Project Design Phase-I
Proposed Solution

Date	5 October 2022
Team ID	PNT2022TMID01194
Project Name	Hazardous Area Monitoring for Industrial Plant powered by IoT.
Maximum Marks	2 Marks

Proposed Solution :

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To monitor and alert the industrial workers the risk of toxic or hazardous gases within the area of an industry, ensuring the safety of the workers. Difficulty in continuous manual monitoring of temperature and communication in hazardous areas.
2.	Idea / Solution description	The hazardous area is integrated with smart temperature beacons which will be sensing and broadcasting the temperature of that particular area. Every person working in those areas will be given smart wearable devices which will be acting as beacon scanners. Whenever the person goes near the beacons, he can view the temperature on his wearable device and if the temperature is high, he will receive the alerts to the mobile through SMS using API.
3.	Novelty / Uniqueness	• Makes it easier to know the temperature (or) any hazardous gases present in the area without the worker having to constantly doing manual checks. • Smart wearable devices are used. • Alerts via SMS to mobiles of the workers when high temperature is detected. • Alerts on both the wearable device and mobile application occurs simultaneously to prevent the worker from entering into hazardous areas.
4.	Social Impact / Customer Satisfaction	• Ensures safety. • Comfortable & User-friendly. • Simple and reliable. • More focus on work without any fear.

5.	Business Model (Revenue Model)	• Through our mobile application the revenue can be made in the form of pop-up advertisements, overlay ads from third party services. • Wearable devices can be priced and sold by the industry to the workers. • Can be implemented in different hazardous areas.
6.	Scalability of the Solution	• It ensures the safety of each and every worker working in harmful gases and high temperature environment. • By increasing the number of devices, this can be implemented in a commercial level. • In future, other elements like radiation and gases can also be monitored.