SMART WASTE MANAGEMENT SYSTEM

Assignment-1

To Build a Smart Home in tinkercad use atleast 2 sensors, led, buzzer in a circuit. Simulate in a single code.

Components and Supplies

- Arduino UNO - 1
- Power Relay, SPDT - 4
- PIR Motion Sensor (generic) - 1
- Temperature Sensor - 1
- IR Receiver (generic) - 1
- 6 pin gas Sensor - 1
- LED Light Bulb Frosted GLS - 2
- DC Motor (generic) - 1
- Buzzer, Piezo - 1
- Resistor - 1

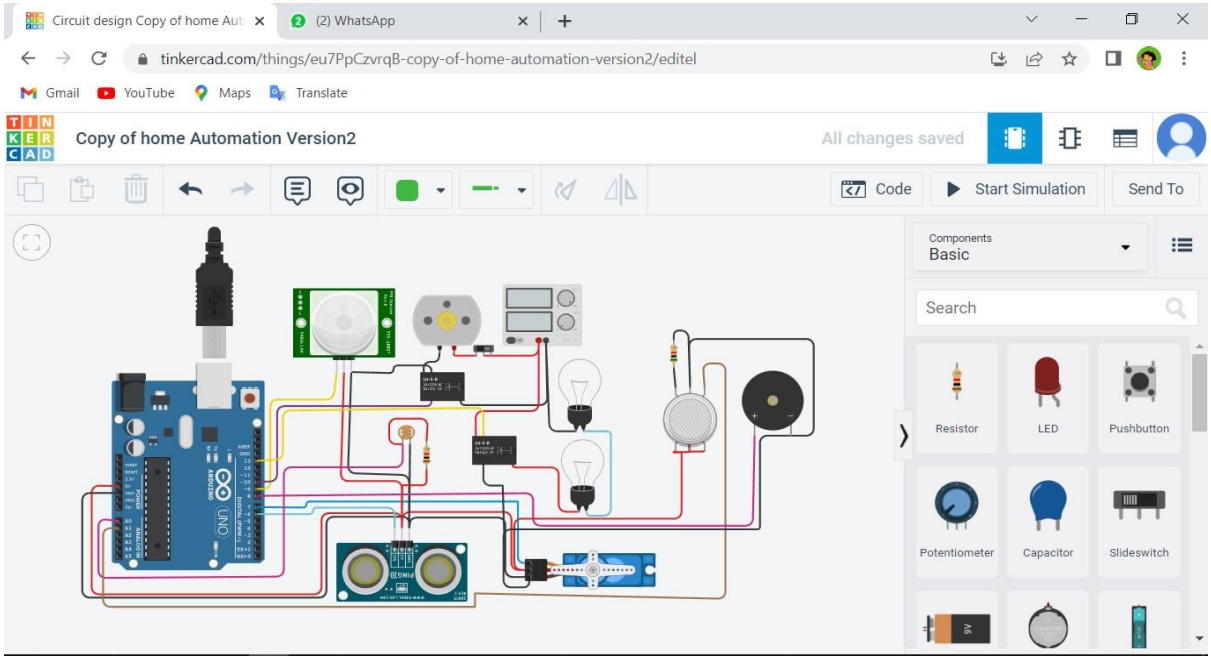
CODE

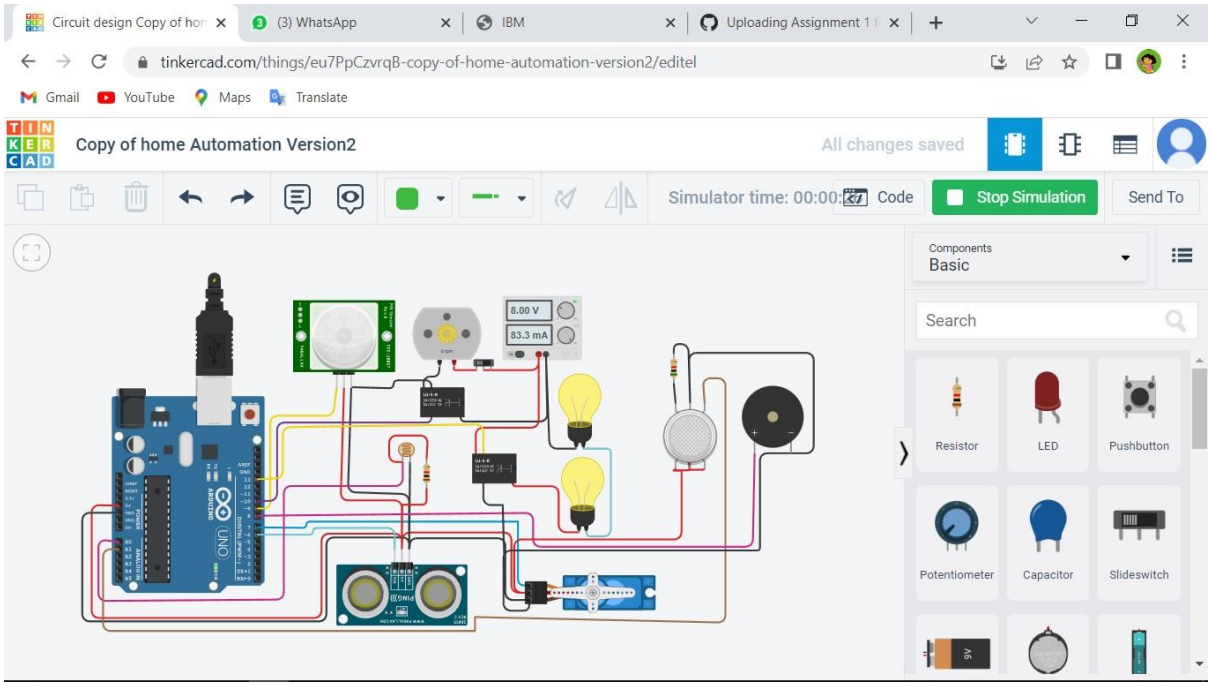
```
Int PIR = 0;

Int temp = 0;

Int IR = 0;

Int gas = 0;

Void setup()

{

pinMode(6, INPUT)

pinMode(7, INPUT)

pinMode(5, INPUT)

pinMode(4, INPUT)
```

```
pinMode(13, INPUT)
pinMode(12, INPUT)
pinMode(11, INPUT)
pinMode(10, INPUT)
Serial.begin(9600);
}
Void loop()
{
PIR = digitalRead(4);
Temp= analogRead(5);
IR = digitalRead(7);
Gas = analogRead(6);
If(temp>=500)
{
digitalWrite(12,HIGH);
serial.println(“fan on”)
} else
{
digitalWrite(12, LOW);
Serial.println(“fan off”);
}
If(PIR==1)
{
digitalWrite(13, HIGH);
