

Project Design Phase-II

Solution Requirements (Functional & Non functional)

TEAM ID	PNT2022TMID44431
PROJECT NAME	Gas Leakage Monitoring and Alerting System
MAXIMUM MARKS	4Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR.NO	Functional Requirement(Epic)	Sub Requirement(Story/Sub Task)
FR-1	Monitoring	<ul style="list-style-type: none">Level of gas is monitoring using sensor and if there is any leakage, alert can be sent through message and with a buzzer.
FR-2	User Reception	<ul style="list-style-type: none">The data like the level of gas can be sent through message.
FR-3	User Understanding	<ul style="list-style-type: none">The user can monitor the level of gas with the help of the data. If there is an increase in gas then the alert will be given by message or buzzer sound.
FR-4	User Performance	<ul style="list-style-type: none">When the user gets notified, they could take precaution steps like turning the gas off, turn on the exhaust fan/sprinkler and avoid serious accident.

NON-FUNCTION REQUIREMENTS:

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

FR NO.	Non-functional	Requirement Description
FR-1	Scalability	<ul style="list-style-type: none">• Sensors can be replaced every time it fails.
FR-2	Availability	<ul style="list-style-type: none">• It can be used for everyday; it includes day and nights.
FR-3	Performance	<ul style="list-style-type: none">• Sprinkler and exhaust fans are used in case of emergency.
FR-4	Reliability	<ul style="list-style-type: none">• Can be able to provide accurate values. It might have a capacity to recognize the smoke accurately and does not give a false.
FR-5	Security	<ul style="list-style-type: none">• As a result of emergency alert , We can be able to protect both the humans and properties. Precaution steps could be taken.
FR-6	Usability	<ul style="list-style-type: none">• It updates the data regularly as well as protects the workers.