Project objectives

Date	17 November 2022
Team ID	PNT 2022 TMID30897
Project Name	Gas leakage monitoring and alarting system

By the end of this project, we will:

- Gain knowledge of Watson Iot Platform
- Connecting Iot devices to the Watson Iot Platform and exchange the sensor data.
- Gain knowledge on Cloudant DB.
- Gain knowledge on using the Clarifai service.
- Gain knowledge of storing images in IBM object storage and retrieving images. creating a web application through which the user interacts ith the devices.

Project flow:

The device will monitoring and detect the gas leakage service.

- If any gas leakage occur is monitoring and detected the image will be captured and stored in the IBM cloud object service.
- It also generates an alarm and indicate the gas leakage .

The image URL will be stored in the IBM Cloudant DB service

The device will also monitor the gas , temperature, and humidity values and send them to the IBM IOT platform.

The image will be retrieved from object storage and displayed in the web application.

- A web application is developed to visualize the gas temperature and humidity values.
- Users can also control the monitor through web applications to accomplish this, we have to complete all the activities and taskslisted below:

  Create and configure IBM cloud services

  Create IBM Waston IOT platfoím.

  Create a device & configure the IBM platform.create Node-RED service.

  Create a database in Cloudant DB to store location data.

Create a cloud object storage service and create a bucket to store the images.

Develop a python script to publish the sensor parameters like temperature Humidity, and gas to the IBM Iot platform.

- Develop a web application using Node=RED service, Display the image in the Node-RED web UI and also display the temperature humidity and levels.