

SPRINT-2

Date	17 November 2022
Team ID	PNT2022TMID11549
Project Name	Smart Waste Management System For Metropolitan Cities

*Creating web ui using node-red and publishing sensor values and location to ui.

```

pythonProject3 - main.py
1 import wiotp.sdk.device
2 import time
3 import random
4 myConfig = {
5     "identity": {"orgId": "zal46w", "typeId": "NodeMCU", "deviceId": "12345"},
6     "auth": {"token": "1234567890"}}
7 def myCommandCallback(cmd):
8     print('Message received from IBM IoT Platform: %s' % cmd.data['command'])
9     s=cmd.data['command']
10 client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
11 client.connect()
12 while True:
13     level=random.randint(0,100)
14     weight= random.randint(0, 1000)
15     level_d={'Level':level}
16     weight_d = {'Weight': weight}
17     client.publishEvent(eventId="status", msgFormat="json", data=level_d, qos=0, onPublish=None)
18     client.publishEvent(eventId="status", msgFormat="json", data=weight_d, qos=0, onPublish=None)
19     print('Published data Successfully: %s', level_d)
20     print('Published data Successfully: %s', weight_d)
21     client.commandCallback = myCommandCallback
22     time.sleep(2)
23     client.disconnect()

```

Run console output:

```

Published data Successfully: %s {'Level': 32}
Published data Successfully: %s {'Weight': 354}
Published data Successfully: %s {'Level': 68}
Published data Successfully: %s {'Weight': 660}
Published data Successfully: %s {'Level': 31}
Published data Successfully: %s {'Weight': 266}
Published data Successfully: %s {'Level': 30}
Published data Successfully: %s {'Weight': 172}
Published data Successfully: %s {'Level': 90}
Published data Successfully: %s {'Weight': 430}
Published data Successfully: %s {'Level': 12}
Published data Successfully: %s {'Weight': 579}
Published data Successfully: %s {'Level': 81}
Published data Successfully: %s {'Weight': 523}
Published data Successfully: %s {'Level': 51}
Published data Successfully: %s {'Weight': 267}
Published data Successfully: %s {'Level': 59}
Published data Successfully: %s {'Weight': 187}
Published data Successfully: %s {'Level': 19}
Published data Successfully: %s {'Weight': 11}
Published data Successfully: %s {'Level': 86}
Published data Successfully: %s {'Weight': 919}
Published data Successfully: %s {'Level': 64}
Published data Successfully: %s {'Weight': 117}
Published data Successfully: %s {'Level': 36}
Published data Successfully: %s {'Weight': 762}

