Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	12 October 2022
Team ID	40785-1660634822
Project Name	Gas leakage monitoring and alerting system for industries
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 Visibility	Level of gas can be monitored by users if there is any leakage, alerts can be sent to the stakeholders through messages.
FR-2	User Reception	The data indicating the level of gas can be informed through messages and a website
FR-3	User Understanding	The user can monitor the level of gas with the help of the data. If there is an increase in gas level, then the alert will be given. They also get notified through a message and alarm
FR-4	User Convenience	Through message we can easily get indication of gas level and in case of gas leakage, it can directly send notifications to nearby fire station, local centre and hospital.
FR-5	User Performance	When the user gets notified, he/she could turn on the exhaust fan/sprinkler

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	It updates the sensory data regularly as well as protects the workers.
NFR-2	**Security**	As a result of emergency alert, protection of both the humans and properties is ensured.
NFR-3	**Reliability**	Can provide accurate values and alerts. Has the capacity to recognize the smoke accurately and does not give a false alarm
NFR-4	**Performance**	Sprinklers and exhaust fans are used in case of emergency.
NFR-5	**Availability**	Can be used around the clock
NFR-6	**Scalability**	Setup can extend to include multiple sensors for a wider coverage