

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

Date	03 October 2022
Team ID	PNT2022TMID13200
Project Name	Gas leakage monitoring and 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	User Registration	Registration through Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Account creation in the IBM watson cloud	Registration through (Google,Apple,Microsoft) or password Registration
FR-4	User Performance	When the user get the alert, they could turn on water sprinkler or exhaust fan
FR-5	Creation of Web Applicaton	Update the server with location of gas leakage
FR-6	User Reception	The notification for the gas level and leakage can be send through messages

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	It updates data periodically and protects the workers in industries
NFR-2	Security	Users and admins can only access the web application through protected login function
NFR-3	Reliability	It will provide most accurate information and have capacity to recognize the hazardous gas which is true or not
NFR-4	Performance	Within a few seconds the user and admin must be alerted through notification to prevent damage
NFR-5	Availability	The circuit for an LPG leakage detector is readily available in the market, cost efficient
NFR-6	Scalability	Once the sensor got fails it can be easily replaced