Project Design Phase-I Proposed Solution Template

Date	09 November 2022
Team ID	PNT2022TMID03078
Project Name	Gas Leakage Monitoring and Alerting System
Maximum Marks	2 Marks

Proposed Solution:

S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Gas leaks cause a variety of mishaps that result in both financial and human suffering. The environment has the greatest impact on people's health issues in everyday life. The actual properties of the item, such as its combustibility, danger, and so on, determine the risk of firing, explosion, and suffocation. Recently, there has been an increase in the number of fatalities caused by gas cylinder explosions. Explosions of this kind are caused by unsafe gas cylinders, out-of-date valves, corroded regulators, and carelessness when using gas cylinders.
2.	Idea / Solution description	Workers in a busy industry who work with gas, whether it is harmful or not, need a way to continuously monitor their gas pipelines and catch gas leaks early so they can work efficiently on major crises instead of worrying about gas leaks or monitoring. This will cut down on manpower in that industry and make the environment more peaceful.
3.	Novelty / Uniqueness	There are numerous solutions to this issue, but none of them met the requirements of customers. Some of the solutions are only detecting certain gases, while others have failed to notify the primary department and are experiencing delays.
4.	Social Impact / Customer Satisfaction	The people who work in the industries and the society that surrounds them will greatly benefit from our solution. Our solution will stop major disasters like the Bhopal Gas Tragedy, saving so many lives. The workers' mental stress will be lessened by this project, allowing them to concentrate on other tasks or unwind. It is inexpensive and simple to set up.

5.	Business Model (Revenue Model)	Since industries are the primary target of our solution, we have planned to visit industries to demonstrate the advantages of our products to them.so that they are aware of the significance of this solution and can use it effectively to ensure their organization's safety.
6.	Scalability of the Solution	Because our solution will be laid on the basic or initial stage of any upgraded version, it can be integrated for further use in the future. It will provide precise values.