## **DEVELOPING PYTHON SCRIPT**

Team ID	PNT2022TMID11461
Project	IoT Based Smart Crop Protection
	System for Agriculture
Date	Nov 7

## **LOCATION DATA**

import wiotp.sdk.device
import time
import random

myConfig={ "identity": ( "orgId": "gagtey", "typeId": "GPS", "deviceId": "12345"}, "auth": { "token": "12345678" }} 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, print("Published data Successfully: %s", myData)

while True:

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)

```
myData={'name': 'Trainl', 'lat': 17.6340889, lon': 78.4745052)
pub (myData)
time.sleep(3)
myData={'name': 'Trainl', 'lat': 17.6248626, 'lon': 78.4720259)
pub (myData)
time.sleep (3)
myData={'name': 'Trainl', '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()
```

## **QR SCANNER CODE:**

Import cv2

time.sleep(3)

import numpy as np

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-v2-16u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz',z:b0ab119f45d3e6255eabb978e7e2f0 cap= cv2.VideoCapture (0)

font cv2.FONT HERSHEY PLAIN

```
while True:
frame cap.read()
decodedobjects pyzbar.decode (frame)
for obj in decodedObjects:
#print ("Data", obj.data)
a-obj.data.decode('UTF-8')
cv2.putText (frame, "Ticket", (50, 50), font, 2, (255, 0, 0), 3)
#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'):
break
cap.release()
cv2.destroyAllWindows ()
```

client.disconnect()