Project Design Phase-I

Proposed Solution Template

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| Date | 30 September 2022 |
| Team ID | PNT2022TMID23535 |
| Project Name | Project – Gas Leakage monitoring and alerting system |
| Maximum Marks | 2 Marks |

Proposed Solution:

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| **S.No.** | **Parameter** | **Description** |
| 1. | Problem Statement (Problem to be solved) | * Leakage of gases * Leads to serious injury or death * Lack of systematic technology * Due to harmful gases there is a great loss of resources |
| 2. | Idea / Solution description | As the safety keeps an important concern, the proposed gas detection system makes use of IoT to detect the leakage and alert the user for preventing the leakage. The gases being a toxic need to be monitored in such a way that an increase in their level needs to be known and proper precautions have to be taken. |
| 3. | Novelty / Uniqueness | * Detecting the harmful gases and indicating when the gases exceed safe level * Sending the data fetched over internet for remote monitoring * Triggers alert system when smoke is detected * Finding the exact location where leakage occured |
| 4. | Social Impact / Customer Satisfaction | * Ensure worker’s Health * Prevent fire hazards and explosions that affects the well-being of the environments * IoT solution is capable enough to offer a data-driven approach that simplifies the workload of the managers and they can easily keep a real-time check upon the assets and products. |
| 5. | Business Model (Revenue Model) | **Target Sector(B2B)**:  The involvement of IoT technology in industries is greatly impacting the process flows, work formation and functionalities, along with keeping a strict watch over the safety of the employees working in disaster-prone areas. |

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|  |  | * **Revenue Model:** With a machine-to-machine interaction, the chemical industry is empowering its potential in dealing with productivity. IoT is a data-driven concept that utilizes the information for predicting future trends, enabling better business growth. * **Cost Model:** The assistive technology segment leads the Internet of Things in the chemical industry with effective costs. |
| 6. | Scalability of the Solution | * The smart remote monitors and includes end-to-end device management, application, superior connectivity, and support to businesses. * With a well-organized and calculated system, the managers get a pre-configured solution, addressing all their challenges. |