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

Date	19 September 2022
Team ID	PNT2022TMID21384
Project Name	Gas Leakage monitoring & Alerting system
Project TEAM members	19D051 - MUKILAN T V 19D068 – RAGUL SHANKAR S 19D079 – SANTHOSH S 19D083 – SEEMAN CHAKKARAVARTHY V

TECHNICAL ARCHITECTURE:
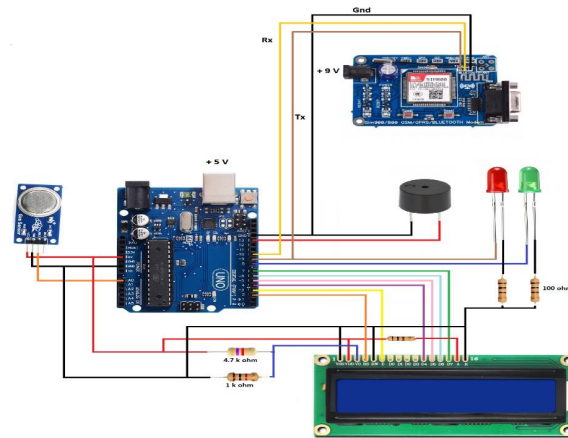
FUNCTIONAL DECOMPOSITION:

S.NO.	COMPONENTS NAME	DESCRIPTION	FUNCTION
1.	Arduino Board	Arduino UNO R3 Development Board	Microcontroller for Data Processing
2.	GSM Module	SIM800/900 UART GSM Module	Gives Alert Messages
3.	LCD Display	JHD162A 16x2 LCD Display	Displays Gas Level
4.	Gas Sensor	MQ-135/MQ7/MQ6/MQ5/MQ2	Detects the Gas Leakage
5.	Arduino Power Supply	5V DC Adapter	Supplies power to Arduino
6.	GSM Power Supply	12V DC Adapter	Supplies power to GSM Module
7.	Connecting Wires	Jumper Wires	Used to Connect Components
8.	Buzzer	–	Gives Buzzing Sound
9.	LED	–	Blinks Red when Leakage is Detected Blinks Green when there is no Leakage

SOFTWARE REQUIREMENTS:

1. Arduino IDE
2. Python