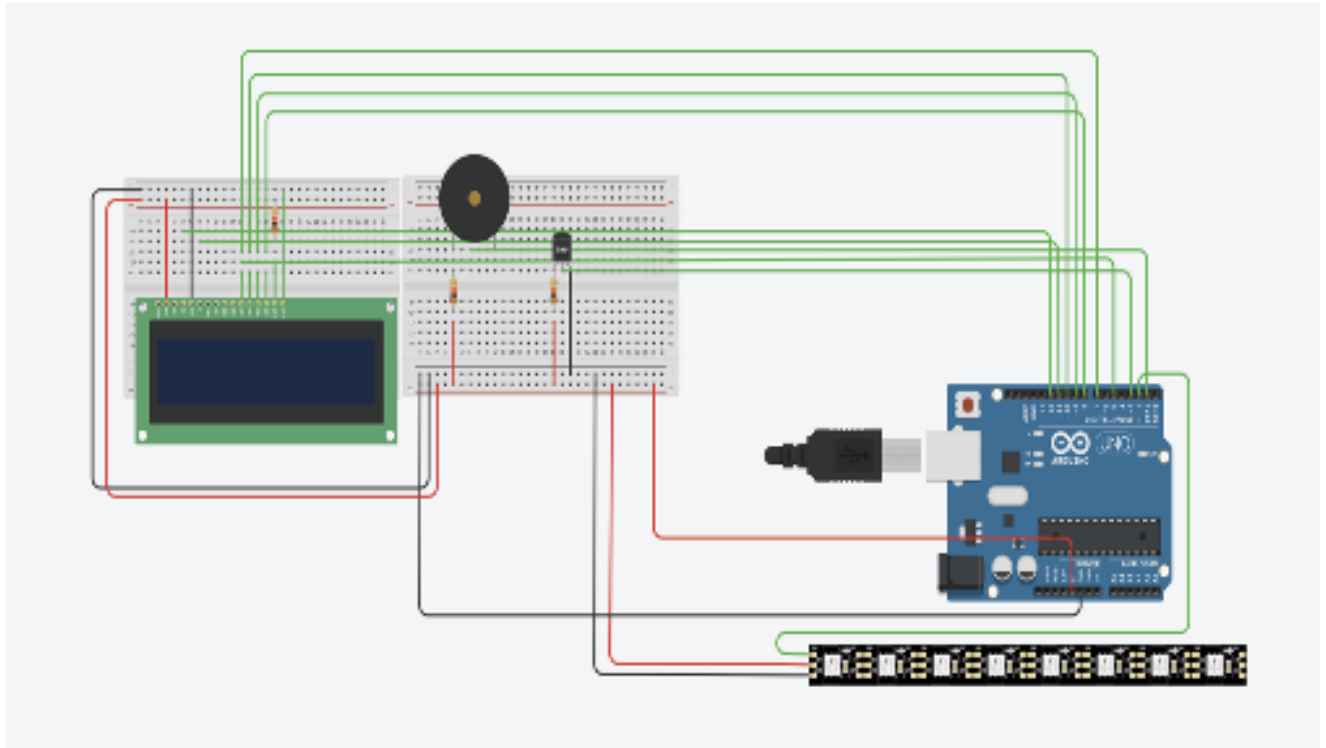# Schematic + Parts List

The diagram consists of a breadboard that has a temperature sensor and a microphone sensor connected with an RGB light which all connects to the Arduino board.
(The diagram consists of an Arduino Uno which will be changed to an Arduino Due)

List of Materials
- Arduino Due
    - o This is an essential piece of the project because this will allow for the whole project to be connected to each other, and provide communication through code.
    - o https://www.amazon.ca/gp/product/B00A6C3JN2/ref=ppx_yo_dt_b_asin_title_o02_s00?ie=UTF8&psc=1
- Breadboard, Jumper Cables, and Resistors
    - o Through the breadboard, cables, and resistors, I will be able to make an entire system that connects the Arduino and led lights.
    - o https://www.amazon.ca/gp/product/B01ERPEMAC/ref=ppx_yo_dt_b_asin_title_o02_s01?ie=UTF8&psc=1
- Temperature Sensor
    - o The temperature sensor is essential to my project because it will communicate with the LEDs and allow them to change colors based on the temperature around the sensor.

- o https://www.amazon.ca/Gikfun-DS18B20-Temperature-Waterproof-Arduino/dp/B012C597T0/ref=sr_1_6?crid=1KH44LWO8E4YJ&dchild=1&keywords=temperature+sensor+arduino&qid=1612932178&sprefix=temperature+sensor+%2Caps%2C-1&sr=8-6
- Microphone Sensor
    - o The microphone sensor is essential to my project because it will change how the LED flashes. For example, if it detects a sound with a strong intensity the LEDs will flash accordingly.
    - o https://www.amazon.ca/Robojax-Detection-Microphone-Module-Arduino/dp/B07PPYK3ND/ref=sr_1_3_sspa?dchild=1&keywords=microphone+sensor+arduino&qid=1612932336&sr=8-3-spons&psc=1&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUEzRjlMV0RGUE9aRjcmZW5jcnlwdGVkSWQ9QTAyNzA2NzUyWUVCN1ZQTVpRRzFXJmVuY3J5cHRlZEFkSWQ9QTAzNzkwODIzNTdESDM0UEwyOFg5JndpZGdldE5hbWU9c3BfYXRmJmFjdGlvbj1jbGlja1JlZGlyZWN0JmRvTm90TG9nQ2xpY2s9dHJ1ZQ==
- RGB Lights
    - o The RGB lights are essential to my project because they will be the true indication of whether or not my project is functioning properly.
    - o https://www.amazon.ca/WS2812B-ALITOVE-Addressable-Programmable-Raspberry/dp/B07RBVKLPX/ref=sr_1_7?dchild=1&keywords=WS2812B+LED+Strip&qid=1612742753&sr=8-7