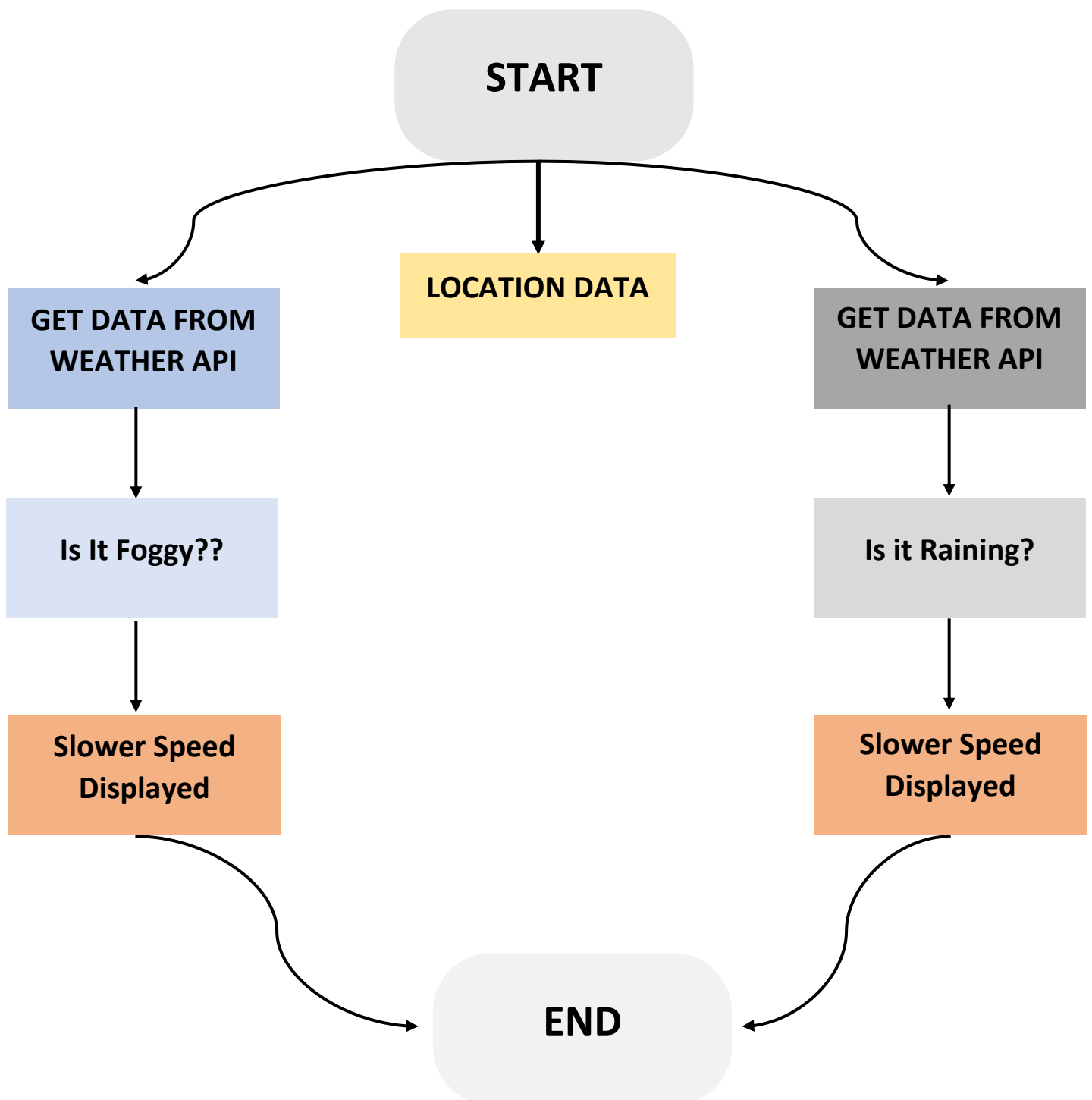


SPRINT DELIVERY-4

| | |
|--------------|--|
| Team ID | PNT2022TMID48096 |
| Project Name | Project – Signs with Smart Connectivity for Better Road Safety |
| Marks | 20 marks |

