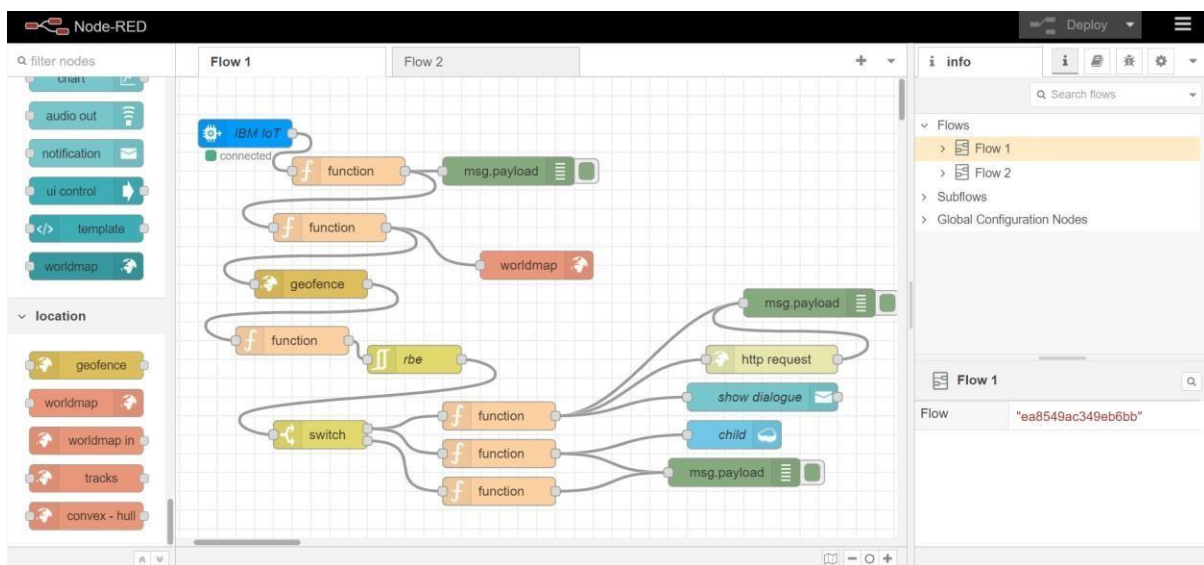


SPRINT 3

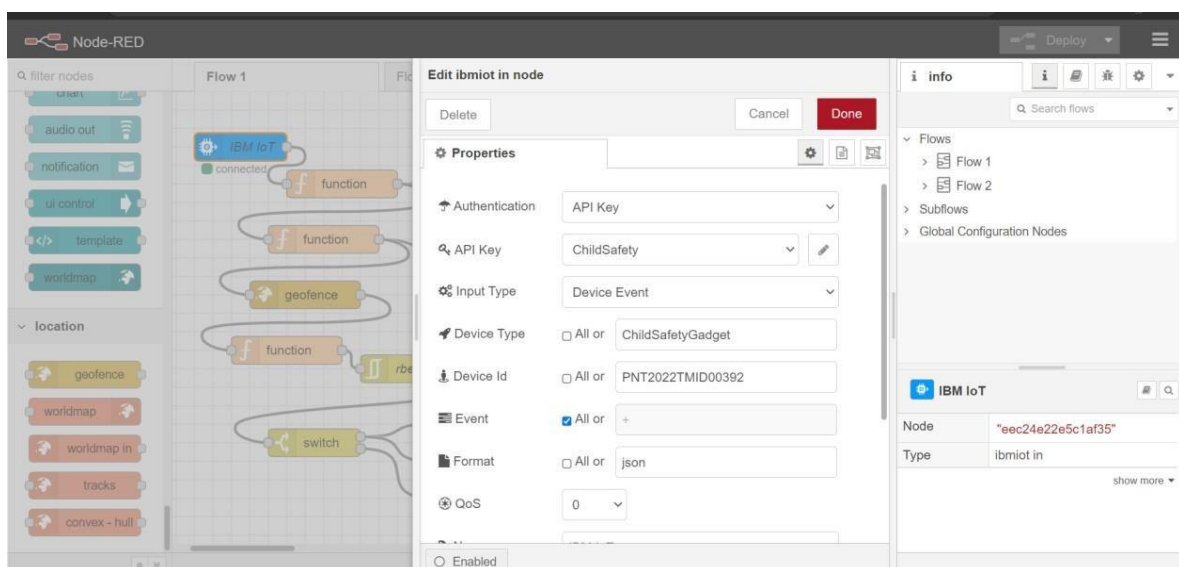
Date	10 November 2022
Team ID	PNT2022TMID17635
Project Name	IoT Based Safety Gadget for ChildSafety Monitoring and Notification

