

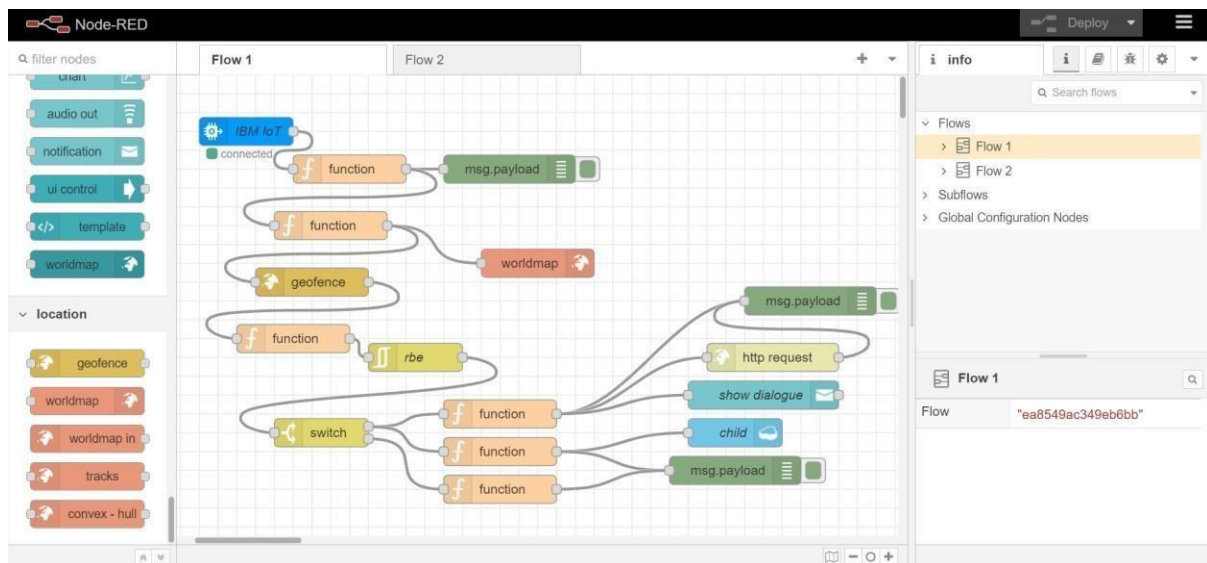
# PROJECT DEVELOPMENT PHASE

## SPRINT-3

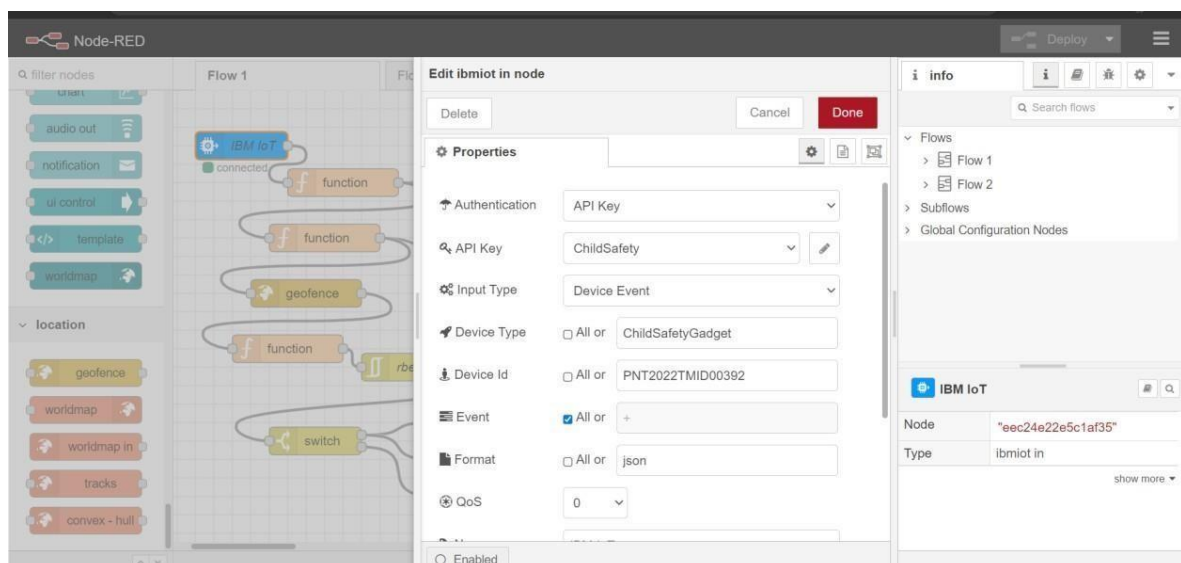
<b>Date</b>	<b>15 November 2022</b>
<b>Team ID</b>	<b>PNT2022TMID32019</b>
<b>Project Name</b>	<b>IoT Based Safety Gadget for ChildSafetyMonitoring and Notification</b>

