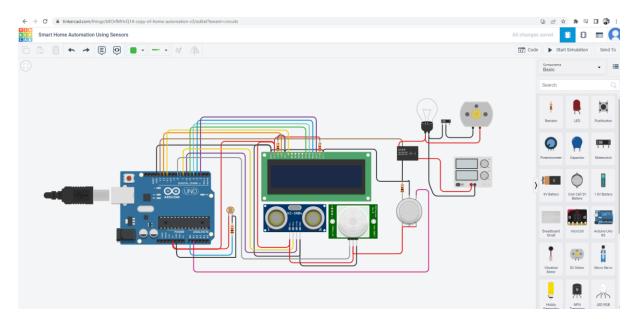
Working of the Circuit I have connected 16*2 LCD display to show to informative message. Then using the gas sensor will detect the level of leakage gas and show message according to that to display e.g. Low, Med, High and if the intensity is very high then it shows the Exit message on display. The LDR / PHOTORESISTOR works on intensity of light at night bulb is automatically turned ON and at the day bulb is Turned OFF. And the main thing is that the Fan and light circuit is active only when someone is inside the room or someone is in front of PIR sensor.

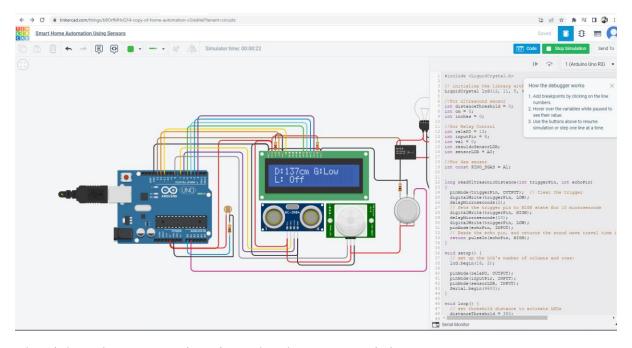
Apparatus required:

- Arduino
- 16*2 LCD display
- SMOKE DETECTOR MQ6
- PIR
- LDR
- ULTRASONIC
- Dc power source (Any 12v)
- Relay Board of 2 channel
 - **⇒** Software Used: Tindercad

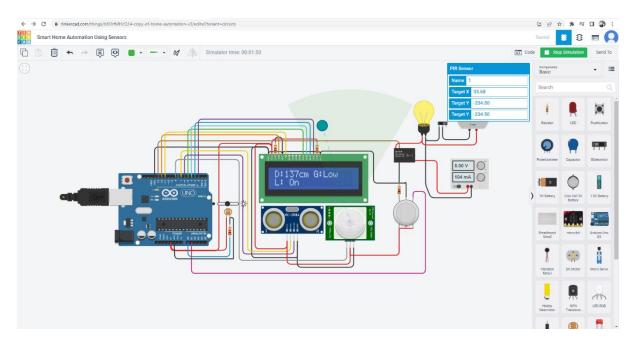
Circuit Design:



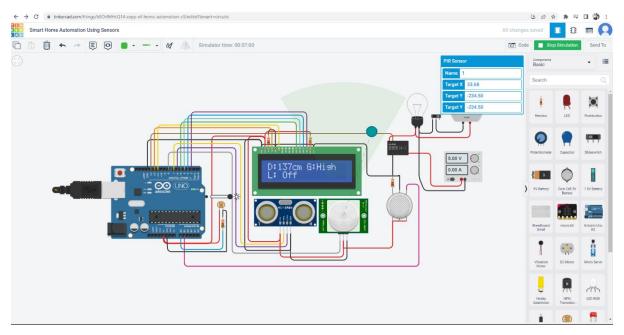
Start the Simulation



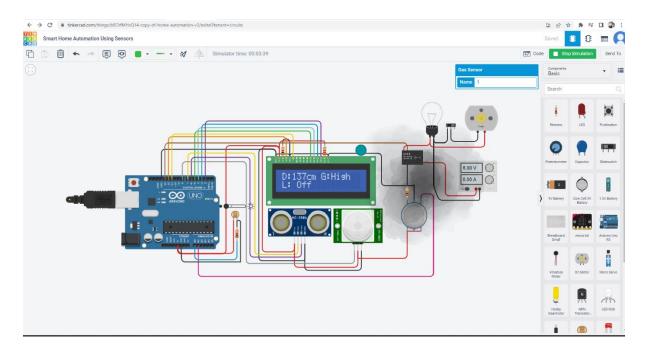
The Light and Fan system is active only when someone is in Room



Lights is Automatically Turned On and OFF According to the Light Intensity



Smoke Sensor Detect the Level of the Gas intensity and Display message according to that (Low, Med, High)



Using Ultrasonic Sensor in front of door to find the distance of the person from Door



Code:

