

Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID02525
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 the proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Gas leakage causes a variety of consequences, including financial loss and human life. Gas leakage can be discovered by neighboring humans but if no one is around, it cannot be found. But occasionally, a human with a poor sense of smell cannot notice it and as a result, this device will aid in the detection of gas leakage. Harmful gas leakage causes global warming and causes health problems.
2.	Idea / Solution description	To build a prototype that can detect the gas leakage and measure the humidity and temperature which will be uploaded on the IBM cloud for cloud computation and to determine the level of gas leakage and alert the concerned person depending upon the gas leakage via Node red Dashboard.
3.	Novelty / Uniqueness	System provides real time alerts about the presence in the atmosphere and real-time updates about leakages with the location.
4.	Social Impact / Customer Satisfaction	The environment has a critical impact on human health issues in everyday life. Fire, Suffocation and explosion risks are all determined by physical attributes like flammability and toxicity. As the leaked gas is detected and alert is given prior to the safety limit, it provides enough time to evacuate workers from the particular area. The rate of risk to workers is lowered.
5.	Business Model (Revenue Model)	Receive instant notifications of the presence of gases in the atmosphere. Prevent explosions and fire dangers. Monitor the levels of gas concentration. Maintain the health of the workforce. Installation is affordable.
6.	Scalability of the Solution	The system can also be used in Mining industries, Semiconductor manufacturing industries, Wastewater treatment, Chemical industry and Oil and gas sector.