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

Date	23 October 2022
Team ID	PNT2022TMID18426
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 through sensor. Detect how much amount of gas has leaked. Detect which gas has been leaked and what is the permissible level and has much has it crossed the level.
FR-2	Alerting the user.	Notification via Email Notification via SMS
FR-3	Notification to the admin.	Notification via E-mail or SMS 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.

NFR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The user who has basic knowledge in operating smart phones and internet. The user who knows about the harmfulness of gases.
NFR-2	**Security**	The web application should be accessed by users and admins only through protected login credentials.
NFR-3	**Reliability**	The user must be notified at the correct time so that damage can be prevented. The admin must be notified about the exact location along with the route.
NFR-4	**Performance**	The user and admin must be alerted through notification immediately within seconds to prevent damage.
NFR-5	**Availability**	Once the notification reaches the admin, he must check if some person is available so that he can be sent to the 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**	There must be at least 20-30 people to address the problem immediately once notified. Leakage must be detected simultaneously at many places.