PROGRAM OVERFLOW



CODING:

```
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "hkc6zs",
        "typeId": "NodeMCU_ESP8266",
        "deviceId": "0101010101"
    },
    "auth": {
        "token": "tuOo@uk5C*QYyxZ2xO"
    }
}

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:
    temp=random.randint(-20,125)
    hum=random.randint(0,100)
    myData={'temperature':temp, 'humidity':hum}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()
```

```
paru.py - Visual Studio Code
File Edit Selection View Go Run Terminal Help

home > admin > Documents > programs > test > paru.py > [4] myConfig

1 import wiotp.sdk.device
2 import time
3 import random
4 myConfig = {
5     "identity": {
6         "orgId": "hkczs",
7         "typeId": "NodeMCU_ESP8266",
8         "deviceId": "0101010101"
9     },
10    "auth": {
11        "token": "tu0o@uK5C"QypZ2x0"
12    }
13 }
14
15 def myCommandCallback(cmd):
16     print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
17     m=cmd.data['command']
18
19 client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
20 client.connect()
21
22 while True:
23     temp=random.randint(-20,125)
24     hum=random.randint(0,100)
25     myData={'temperature':temp, 'humidity':hum}
26     client.publishEvent(eventId="status", myFormat="json", data=myData, qos=0, onPublish=None)
27     print("Published data Successfully: %s" % myData)
28     client.commandCallback = myCommandCallback
29     time.sleep(2)
30 client.disconnect()
```

TERMINAL JUPYTER SQL CONSOLE PROBLEMS OUTPUT DEBUG CONSOLE

```
python -u "/home/admin/Documents/programs/test/paru.py"
2022-11-17 21:38:40.706 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:hkczs:NodeMCU_ESP8266:0101010101
Published data Successfully: %s {'temperature': 1, 'humidity': 70}
Published data Successfully: %s {'temperature': 23, 'humidity': 30}
Published data Successfully: %s {'temperature': 52, 'humidity': 45}
Published data Successfully: %s {'temperature': 98, 'humidity': 97}
Published data Successfully: %s {'temperature': -7, 'humidity': 23}
Published data Successfully: %s {'temperature': 1, 'humidity': 90}
Published data Successfully: %s {'temperature': 69, 'humidity': 65}
Published data Successfully: %s {'temperature': 91, 'humidity': 15}
Published data Successfully: %s {'temperature': 88, 'humidity': 83}
Published data Successfully: %s {'temperature': 7, 'humidity': 61}
Published data Successfully: %s {'temperature': 10, 'humidity': 50}
Published data Successfully: %s {'temperature': 46, 'humidity': 62}
Published data Successfully: %s {'temperature': -3, 'humidity': 13}
Published data Successfully: %s {'temperature': 111, 'humidity': 23}
```

DESIGN THE MODULE AND MAKE THE USER TO INTERACT (WEB UI)

