

Sprint – 2

| | |
|--------------|--|
| Date | 08 November 2022 |
| Team ID | PNT2022TMID04739 |
| Project Name | Project - IoT based safety gadget for Child Safety Monitoring and Notification |
| TEAM LEADER | VIMAL NISHANTHAN T |
| TEAM MEMBERS | SRINATH A VISHNU PRASATH S SURYA PRAKASH S SUJITH S |

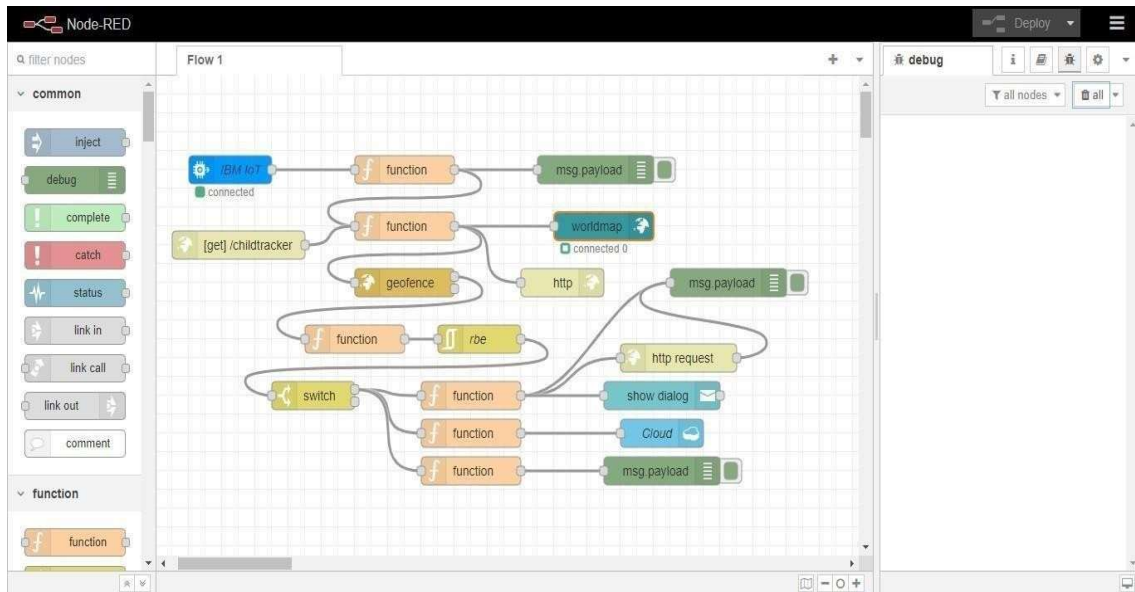
USN- 4 : Integrating the IBM Watson IoT Platform and Cloudant DB with the node red.

- Launching IBM IoT Watson

The screenshot displays the IBM Watson IoT Platform interface. On the left is a dark sidebar with various icons. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces', along with an 'Add Device' button. The main heading is 'Browse Devices', with tabs for 'All Devices' and 'Diagnose'. Below this, a text block explains that the table shows a summary of added devices and can be filtered or searched. A search bar labeled 'Search by Device ID' is present. To the right of the search bar is a 'Device Simulator' toggle switch. The table below has columns for 'Device ID', 'Status', 'Device Type', 'Class ID', and 'Date Added'. It contains one row for a device with ID 28, which is 'Disconnected' and a 'Tracker' type. The footer of the table shows 'Items per page 50' and '1-1 of 1 item'.

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

- Implementing the node-red in IBM cloud.
- Designing the node-red work flow for our project.



- Launch the cloudant DB and create a database to store the location data.

| Databases | | | | | |
|---|---------|-----------|-------------|-------------------------------------|--|
| <div>Database name</div> <div>Create Database</div> <div>{ } JSON</div> <div></div> <div></div> | | | | | |
| Your Databases | | | | | |
| Name | Size | # of Docs | Partitioned | Actions | |
| child_location | 0 bytes | 0 | Yes | <div></div> <div></div> <div></div> | |
| noderednwbe20221105 | 30.4 KB | 4 | No | <div></div> <div></div> <div></div> | |
| sample | 0 bytes | 0 | Yes | <div></div> <div></div> <div></div> | |

Showing 1-3 of 3 databases. Databases per page 20 < 1 >

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



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

```

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\dell\AppData\Local\Programs\Python\Python311\python.exe C:/Users/dell/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.

| Brave Action Owice Types Interfaces | | | | | Add Device + |
|--|---|--|--|------|-------------------|
| Identify Deyke Tototma4ion Recent Events Settings Logs | | | | | X |
| status | {"name": "Child", "lat": 17.4219272, "lon": 78.5488783} | | | json | a few seconds ago |
| status | {"name": "Child", "lat": 17.4219272, "lon": 78.5488783} | | | json | a few seconds ago |
| status | {"name": "Child", "lat": 17.4219272, "lon": 78.5488783} | | | json | a few seconds ago |
| status | {"name": "Child", "lat": 17.4219272, "lon": 78.5488783} | | | json | a few seconds ago |
| status | {"name": "Child", "lat": 17.4219272, "lon": 78.5488783} | | | json | a few seconds ago |