

**Make a Smart Home in Tinkercad, using 2+ sensors, Led,
Buzzer in single code and circuit**

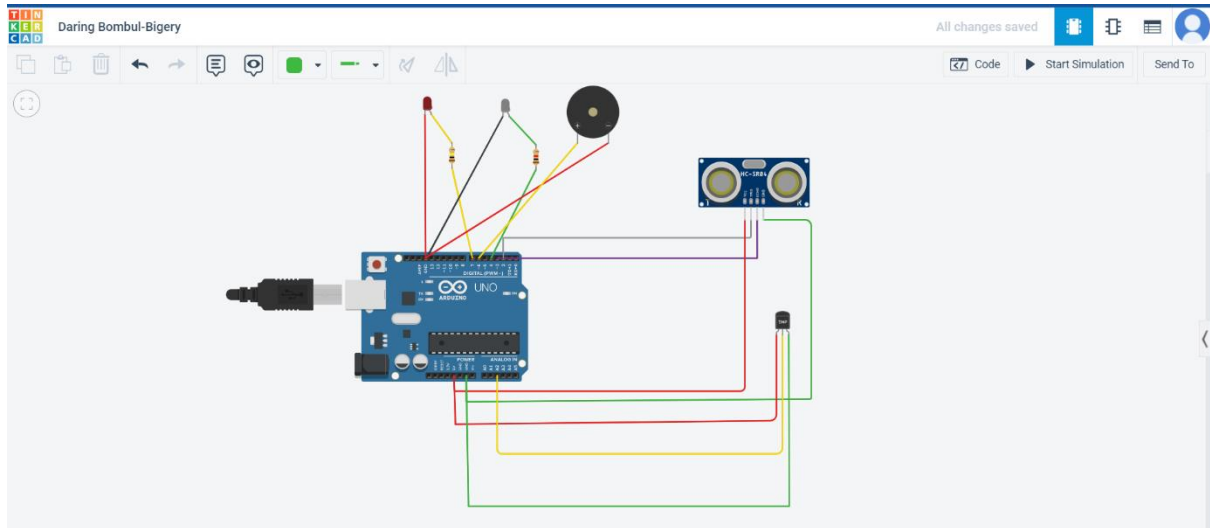
Team Members:

P.Nivethitha

S.Priyanka

V.Lavanya

M.D.Priyadarshini



Name	Quantity	Component
Uu1	1	Arduino Uno R3
DISTDIST 1	1	Ultrasonic Distance Sensor
Uu2	1	Temperature Sensor [TMP36]
DR2	1	Red LED
PIEZOPiezo1	1	Piezo
RR1	1	100 kΩ Resistor
RR2	1	1 kΩ Resistor
DD1	1	White LED

CODE:

```
// C++ code
```

```
int trig = 2;
```

```
int echo = 3;
```

```
int led=4;
```

```
int buz=6;
```

```
int led1=7;
```

```
void setup()
```

```
{
```

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

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

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

```
pinMode(led,OUTPUT);
```

```
pinMode(led1,OUTPUT);
```

```
pinMode(buz,OUTPUT);
```

```
}
```

```
void loop()
```

```
{
```

```
// temperature sensor
```

```
double t = analogRead(A2);
```

```
Serial.print("Analog data: ");
```

```
Serial.println(t);  
double n= t/1024;  
double v=n*5;  
Serial.print("Voltage data: ");  
Serial.println(v);  
  
double c=v-0.5;  
double k=v*100;  
Serial.print("Temperature value:");  
Serial.println(k);  
delay(1000);  
//ultrasonic sensor  
digitalWrite(trig,LOW);  
digitalWrite(trig,HIGH);  
delayMicroseconds(10);  
digitalWrite(trig,LOW);  
float dur=pulseIn(echo,HIGH);  
float dist=(dur*0.0343)/2;  
Serial.print("Distance in cm : ");  
Serial.println(dist);  
//led  
if(dist>=100)  
{  
digitalWrite(led,HIGH);
```

```
}  
else  
{  
  digitalWrite(led,LOW);  
}  
//buzzer  
digitalWrite(buz,LOW);  
digitalWrite(led1,LOW);  
delay(1000);  
digitalWrite(buz,HIGH);  
digitalWrite(led1,HIGH);  
  
delay(1000);  
}
```

TINKERCARD LINK:

<https://www.tinkercad.com/things/eB9abRO5Pdd>