

Project Design Phase-I
Proposed Solution Template

Date	27 September 2022
Team ID	PNT2022TMID04554
Project Name	Project - Industry Specific Intelligent Fire Management System
Maximum Marks	2 Marks

Proposed Solution Template:

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

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To improve the safety management system in industries. Improving the safety management system against the fire incidents in industries.
2.	Idea / Solution description	To implement the fire safety management in industry based on IOT using Arduino uno board with fire detection and fire extinguisher system. And using some sensors (Humidity sensor, Flame sensor, smoke sensor) with GPS tracking system.
3.	Novelty / Uniqueness	Usage of liquid Nitrogen. Liquid nitrogen will immediately vaporize causing a cooling effect and makes the site deprived of oxygen. Using water sprinklers after liquid nitrogen can put off even intense fire effectively.
4.	Social Impact / Customer Satisfaction	1) Harmful gasses can be purified and released into atmosphere 2) Cause of impact can be traced from the sensor data that can be analyzed to prevent future accidents.
5.	Business Model (Revenue Model)	1) This is used to calculate the probability of ignition and spread of fires across a landscape. 2) This outcome allows for a better understanding of how changes in one aspects of management can affect other aspects of management.
6.	Scalability of the Solution	It is trying to execute this technique as we need to introduce an arduino gadget which was modified with an Arduino that takes received signals from sensors .Easy reliability and maintenance. Required low time for maintenance. Cost is reasonable.