

Sprint-2

GPS Tracking

Sprint Start Date	09 November 2022
Sprint End Date	10 November 2022
Team ID	PNT2022TMID47359
Project name	Project – Smart Solutions for Railways

Python Code:

The python programs are used to send data to the Watson IoT device to provide tracking of the trains.

```
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "ytluse",
        "typeId": "2702",
        "deviceId": "12345"
    },
    "auth": {
        "token": "O+n)Eh+INX0y3?rG!8"
    }
}
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)

while True:
    myData = {'name':'Delhi Express','lat':13.344279,'lon':80.214367}
    pub(myData)    time.sleep(3)
    myData = {'name':'Delhi Express','lat':13.515254,'lon':80.093518}
    pub(myData)    time.sleep(3)
```

```

    myData = {'name':'Delhi Express','lat':13.728799,'lon':80.005627}
pub(myData)    time.sleep(3)
    myData = {'name':'Delhi Express','lat':13.910160,'lon':79.906750}
pub(myData)    time.sleep(3)
    myData = {'name':'Delhi Express','lat':14.102035,'lon':79.851819}
    pub(myData)
time.sleep(3)
    myData = {'name':'Delhi Express','lat':14.261807,'lon':79.862805}
pub(myData)    time.sleep(3)
    myData = {'name':'Delhi Express','lat':14.623537,'lon':79.950695}
pub(myData)    time.sleep(3)
    myData = {'name':'Delhi Express','lat':15.111987,'lon':79.994641}
pub(myData)    time.sleep(3)
    myData = {'name':'Delhi Express','lat':15.313413,'lon':80.005627}
pub(myData)    time.sleep(3)
    myData = {'name':'Delhi Express','lat':15.567568,'lon':80.104504}
pub(myData)    time.sleep(3)
    myData = {'name':'Delhi Express','lat':15.747405,'lon':80.269299
}
pub(myData)
time.sleep(3)
    myData = {'name':'Delhi Express','lat':15.821409,'lon':80.302258}
pub(myData)    time.sleep(3)
    myData = {'name':'Delhi Express','lat':15.927082,'lon':80.445080}
pub(myData)    time.sleep(3)
    myData = {'name':'Delhi Express','lat':16.022141,'lon':80.554943}
pub(myData)    time.sleep(3)
    myData = {'name':'Delhi Express','lat':17.033801,'lon':80.295512}
pub(myData)    time.sleep(3)
    myData = {'name':'Delhi Express','lat':18.383088,'lon':18.383088}
pub(myData)    time.sleep(3)
    myData = {'name':'Delhi Express','lat':19.074762,'lon':79.487698}
pub(myData)    time.sleep(3)
    myData = {'name':'Delhi Express','lat':20.179065,'lon':79.001439}
pub(myData)    time.sleep(3) myData = {'name':'Delhi
Express','lat':21.306421,'lon':78.789356} pub(myData) time.sleep(3)
    myData = {'name':'Delhi Express','lat':22.518024,'lon':77.829404}
                                pub(myData)

    time.sleep(3)
    myData = {'name':'Delhi Express','lat':23.264139,'lon':77.429333}
pub(myData)    time.sleep(3)
    myData = {'name':'Delhi Express','lat':24.509723,'lon':78.330212}
pub(myData)    time.sleep(3)
    myData = {'name':'Delhi Express','lat':25.668840,'lon':78.451062}
pub(myData)    time.sleep(3)

```

```
    myData = {'name':'Delhi Express','lat':26.177704,'lon':78.170910}
pub(myData)    time.sleep(3)
    myData = {'name':'Delhi Express','lat':27.505914,'lon':77.676526}
pub(myData)    time.sleep(3)
    myData = {'name':'Delhi Express','lat':28.302041,'lon':77.308484}
pub(myData)
    time.sleep(3)
    client.commandCallback = myCommandCallback
client.disconnect()
```