Project Design Phase-I
Proposed Solution Template

Date	1st October 2022
Team ID	PNT2022TMID18105
Project Name	Gas Leakage Monitoring and Alerting System
Maximum Mark	2 marks

Proposed Solution Template :-

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Continuous industrial development gives rise to harmful gas release. Often these emission are controlled. However, many operation involve the handling of hazardous gases. Lapses in preventive maintenance lead to faculty pipelines & equipment. Such operational negligence to detect gas leaks is damaging the environment. Consequently breathing even with low conc. Can lead to many disease and increase fatality. Without early gas leakage detection timely corrective action will not be possible.
2.	Idea / Solution description	Real-time gas monitors can overcome delayed response times to such gas leaks. Hence, multiple gas monitors can be placed strategically across any potential source for early gas leak detection. Also, mapping of such gas leaks in these industrial zones can help the safety in charge to take timely corrective actions. Hence, by setting appropriate thresholds, various data-driven environmental automation can be implemented for industrial safety.

3.	Novelty / Uniqueness	Even though there are many existing solutions for this problem they failed to satisfy the needs of customer. Some of the solutions are only detecting some particular gases where some others failed to alert the main department and other solutions are with some delays. Our solution not only notify the industry person but also notify the fire fighters so that can take control over the situation and our solution will alert the workers even there is a small leak of gases.
4.	Social Impact / Customer Satisfaction	By implementing real-time gas leak detection, industries can monitor their environmental performance, ensure better occupational health, and eliminate potential hazards for optimum safety. Also, early detection of gas leaks can trigger concerned engineers to curtail the spread and keep a safe environment for better health and safety.
5.	Business Model (RevenueModel)	The main target of our solution is Industries so we have planned to visit industries and explain them about the benefits of our products. So that they can aware of the importance of this solution and use it.
6.	Scalability of the Solution	Our solution can be integrated for further future use because the solution we have provided will be lay on the basic or initial stage of any upgraded version.