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

Date	13 October 2022
Team ID	PNT2022TMID32725
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	User Registration	Registration through Form Registration through Gmail Registration through LinkedIN
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Login	Login through Registered Email Login through Registered Mobile Number Login through individual id/password
FR-4	User Verification	Verification through Email login Two-step verification
FR-5	User Dashboard	Access via Mobile Application
FR-6	User Authentication	Authenticate signin of unknown devices via email

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	There are different kinds of usability criteria. Such as Efficiency,Satisfaction.Our solution allows a user to know about the industrial environment.Like temperature level,toxic gases,flame produced by burning.And it sends messages to alert the user whenever it needs.

NFR-2	**Security**	**Security** is preventing all the data inside the system.It prevents the internal parts of a system and they need to be protected against unauthorized access.To secure the data our solution provides necessary data flow and it describes the user actions.
NFR-3	**Reliability**	**Reliability** is an aspect of performance that refers to how consistently the project does what it's supposed to do.Our solution is very much reliable as it monitors continuously and sends real time analysis of the particular area.
NFR-4	**Performance**	**Performance** describes the efficiency of the product.Product performance is described as the response of a product to external actions in its working environment.Our solution explains how long a user must wait before the target operation happens(the page renders,errors etc.,)given the overall number of users at the moment.
NFR-5	**Availability**	**Availability** explains how likely the system is available to a user.It describes the accessibility of a user at a certain time.You may also define it as a percentage of time the system is accessible for operation during some time period.
NFR-6	**Scalability**	**Scalability** defines the ability of a computing process to be used or produced in a range of capabilities.Our solution ensures the safety of each and every worker working in the industry by alarm and sending alert messages.It provides access to multiple users and they can receive the alert messages simultaneously in case of any emergency.