

**ProjectDesignPhase-II**  
**SolutionRequirements(Functional&Non-**  
**functional)**

Date	19 November 2022
Team ID	PNT2022TMID30401
ProjectName	GasLeakageMonitoring&AlertingSystem
MaximumMarks	4 Marks

**FunctionalRequirements:**

Followingarethefunctionalrequirementsoftheproposedsolution.

FR No.	Functional Requirement(Epic)	SubRequirement(Story/Sub-Task)
FR-1	UserRegistration	<input type="checkbox"/> RegistrationthroughForm <input type="checkbox"/> OfflineRegistration
FR-2	UserConfirmation	<input type="checkbox"/> ConfirmationviaEmail <input type="checkbox"/> ConfirmationviaOTP
FR-3	User Authentication	<input type="checkbox"/> User verification through valid User ID andpassword.
FR-4	User Access	<input type="checkbox"/> RealtimeMonitoringof GasLeakageSystem,throughwebportalforAuthorizedUsers.
FR-5	User Alert	<input type="checkbox"/> UserreceivesanalertthroughSMS. <input type="checkbox"/> TurnonAlertingSysteminIndustry.
FR-6	ReviewandFeedback	<input type="checkbox"/> ReceiveFeedbackfromUsers.



### Non-functional Requirements:

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

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	<ul style="list-style-type: none"><li>□ Easier Installation process and easy to use</li></ul>
NFR-2	Security	<ul style="list-style-type: none"><li>□ Data transmission and handling through secured protocols.</li><li>□ Credential encryption &amp; Cloud security.</li></ul>
NFR-3	Reliability	<ul style="list-style-type: none"><li>□ Only authorized personnel have access to the system.</li><li>□ Assured Data Security and Information conciseness.</li><li>□ Longer Lifetime of Product/Service.</li></ul>
NFR-4	Performance	<ul style="list-style-type: none"><li>□ High Accuracy of gas leakage detection in localized area.</li><li>□ Faster Response to Gas Leakage Detection (SMS alert, valve closing).</li></ul>
NFR-5	Availability	<ul style="list-style-type: none"><li>□ The user can access the system 24/7. □ Real-time monitoring system.</li></ul>
NFR-6	Scalability	<ul style="list-style-type: none"><li>□ The system is scalable even in case of many gas sensors. Or in case of many supervisors.</li></ul>

