TEAM ID : PNT2022TMID16088

PROJECT : SMART WASTE MANAGEMENT SYSTEM FOR METROPOLITAN CITIES

SPRINT 1

In sprint 1 we have developed the code for smart waste management and seen output in python idle.

```python
# Project : Smart Waste Management
# Team ID : PNT2022TMID01046
import requests
import json
import ibmiotf.application
import ibmiotf.device
import time
import random
import sys

# watson device details

organization = "ms9s4l"
devicType = "Project"
deviceId = "TMID01046"
authMethod= "token"
authToken= "13150415"

#generate random values for randomo variables for distance and loadcell


def myCommandCallback(cmd):
    global a
    print("command recieved:%s" %cmd.data['command'])
    control=cmd.data['command']
    print(control)

try:
    deviceOptions={"org": organization, "type": devicType,"id": deviceId,"auth-method":authMethod,"auth-token":authToken}
    deviceCli = ibmiotf.device.Client(deviceOptions)
except Exception as e:
    print("caught exception connecting device %s" %str(e))
    sys.exit()

#connect and send a datapoint "distance and loadcell" with value integer value into the cloud as a type of event for every 10 seconds
deviceCli.connect()

while True:

    distance= random.randint(10,70)
    loadcell= random.randint(5,15)
    data= {'dist':distance,'load':loadcell}

    if loadcell < 13 and loadcell > 15:
        load = "90 %"
```

```
Python 3.7.8 (tags/v3.7.8:4b47a5b6ba, Jun 28 2020, 08:53:46) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
=============== RESTART: C:\Users\aksha\OneDrive\Desktop\bin4.py ===============
2022-11-12 14:34:04,621   ibmiotf.device.Client        INFO    Connected successfully: d:ms9s4l:Project:TMID01046
Chennai
published distance = 26  loadcell:12  lon = 78.135731  lat = 10.939091
0 %
Risk warning:dumpster is above 60%
alert :No need to collect right now
Chennai
published distance = 26  loadcell:12  lon = 78.135731  lat = 10.939091
0 %
Risk warning:dumpster is above 60%
alert :No need to collect right now
Chennai
published distance = 59  loadcell:8  lon = 78.135731  lat = 10.939091
0 %
Risk warning:40 %
alert :No need to collect right now
Chennai
published distance = 59  loadcell:8  lon = 78.135731  lat = 10.939091
0 %
Risk warning:40 %
alert :No need to collect right now
Chennai
published distance = 59  loadcell:8  lon = 78.135731  lat = 10.939091
0 %
Risk warning:40 %
alert :No need to collect right now
Chennai
published distance = 59  loadcell:8  lon = 78.135731  lat = 10.939091
0 %
Risk warning:40 %
alert :No need to collect right now
Chennai
published distance = 63  loadcell:15  lon = 78.135731  lat = 10.939091
0 %
Risk warning:17 %
alert :No need to collect right now
Chennai
published distance = 63  loadcell:15  lon = 78.135731  lat = 10.939091
0 %
Risk warning:17 %
alert :No need to collect right now
Chennai
published distance = 32  loadcell:12  lon = 78.135731  lat = 10.939091
```