Project Objectives

Team ID	PNT2022TMID00340
Project Name	Hazardous Area Monitoring for Industrial Plant powered by IoT

Project Title:

Hazardous Area Monitoring for Industrial Plant powered by IoT

Category:

Internet of Things

Project Flow:

- Send Temperature and Humidity sensor values to the IBM Watson IoT platform.
- Sensors values can be viewed in the Web Application created using Node-RED Service.
- Notify the admin the sesnor values cross the threshold limit.
- The sensor values can also be viewed in the mobile application created using MIT App Inventor.

Project Description:

The Hazardous area monitoring system will allow us to monitor the critical parameters like temperature, humidity,etc of dangerous locations in industrial plants. Smart beacons would be deployed in these dangerous locations, and they will be reporting the critical parameters measured. Smart wearables that serve as beacon scanners will be distributed to everyone working in the industrial plant. The critical parameters can be viewed on the wearable device whenever a person is close to a beacon scanner, and if any critical parameter exceeds critical limit, the personnel will receive alerts to their mobile phones via SMS utilising API. The admins of that specific plant can check the data on the dashboard and, if necessary, take the appropriate measures after the data has been transferred to the cloud via this wearable device.

Proposal:

Hazardous elements within an industrial plant can be monitored at a cost effective and efficient way by using Sensor-cloud Technology and Remote sensing applications.