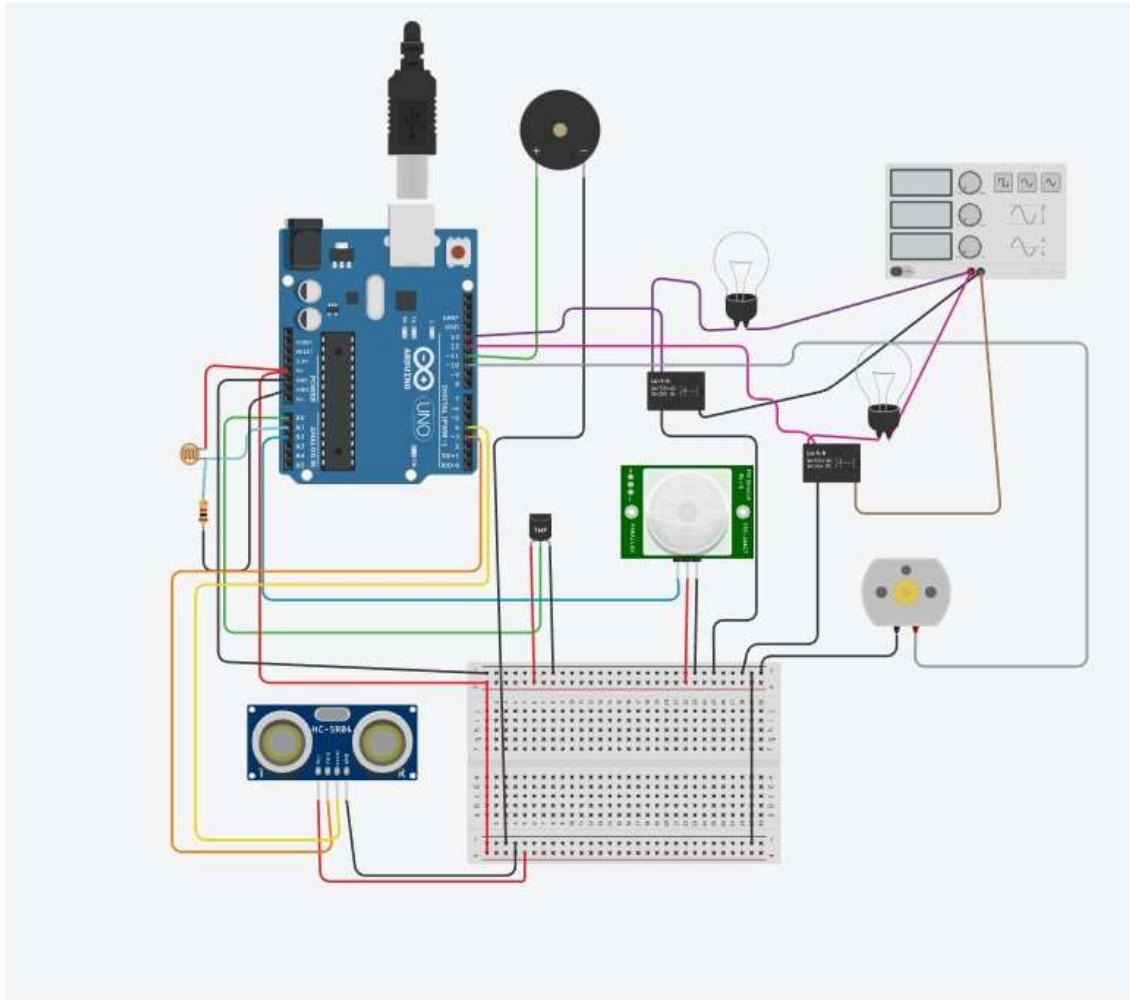


## TINKERCAD CIRCUIT



### TINKERCAD LINK:

<https://www.tinkercad.com/things/erWwhuArw9y-ibm-tinker/editel>

## **TINKERCAD CODE**

```
const int r11 = 13, r12 = 12, buzz = 11, motor = 10, trig = 3, echo = 4;
```

```
const int ldr = A1, pir = A2, tmp = A0;
```

```
void setup()
```

```
{
```

```
  Serial.begin(9600);
```

```
  pinMode(motor, OUTPUT);
```

```
  pinMode(trig, OUTPUT);
```

```
  pinMode(echo, INPUT);
```

```
  pinMode(ldr, INPUT);
```

```
  pinMode(pir, INPUT);
```

```
  pinMode(tmp, INPUT);
```

```
  pinMode(r11, OUTPUT);
```

```
  pinMode(r12, OUTPUT);
```

```
  pinMode(buzz, OUTPUT);
```

```
}
```

```
void loop()
```

```
{
```

```
  float temperature = analogRead(tmp);
```

```
  temperature = map(temperature, 20, 258, 0, 100);
```

```
  float light = analogRead(ldr);
```

```
  light = map(light, 6, 679, 0, 255);
```

```
  float motion = analogRead(pir);
```

```
  long duration;
```

```
  int distance;
```

```
digitalWrite(trig, LOW);  
delayMicroseconds(2);  
digitalWrite(trig, HIGH);  
delayMicroseconds(10);  
digitalWrite(trig, LOW);  
duration = pulseIn(echo, HIGH);  
distance = duration * 0.034 / 2;
```

```
    if(motion)  
    {  
        digitalWrite(r11,HIGH);  
    }  
    else  
    {  
        digitalWrite(r11,LOW);  
    }  
    if(distance <14)  
    {  
        digitalWrite(buzz,HIGH);  
    }  
    else  
    {  
        digitalWrite(buzz,LOW);  
    }
```

```
    if(temperature >30)  
    {  
        digitalWrite(motor,HIGH);  
    }  
    else
```

```
{  
    digitalWrite(motor,LOW);  
}  
if(light <128)  
{  
    digitalWrite(rl2,HIGH);  
}  
else  
{  
    digitalWrite(rl2,LOW);  
}  
}
```