PROJECT DEVELOPMENT PHASE

PROJECT DEVELOPMENT DELIVERY OF SPRINT 1

Date	**11-11-2022**
Team ID	**PNT2022TMID34548**
Project Name	**Smart Waste Management System For Metropolitan Cities**

ABOUT OUR TOPIC:

Smart Waste Management System for Metropolitan Cities:

The waste collection process is a critical aspect for the service providers. The traditional way of manually monitoring the wastes in waste bins is a complex, cumbersome process and utilizes more human effort, time and cost which is not compatible with the present day technologies. In order to overcome all these problems, we are proposing the idea of a waste management system which helps in the management of waste with the least human interaction in order to maintain a clean environment.

IOT Garbage Monitoring System monitors the garbage bins and informs about the level of garbage collected in the garbage bins via a message .We are making use of various sensors to scan type of garbage and then categorize them to different bins by automatically opening the door. It also uses ultrasonic sensors placed over the bins to detect the garbage level. Our system works on solar energy. If the dustbin is not cleaned in a specific time, then the record is sent to the higher authority who can take appropriate action. This system also helps to monitor the fake reports and hence can reducecorruption in the overall management system. It will stop overflowing of dustbins along roadsides and localities as smart bins are managed at real time. The filling and cleaning time of smart bin will also be reduced thus making empty and clean dustbins available to common people.

THINGS TO BE DONE:

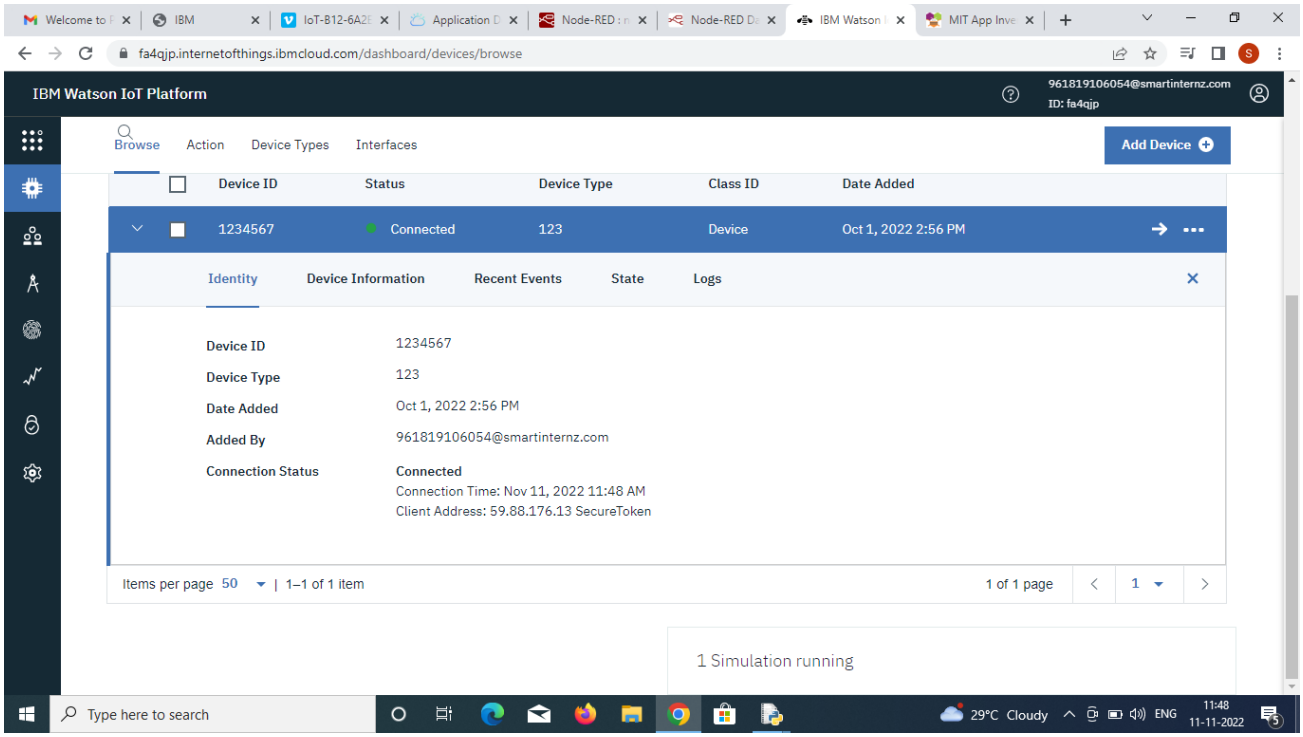
- To develop the Application using given deliverables
- To create IBM Watson Cloud and to link with the application developed
- To create Node Red Service
- To express the Python Code and simulate successfully in IBM Cloud

IBM WATSON IOT Platform:

Device Description:

We have created a New Device 1234567, where the Device Type is 123. When the codes uploaded in the Simulation device section becomes True, the outputs will be appeared in the Recent Event site below the Respected Device block. The output displays until the python code is Switched OFF.

