

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

Date	20 May 2023
Team ID	NM2023TMID02223
Project Name	Industrial workers health and safety system based on the IOT

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Measuring parameters	Measure the Temperature using DHT Sensor Measure the Pressure Count the Foot steps
FR-2	Store the Information in the cloud	IBM Watson IOT platform
FR-3	Cloud connected with web application	Node-Red
FR-4	Monitoring and Alerting	Authorised person

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Real-time monitoring, Enhanced safety measures.
NFR-2	Security	Device authentication, Data encryption, Access control
NFR-3	Reliability	Redundancy and fault tolerance, Reliable connectivity, Continuous monitoring and maintenance, Testing and validation
NFR-4	Performance	Data collection and processing speed, Low latency, Scalability
NFR-5	Availability	Service level agreements (SLAs), Regular maintenance and updates, Monitoring and alerting
NFR-6	Scalability	Distributed processing, Data storage scalability, Elasticity, Load testing and performance optimization