PROJECT DESIGN PHASE-I PROPOSED

SOLUTION TEMPLATE

Date	8th Oct 2022
Team ID	PNT2022TMID04047
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)	The leakage of gases only can be detected by human nearby and if there are no human nearby, it cannot be detected. But sometimes it cannot be detected by human that has a low sense of smell. Thus, this system will help to detect the presence of gas leakage.
2.	Idea/Solution Description	IOT and Arduino based leakage detection system senses the gas with the help of an gas sensor. Data sensed by these sensors is sent to the IOT. The IOT module then sends the data over to a website. The buzzer is turned ON once the gas leakage is detected. At this time, LCD Display shows a message as "Leakage detected".

3.	Novelty of the project	Although, there are many solutions for this problem but they have some disadvantages. Some of the solutions only detects some particular gases and some others only detect those gases and alert small distance only. This can be rectified by alerting large area and detect more gases. The fire and rescue services department can be notified by sending the alert message to them.
4.	Social Impact	The system provides constant monitoring and detection of gas leakage along with storage of data in database for predictions and analysis. The IOT components used helps in making the system much more cost effective. Our solution will prevent great losses like Bhopal Gas Tragedy.
5.	BusinessModel(Revenue Model)	The main objective of our project is to save lives. So we can establish this project as a product and visit the industries and make them aware of this project.
6.	Scalability of the solution	We can use our project as a basic model and we can develop our project in a large scale and establish some new ideas in the future. We can upgrade our project with some more features in the future.