

## Project Design Phase-I Proposed Solution Template

Date	01 November 2022
Team ID	PNT2022TMID15035
Project Name	Project - Industry-specific intelligent fire management system
Maximum Marks	2 Marks

### 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)	To improve the safety management system against the fire incidents in industries.
2.	Idea / Solution description	<ul style="list-style-type: none"> <li>To establish smart fire management system using IOT technology which automates fire extinguishing process and save lives and properties.</li> <li>This smart fire management system includes a Gas sensor, Flame sensor and temperature sensors to detect any changes in the environment.</li> <li>Based on the temperature readings and if any Gases are present the exhaust fans are powered ON.</li> <li>If any flame is detected the sprinklers will be switched on automatically.</li> <li>Emergency alerts are notified to the authorities and Fire station.</li> </ul>
3.	Novelty / Uniqueness	The use of gas sensor, Flame sensor and temperature sensor detects the change in the environment and if any fire incidents happen it extinguish the fire and sends an emergency alert to the authorities and fire station.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> <li>To get rid of fear over fire accidents.</li> <li>To reduce the fire accidents in industries.</li> <li>To reduce the loss of lives.</li> <li>To make a secured society.</li> </ul>
5.	Business Model (Revenue Model)	<p style="text-align: center;">Industry-specific intelligent fire management system</p> <pre> graph LR     A([Detects the smoke /fire using sensor and fire detector]) --&gt; B([If any Gases are present the exhaust fans are powered ON.])     B --&gt; C([If any flame is detected the sprinklers will be switched on automatically.])     C --&gt; D([Emergency alerts are notified to the authorities and Fire station]) </pre>
6.	Scalability of the Solution	<ul style="list-style-type: none"> <li>This working model gives a high scalability</li> <li>Low cost and easy to implement technology</li> <li>Can be used more efficiently.</li> <li>Practically implementable and reliable solution</li> </ul>