

Project Design Phase-II
Functional & Non-functional Requirements

Date	17 October 2022
Team ID	PNT2022TMID19670
Project Name	Hazardous Area Monitoring for Industrial Plants 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	<ul style="list-style-type: none">➤ Registration through Gmail➤ Registration by creating a new user name and password
FR-2	User Confirmation	<ul style="list-style-type: none">➤ Confirmation via Email➤ Confirmation via OTP
FR-3	Cloud Registration	<ul style="list-style-type: none">➤ Registration via Email➤ Registration by creating a new user name and password
FR-4	Cloud Confirmation	<ul style="list-style-type: none">➤ Confirmation via Email➤ Confirmation via OTP
FR-5	User login	<ul style="list-style-type: none">➤ Login using the credentials we have used during registration
FR-6	User testing	<ul style="list-style-type: none">➤ Only verify any alert messages
FR-7	User action	<ul style="list-style-type: none">➤ There is any alert message,admin alert the workers
FR-8	Authentication	<ul style="list-style-type: none">➤ Through OTP verification➤ Through Strong passwords
FR-9	Administration functions	<ul style="list-style-type: none">➤ 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 workers who works in industries under hazardous area
NFR- 2	Security	➤ Security is very high as we provide step by step verification code
NFR-3	Reliability	➤ Reliability is high because of timely update ➤ As a result of continuous tracking accident can be predicted
NFR-4	Performance	➤ When there is any deviation occurs ,it send an alert message to admin which results in better performance
NFR-5	Availability	➤ It can be enabled at any system like laptop,PC,Smart watch, android phone and user friendly ➤ 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 ➤ The sensors are used in this frame work are low budget functionalities hence they are highly scalable