

## Sprint – 2

Date	10- Nov-2022
Team ID	PNT2022TMID25072
Project Name	Project - IoT Based Safety Gadget for Child Safety Monitoring & Notification
Maximum Marks	8 Marks

**USN- 4 :** Integrating the IBM Watson IoT Platform and Cloudant DB with the node red.

- Launching IBM IoT Watson

The screenshot displays the IBM Watson IoT Platform interface. At the top, there's a navigation bar with 'Browse', 'Action', 'Device Types', and 'Interfaces'. A sidebar on the left contains various icons. The main area is titled 'Browse Devices' and includes a 'Diagnose' button. Below this, a message states: '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.' A search bar labeled 'Search by Device ID' is present. To the right, there's a 'Device Simulator' toggle and a filter icon. The table below lists one device:

Device ID	Status	Device Type	Class ID	Date Added
28	Disconnected	Tracker	Device	Nov 6, 2022 11:54 AM

At the bottom, it shows 'Items per page: 50' and '1-1 of 1 item'.

- Implementing the node-red in IBM cloud.



Monitoring
 Databases
 Replication
 Active Tasks
 Account
 Support
 Documentation
   
 IBM Cloudant
   
 Log Out IBMID-66700085RV

Databases

Database name

Create Database

{ } JSON

Your Databases

Name	Size	# of Docs	Partitioned	Actions
child_location	0 bytes	0	Yes	
noderedrvwbe20221105	30.4 KB	4	No	
sample	0 bytes	0	Yes	

Showing 1-3 of 3 databases. Databases per page 20 « 1 »

- For our project we are creating a database called child\_loaction.

## USN – 5 : Developing the Python code for connecting with IBM Watson IoT platform.

Monitoring
 Databases
 Replication
 Active Tasks

Databases

Database name

Create Database

{ } JSON

Your Databases

Name	Size	# of Docs	Partitioned	Actions
child_location	0 bytes	0	Yes	

```

1 import time
2 import wiotp.sdk.application
3 print("Hello")
4 myConfig = {
5     "identity": {
6         "orgId": "fjde2i",
7         "typeId": "Tracker",
8         "deviceId": "28",
9     },
10    "auth": {
11        "token": "123456789"
12    }
13 }
14 client = wiotp.sdk.device.DeviceClient(config = myConfig, logHandlers = None)
15 client.connect()
16
17 while True:
18     name = "Child"
19     #in area location
20
21     latitude = 17.4219272
22     longitude = 78.5488783
23
24
25
26     #out area location
27
28     #latitude = 17.4219272
29     #longitude = 78.5488783
30     myData = {'name': name, 'lat': latitude, 'lon': longitude}
31     client.publishEvent(eventId = "status", msgFormat = "json", data = myData, qos = 0, onPublish = None)
32     print("Data published to IBM IoT Platform: ", myData)
33     time.sleep(5)
34
35 client.disconnect()
36

```

- Connected successfully with IBM IoT Watson.



```

Run: child x
C:\Users\de11\AppData\Local\Programs\Python\Python311\python.exe C:/Users/de11/AppData/Local/Programs/Python/child.py
Data published to IBM IoT Platform: {'name': 'Child', 'lat': 17.4219272, 'lon': 78.5488783}
2022-11-08 20:56:53,786 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:fjde2i:Tracker:28
Data published to IBM IoT Platform: {'name': 'Child', 'lat': 17.4219272, 'lon': 78.5488783}
Data published to IBM IoT Platform: {'name': 'Child', 'lat': 17.4219272, 'lon': 78.5488783}
Data published to IBM IoT Platform: {'name': 'Child', 'lat': 17.4219272, 'lon': 78.5488783}
Data published to IBM IoT Platform: {'name': 'Child', 'lat': 17.4219272, 'lon': 78.5488783}

```

- IBM IoT Watson platform receiving the details of the child's location.

Browse   Action   Device Types   Interfaces
Add Device +

---

▼
 28
Disconnected
Tracker
Device
Nov 6, 2022 11:54 AM
→ ...

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	{"name":"Child","lat":17.4219272,"lon":78.5488...	json	a few seconds ago
status	{"name":"Child","lat":17.4219272,"lon":78.5488...	json	a few seconds ago
status	{"name":"Child","lat":17.4219272,"lon":78.5488...	json	a few seconds ago
status	{"name":"Child","lat":17.4219272,"lon":78.5488...	json	a few seconds ago
status	{"name":"Child","lat":17.4219272,"lon":78.5488...	json	a few seconds ago