

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

Date	03 November 2022
Team ID	PNT2022TMID22887
Project Name	Project - 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	Detection of Leakage of Gases	With the help of sensor ,the gas which is leaked will be detected
FR-2	Notifying the user	Notification via SMS Alerting using Bot-Call
FR-3	Notifying the administrator	Notification via SMS Notifying people of the incident's exact location. Update the person with route to the location.
FR-4	Web application	Update the level of leakage in the particular industry. Update the website with the location of the leak's source.

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	The person who is familiar with using the internet and mobile devices. The user who is aware of how dangerous gases are.
NFR-2	<b>Security</b>	Users and administrators should only be able to access the web application using password-protected login credentials.
NFR-3	<b>Reliability</b>	In order to stop damage, the user must be informed at the appropriate time. The exact location and the route must be communicated to the administrator.
NFR-4	<b>Performance</b>	To stop incident, the user and admin must be informed via notification right away and within seconds.
NFR-5	<b>Availability</b>	When the admin receives the notification, he must determine whether someone is available so that he can be dispatched to the location where the leakage occurred. If not, he must at least let the user know when they can expect them.
NFR-6	<b>Scalability</b>	There must be at least 20-30 people to address the problem immediately once notified. Leakage must be detected simultaneously at many places.