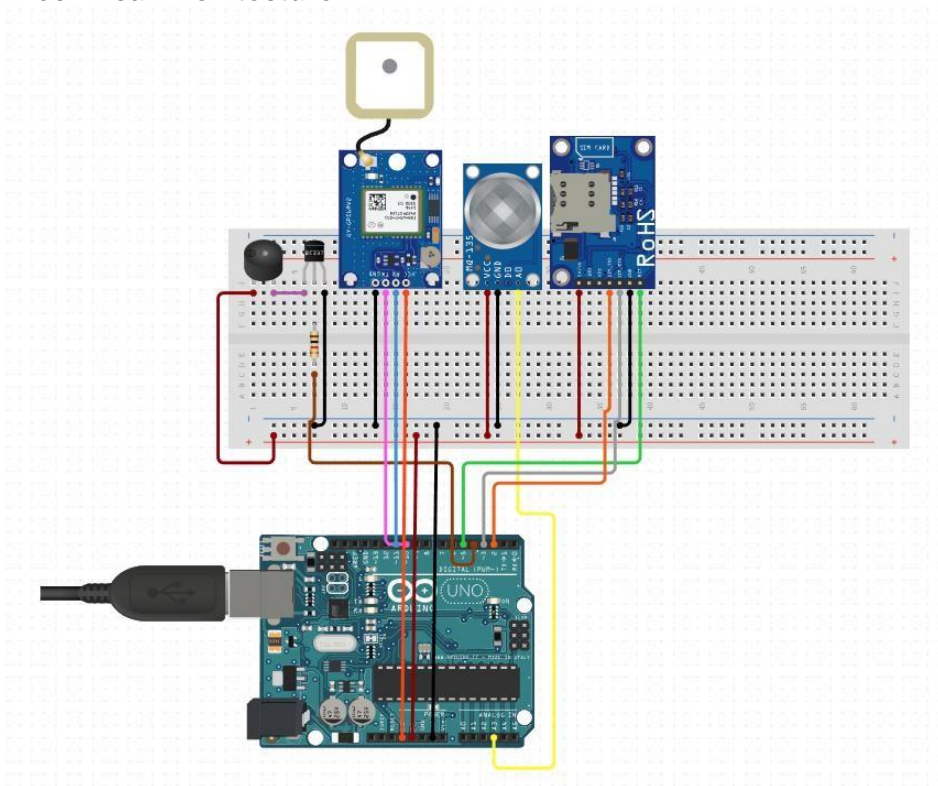


Project Design Phase-II Technology Stack (Architecture & Stack)

Date	25 October 2022
Team ID	PNT2022TMID08134
Project Name	Gas Leakage monitoring & Alerting system for Industries

Technical Architecture:



TECHNICAL

- ◆ MQ135 Gas sensor
- ◆ Arduino Uno
- ◆ GSM SIM800 Module
- ◆ Neo 6M GPS Module

FUNCTIONAL

- ◆ Detects the Gas Leakage
- ◆ Type of Gas
- ◆ Alert the user

Hardware Requirements

- Arduino Uno
- Piezo Buzzer
- Transistor - NPN BC337
- 1K Ohm Resistor
- USB Cable A to B
- Ublox NEO-6M GPS Module
- Hazardous Gas Sensor - MQ-135
- QuadBand GPRS-GSM SIM800L
- BreadBoard
- Jumper Wires Pack - M/M

Software Requirements

- Arduino IDE
- Python

Working:

Step 1: If the MQ sensors recognizes a gas leak. It notifies the user and sends them information about the type of gas and the location using a Neo-6M GPS module.

Step 2: The web application's users can log in and monitor the status of Gas Sensor Devices.

Step 3: The administration and the fire department can locate the leak quickly and investigate it. And avoid the Accident