PROJECT DESCRIPTION

TINKERCAD SIMULATION ON HOME AUTOMATION USING INTERNET OF THINGS

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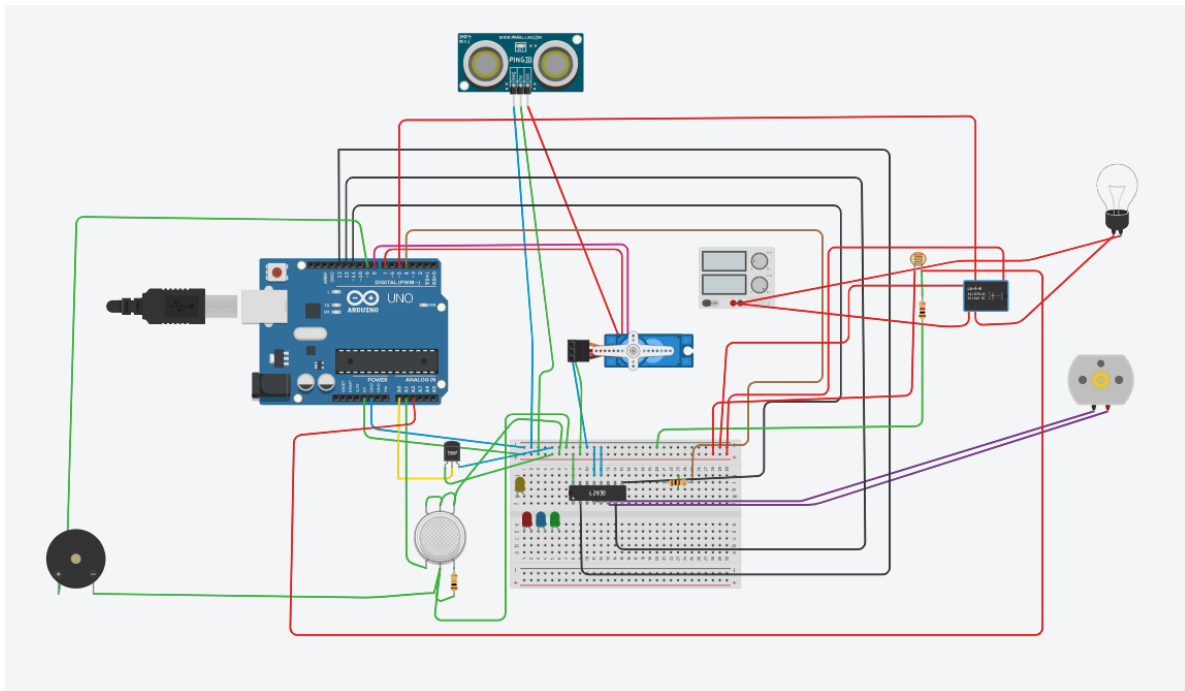
List of equipments used in this project.

1)Ultrasonic sensor

2)Temperature sensor

3)Gas sensor

4)Servo motor

5)DC motor for fan

6)Bulb

7)Buzzer

8)Power supply

9)Relay SPDT

10)Thermistor

11)Arduino board

12)Bread board

Working methodology

1)Ultrasonic sensor is used to detect any movements within 40cm. If any movement is detected, then servomotor which acts as door will open for 2 seconds

2)Temperature sensor senses the temperature. DC motor which acts as a fan in this case, switches on if temperature exceeds 20 degree celcius

3)Gas sensor will be attached to the kitchen. If any leakage of gas is detected, then it alarms us with the help of buzzer

4)Thermistor or Light dependent sensor is mounted which calculates the intensity of light. Accordingly if intensity of light decreases (during night), then bulb is switched on otherwise switched off.

Picture of the simulation

Serial monitor output

Gas sensor value487BULB OFFtemperature
73.44
Gas sensor value487BULB OFFtemperature
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Gas sensor value487BULB OFFtemperature
73.44
Gas sensor value487