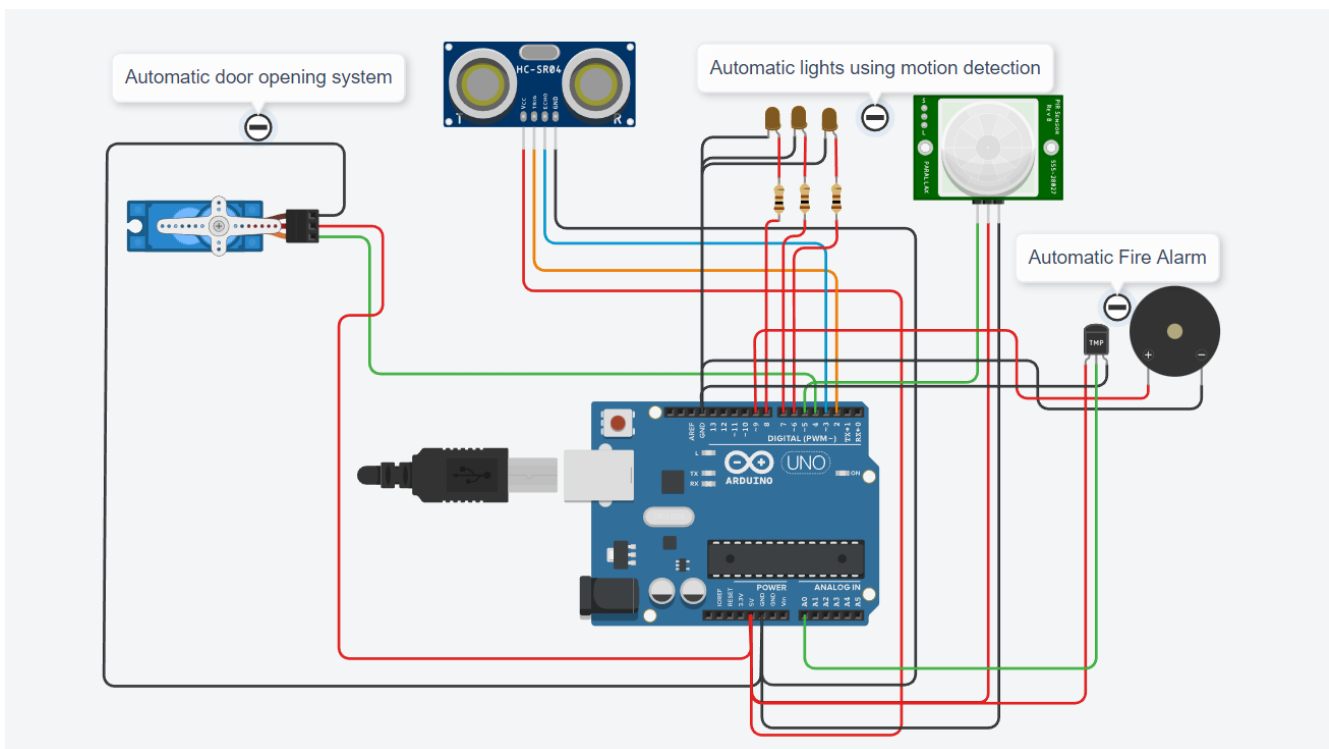


CIRCUIT DIAGRAM:



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);

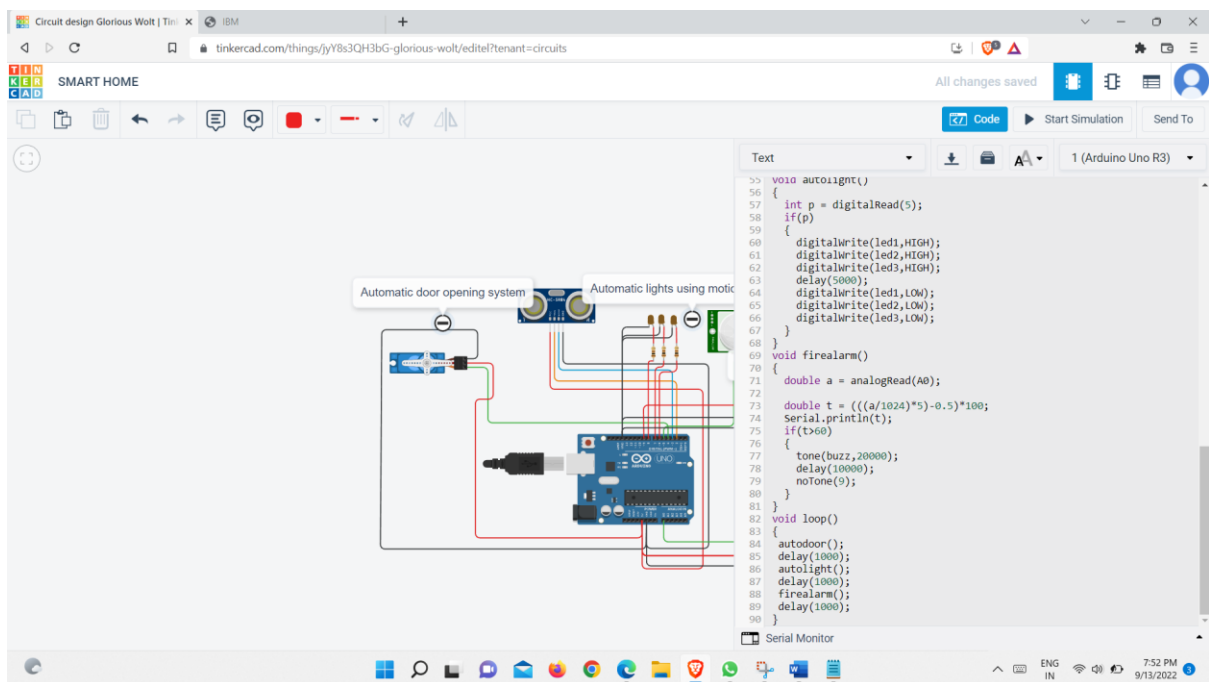
    double t = (((a/1024)*5)-0.5)*100;
    Serial.println(t);
    if(t>60)
    {
        tone(buzz,20000);
        delay(10000);
        noTone(9);
    }
}
```

```

    }
}

void loop()
{
    autodoor();
    delay(1000);
    autolight();
    delay(1000);
    firealarm();
    delay(1000);
}

```



LINK TO THE PROJECT:

https://www.tinkercad.com/things/jyY8s3QH3bG-smart-home/editel?sharecode=hGpJq52OaS_iGMtREQza2d6QW9xbI5FLgMEm5zuKFIs