Serial.println(“lights on”);
} else
```

```
{
digitalWrite(13, LOW);
Serial.println(“lights off”);
}
If(gas>=200)
{
digitalWrite(10,HIGH);
serial.println(“gas leak”);
} else
{
digitalWrite(10, LOW);
}
If(IR==1)
{
digitalWrite(11,HIGH);
Serial.print(“signal received”);
} else
{
digitalWrite(11, LOW);
}
Delay(30);
}
```

OUTPUT


Circuit design Copy of home Aut
(2) WhatsApp
tinkercad.com/things/eu7PpCzvrqB-copy-of-home-automation-version2/editel
Gmail
YouTube
Maps
Translate
Copy of home Automation Version2
All changes saved
Code
Start Simulation
Send To
Components
Basic
Search
Resistor
LED
Pushbutton
Potentiometer
Capacitor
Slideswitch


Circuit design Copy of hon
(3) WhatsApp
IBM
Uploading Assignment 1 f
tinkercad.com/things/eu7PpCzvrqB-copy-of-home-automation-version2/editel
Gmail
YouTube
Maps
Translate
Copy of home Automation Version2
All changes saved
Simulator time: 00:00:
Code
Stop Simulation
Send To
8.00 V
83.3 mA
Components
Basic
Search
Resistor
LED
Pushbutton
Potentiometer
Capacitor
Slideswitch