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

Date	19 October 2022
Team ID	PNT2022TMID12343
Project Name	Project – Gas leakage monitoring and alerting system
Maximum Marks	4 Marks

SANTHOSH P, BADHR MUHAMMED S, LAKSHMI NARAYANAN B, AKASH RAJ M

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 Registration through Gmail Registration through LinkedIN
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 RealtimeMonitoring Service.
NFR-2	**Security**	Data transmission and handling through secure protocols. Data encryption & Cloud security.
NFR-3	**Reliability**	Only authorized personnel have access to the system. 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**	Real time monitoring allows user to access the system 24/7.

NFR-6	**Scalability**	The system is scalable even in case of many gas sensors. Or in case of many supervisors.