**Project Design Phase-II**

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

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| Date | 03 October 2022 |
| Team ID | PNT2022TMID40560 |
| Project Name | Gas Leakage Monitoring and Alerting  System |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

**Functional Requirements**

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| --- | --- | --- |
| **Business Requirements** | **User Requirements** | **Product Requirements** |
| The said system can be deployed in homes, hotels, factory units, LPG cylinder storage areas, and so on. The main advantage of this IoT and Arduino-based application is that it can determine the leakage and send the data over to a site. It can be monitored, and preventive measures can be taken to avoid any disaster. | The gas leakage detection system can be optimized for detecting toxic gasses along with upgrading them with smoke and fire detectors to identify the presence of smoke and fire. Ensuring worker safety is important but making using of the right technology is even more vital. | Detecting gasses is necessary regardless of your business role or individual purpose. Certain technologies at play make such IoT devices what they are, and if you want to indulge in IoT application development, you must know what they are and what  purpose they can fulfill. |

**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** | Very usefull |
| NFR-2 | **Security** | Securable |
| NFR-3 | **Reliability** | Reliable |
| NFR-4 | **Performance** | Good |
| NFR-5 | **Availability** | - |
| NFR-6 | **Scalability** | - |