

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

Date	15 October 2022
Team ID	PNT2022TMID45922
Project Name	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	Objective	The purpose of the system is to detect early gas leakage in the industries through the gas pipelines and alert the user with their location.
FR-2	Focus	To alert the user immediately if any gas leakage is sensed.
FR-3	Features	Gas leakage level will be indicated by the LED lights. It detects the different harmful gases like methane, LPG etc., by using the required sensors. It updates the sensor parameters in web applications.
FR-4	Essentiality	To prevent the industry workers from being exposed to toxic gases.
FR-5	Gas leakage location sent	Location sent to the web application through GPS module.

Non-Functional Requirements:

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

FR No.	Non-Functional Requirement	Description
FR-1	Usability	The web application is simple and easy to use. Efficiency is high.
FR-2	Reliability	The application runs accurately.
FR-3	Availability	The application can be accessed at any time and anywhere.
FR-4	Security	The web application is highly secure. Software is protected from unauthorized access.
FR-5	Scalability	Application is not limited to the users.