PROJECT DESIGN PHASE - I

PROPOSED SOLUTION

Date	31 October 2022
TEAM ID	PNT2022TMID42645
PROJECT TITLE	HAZARDOUS AREA MONITORING IN INDUSTRIAL PLANTS
MAXIMUM MARKS	2

Proposed Project 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**	Temperature sensor interfaced with a miniaturized microcontroller, with latest temperature sensor to monitors temperature and gases inside the plant. As all the workers in the power plant would be wearing a helmet, the device installed at the front of the helmet. Then it would have an ultrasonic sensor so there is a distance alert when the temperature goes beyond the actual operating temperature.
3.	**Novelty/Uniqueness**	The device will be compact, and microcontroller used is an Arduino UNO rev3 or Pyboard for utilizing advanced technology. Uses Infrared temperature sensor for monitoring temperature. Wifi module to upload all the data to the cloud and maintain the daily data and for verifications.
4.	**Social Impact /Customer Satisfaction**	It will be more efficient, compact, lower power utilization and repairable. The product will be more reliable and will make the industrial supervisor recommend to the other plant and organization that require such devices.
5.	**Business Model (Revenue Model)**	The proposed design will be cheaper and be more efficient and effective for the prize the industry spend.
6.	**Scalability of the Solution**	We product will include a Miniaturized MOS sensor for monitoring the gaseous fuel level inside the power plant.