1.IBM WATSON IOT PLATFORM

hkcZs.internetofthings.ibmcloud.com/dashboard/devices/browse

IBM Watson IoT Platform

Browse Action Device Types Interfaces

Add Device

Browse Devices

All Devices Diagnose

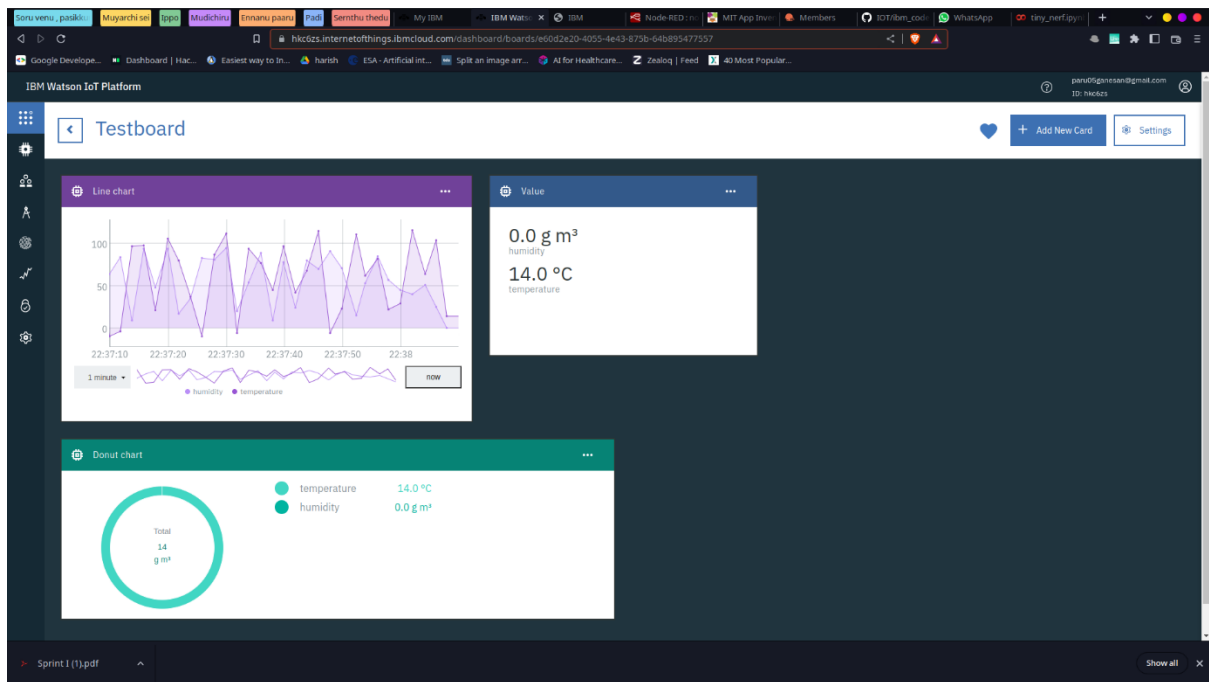
This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. To get started, you can add devices by using the Add Device button, or by using API.

Q Search by Device ID Device Simulator

| Device ID | Status | Device Type | Class ID | Date Added | Descriptive Location | Added By | Device Class |
|------------|-----------|-----------------|----------|-------------------|----------------------|-------------------------|--------------|
| 0101010101 | Connected | NodeMCU_ESP8266 | Device | 10 Nov 2022 12:38 | | paru05ganesan@gmail.com | |

Items per page 50 | 1-1 of 1 item 1 of 1 page

2.IBM IOT PLATFORM BOARD RANDOM INPUTS FROM PYTHON



3.IBM DASHBOARD

The screenshot displays the IBM Cloud Resource list dashboard. The top navigation bar includes the 'Resource list' title and a 'Create resource' button. The main content area features a table of resources with the following columns: Name, Group, Location, Product, Status, and Tags. The table is filtered by 'Name or IP address...'. The resources listed are:

| Name | Group | Location | Product | Status | Tags |
|--------------------------------|--|-----------|-----------------------------|---------|------|
| Node RED TamilNadu | Shanmuganathan Engineering College / Dev | London | Node.js | Started | - |
| Internet of Things Platform-1u | Default | Frankfurt | Internet of Things Platform | Active | - |

The table is filtered by 'Name or IP address...'. The resources listed are:

- Node RED TamilNadu (Shanmuganathan Engineering College / Dev, London, Node.js, Started, -)
- Internet of Things Platform-1u (Default, Frankfurt, Internet of Things Platform, Active, -)

The bottom of the interface shows a 'Show all' button.