

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

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Team ID	PNT2022TMID51029
Team Leader	Shriya R
Project Name	Gas Leakage Monitoring and Alerting System
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 through 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	With the aid of the data, the user may keep an eye on the gas level. The warning will be issued if the gas level rises. The warning also notifies them.
FR-4	User Convenience	Through messages, we can quickly obtain information about the gas level, and in the event of a gas leak, it can immediately notify the local hospital and police station.
FR-5	User Performance	When the user receives notification, the user 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	<b>Usability</b>	It safeguards the workers while also routinely updating the data.
NFR-2	<b>Security</b>	Our ability to protect people and property is made possible by emergency alerts.
NFR-3	<b>Reliability</b>	It can be in a position to give reliable values. It may be capable of precisely identifying the smoke and does not provide a misleading reading.
NFR-4	<b>Performance</b>	When there is a crisis, sprinklers and exhaust fans are deployed.
NFR-5	<b>Availability</b>	It contains both the day and the night, so it can be used every day.
NFR-6	<b>Scalability</b>	Every time the sensor malfunctions, another one can be installed.