Project Design Phase-I
Proposed Solution
Industry-specific intelligent fire management system

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To enhance the industry's safety management system and To improve the safety management system in industries. Enhancing the safety management system to prevent industrial fire occurrences and Improving the safety management system against the fire incidents in industries.
2.	Idea / Solution description	Combining an Arduino Uno board with a fire detection and fire extinguisher system, to establish IOT-based fire safety management in the industrial sector. Additionally, a GPS tracking system is used with some sensors (such as a humidity, flame, and smoke sensor).In the proposed model, a gas sensor, flame sensor and temperature sensors are used for the detection of fire.
3.	Novelty / Uniqueness	A fire detection system uses a smoke detector to detect a fire before it actually starts. An effective fire detection system eliminates damage by ensuring that a fire can be prevented before it even starts. A fire detector may also have a direct connection to an alarm monitoring centre. The smart fire management system includes a Gas sensor, Flame sensor and temperature sensors to detect any changes in the environment. Based on the temperature readings and if any gases are present then the alarm is triggered. If any flame is detected the sprinklers will be switched on automatically. Emergency alerts are notified to the authorities and fire station
4.	Social Impact / Customer Satisfaction	The number one reason to install a fire alarm is to make the building safe for your employees, customers, and tenants. A combination of smoke and heat detectors, sirens and bells, and strobe lights detect fires and alert building occupants, giving them ample time to evacuate in an orderly fashion. Using automatic fire sprinklers protects the environment while further verifying that they reduce property damage and protect lives. It reduces financial loss in industries. It early prevents the accident cost by fire in industries . It acts very accurately, finely and user friendly. As the automation of fire extinguishing is done and life of lot of workers Is saved

5.	Business Model (Revenue Model)	Many sectors can use this product. Given the numerous sectors that are currently involved in saving people and machinery from fire accidents, this might be seen as a useful and productive item and It can be used in many industries. If it is made at easy installation there will lot of use of this device and it should be user friendly and eco- friendly as well.
6.	Scalability of the Solution	The proposed model can be used in textile industries, paper industries, automobile industries, mining industries, cracker industries, cement industries etc and It could be done in cost effective and work effective. As we are using normal sensors we can make it less cost , effective and with good compatibility.