

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

Date	22 October 2022
Team ID	PNT2022TMID08020
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. It Detect how much amount of gas has leaked. Determine which gas has leaked, the permitted level, and how much the level has been exceeded.
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.

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	the person who is familiar with using the internet and mobile devices. the user who is aware of how dangerous gases are.
NFR-2	Security	Users and administrators should only be able to access the web application using password-protected login credentials.
NFR-3	Reliability	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	Performance	To stop incident, the user and admin must be informed via notification right away and within seconds.
NFR-5	Availability	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	Scalability	There must be at least 20-30 people to address the problem immediately once notified. Leakage must be detected simultaneously at many places.