

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

Date	17 May 2023
Team ID	NM2023TMID09251
Project Name	Industrial Workers Health and Safety System based on Internet of Things

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 Gmail
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Mobile support. Users must be able to interact in the same roles and on the same tasks on computers and mobile devices where practical, given mobile capabilities.
NFR-2	Security	Data security. All persisted data requires secure access. Device security. Devices must register and communicate securely, such as by using transport layer security (TLS). Unauthorized devices are prohibited.
NFR-3	Reliability	Its easy to use
NFR-4	Performance	Function offload to the edge. The system must have a centralized configuration with offload to the edge for rules-based decision-making and streaming analytics. Hybrid cloud. It must be possible to deploy the platform layer on premises, in the cloud, or part on premises and part in the cloud.
NFR-5	Availability	High availability (HA). Some IoT solutions and domains demand highly available systems for 24x7 operations. That said, this type of system isn't a <i>critical production</i> application, which means that operations or production don't go down if the IoT solution is down

NFR-6	Scalability	Horizontal scalability. The system must handle expanding load and data retention needs that are based on the upscaling of the solution scope, such as extra manufacturing facilities and extra buildings.
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