SMART CITY WASTE MANAGEMENT

PROJECT URL:

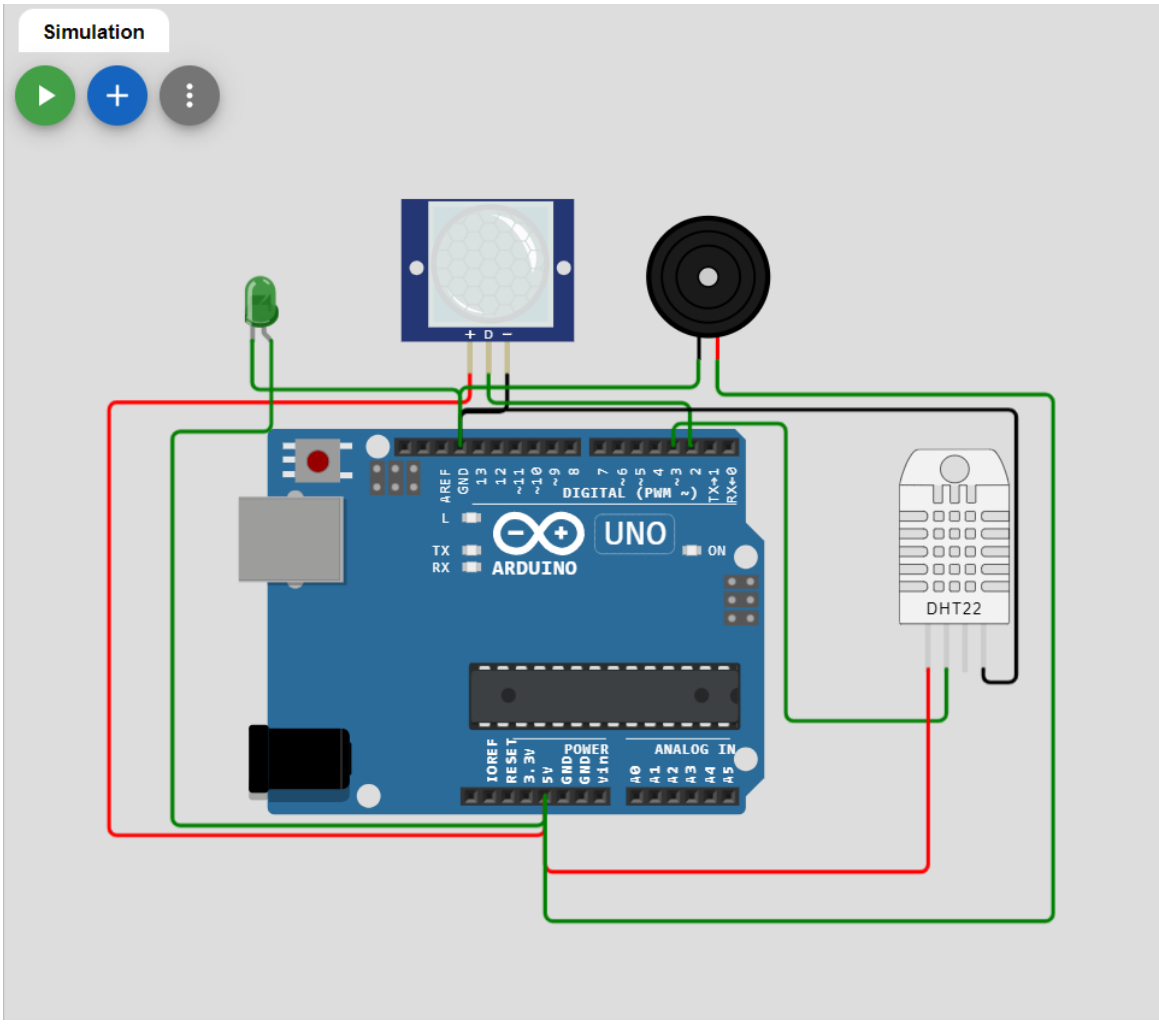
https://wokwi.com/projects/362905058533886977

PROJECT CODE:

```
#include <DHT.h>

#define DHTPIN 3     // what pin we're connected to
#define DHTTYPE DHT11   // DHT 11
DHT dht(DHTPIN, DHTTYPE);

int pirPin = 2;    // PIR sensor pin
int ledPin = 7;    // LED pin
int buzzerPin = 8; // Buzzer pin
int pirState = LOW;   // current state of the PIR sensor
int lastPirState = LOW;  // previous state of the PIR sensor

void setup() {
  pinMode(pirPin, INPUT);
  pinMode(ledPin, OUTPUT);
  pinMode(buzzerPin, OUTPUT);
  Serial.begin(9600);
  dht.begin();
}

void loop(){
  // Read PIR sensor state
  pirState = digitalRead(pirPin);

  // If the PIR sensor state has changed
  if (pirState != lastPirState) {
    // If motion is detected
    if (pirState == HIGH) {
      digitalWrite(ledPin, HIGH);
      digitalWrite(buzzerPin, HIGH);
      delay(500);
      digitalWrite(buzzerPin, LOW);
      Serial.println("Motion detected!");
    } else {
      digitalWrite(ledPin, LOW);
```

```
      digitalWrite(buzzerPin, LOW);
    }

    // Remember the PIR sensor state for next time
    lastPirState = pirState;
  }

  // Read temperature and humidity
  float humidity = dht.readHumidity();
  float temperature = dht.readTemperature();

  // Print temperature and humidity to serial monitor
  Serial.print("Humidity: ");
  Serial.print(humidity);
  Serial.print("%  Temperature: ");
  Serial.print(temperature);
  Serial.println("°C");

  delay(1000);
}
```

CONNECTION:


Simulation
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DIGITAL (PWM ~)
UNO
ARDUINO
TX
RX
L
ON
DHT22
POWER
ANALOG IN