Project Design Phase-I
Proposed Solution

Date	19 September 2022
Team ID	PNT2022TMID21384
Project Name	Gas Leakage Monitoring and Alerting System
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	LPG gas can be used in the car, kitchen, and in the storage tank or service station. But, due to some reasons the LPG gas might leak from the gas cylinders, this may cause the cylinder blast, damage the building and risk of a life to the living persons in the building.
2.	Idea / Solution description	The proposed system includes an alerting system for the users. The system is based on a sensor that easily detects a gas leakage. This system alerts by giving alarm sound, and immediately turn off the cylinder regulator to prevent further leakage, and an exhaust fan is also attached to eliminate the LPG.
3.	Novelty / Uniqueness	In addition to an alarm, it also sends message to the user with the help of GSM Module.
4.	Social Impact / Customer Satisfaction	LPG gas can be used in the car, in the storage tank or service station. But, due to some reasons the LPG gas might leak from the gas cylinders, this may cause the cylinder blast, damage the house and risk of a life to the living persons in the house. The fire ignite can be occurred due to many reasons such as an electrical short circuit, oil lamps or candles kept inside the house. Sometimes fire accidents are very small, but if proper action is not taken to control the fire, then it can spread in complete house. To overcome this problem, an LPG gas sensor is used to detect the presence of a dangerous LPG gas leak in various places.
5.	Business Model (Revenue Model)	There is no one-size-fits-all answer when it comes to business. The model you select will depend on your target market, business objectives, and the resources you already have available.
6.	Scalability of the Solution	The user can identify the gas leakage from the message received. There will be some features in the device that allow the user to detect the gas leakage. The sensor keeps detecting the gas leakage and when detected, it sends signal to buzzer and a message will be received.