

Project Design Phase-I Proposed Solution Template

Date	10 October 2022
Team ID	PNT2022TMID14470
Project Name	Project -IoT Based gas leakage monitoring and alerting system
Maximum Marks	2 Marks

Proposed Solution Template:

This is our proposed solution for our system:

S.No.	Parameter	Description
1.	Problem Statement	Natural gases such as Liquefied Petroleum Gas (LPG) are widely used in the whole world. LPG is used for cooking in home or hotel. It is also used in certain gas based industry. As for now, the use of natural gases instead of petroleum as the alternative fuel for mobile cars also has been increased. Although the procedure of installing LPG-based system is very tight, we could not give 100% guaranteed that the LPG-system will not having leakage.
2.	Idea / Solution description	To design a gas leakage detector, that is capable of identifying of the gas leakage and fire and send a message to emergency contact numbers such as nearest fire service station and house owner.
3.	Novelty / Uniqueness	1)Even though human is a perfect creation of God, they still have certain weakness. Human cannot detect the presence of natural gases as fast as the sensor do. Thus,the use of gas sensing system is hugely needed to give real-time monitoring of the gas system. 2)In certain cases, gas leakage can cause fire that will destroy human property. The large scale of fire also could contribute to serious injury or death. This is due to the fire station got delay information about the fire occurred .
4.	Social Impact / Customer Satisfaction	In most of the gas leakage accidents cause many damage due to late intimation of information to the fire station . With our project model we can sense the danger in advance and alerts are sent to both the neighbors and to the fire station.
5.	Business Model (Revenue Model)	The main target of our project are cylinder using houses .we are planning to improve our features and to decrease the cost .which can be easily made available to all range of customers.
6.	Scalability of the Solution	Mostly used system are based on only leakage detection and alerting through alarm ,But our implemented system is different from that existing system. We added an SMS based alert system which was not found the existing

		system. We are working to develop a unique ideas which will help in improving our system further more that be made helpful to peoples of our country.
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