PROJECT DESIGN PHASE- 2

TEAM ID	PNT2022TMID04029
DATE	30/11/2022
PROJECT NAME	GAS LEAKAGE MONITORING AND ALERTING SYSTEM
MAXIMUM MARKS	4 MARKS

SOLUTION REQUIREMENTS

FUNCTIONAL ⟷ NON - FUNCTIONAL

REQUIREMENTS   REQUIREMENTS
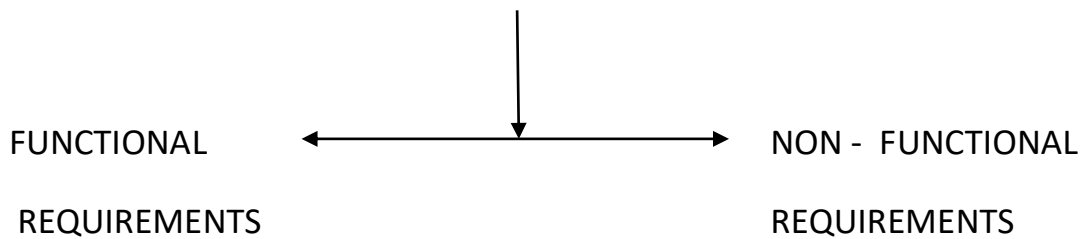
FUNCTIONAL REQUIREMENTS:

S.NO	Functional Requirements	Sub Requirements (sub tasks)
1	User Understanding	The user can monitor the level of gas with help of data or using sensor. If the gas level exceeds the threshold value the system alerts the user.
2	User Performance	When the user gets notified by the alert message .User can take precautions measure such as turning on the ventilation ,alerts the surrounding .
3	User Alert	User can get alert message through SMS and alarm by buzzer.

NON - FUNCTIONAL REQUIREMENTS :

S.NO	Non - functional Requirements	Requirement Description
1	Usability	The device must be easily usable by the customers and the device keeps on updating the data.
2	Security	Data from the device stored securely and in emergency situations the customer can able to protect both human and physical properties in the environment.
3	Reliability	The device must be able to provide accurate data and sense the gas with accurately and not to give false alert.
4	Performance	Exhaust fans and alarm can be used in case of emergency. Turning off the gas valve or fix the gas leaking area can also be done.
5	Availability	The device must with stand in harsh condition environment too. The device must continuously monitored the gas leakage day and night.
6	Scalability	The device must be capable of measuring the gas leakage even in large industries and sensors can be replaced.