

Sprint – 2

Date	10- Nov-2022
Team ID	PNT2022TMID25027
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

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.

Search by Device ID Device Simulator

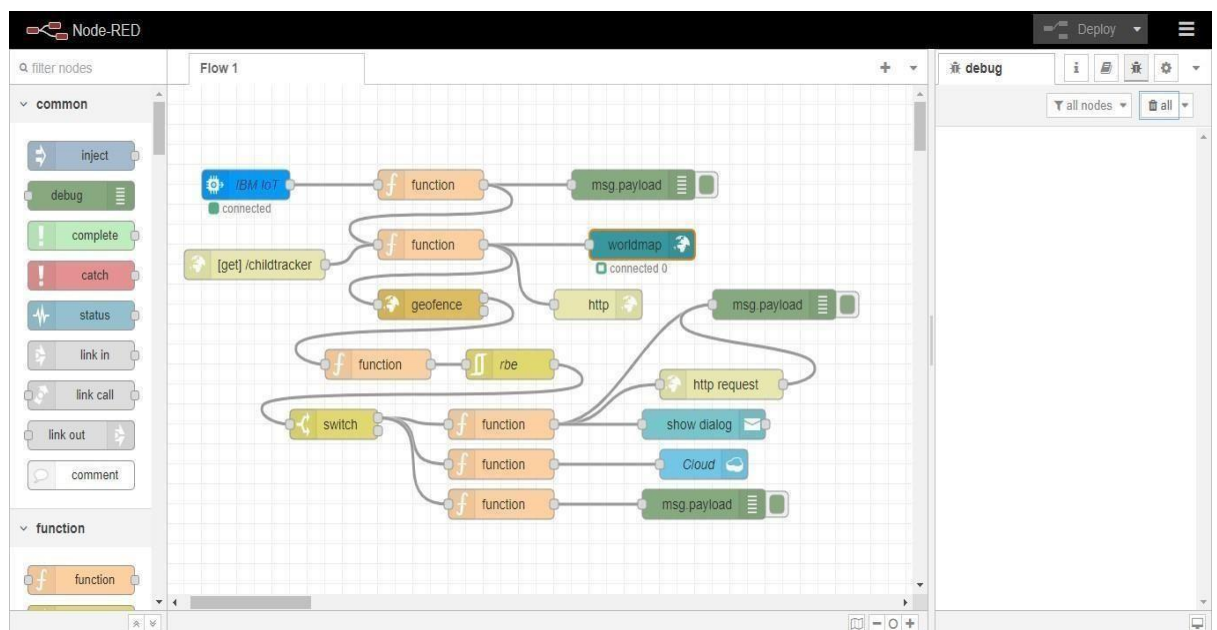
<input type="checkbox"/>	Device ID	Status	Device Type	Class ID	Date Added
> <input type="checkbox"/>	28	Disconnected	Tracker	Device	Nov 6, 2022 11:54 AM

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

- Implementing the node-red in IBM cloud.

Name	Group	Location	Product	Status	Tags
Databases (2)					
node-red-rvwbe-2022--cloudant-...	Default	London	Cloudant	Active	—
node-red-rvwbe-2022--cloudant-...	asvithavscse19veltechmultitech / 1	Sydney	Cloudant	Provisioned	—
Developer tools (3)					
Continuous Delivery	Default	Sydney	Continuous Delivery	Active	—
Node RED RVWBE 2022-11-05	Default	Global	Cloud Application	—	—
NodeREDRVWBE2022-11-05	Default	Sydney	Toolchain	—	—
Logging and monitoring (0)					
Migration (0)					
Integration (0)					
Internet of Things (1)					
Internet of Things Platform-asvi	Default	Frankfurt	Internet of Things Platform	Active	—

- Designing the node-red work flow for our project.



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

Databases

Database name

Create Database

{ } JSON

Monitoring

Databases

Replication

Active Tasks










Account

Support

Documentation

IBM Cloudant

Log Out IBMid-66700085RV

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

- 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

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.

The screenshot displays the IBM IoT Watson platform interface. On the left is a dark sidebar with various icons. The main content area has a top navigation bar with tabs: 'Browse', 'Action', 'Device Types', and 'Interfaces'. A blue header bar contains the following information: a dropdown arrow, a square icon, the number '28', a 'Disconnected' status with a signal icon, the label 'Tracker', the word 'Device', the timestamp 'Nov 6, 2022 11:54 AM', and a right-side menu icon. Below this header is a sub-header with tabs: 'Identity', 'Device Information', 'Recent Events' (which is selected), 'State', and 'Logs'. A text message states: 'The recent events listed show the live stream of data that is coming and going from this device.' Below this is a table with four columns: 'Event', 'Value', 'Format', and 'Last Received'. The table contains five rows of data, all with the event name 'status'.

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