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

Date	05 November 2022
Team ID	PNT2022TMID54064
Project Name	Project – Gas Leakage Monitoring and Alerting System.
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	Detection of Leakage of Gases	Detection of gases with the use of sensor. Detect which gas has been leaked and what is the permissible level and has much has it crossed the level.
FR-2	Altering the user	Notification via SMS Notification via Email
FR-3	Notification to the admin.	Notifying the exact location where the incident has occurred. Update the person with route to the location.
FR-4	Creation of web application	Update the website with location of place where leakage has happened. Update the level of leakage in the particular industry.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	There must be basic knowledge to the users in operating internet. The user should be aware about the harmfulness of gases.
NFR-2	**Security**	Users and admins can only access the web application through protected login functions.
NFR-3	**Reliability**	The admin must notified about the exact location along the route. Notification must be sent to the user at correct time so that we can prevent the damage.
NFR-4	**Performance**	Within few seconds the user and admin must be alerted through notification to prevent damage.
NFR-5	**Availability**	If the notification reaches the admin, he must check if some person is available so that he can be sent to place where leakage has occurred. If not, he must atleast inform the user about how long it will take to reach them.
NFR-6	**Scalability**	Once the problem is notified there must be atleast 20-30 people to address the problem immediately once notified.