Project Development Phase
Sprint 1

Date	25 October 2022
Team ID	PNT2022TMID04593
Project Name	Smart waste management system for metropolitan cities
Maximum Marks	8 Marks

Python script and output

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

File Edit Format Run Options Window Help

```python
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random

#Provide your IBM Watson Device Credentials
organization = "kmqq03"
deviceType = "BIN1"
deviceId = "BINID"
authMethod= "token"
authToken = "123456789"


#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
```

Ln: 5 Col: 0