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

Date	15 October 2022
Team ID	PNT2022TMID13542
Project Name	Hazardous Area Monitoring for Industrial 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	Communicate and exchange information to provide server for user	To monitor the temperature parameter of theHazardous area in industrial plants. Alert the person working in those areas and admins ofthat particular plant through SMS using API.
FR-2	Live asset monitoring	Set the reference Temperature Detect the temperature and the particular location. Warning when the temperature raise to set temperature.
FR-3	User requirement	Easily integrate with the current solution It eliminates the time consuming process and workers requirement. Improve efficiency.
FR-4	Mandatory	Keep safe from unexpected injuries. The reduction of human risk. Spotting disastrous earlier and taking precautions. The required information exist for a long time.
FR-5	Testing Reference Temperature(T1) Crossed the Reference Temperature	The test case status is pass if When the current temperatures equal to reference temperature(T1). Once the temperature cross the warning SMS will be sent to the workers and admins of the plant.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	High usability of user experience design for user, which is to solve the problem efficiently.
NFR-2	**Security**	The system can accessed by authorized person only.
NFR-3	**Reliability**	Monitoring the temperature parameter and providing clear solution for it, by accurate real time data collection.
NFR-4	**Performance**	The Performance should be very effective and efficient.
NFR-5	**Availability**	The existing system affects the workers due to a minute error may lead to great loss and the company may face the catastrophic failure.
NFR-6	**Scalability**	Website traffic limit must be scalable enough to support users at a time. The system should have upgradable feature.