



SOUTHEAST UNIVERSITY
Meeting the Challenges of Time

Project Report

Door Buzzer

Team Members

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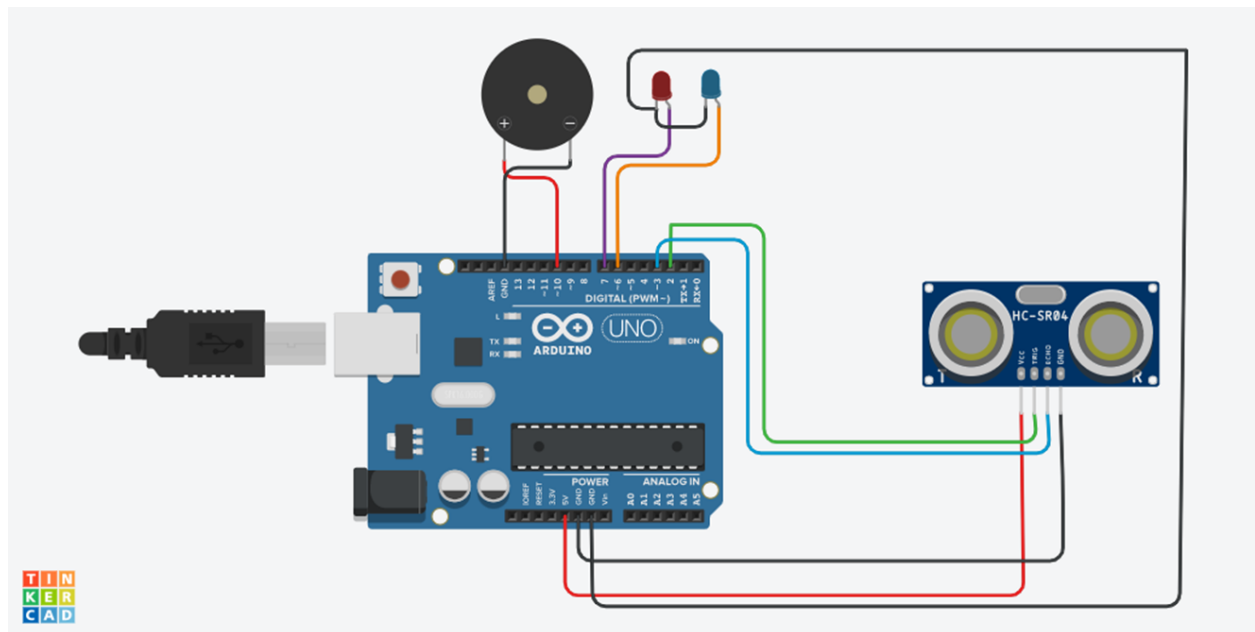
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Equipments:

1. Tinkercad (online Platform)
2. Arduino
3. Wire
4. Ultrasonic Sonar Sensor
5. Buzzer
6. LED

Circuit Diagram:



Code:

```
int trigger_pin = 2, echo_pin = 3, buzzer_pin = 10;
int ledpinred = 7, ledpinblue = 6, time, distance;
void setup()
{
    Serial.begin (9600);
    pinMode (trigger_pin, OUTPUT);
    pinMode (echo_pin, INPUT);
    pinMode (buzzer_pin, OUTPUT);
    pinMode (ledpinred, OUTPUT);
    pinMode (ledpinblue,OUTPUT);
}
void loop()
{
    digitalWrite (trigger_pin, HIGH);
    delayMicroseconds (10);
    digitalWrite (trigger_pin, LOW);
    time = pulseIn (echo_pin, HIGH);
    distance = (time * 0.034) / 2;
    if (distance <= 30)
    {
        Serial.println (" Door Open ");
        Serial.print (" Distance= ");
```

```
Serial.println (distance);  
digitalWrite (buzzer_pin, HIGH);  
digitalWrite (ledpinred, HIGH);  
digitalWrite (ledpinblue, LOW);  
delay (500);  
}  
else {  
  Serial.println (" Door closed ");  
  Serial.print (" Distance= ");  
  Serial.println (distance);  
  digitalWrite (buzzer_pin, LOW);  
  digitalWrite (ledpinred, LOW);  
  digitalWrite (ledpinblue, HIGH);  
  delay (500);  
}  
}
```

What does the system do:

The System is a door buzzer system . when it measure distance between 30cm the buzzer rings and red led will on also the door will open.and when the distance is above 30cm then the blue light will on and no Buzzer tone also door will close.

