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

Date	11 October 2022
Team ID	PNT2022TMID44567
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**	O The user can access the System 24/7. O Realtime monitoring system.
NFR-6	**Scalability**	O The system is scalable even in case of many gas sensors. Or in case of many supervisors.