

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

Date	15 October 2022
Team ID	PNT2022TMID21717
Project Name	Project - 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	Users can check the gas level and receive alerts via texts if there is a leak.
FR-2	User Reception	Messages can be used to communicate data, such as gas level information.
FR-3	User Understanding	The data can be used by the user to keep track of the gas level. The notice will be sent if the gas level increases. Additionally, the alert notifies them.
FR-4	User Convenience	We can simply obtain gas level information through messages, and in the event of a gas leak, it can immediately notify the local hospital, police and fire station.
FR-4	User Performance	When the user receives notification, he may activate the sprinkler or exhaust fan.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Regular data updates and worker safety are also provided.
NFR-2	Security	Helps to emergency alerts, we are able to safeguard both people and property.
NFR-3	Reliability	may be able to give precise values. It might be able to distinguish the smoke clearly and doesn't provide a false reading.
NFR-4	Performance	In an emergency, sprinklers and exhaust fans are deployed.
NFR-5	Availability	It contains both the day and the night, so it can be used every day.
NFR-6	Scalability	Every time a sensor malfunctions, it can be replaced.