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

Date	15 October 2022
Team ID	PNT2022TMID04334
Project Name	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 alert	Warnings must be sent to the user. Send the message as soon as possible
FR-2	User Understanding	The user could understand the amount and type of gas leaked and detect the location
FR-3	User controls	The user shall be able to turn off the electricity and other gadgets.
FR-4	User feasible	The user shall be able to notify the nearby fire station if gas leakage level is high.
FR-5	User location	The user shall be able to view the location of the gas leaked.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Easy to operate and can be used effectively even by the uneducated people.
NFR-2	**Security**	The communication between the sensors and the simulator are secured using encryption.
NFR-3	**Reliability**	0% false alarming rate and able to get notifications through SMS, e-mail, or even through call.
NFR-4	**Performance**	Low latency and immediate response to the user and make immediate decision.
NFR-5	**Availability**	The system should work 24/7.
NFR-6	**Scalability**	The system can be used for domestic houses or even for large industry.