

Project Design Phase-I
Solution Architecture

Date	1 October 2022
Team ID	PNT2022TMID17430
Project Name	Hazardous Area Monitoring in 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 temperature in areas of industrial plants using IOT enabled devices .
- Temperature sensors are interfaced with a light weight microcontroller which make them wearable. These microcontrollers are interfaced with LORA communication devices to communicate with distributed gateways. These gateways are connected to the internet through which the temperature is monitored.
- The devices (E.g., BEACON) with similar features which are available now are fixed in a single position and they are costly.
- The sensing devices are mobile and hence they can give accurate measurements of temperature across the industrial plant.
- The proposed solution communicates about the temperature across the industrial plant monitored through sensors, to the users .It can be scaled to include gas sensors and other wide variety of sensors enabling safety of the users.

Solution Architecture Diagram:



