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

Date	19 October 2022
Team ID	PNT2022TMID01814
Project Name	Gas Leakage Monitoring & 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	➢ Registration through Form ➢ Offline Registration
FR-2	User Confirmation	➢ Confirmation via Email ➢ Confirmation via OTP
FR-3	User Authentication	➢ User verification through valid User ID and password.
FR-4	User Access	➢ Realtime Monitoring of Gas Leakage System, through web portal for Authorized Users.
FR-5	User Alert	➢ User receives an alert through SMS. ➢ Turn on Alerting System in Industry.
FR-6	Review and Feedback	➢ 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**	➢ Easier Installation process, and Realtime Monitoring Service.
NFR-2	**Security**	➢ Data transmission and handling through secured protocols. ➢ Data encryption & Cloud security.
NFR-3	**Reliability**	➢ Only authorised personnel have access to the system. ➢ Assured Data Security and Information conciseness. ➢ Longer Lifetime of Product/Service.
NFR-4	**Performance**	➢ High Accuracy of gas leakage detection in localized area. ➢ Faster Response to Gas Leakage Detection (SMS alert, valve closing).
NFR-5	**Availability**	➢ The user can access the System 24/7. ➢ Realtime monitoring system.
NFR-6	**Scalability**	➢ The system is scalable even in case of many gas sensors. Or in case of many supervisors.