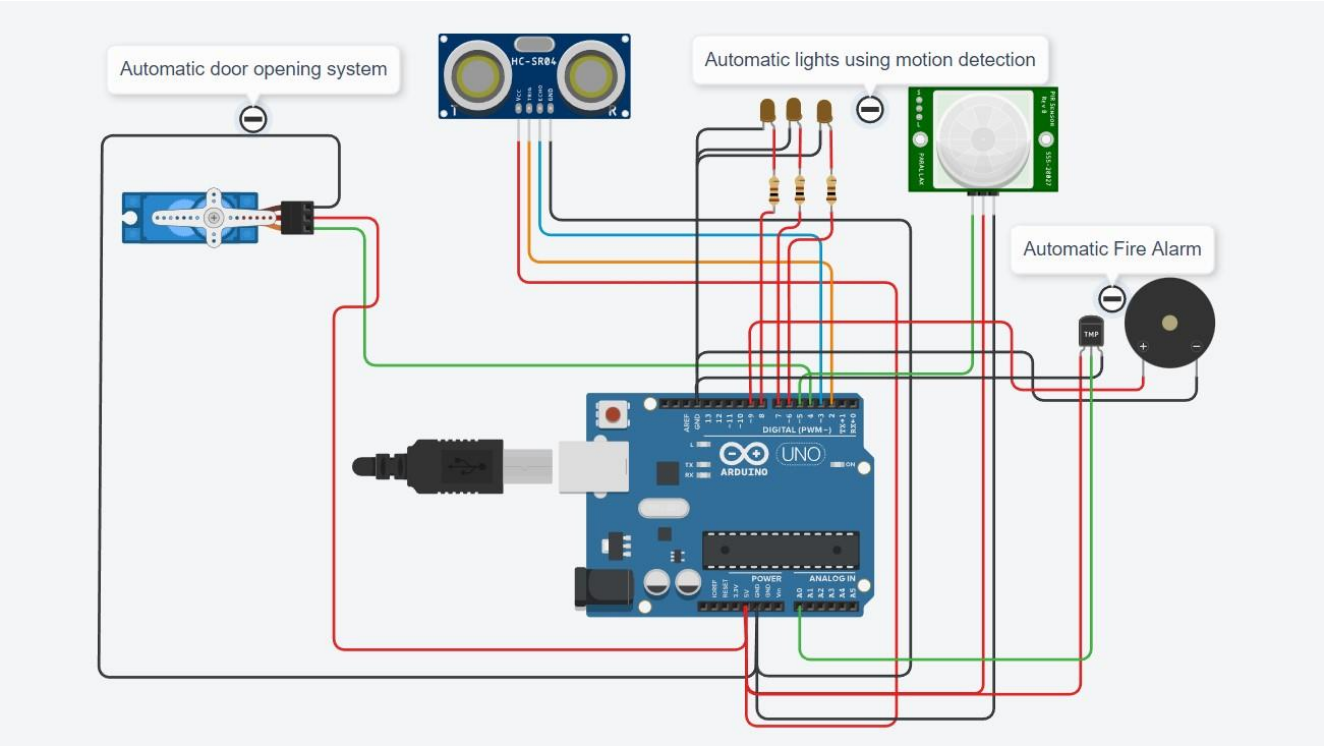
CIRCUIT DIAGRAM:



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()
{
```

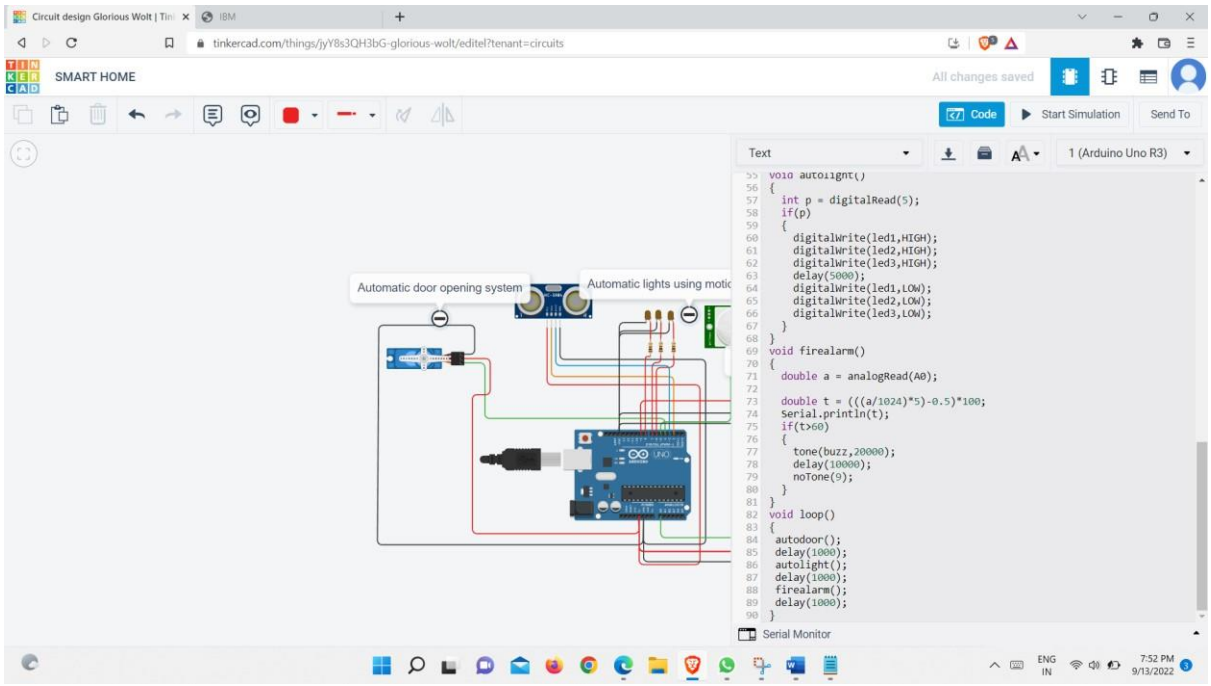
```
  Serial.begin(9600);
pinMode(trig,OUTPUT);
pinMode(ec,INPUT);
pinMode(PIR,INPUT);
pinMode(led1,OUTPUT);
pinMode(led2,OUTPUT);
pinMode(led3,OUTPUT);
pinMode(buzz,OUTPUT);
  s.attach(4);
  s.write(0);
digitalWrite(led1,LOW);
digitalWrite(led2,LOW);
digitalWrite(led3,LOW);
} void autodoor() {
digitalWrite(trig,LOW);
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 | Tin
IBM
tinkercad.com/things/jyY8s3QH3bG-glorious-wolt/editel?tenant=circuits
SMART HOME
All changes saved
Code
Start Simulation
Send To
Text
1 (Arduino Uno R3)
Automatic door opening system
Automatic lights using motic
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);
}
Serial Monitor
ENG
IN
7:52 PM
9/13/2022