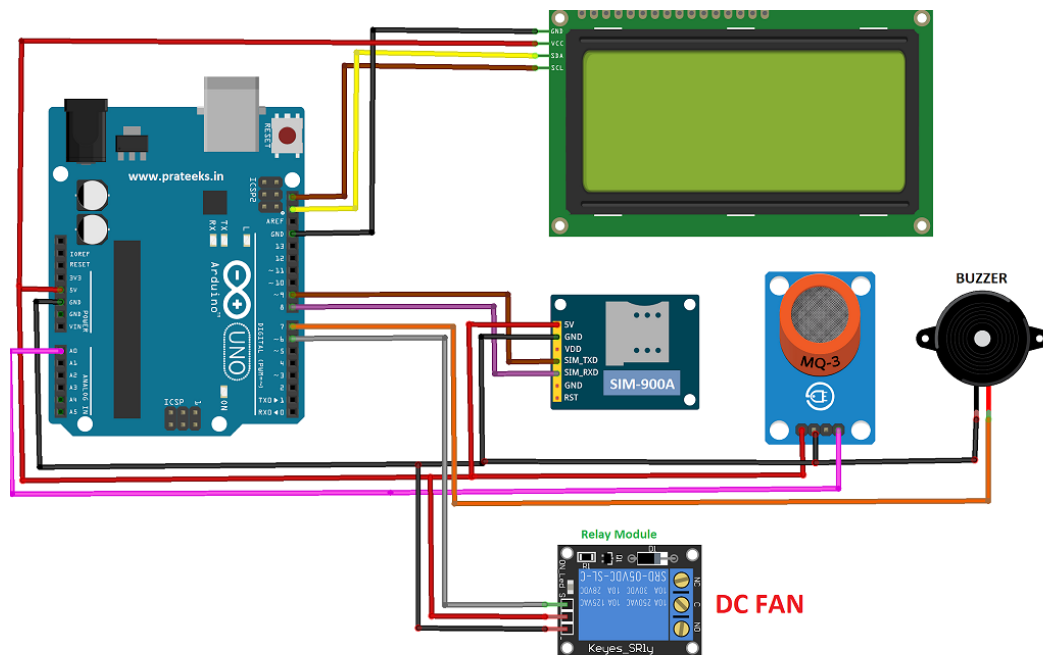


Project Design Phase-II Technology Stack (Architecture & Stack)

Date	19 September 2022
Team ID	PNT2022TMID19526
Project Name	Project - GAS LEAKAGE MONITORING AND ALERTING SYSTEM
Maximum marks	4 Marks

Technical Architecture:



Technical :

- MQ5 gas sensor
- Arduino uno board
- GSM 800A module
- DC fan
- LCD display (gas scan and alert)

Functional:

- First detects the gas leak.
- Signal goes to Arduino
- DC fan turns ON
- Alert SMS sent to user's mobile number
- Source valve turned OFF.

DEVELOPMENT OF TASK ANALYSIS:

Hardware Requirements

- 1) Arduino UNO Microcontroller
- 2) Green LED 1, Red LED 1
- 3) Buzzer 1
- 4) Servo motor 1
- 5) Dc motor with relay 5v
- 6) 9V Power supply
- 7) MQ6 Gas sensor
- 8) GSM 800a Module
- 9) GSM Sim
- 10) Connecting wires
- 11) Project base

Software Requirements

- 1) Arduino IDE
- 2) Language C

WORKING:

Step 1: A signal from the microcontroller will go to the display and show gas leakage message there.

Step 2: Simultaneously automatically turns on the DC fan to ventilate the leaked gas, and the source solenoid valve will be turns off

Step 3: Signal from microcontroller activates the GSM module and sends an alert SMS “ALERT GAS LEAKING” to the user’s mobile number.