



IOT BASED PROJECT

SMART FIRE SECURITY SYSTEM

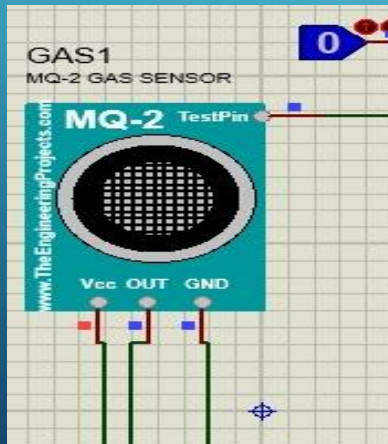
HERE WE ARE TRYING TO BUILD A SMART FIRE SECURITY SYSTEM BASED ON INTERNET OF THINGS . HERE WE DESIGNED IT SO AS TO OCCURRING MINIMISES THE HUMAN LOSS IN FIRE ACCIDENTS OCCURRING OFTENLY .

NAME – RAJ ANAND

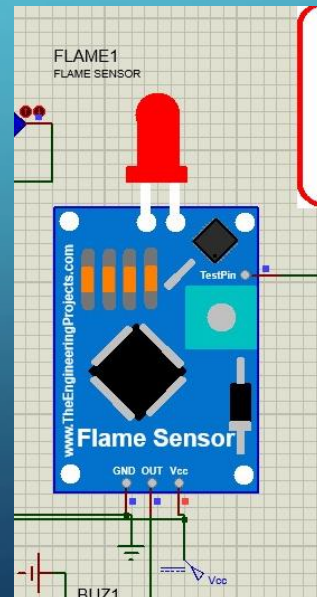
ADMISSION NUMBER - 21JE0733

SENSORS USED IN THE PROJECT

- 1 GAS DETECTOR: IT DETECTS COMBUSTIBLE GASES IN SURROUNDING LIKE LPG.
- 2 FLAME SENSOR: IT DETECTS THE BURNING FLAME IN THE SURROUNDING.



Gas
Detector

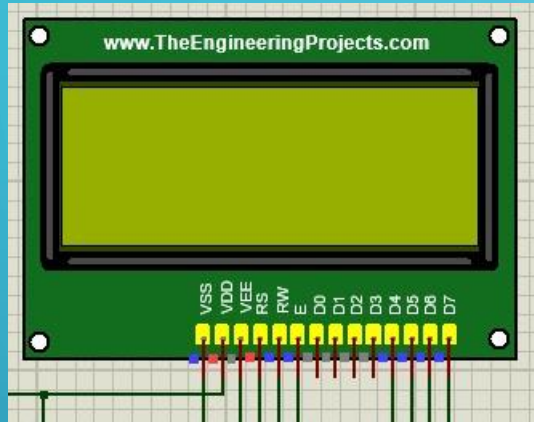


Flame Sensor

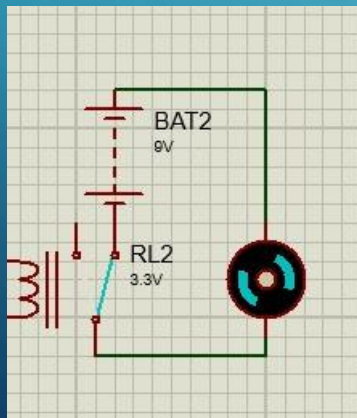
OTHER DEVICES USED

- ARDUINO : IT IS USED TO PERFORM ALL THE NECESSARY FUNCTION BY WRITING THE PROPER CODE AND CONNECTING THE SENSORS AND DEVICES INVOLVED.
- DISPLAY SCREEN: IT IS USED TO DISPLAY THE NECESSARY DATA ON THE SCREEN .
- FAN: IT IS HERE USED TO SHOW THE ELECTRICAL POWER SUPPLY PRESENT ON HOME.
- ELECTRONICS APPLIANCES: THEY ARE NECESSARY FOR CONNECTING CIRCUIT EQUIPMENTS .

