**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 critical production 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. |