## NODE – RED

### Connections



### Codes in Node's



# PROJECT DEVELOPMENT PHASE

## SPRINT-3

Node-RED interface showing the 'Edit function node' dialog. The code in the editor is as follows:

```
1 var name = msg.payload.name
2 var lat = msg.payload.lat
3 var lon = msg.payload.lon
4 global.set('latitude', lat)
5 global.set('longitude', lon)
6 global.set('name', name)
7 return msg;
```

The right sidebar shows the 'info' panel with the following details:

- Node: "76ec77ccd270c2c7"
- Type: function

Node-RED interface showing the 'Edit function node' dialog. The code in the editor is as follows:

```
1 msg.payload={
2   'name':global.get('name'),
3   'lat':global.get('latitude'),
4   'lon': global.get('longitude')
5 }
6 return msg;
```

The right sidebar shows the 'info' panel with the following details:

- Node: "77b707bf262aa6f4"
- Type: function

Node-RED interface showing the 'Edit geofence node' dialog. The map shows a geofence area centered on a location. The right sidebar shows the 'info' panel with the following details:

- Node: "ee4695a46b4858f1"
- Type: geofence

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The screenshot shows the Node-RED web interface. On the left, a palette of nodes is visible, including 'worldmap' under the 'location' category. The main workspace displays a flow with an 'IBM IoT' node connected to a 'function' node, which is then connected to a 'worldmap' node. The 'Edit worldmap node' dialog is open, showing the following properties:

- Start:** Latitude (17.4219272), Longitude (78.5400783), Zoom (16)
- Map list:** 1 selected
- Base map:** ESRI Satellite
- Overlays:** 5 selected
- Cluster when:** zoom level is less than 0 (0, off - 19)
- Max age:** Remove markers after 600 seconds
- User menu:** Show
- Layer menu:** Hide
- Lock map:** False
- Lock zoom:** False
- Enabled:** ☐

The right sidebar shows the 'info' panel with a search bar and a list of flows (Flow 1, Flow 2) and subflows. Below this, the 'worldmap' node is listed with its ID '5ed11e914b5614ea' and type 'worldmap'.

The screenshot shows the Node-RED web interface with the 'Edit function node' dialog open. The 'On Message' tab is selected, and the following code is entered in the editor:

```
1 msg.payload=msg.location.inarea
2 return msg;
```

The right sidebar shows the 'info' panel with a search bar and a list of flows (Flow 1, Flow 2) and subflows. Below this, the 'function' node is listed with its ID '3585a4ac8098085f' and type 'function'.

The screenshot shows the Node-RED web interface with the 'Edit switch node' dialog open. The 'Property' dropdown is set to 'msg.payload'. The 'is false' rule is selected, and the output is set to 1. The 'is true' rule is also selected, and the output is set to 2. The 'checking all rules' dropdown is set to 'checking all rules'. The 'recreate message sequences' checkbox is unchecked. The 'Enabled' checkbox is checked.

The right sidebar shows the 'info' panel with a search bar and a list of flows (Flow 1, Flow 2) and subflows. Below this, the 'switch' node is listed with its ID 'f6b63596382b4cc6' and type 'switch'.

# PROJECT DEVELOPMENT PHASE

## SPRINT-3

Node-RED interface showing a function node being edited. The code calculates a new date based on a UTC offset and returns a message with location data.

```
1 var d = new Date();
2 var utc = d.getTime() + (d.getTimezoneOffset() * 60000);
3 var offset = 5.5; // This is the offset for UTC+3, in your case (UTC+1
4 newDate = new Date(utc + (3600000*offset));
5- msg.payload = {
6   "message": "Entry",
7   "Time": newDate.toLocaleString(),
8   "name": global.get('name'),
9   "lat": global.get('latitude'),
10  "lon": global.get('longitude')
11- };
12 return msg;
```

Node ID: 322663c3205cc798

Node-RED interface showing a function node being edited. The code calculates a new date based on a UTC offset and returns a message with location data.

```
1 var d = new Date();
2 var utc = d.getTime() + (d.getTimezoneOffset() * 60000);
3 var offset = 5.5; // This is the offset for UTC+3, in your case (UTC+1
4 newDate = new Date(utc + (3600000*offset));
5- msg.payload = {
6   "message": "Entry",
7   "Time": newDate.toLocaleString(),
8   "name": global.get('name'),
9   "lat": global.get('latitude'),
10  "lon": global.get('longitude')
11- };
12 return msg;
```

Node ID: dfef78abe1ae2fd4

Node-RED interface showing a function node being edited. The code calculates a new date based on a UTC offset and returns a message with location data.

