DIY Motion Sensor Alert System

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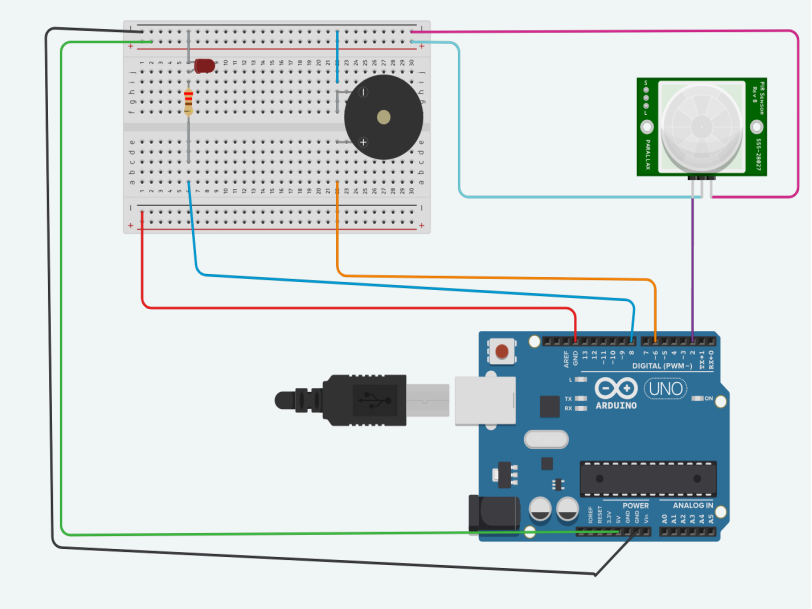

Hardware and Software Requirements

- Arduino Mega2560 Controller Board
- 830 tie-points Breadboard (small or large works)
- HC-SR501 PIR motion sensor
- Passive Buzzer
- 5 Jumper wires
- 3 male to female wires
- 1 220 ohms resistor
- LED
- Arduino IDE 2.3.3

Setting up

- Follow instructions through tinkercad diagram
- **Make Sure:**
  - Buzzer is connected to pin 6 on arduino
  - LED is connected to pin 8 on arduino
  - PAY ATTENTION TO THE GRAY LINES(They are showing where the pins for the resistor, led, and buzzer should actually be)

Code

- Follow this code in order to use the motion sensor alarm correctly(Created by Celine Pei Rong)

```
int pirPin = 2;
int ledPin = 8;
int Buzzer = 6;


void setup(){
  pinMode(pirPin, INPUT);
  pinMode(ledPin, OUTPUT);
  pinMode(Buzzer, OUTPUT);
  digitalWrite(pirPin, LOW);
  Serial.begin(9600);

  }


void loop(){

if(digitalRead(pirPin) == HIGH){
  digitalWrite(ledPin, HIGH);
  tone(Buzzer,750);
  Serial.println("Motion Detected");

      }

    if(digitalRead(pirPin) == LOW){
      digitalWrite(ledPin, LOW);
      noTone(Buzzer);

  }
}
```

Optional:

- Place in box and create a hole for PIR sensor, to make it look like an actual alert system