Project Design Phase-II

Solution Requirements (Functional & Non-functional)

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| Date | 03October 2022 |
| Team ID | PNT2022TMID34760 |
| Project Name | 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 | Methodology | It is a well way to get rapid results in a short time. |
| FR-2 | Impact | Sensor has excellent sensitivity combined with a quick fast response time , possible to get instantaneous  results. |
| FR-3 | sensitivity | Specialised of the gas in all similar systems |
| FR-4 | WIFI -Module | Can communicate directly with industrial scientific, consumer technology that is web friendly with no use of shields or any peripherals. |
| FR-5 | operation | The system be operated in android operating system. |
| FR-6 | User Interface | Emergency call, message with application systems |

# 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** | It helps prevent the high risk of gas explosions |
| NFR-2 | **Security** | The system should not display the homeowner personal information to anyone. |
| NFR-3 | **Reliability** | Unsafe behaviour of personnel has the greatest  impact on the probability of gas leakage. |
| NFR-4 | **Performance** | Arduino response time will be fast. |
| NFR-5 | **Availability** | The system should work 24 hours 7 days a week. |
| NFR-6 | **Scalability** | The system interface should be easy and effective(user-friendly). |