Project Design Phase-I
Proposed Solution

Date	27 September 2022
Team ID	PNT2022TMID16972
Project Name	Project – Gas Leakage Monitoring and Alerting System for Industries
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)	Liquid Petroleum Gas (LPG) is a highly flammable chemical that consists of mixture of propane and butane. LPG is used for cooking at home, restaurant, and certain use for industry. They have certain weaknesses that make the gas leakage occur. The leakage of gases only can be detected by human nearby and if there are no human nearby, it cannot be detected. But sometimes it cannot be detected by human that has a low sense of smell. Thus, this system will help to detect the presence of gas leakage. Furthermore, gas leakage can cause fire that will lead to serious injury or death and it also can destroy human properties. This system was developed by using IoT to give real-time response to the user and the nearest fire station.
2.	Idea / Solution description	To build a system that can detect the liquid petroleum gas leakage. To detect the changes of temperature caused by fire. To send the information to the nearest fire station through Internet of Thing (IoT).
3.	Novelty / Uniqueness	This system helps to prevent the high risk of gas explosions and affecting any casualties within and outside the premises.
4.	Social Impact / Customer Satisfaction	This mainly focuses on the deduction of gas leakage and providing security when the user is around or away from home.

5.	Business Model (Revenue Model)	Gas Leakage system is a major concern with residential, commercial premises and gas powered transportation vehicles, that can automatically detect and alert.
6.	Scalability of the Solution	This gas leakage system can be applied for household safety and many other applications in the industry. Any leakage can be recognized through the receiver module and automatically will convey the information to the firefighters. Since the system being monitored 24 hours by the Fire Station therefore this system may avoid the dangerous of the leakage gas.