```

IBM Watson IoT Platform

910619106301@smartinternz.com

1 item selected Cancel

ADD DEVICE

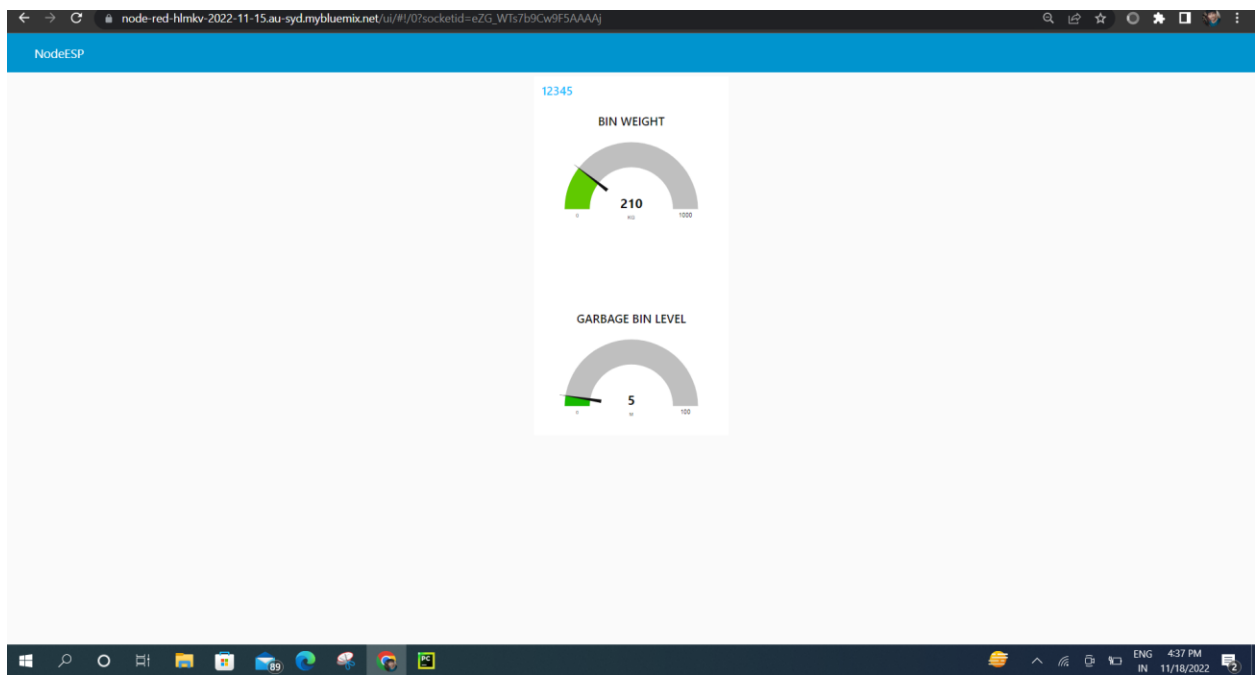
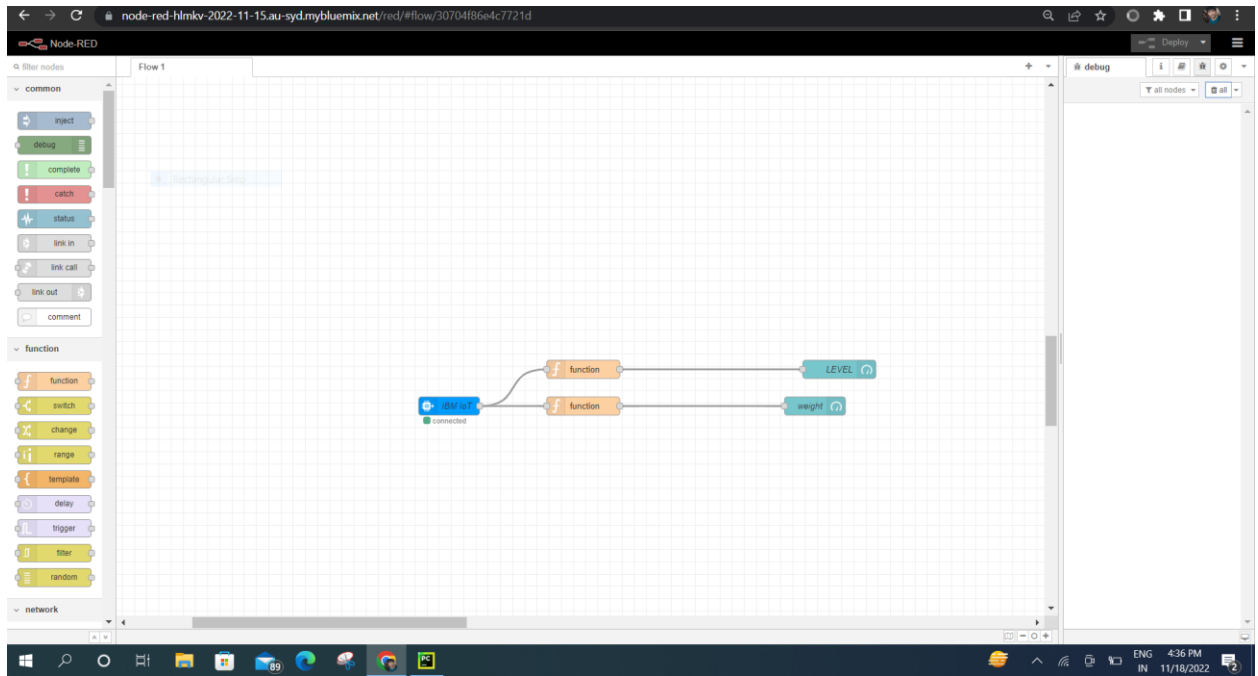
ID	Status	Device Type	Device Name	Last Seen
12345	Disconnected	Dumpster	Device	Nov 17, 2022 9:02 PM
12345	Connected	NodeMCU	Device	Nov 15, 2022 10:41 PM

