

**Project Design Phase-I**  
**Proposed Solution**

Date	24 September 2022
Team ID	PNT2022TMID35932
Project Name	Hazardous Area monitoring in Industrial Plant powered by IOT.
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 monitor the temperature in Industrial plants by using IOT enabled devices.
2.	Idea / Solution description	<p>Temperature sensors can be interfaced with a light weight microcontroller, which will make the monitoring device wearable for industrial workers.</p> <p>The Microcontrollers are to be interfaced with LORA communication devices to enable them to communicate with distributed gateways that can be placed across the plant.</p> <p>The Gateways are to be connected to the internet through which the temperature across the plant can be monitored.</p>
3.	Novelty / Uniqueness	<p>The devices available currently with similar functions are fixed on single position, and hence are costly to monitor the temperature across the area of the device.</p> <p>The proposed solution's novelty is that, The sensing device are mobile and hence can give accurate measurements of temperature in periphery of the Industry worker.</p>
4.	Social Impact / Customer Satisfaction	<p>The proposed solution upon its full completion can ensure better safety at an individual level.</p> <p>This boosts the confidence of the Industrial Personnel in their work environment which has the potential to boost the productivity of the Industry.</p>
5.	Business Model (Revenue Model)	The proposed solution acts as a cost effective upgrade to the current technology used in the industry.
6.	Scalability of the Solution	The solution can be scaled to include gas sensors and other wide variety of sensors enabling better vigilance on safety.