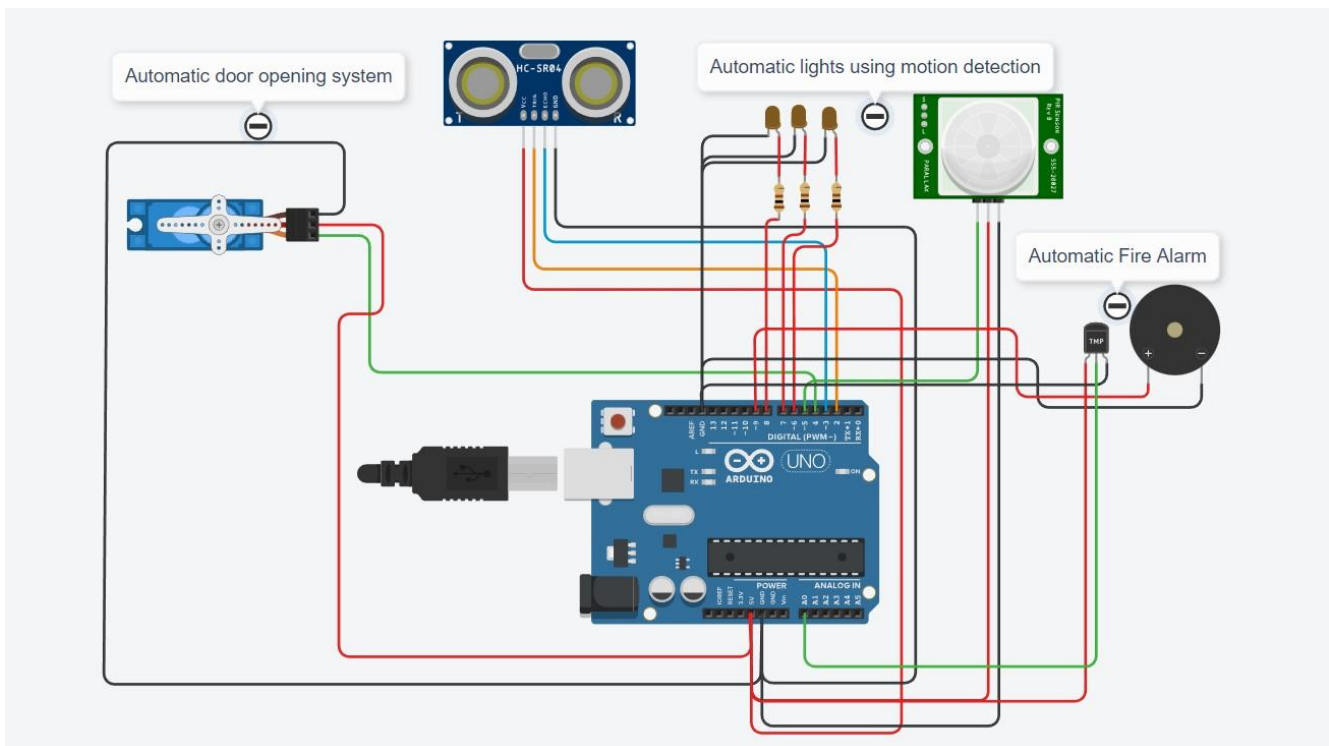


## CIRCUIT DIAGRAM:



## CODE:

```
#include <Servo.h>

Servo s; int trig=2;
int ec=3; int
PIR=5; int led1=6;
int led2=7; int
led3=8; int buzz=9;
void setup()
{
```

```
Serial.begin(9600);
pinMode(trig,OUTPUT);
pinMode(ec,INPUT);
pinMode(PIR,INPUT);
pinMode(led1,OUTPUT);
pinMode(led2,OUTPUT);
pinMode(led3,OUTPUT);
pinMode(buzz,OUTPUT);
s.attach(4);
s.write(0);
digitalWrite(led1,LOW);
digitalWrite(led2,LOW);
digitalWrite(led3,LOW);
} void autodoor() {
digitalWrite(trig,LOW);
digitalWrite(trig,HIGH);
delayMicroseconds(10);
digitalWrite(trig,LOW); float
duration = pulseIn(ec,HIGH); float
dist = (duration*0.0343)/2;
//Serial.println(dist); if(dist<100)
{  open(); } } void open() {  for
(int i=0;i<=90;i++)
```

```

    {
        s.write(i);
    delay(100);
    }

    delay(5000);  for
(int j=90;j>=0;j--)
    {
        s.write(j);
    delay(100);
    } } void
autolight()
{
    int p = digitalRead(5);
    if(p)
    {
        digitalWrite(led1,HIGH);
        digitalWrite(led2,HIGH);
        digitalWrite(led3,HIGH);
        delay(5000);
        digitalWrite(led1,LOW);
        digitalWrite(led2,LOW);
        digitalWrite(led3,LOW);
    }
}

```

```

    }
}

void firealarm() {  double a
= analogRead(A0);

    double t = (((a/1024)*5)-0.5)*100;
Serial.println(t);  if(t>60)
{
    tone(buzz,20000);
delay(10000);  noTone(9);
} } void
loop()
{
autodoor();
delay(1000);
autolight();
delay(1000);
firealarm();
delay(1000);
}

```

Circuit design Glorious Wolt | Tinkercad

tinkercad.com/things/yY8s3QH3bG-glorious-wolt/edit?tenant=circuits

SMART HOME

All changes saved

Code Start Simulation Send To

Text 1 (Arduino Uno R3)

```
55 void autolight()
56 {
57   int p = digitalRead(5);
58   if(p)
59   {
60     digitalWrite(led1,HIGH);
61     digitalWrite(led2,HIGH);
62     digitalWrite(led3,HIGH);
63     delay(5000);
64     digitalWrite(led1,LOW);
65     digitalWrite(led2,LOW);
66     digitalWrite(led3,LOW);
67   }
68 }
69 void firealarm()
70 {
71   double a = analogRead(A0);
72   double t = (((a/1024)*5)-0.5)*100;
73   Serial.println(t);
74   if(t>60)
75   {
76     tone(buzz,20000);
77     delay(10000);
78     noTone(9);
79   }
80 }
81 void loop()
82 {
83   autodoor();
84   delay(1000);
85   autolight();
86   delay(1000);
87   firealarm();
88   delay(1000);
89 }
90
```

Serial Monitor

Automatic door opening system

Automatic lights using motion

5V

Arduino Uno R3

7:52 PM 9/13/2022