Identity Device Information Recent Events State Logs

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
status	{"Weight":976}	json	a few seconds ago
status	{"Level":99}	json	a few seconds ago
status	{"Weight":414}	json	a few seconds ago
status	{"Level":98}	json	a few seconds ago
status	{"Weight":574}	json	a few seconds ago

0 Simulations running



```
pythonProject - main.py
1 import wiotp.sdk.device
2 import time
3 from geopy.geocoders import Nominatim
4 import random
5 dumpid=1
6 geoloc=Nominatim(user_agents="geopiExercises")
7 lat_long="9.914470","78.143418"
8 location=geoloc.reverse(lat+",""+long)
9 address=location.raw['address']
10 suburb=address.get('suburb','')
11 city=address.get('city','')
12 myConfig = {
13     "identity": {
14         "orgid": "zal46w",
15         "ypid": "NodeMCU",
16         "deviceId": "12345"},
17     "auth": {
18         "token": "1234567890"
19     }
20 }
```

Run: main

Published data Successfully: %s {'d': {'dump': 1, 'Level': 98, 'Weight': 755, 'Lat': '9.914470', 'Long': '78.143418', 'Suburb': 'Anna Nagan', 'City': 'Madurai'}}
pick
Published data Successfully: %s {'d': {'dump': 1, 'Level': 74, 'Weight': 302, 'Lat': '9.914470', 'Long': '78.143418', 'Suburb': 'Anna Nagan', 'City': 'Madurai'}}
pick
Published data Successfully: %s {'d': {'dump': 1, 'Level': 66, 'Weight': 45, 'Lat': '9.914470', 'Long': '78.143418', 'Suburb': 'Anna Nagan', 'City': 'Madurai'}}
pick
Published data Successfully: %s {'d': {'dump': 1, 'Level': 29, 'Weight': 260, 'Lat': '9.914470', 'Long': '78.143418', 'Suburb': 'Anna Nagan', 'City': 'Madurai'}}
pick
Published data Successfully: %s {'d': {'dump': 1, 'Level': 96, 'Weight': 829, 'Lat': '9.914470', 'Long': '78.143418', 'Suburb': 'Anna Nagan', 'City': 'Madurai'}}
pick
Published data Successfully: %s {'d': {'dump': 1, 'Level': 67, 'Weight': 769, 'Lat': '9.914470', 'Long': '78.143418', 'Suburb': 'Anna Nagan', 'City': 'Madurai'}}
pick

Download pre-built shared indexes: Reduce the indexing time and CPU load with pre-built Python packages shared indexes // Always download // Download once // Don't show again // Configure... (23 minutes ago)

zal46w.internetofthings.ibmcloud.com/dashboard/devices/browse

IBM Watson IoT Platform

910619106301@smarternz.com
ID: zal46w

Browse Action Device Types Interfaces

Add Device

	ID	Status	Device Type	Device	Last Seen
>	12345	Disconnected	Dumpster	Device	Nov 17, 2022 9:02 PM
▼	12345	Connected	NodeMCU	Device	Nov 15, 2022 10:41 PM

Identity Device Information Recent Events State Logs

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
status	{"d":{"dump":1,"Level":12,"Weight":847,"Lat":9....	json	a few seconds ago
status	{"d":{"dump":1,"Level":12,"Weight":847,"Lat":9....	json	a few seconds ago
status	{"d":{"dump":1,"Level":91,"Weight":594,"Lat":9....	json	a few seconds ago
status	{"d":{"dump":1,"Level":91,"Weight":594,"Lat":9....	json	a few seconds ago
status	{"d":{"dump":1,"Level":91,"Weight":594,"Lat":9....	json	a few seconds ago

0 Simulations running

