Project Design Phase-I
Proposed Solution Template

Date	05 October 2022
Team ID	PNT2022TMID21463
Project Name	GAS LEAKAGE MONITORING AND ALERTING SYSTEM
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Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Gas leakage in industries can be very dangerous as certain gases can be poisonous while others can be explosive. So, system can be designed to monitor, detect and alert the workers in the case of a gas leakage in a timely manner.
2.	Idea / Solution description	Gas sensors can be placed at strategic locations in an industry that is prone to accidents due to gas leakage. These sensors can be interfaced with the cloud using a microcontroller. When the level of gas passes a threshold value, the sensor can send an alert via the cloud and also a buzzer can be made to give an alert sound to alert the workers on site. By using GSM module, SMS can also be sent to the required people or helpline. It enables us to monitor gas levels remotely and in real time.
3.	Novelty / Uniqueness	Here wireless communication system using either Wi-Fi or ZigBee can be used.
4.	Social Impact / Customer Satisfaction	Easy to install, lesser cost and reduction in accidents due to gas leakage.
5.	Business Model (Revenue Model)	Due to inflammatory or poisonous gases being used in many industries, the rate of accidents and deaths increased. The gas leakage detection model can help prevent accidents so as long as there are workers in industries, this model is a necessity and production will not be stopped.

6.	Scalability of the Solution	Even if there is a large volume of gas leakage, the product will sense the accurate value and alert the users. In the case of accident or extreme leakage, the respective authorities or helplines can be notified almost immediately with the fast communication that is provided.