

Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID40473
Project Name	Gas leakage Monitoring & Alerting System for Industries
Maximum Marks	2 Marks

Proposed Solution Template

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<p>Gas leakage is the major problem that need to be solved. However we might not be able to prevent the gas leakage, but at least we have to prevent the consequences of it.</p> <p>Whenever a flammable gas leaks, it has the chances of getting fired and leads to a massive explosion of an Industry in which lots of labours will lose their lives and it also affects the environment as well the industry growth.</p> <p>If the gas leaks are harmful gases, it may cause several damages to the workers who are exposed to it, and will lead to the chance of death.</p>
2.	Idea / Solution description	<p>The solution is to monitor the gas pipelines, containments etc., by Using gas sensors near the area at where the gas leak is most likely to occur. If gas leakage happens, the sensors detects the leakage and send notification along with the exact location of where the gas leakage take places and it also alert the labours at those sectors by an Emergency alerting system.</p>
3.	Novelty / Uniqueness	<ul style="list-style-type: none">➤ Our solution has the Uniqueness of showing information related to if any fire take place at the leakage area with the help of a sensor it may be a temperature or flame sensor etc.,. It helps the admin to know if there is any incipient fire occurred, and our web app has the command of enabling the fire suppression system so the admin can turn it on and it will help to control the fire.➤ Also our web app will have the feature of Indicating information whenever a sensor is damaged or not in working condition. This will help the admin to easily know about when a sensor is damaged.
4.	Social Impact / Customer Satisfaction	<p>By implementing this solution, it ensures a better occupational health. It helps for the workers in monitoring the gas leaks and makes them feel secured.</p>
5.	Business Model (Revenue Model)	<p>Now a days, the gas leakage detection system is mostly needed and it's mandatory for an industrial safety. So we can get revenue by Selling this to the Industries with an affordable price and also we can able to make revenue by promoting any industry relatable needs at different section on the web app.</p>
6.	Scalability of the Solution	<p>The user can able to detect the type of gas using different gas sensors. This model will fits for different gas sensors, so any gas sensor can be used, according to the gas used on their industry. Also Multiple number of gas sensors can be placed at multiple areas and those can be able to link with the web app for monitoring.</p>