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

Date	22 October 2022
Team ID	PNT2022TMID49260
Project Name	Hazardous area monitoring for industrial power plant powered by IoT
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	Monitoring	❖ To monitor the condition of area ❖ To monitor the temperature ❖ To monitor these places will be given a wearable device which will be acting as a beacon scanner
FR-4	Remote Temperature monitoring	❖ Using LM35 Sensor and Intimate
FR-5	Module	❖ Arduino module is displayed in(16x2LCD) ❖ Analog to digital(ADC) converter is used to measure the Voltage and current. ❖ LED glow when there is some gas leak

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Area monitoring are great tool that can used to see whether gas hazards on your place
NFR-2	**Security**	More secure and receive alert to the mobile through SMS
NFR-3	**Reliability**	Reliable communication between workers and fixed base station
NFR-4	**Performance**	Model will achieve high accurancy with good potential.
NFR-5	**Availability**	Hazardous area monitoring using Embedded system and WSN
NFR-6	**Scalability**	Scalable