Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	13 October 2022
Team ID	PNT2022TMID17322
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
FR-2	User Confirmation	● Confirmation via Email ● Confirmation via OTP
FR-3	Cloud Registration	● Registration through Gmail
FR-4	Cloud Confirmation	● Confirmation via OTP and Email
FR-5	User Login	● Login using credentials
FR-6	User testing	● Only verify any alert messages
FR7	User action	● There is any alert message, admin alert the workers
FR8	Authentication	● Through OTP verification ● Through Strong passwords
FR9	Administration functions	● Preventing and monitoring each and every second. There is any deviation Admin send an alarm to workers.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Our solution is intended for wide range of users including industries which work under the hazardous area.
NFR-2	**Security**	Security is high because we attached step by step verification code.
NFR-3	**Reliability**	Reliability is high because of the continuously tracking to predict the accidents caused due to environmental factors.
NFR-4	**Performance**	Regarding the continuous monitoring of the environmental parameters as well as workers body condition, when There is any deviation detected, Send an alert message to admin. Which results in better performance.
NFR-5	**Availability**	This application is available to use online and also it will meet all the requirements of the users with better services.

NFR-6	**Scalability**	Users can access the application seamlessly without any interrupts of errors and the sensors are used in this framework are low budget functionalities, Hence they are highly scalable