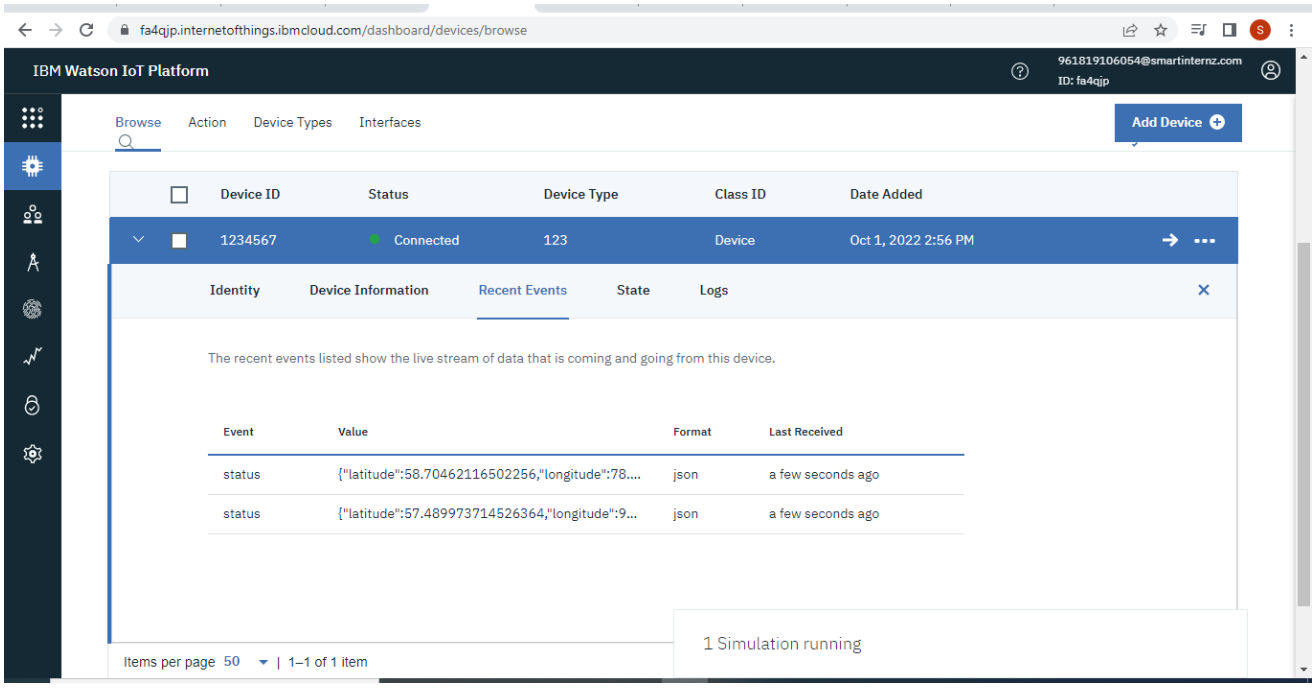
Device Creation:



The device is connected to the code and the data is transferred in the recent events in the IBM Watson IOT platform.

Recent Events:

The bin value with latitude and longitude is sent to the IBM Watson IOT platform, Whenever the bin value is above the maximum value. When the bin is in normal level no message is sent to the IBM.


fa4qjp.internetofthings.ibmcloud.com/dashboard/devices/browse
IBM Watson IoT Platform
961819106054@smartinternz.com
ID: fa4qjp
Browse
Action
Device Types
Interfaces
Add Device
Device ID
Status
Device Type
Class ID
Date Added
1234567
Connected
123
Device
Oct 1, 2022 2:56 PM
Identity
Device Information
Recent Events
State
Logs
The recent events listed show the live stream of data that is coming and going from this device.
Event
Value
Format
Last Received
status
{"latitude":58.70462116502256,"longitude":78....
json
a few seconds ago
status
{"latitude":57.489973714526364,"longitude":9...
json
a few seconds ago
Items per page 50
1–1 of 1 item
1 Simulation running

THANK YOU