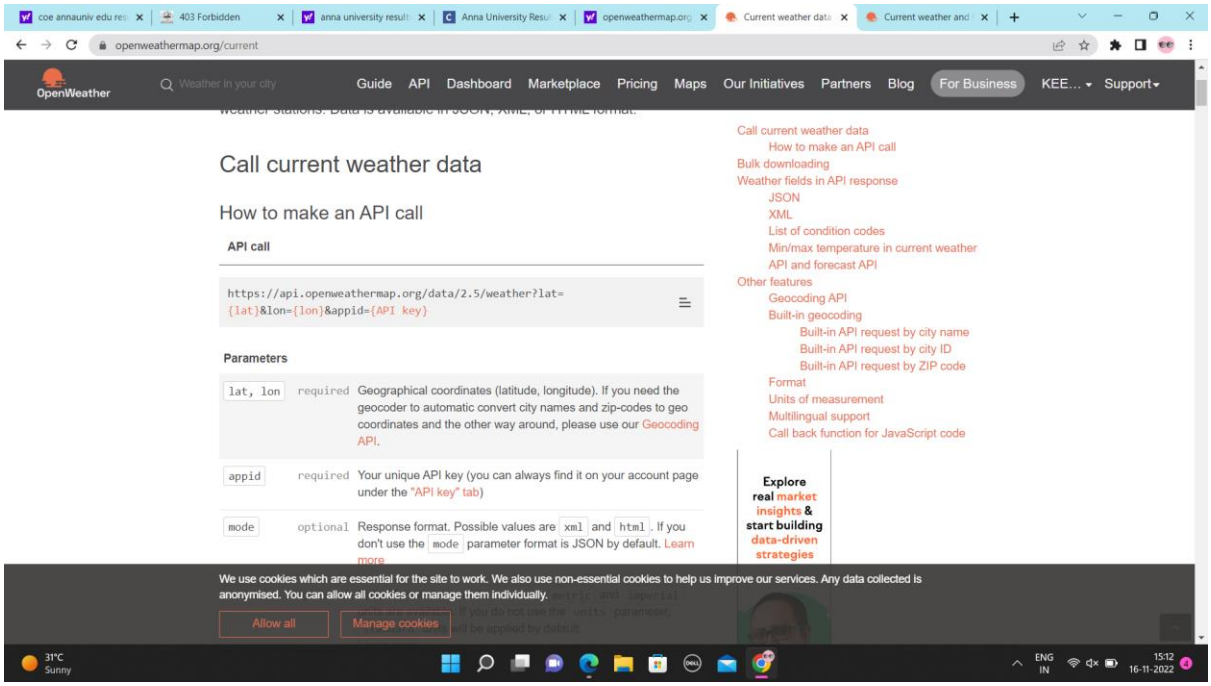
SPRINT – 1

Date	05 November 2022
Team ID	PNT2022TMID29675
Project Name	Signs with smart connectivity for Better Road Safety
Maximum Marks	4 Marks

ACCOUNT CREATION IN WEARHER API:



PYTHON CODE:

#IBM Watson IOT Platform

#pip install wiotp-sdk

```
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "afblzo",
        "typeId": "raspberrypi",
        "deviceId":"1234"
    },
    "auth": {
        "token": "123456789"

    }
}

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()

while True:
    temperature=random.randint(-20,125)
    vehiclescount=random.randint(0,100)
    workingarea_distance=random.randint(0,60)
```

```
accidentalarea_distance=random.randint(1,25)
p="Your Prefered Speed"
q="Speed Limit is 30 km\hr"
r="Take another route"
s="As Your Wish"
t="Go Slow"
u="Moderate speed"
v="it's accidental area, Be Carefull"
w="Beyond the accidental area! Have a safe journey"

a={'Condition_for_Speed':p}
b={'Condition_for_Speed':q}
c={'Condition_for_Direction':r}
d={'Condition_for_Direction':s}
e={'Cond_for_Speed':t}
f={'Cond_for_Speed':u}
g={'Condition_for_Drive':v}
h={'Condition_for_Drive':w}



myData1={'Temperature':temperature}
myData2={'Vehiclescount':vehiclescount}
myData3={'WorkingArea_Distance':workingarea_distance}
myData4={'AccidentalArea_Distance':accidentalarea_distance}
```

```
client.publishEvent(eventId="status",msgFormat="json",data=myData1,qos=0,
onPublish=None)
   print("Published:%s",myData1)
   if temperature>=21:


      client.publishEvent(eventId="status",
msgFormat="json",data=a,qos=0,onPublish=None)
      print(a)
      print("\n")
   else :
      client.publishEvent(eventId="status",
msgFormat="json",data=b,qos=0,onPublish=None)
      print(b)
      print("\n")



client.publishEvent(eventId="status",msgFormat="json",data=myData2,qos=0,
onPublish=None)
   print("Published:%s",myData2)
   if vehiclescount>=53:

client.publishEvent(eventId="status",msgFormat="json",data=c,qos=0,onPublis
h=None)
      print(c)
      print("\n")
   else:
```

```
client.publishEvent(eventId="status",msgFormat="json",data=d,qos=0,onPublish=None)
        print(d)
        print("\n")


client.publishEvent(eventId="status",msgFormat="json",data=myData3,qos=0,onPublish=None)
    print("Published:%s",myData3)
    if workingarea_distance>=4:
        client.publishEvent(eventId="status",msgFormat="json",data=f,qos=0,onPublish=None)
        print(f)
        print("\n")
    else :
        client.publishEvent(eventId="status",msgFormat="json",data=e,qos=0,onPublish=None)
        print(e)
        print("\n")


client.publishEvent(eventId="status",msgFormat="json",data=myData4,qos=0,onPublish=None)
    print("Published:%s",myData4)
    if accidentalarea_distance>=3:
        client.publishEvent(eventId="status",msgFormat="json",data=h,qos=0,onPublish=None)
        print(h)
```

```
        print("\n")
    else :
        client.publishEvent(eventId="status",
msgFormat="json",data=g,qos=0,onPublish=None)
        print(g)
        print("\n")


    client.commandCallback=myCommandCallback
    time.sleep(10)
client.disconnect()
```

OUTPUT: