**Project Design Phase-II**

**Solution Requirements (Functional & Non-functional)**

| Date | 28 OCTOBER |
| --- | --- |
| Team ID | PNT2022TMID42716 |
| Project Name | Project - GAS LEAKAGE MONITERING AND ALERTING SYSTEM |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| --- | --- | --- |
| FR-1 | User Registration | Registration through Form  Registration through Gmail  Registration through LinkedIN |
| FR-2 | User Confirmation | Confirmation via Email  Confirmation via OTP |
| FR-3 | Detect the gas | Detect the gas level and give Alert |
| FR-4 | Avoid the Accident | It will monitor the gas level and Temperature for avoiding the accident |
| FR-5 | Alerting System | Buzzer will alert when the gas level is high |
| FR-6 | Monitering | It will monitor the whole system |

**Non-functional Requirements:**

Following are the non-functional requirements of the proposed solution.

| **FR No.** | **Non-Functional Requirement** | **Description** |
| --- | --- | --- |
| NFR-1 | **Usability** | The purpose of this system is to detect gas leakage, neutralize it, and prevent the explosion |
| NFR-2 | **Security** | Prevent the high risk of gas explosions and affecting any casualties within and outside the premises. |
| NFR-3 | **Reliability** | Most leak detectors are primarily responsible for locating the leak, determining the extent or rate of leakage, and keeping track of increases or decreases in leakage |
| NFR-4 | **Performance** | Having the appliances that require gas checked regularly by a certified professional will help maintain the strength of the system and reduce the chance of leaks |
| NFR-5 | **Availability** | Gas leaks can be hazardous to health as well as the environment. |
| NFR-6 | **Scalability** | The system is designed so that it can with stand large number of users at any given movement. |