**Project Design Phase-II**

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

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| Date | 05 October 2022 |
| Team ID | PNT2022TMID35481 |
| Project Name | Project – Gas leakage monitoring and alerting system |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

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| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | User Registration | Registration using mobile number  Registration using email-id |
| FR-2 | User Confirmation | Confirmation via Email  Confirmation via OTP |
| FR-3 | User monitoring | Alerts should be received by the user  Real-time gas levels should be available |
| FR-4 | User problems | Portal to report problems faced  Active customer care services |
| FR-5 | Setting up device | Easy to install  Concealable and modern  Clear instructions for setup |
| FR-6 | Secure user database | Database should be monitored my administrator  Data stored should be encrypted for enhanced security |

**Non-functional Requirements:**

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

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | Compact and easy to use  Registration and monitoring is streamlines |
| NFR-2 | **Security** | Data stored in cloud should be encrypted  Strong passwords should be used or OTP based login can be used |
| NFR-3 | **Reliability** | Leakage detection should be highly accurate and SMS delivery should be fast  Alert should not be false |
| NFR-4 | **Performance** | The UI should be easy to use and levels shown should be accurate |
| NFR-5 | **Availability** | Login and monitoring must be possible from anywhere as long as cell phone or internet services exist |
| NFR-6 | **Scalability** | Can be scaled for monitoring gas levels in large industries |