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

Date	13 May 2023
Team ID	NM2023TMID16319
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 Form Registration through Gmail Registration through LinkedIN
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Sensor Integration	integration with different types of gas pipeline sensors, sensors that measure pressure, flow rate, temperature, humidity.
FR-4	Real-Time Data Collection and Processing	collect and process industry atmosphere data in real-time
FR-5	Alerting and Notification	multiple notification options, including email, SMS, and mobile notifications, to ensure prompt response.
FR-6	User Interface	user-friendly interface, allowing industry workers to easily access and view data, alerts, and notifications.

Non-functional Requirements:

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

NFR-1	**Usability**	The system should be easy to use, with a userfriendly interface that provides relevant information in a clear and concise manner.
NFR-2	**Security**	The system should have strong security measures in place to prevent unauthorized access, ensure data privacy, and protect against cyber threats.

NFR-3	**Reliability**	The system should be highly reliable, ensuring that it operates continuously without downtime, and that it can handle large volumes of data from multiple sensors without failure
NFR-4	**Performance**	The system should be capable of processing and analyzing data from multiple sensors in real-time, ensuring timely detection and response to issues.
NFR-5	**Availability**	The system should be available 24/7 to monitor the , and be designed to minimize any planned or unplanned system downtime.
NFR-6	**Scalability**	The system should be scalable to accommodate future growth, with the ability to add more sensors and scale processing capabilities as needed.