SPRINT-3

Date	12 November 2022	
Team ID	PNT2022TMID47478	
Project Name	SMART SOLUTIONS FOR RAILWAYS	

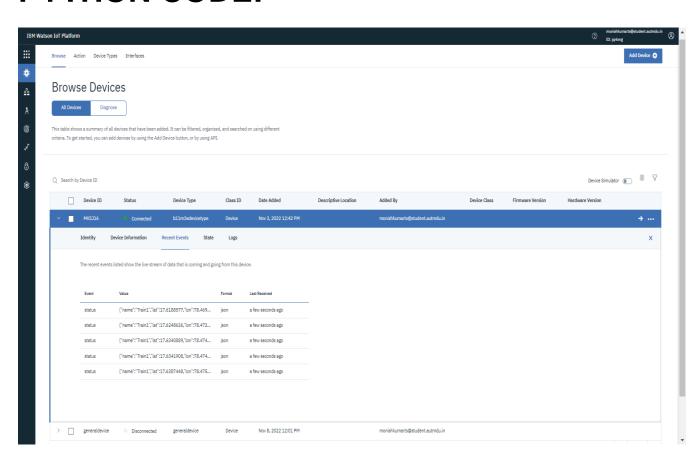
A python code for publishing the location (latitude and longitude) data to the IBM loT Platform:

```
PYTHON CODE FOR PROJECT.py - C:\python\Python37\PYTHON CODE FOR PROJECT.py (3.7.0)
File Edit Format Run Options Window Help
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
       "orgId": "jqr6mg",
"typeId": "b11m3edevicetype",
       "deviceId": "MKSJ16"}
    "auth": {
        "token": "25214317"
def myCommandCallback(cmd):
   print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
   m=cmd.data['command']
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
def pub (data):
   client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
   print("Published data Successfully: %s", myData)
   myData={'name':'Train1','lat': 17.6387448,'lon': 78.4754336}
    pub (myData)
    time.sleep(3)
    #myData={'name':'Train2','lat':17.6387448,'lon': 78.4754336}
    #pub (myData)
    #time.sleep(3)
   myData={'name':'Train1','lat': 17.6341908,'lon': 78.4744722}
    pub (myData)
    time.sleep(3)
   myData={'name':'Train1','lat': 17.6340889,'lon': 78.4745052}
   pub (myData)
    time.sleep(3)
   myData={'name':'Train1','lat': 17.6248626,'lon': 78.4720259}
   pub (myData)
    time.sleep(3)
   myData={'name':'Train1','lat': 17.6188577,'lon': 78.4698726}
    pub (myData)
    time.sleep(3)
   myData={'name':'Train1','lat': 17.6132382,'lon': 78.4707318}
   pub (myData)
    time.sleep(3)
    client.commandCallback = myCommandCallback
client.disconnect()
```

OUTPUT OF PYTHON CODE:



IBM IOT WATSON OUTPUT USING PYTHON CODE:



PYTHON CODE FOR SCANNER:

```
scanning code for project.py - C:\python\Python37\scanning code for project.py (3.7.0)
File Edit Format Run Options Window Help
import cv2
import numpy as np
import time
import time
import pyzbar.pyzbar as pyzbar
from ibmcloudant.cloudant_v1 import CloudantV1
from ibmcloudant import CouchDbSessionAuthenticator
from ibm_cloud_sdk_core.authenticators import BasicAuthenticator
authenticator = BasicAuthenticator('apikey-v2-16u3crmdpkghhxefdi kvpssoh5fwezrmuup5fv5g3ubz', 'b0ab119f45d3e6255eabb978')
service = CloudantV1(authenticator=authenticator)
service.set_service_url('https://apikey-v2-16u3ermdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz:b0ab119145d3e6255eabb978e7e2f0')
cap= cv2.VideoCapture(0)
font = cv2.FONT_HERSHEY_PLAIN
          #print (a)
                      try:
                                response = service.get_document(
                                         db='booking',
doc_id = a
                               ).get_result()
print (response)
time.sleep(5)
                     except Exception as e:
    print ("Not a Valid Ticket")
    time.sleep(5)
          cv2.imshow("Frame", frame)
if cv2.waitKey(1) & 0xFF ==ord('q'):
cv2.destroyAllWindows()
client.disconnect()
```