

Project Design Phase-I
Proposed Solution Template

Date	06 May 2023
Team ID	NM2023TMID16319
Project Name	Industrial Workers Health and Safety System based on Internet of Things

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Develop an IoT-based system for real-time health and safety monitoring of industrial workers, addressing the limitations of manual inspections. The system will integrate sensors, devices, and data analytics to collect and analyze data on temperature, humidity, gas levels, noise levels, and worker vital signs. It will enable location tracking for worker safety in hazardous areas. Real-time processing and analysis will detect anomalies and potential hazards, triggering immediate alerts through various channels. The system will provide a user-friendly interface for workers and supervisors, allowing incident reporting and real-time monitoring. It will generate reports and analytics to identify trends and areas for improvement, optimizing health and safety protocols.
2.	Idea / Solution description	The solution involves the integration of various IoT components, including sensors, devices, connectivity infrastructure, and data analytics. These components work together to collect, transmit, and analyze critical data related to worker health and safety.
3.	Novelty / Uniqueness	offers several unique features: Real-time Monitoring Comprehensive Data Collection Proactive Hazard Detection Location Tracking
4.	Social Impact / Customer Satisfaction	Enhanced Worker Safety Timely Incident Response Empowerment and Engagement
5.	Business Model (Revenue Model)	Hardware Sales Software Licensing Subscription or Service Fees Data Analytics and Insights
6.	Scalability of the Solution	Sensor and Device Integration Network Infrastructure Cloud-based Architecture