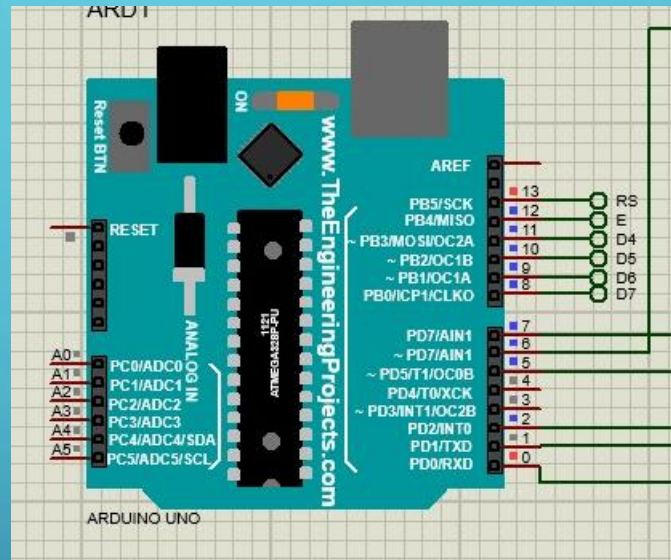
OTHER DEVICES INVOLVED



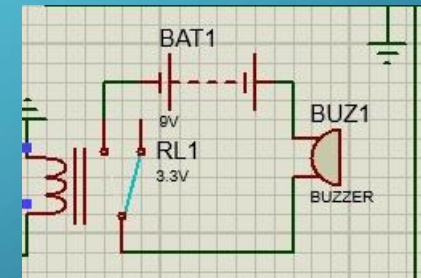
DISPLAY SCREEN



FAN



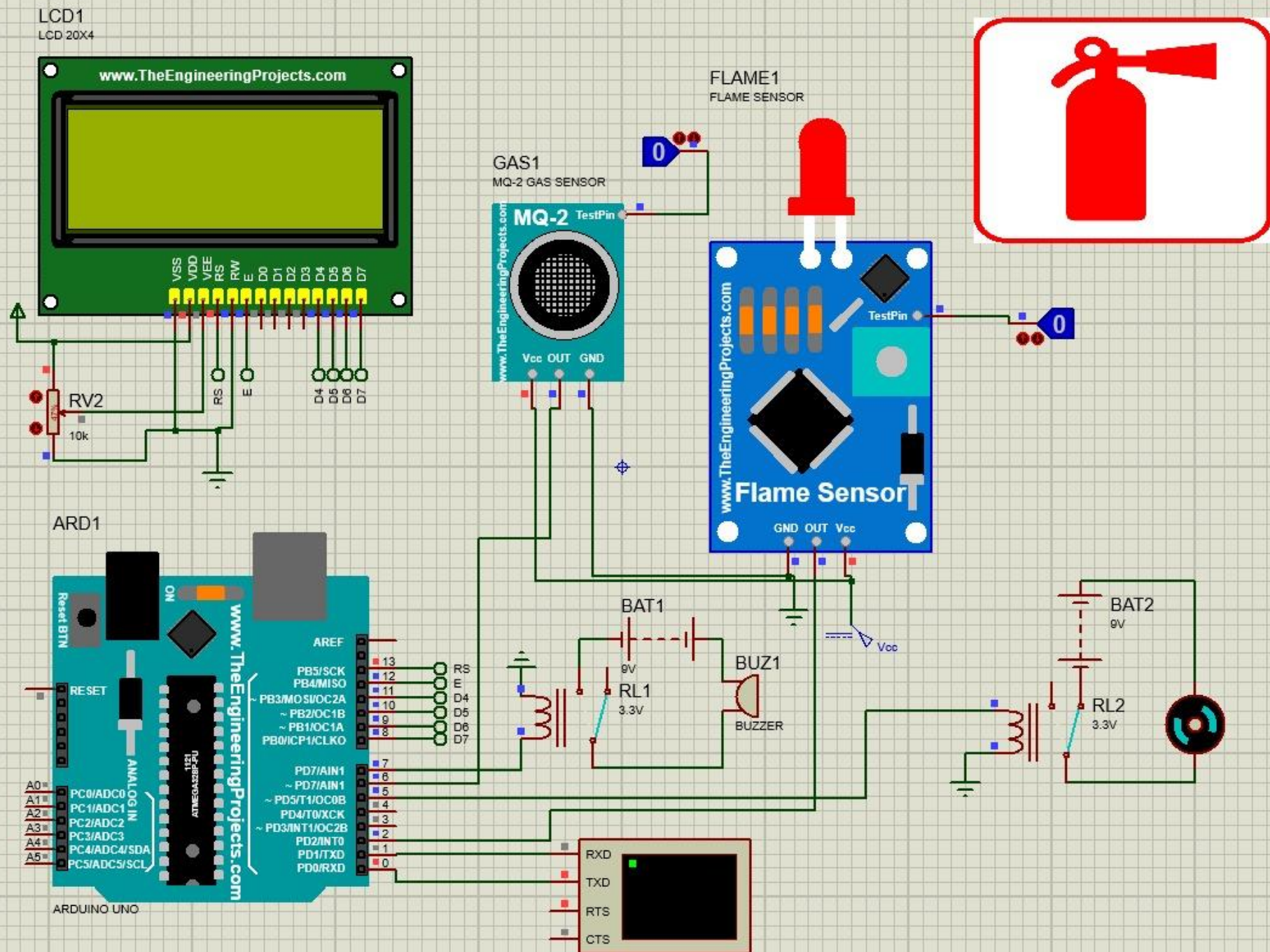
ARDUINO

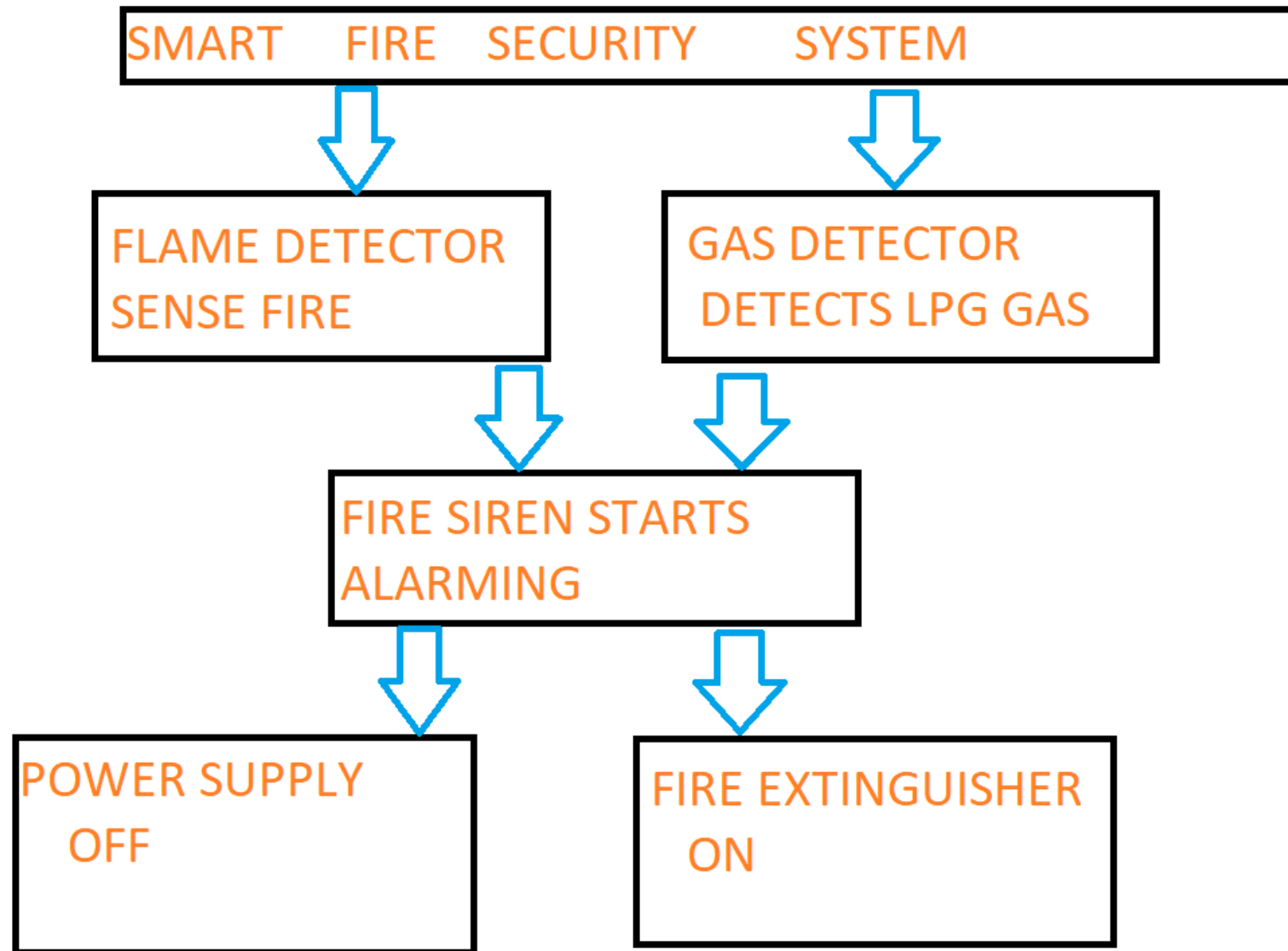


BUZZER

PROJECT DESCRIPTION

- In this project , if there is any leakage of combustible gases then it is detected by gas detector further even if there is fire at home for some other reasons then it is detected by flame sensor and it starts producing Fire Siren and at the same time the power supply of home is switched off and fire extinguisher is turned on. In this way necessary precaution are taken in order to prevent mass destruction.





FUTURE SCOPE

- In further scope we can add new features like notifying the fire station via sharing the GPS location of the home .Also we can build a laser system which can detect the direction of fire and correspondingly spray water stream on it in that direction .Also we can make a regulator of gas cylinder such that it turn the knob by help of motor as soon as LPG gas is detected .

The image features a blue gradient background with white circuit-like lines in the corners. These lines consist of small circles connected by straight lines, resembling a stylized electronic circuit or data network. The lines are positioned in the top-left, top-right, bottom-left, and bottom-right corners, framing the central text.

THANK YOU