

Project Design Phase-I
Proposed Solution

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| Date | 03 October 2022 |
| Team ID | PNT2022TMID35867 |
| Project Name | Gas Leakage Monitoring and Alerting System |
| Maximum Marks | 2 Marks |

Proposed Solution:

| S. No. | Parameter | Description |
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| 1. | Problem Statement (Problem to be solved) | In Industries, Gas Leakage causes a variety of consequences, including financial loss and human life. This device will aid in the detection of gas leakage and alert people of prone zone. |
| 2. | Idea / Solution description | To design a model that can detect the gas leakage using gas sensor 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. Additionally, sent notification of gas leakage to intended/concerned person via Appinventor. |
| 3. | Novelty / Uniqueness | System provides alert message about the hazardous gas presence in the atmosphere with continuous monitoring and provides real-time updates about gas leakage with location. |
| 4. | Social Impact / Customer Satisfaction | Fire, Suffocation, Death and explosion risks are all determined by physical attributes like flammability and toxicity in industries. This device detect gas leakage and alert message is given prior to the safety limit; it provides enough time to evacuate workers from the particular area. The rate of risk to workers and costly machineries gets lowered. |
| 5. | Business Model (Revenue Model) | Receive instant notifications of the presence of gases in the atmosphere by App-inventor which saves life and losses. Prevent explosions and fire dangers if there's preventive/control measures are available readily once gas leakage detected. Monitor the levels of gas concentration dynamically & maintain assured health status of the workspace. Installation and Maintenance is economic and eco-friendly. |
| 6. | Scalability of the Solution | System can be deployed in any industries by deciding appropriate Gas sensor. |