

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

Date	03 October 2022
Team ID	PNT2022TMID15063
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 Registration	<ul style="list-style-type: none">Registration through FormOffline Registration
FR-2	User Confirmation	<ul style="list-style-type: none">Confirmation via EmailConfirmation via OTP
FR-3	User Authentication	<ul style="list-style-type: none">User verification through valid User ID and password
FR-4	User Access	<ul style="list-style-type: none">Realtime Monitoring of Gas Leakage System, through web portal for Authorized Users.
FR-5	User Alert	<ul style="list-style-type: none">User receives an alert through SMS.Turn on Alerting System in Industry.
FR-6	Review and Feedback	<ul style="list-style-type: none">Receive Feedback from Users.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	<ul style="list-style-type: none">Easier Installation process and easy to use
NFR-2	Security	<ul style="list-style-type: none">Data transmission and handling through secured protocols.Credential encryption & Cloud security
NFR-3	Reliability	<ul style="list-style-type: none">Only authorized personnel have access to the system.Assured Data Security and Information conciseness. Longer Lifetime of Product/Service.
NFR-4	Performance	<ul style="list-style-type: none">High Accuracy of gas leakage detection in localized area.Faster Response to Gas Leakage Detection (SMS alert, valve closing).
NFR-5	Availability	<ul style="list-style-type: none">The user can access the System 24/7.Realtime monitoring system.
NFR-6	Scalability	<ul style="list-style-type: none">The system is scalable even in case of many gas sensors. Or in case of many supervisors.