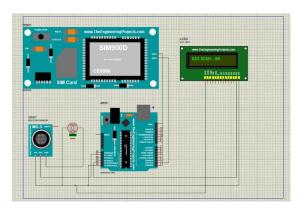
# Project Design Phase-II Technology Architecture

Date	19 Sep 2022
Team ID	PNT2022TMID40124
Project Name	Gas leakage monitoring and alerting system for
	industries

#### **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 tuns 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 3
- 3) 9V Power supply (230V TO 9V STEPDOWN TRANSFORMER)
- 4) MQ6 Gas sensor
- 5) GSM 800 Module
- 6) GSM Sim
- 7) Connecting wires
- 8) 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.