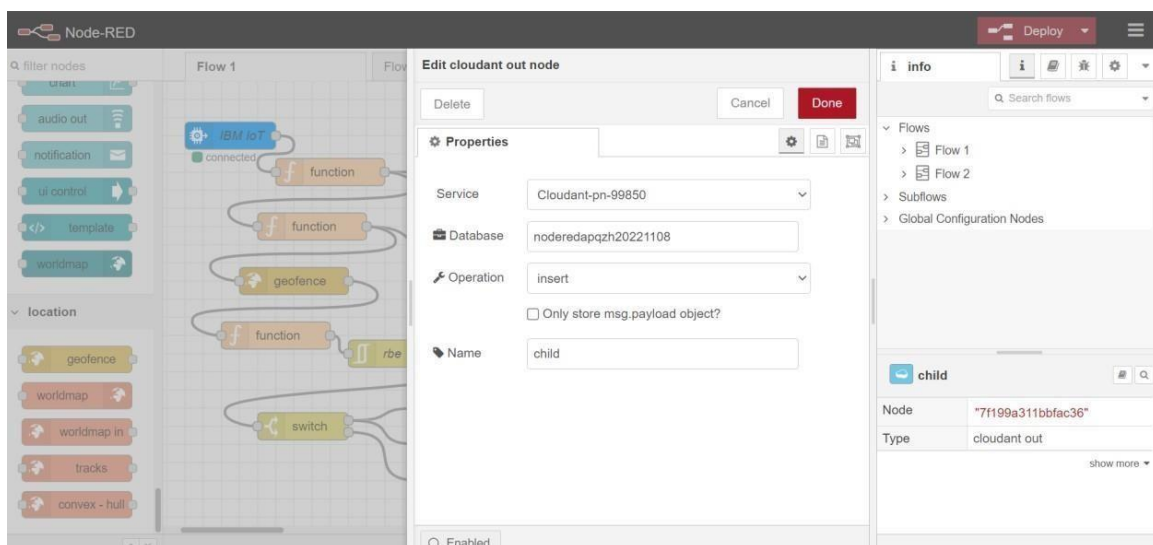
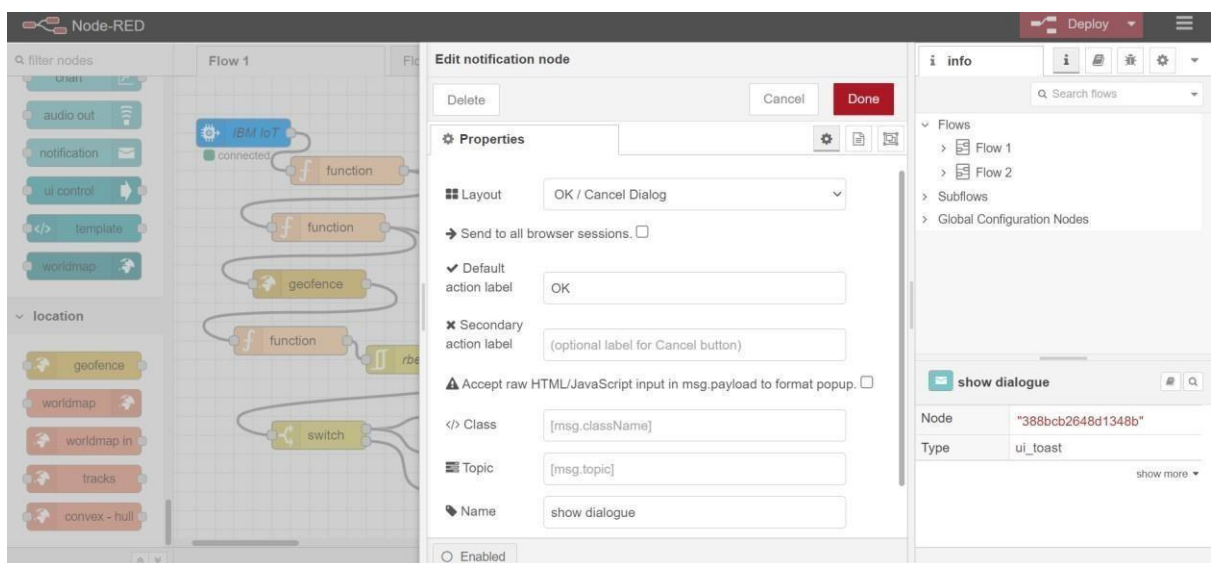
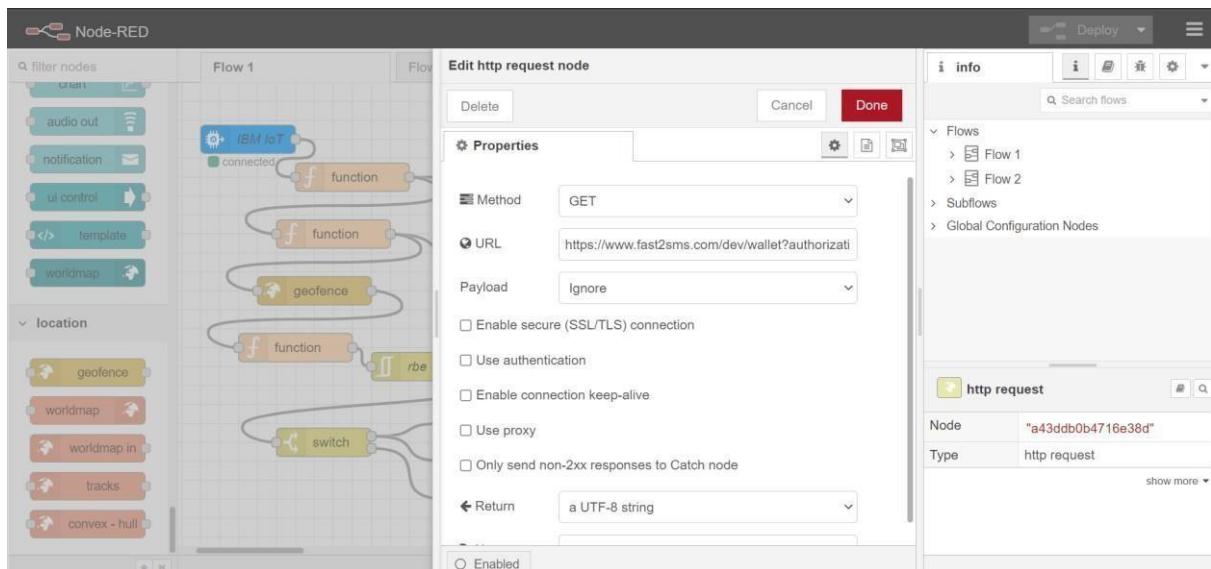
```
1 var d = new Date();
2 var utc = d.getTime() + (d.getTimezoneOffset() * 60000);
3 var offset = 5.5; // This is the offset for UTC+3, in your case (UTC+1
4 newDate = new Date(utc + (3600000*offset));
5- msg.payload = {
6   "message": "Entry",
7   "Time": newDate.toLocaleString(),
8   "name": global.get('name'),
9   "lat": global.get('latitude'),
10  "lon": global.get('longitude')
11- };
12 return msg;
```

Node ID: 36df960d0bd4f874



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### CLOUD NOTIFICATION:

The screenshot displays the IBM Watson IoT Platform interface. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. The main content area shows a table of devices. The selected device, ID 54321, is in a 'Connected' state. Below the table, the 'Recent Events' tab is active, showing a stream of data events. Each event contains a 'distance' value and an 'object' type, all in JSON format. The events are timestamped as 'a few seconds ago'.

Device ID	Status	Device Type	Class ID	Date Added
54321	Connected	Node_Mcu	Device	Nov 8, 2022 9:52 PM

Event	Value	Format	Last Received
Data	{"distance":403.49,"object":"No"}	json	a few seconds ago
Data	{"distance":403.49,"object":"No"}	json	a few seconds ago
Data	{"distance":403.45,"object":"No"}	json	a few seconds ago
Data	{"distance":403.47,"object":"No"}	json	a few seconds ago
Data	{"distance":403.49,"object":"No"}	json	a few seconds ago