

Project Design Phase-I Solution Architecture

Date	20 October 2022
Team ID	PNT2022TMID41855
Project Name	Hazardous area Monitoring For industrial plant powered by IOT
Maximum Marks	4 Marks

Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- To monitor the condition, we can integrate the smart device in the area which are needed to be monitored every device will be acting as a beacon and it is connected to temperature sensors.
- In this project, we create an IoT-based hazards monitoring system specifically suited to the requirements of mining, refining, and manufacturing industries
- The system actively records, processes and analyzes the temperature of the surroundings, which is a prime safety parameter in areas where molten metal is processed, manufacturing is done or welds are made. if a parameter is violated, the system sends an immediate notification to a set of a preset list of users on their smartphone and continues logging and monitoring data for further analysis to suggest improvements in the safety regulation of the industry.
- broadcast the temperature data along with the location of that particular area through beacons. The persons who generally monitor these places will be given a wrist band and cell phones by alerting the call and SMS.
- Whenever the person enters the desired area then he can view the required parameters and can be alerted, these are sent to the cloud storage.

Solution Architecture

