**IOT Based Smart Crop Protection System for Agriculture .** Team ID - PNT2022TMID20342

DEVELOPING PYTHON SCRIPT

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) time.sleep(3) 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 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', 'b0ab119f45d3e6255eabb978 service Cloudant V1 (authenticator-authenticator) service.set\_service\_url('https://apikeyv216u3crmdpkghhxefdikvpssoh5fwezrmuup5fv5g3ubz:b0ab119 f45d3e6255eabb978e7e2f0 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) aobj.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()