**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 19 September 2022 |
| Team ID | PNT2022TMID42277 |
| Project Name | Project – Gas Leakage Monitoring and Alerting System |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | Gas leakage leads to various accidents resulting in loss of human lives and industry properties. Sometimes, the gas leakage cannot be detected by human that has a low sense of smell. Thus, this system will help to detect the presence of gas leakage and alert the users. |
|  | Idea / Solution description | It detects the gas leakage by using various sensors. If the gas leakage level is above the threshold level, it sends the alert message through SMS to the user by using GSM module and buzzer the alarm. |
|  | Novelty / Uniqueness | We use location tagging and alert service so that the admin and fire department team will  be notified the exact location. The system provides constant monitoring and detection of gas leakage along with storage of data in database for predictions and analysis. |
|  | Social Impact / Customer Satisfaction | By implementing real-time gas leak detection, industries can monitor their environmental performance, ensure better occupational health, and eliminate potential hazards. Also, early detection of gas leaks can trigger concerned engineers to curtail the spread and keep a safe environment for better health and safety. |
|  | Business Model (Revenue Model) | The product can be made compact, cost  efficient and easily installable so that all the  industries from small scale to large scale can able to buy the product . |
|  | Scalability of the Solution | The system is very simple and easy to maintain and cost efficient. It has the capability to works for a period of time without any damage in the system components. |