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

Date	13 October 2022
Team ID	PNT2022TMID14913
Project Name	Project – 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
FR-2	User Confirmation	❖ Confirmation via Email ❖ Confirmation via OTP
FR-3	User SIGN IN	❖ User can sign in with username and password
FR-4	Connect the NODEMCU device	❖ Connect the NODEMCU device with application through Wifi.
FR-5	Update contact details	❖ Update the emergency contact number.
FR-6	REALTIME MONITORING	❖ It display the temperature level in pictorial representation using flow chart.
FR-6	Output	❖ In Emergency situation, it sends alert message to emergency contact number. ❖ It sends message to fire service.
FR-7	Review and Feedback	❖ User can share their experience about the app usage. ❖ Provide feedback

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	❖ In Industries, we use this device to avoid the fire accidents. ❖ The device can be accessed through Wifi.
NFR-2	**Security**	Only authorised person can access the important details.
NFR-3	**Reliability**	❖ Prevent from accidents. ❖ Avoid false Alarm. ❖ It Should avoid the delay alert message.

NFR-4	**Performance**	In a gas usage industries, the gas is transferred from one end to another end through pipes at the time gas leakage is possible. We use this device to detect the gas leakage and gives buzzer alarm and send alert message to nearest police station and fire service department.
NFR-5	**Availability**	This model is used to continuously monitor and display the gas level and check the gas level is exceed or not.
NFR-6	**Scalability**	Lot of users can access the application at the same time without any inconvenience.