NODE – RED

Connections



Codes in Node's



Node-RED interface showing the "Edit function node" dialog. The node is named "function: 76ec77ccd270c2c7". The code in the "On Message" tab is:

```
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 a search bar and a list of flows: Flow 1, Flow 2, Subflows, and Global Configuration Nodes.

Node-RED interface showing the "Edit function node" dialog. The node is named "function: 77b707bf262aa6f4". The code in the "On Message" tab is:

```
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 a search bar and a list of flows: Flow 1, Flow 2, Subflows, and Global Configuration Nodes.

Node-RED interface showing the "Edit geofence node" dialog. The node is named "geofence: ee4695a46b4858f1". The map shows a geofence area (purple circle) centered on a street intersection. The right sidebar shows the "info" panel with a search bar and a list of flows: Flow 1, Flow 2, Subflows, and Global Configuration Nodes.

Node-RED interface showing the configuration of a **worldmap** node.

Flow 1 (left sidebar):

- Nodes: **IBM IoT** (connected) → **function** → **function** → **geofence** → **function** → **switch**.

Edit worldmap node (center panel):

- 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**: ☐ Enabled.

Info (right sidebar):

- Flows**: Flow 1, Flow 2.
- Subflows**: Global Configuration Nodes.
- worldmap**:
 - Node**: "5ed11e914b5614ea"
 - Type**: worldmap.
 - The map can be found [here](#).

Node-RED interface showing the configuration of a **function** node.

Flow 1 (left sidebar):

- Nodes: **IBM IoT** (connected) → **function** → **function** → **geofence** → **function** → **switch**.

Edit function node (center panel):

- Properties**:
 - Name**: Name.
 - Setup**: ☐ Setup, ☐ On Start, ☐ On Message, ☐ On Stop.
 - Code**:

```
1 msg.payload=msg.location.inarea
2 return msg;
```
 - Enabled**: ☐ Enabled.

Info (right sidebar):

- Flows**: Flow 1, Flow 2.
- Subflows**: Global Configuration Nodes.
- function: 3585a4ac8098085f**:
 - Node**: "3585a4ac8098085f"
 - Type**: function.

Node-RED interface showing the configuration of a **switch** node.

Flow 1 (left sidebar):

- Nodes: **IBM IoT** (connected) → **function** → **function** → **geofence** → **function** → **switch**.

Edit switch node (center panel):

- Properties**:
 - Name**: Name.
 - Property**: msg. payload.
 - Rules**:
 - is false → 1
 - is true → 2
 - add**:
 - checking all rules**: ☐ checking all rules.
 - recreate message sequences**: ☐ recreate message sequences.
 - Enabled**: ☐ Enabled.

Info (right sidebar):

- Flows**: Flow 1, Flow 2.
- Subflows**: Global Configuration Nodes.
- switch**:
 - Node**: "16b63596382b4cc6"
 - Type**: switch.

Node-RED interface showing the Edit function node configuration. The node is named "function" and is configured to run on the "On Message" event. The code defines a function that calculates the current time in UTC, adjusts it by a 5.5-hour offset, and returns a message object containing the time, name, latitude, and longitude.

```
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;
```

The right sidebar shows the "info" tab with the node ID "322663c3205cc798" and the type "function".

Node-RED interface showing the Edit function node configuration. The node is named "function" and is configured to run on the "On Message" event. The code defines a function that calculates the current time in UTC, adjusts it by a 5.5-hour offset, and returns a message object containing the time, name, latitude, and longitude.

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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;
```

The right sidebar shows the "info" tab with the node ID "dfef78abe1ae2fd4" and the type "function".

Node-RED interface showing the Edit function node configuration. The node is named "function" and is configured to run on the "On Message" event. The code defines a function that calculates the current time in UTC, adjusts it by a 5.5-hour offset, and returns a message object containing the time, name, latitude, and longitude.

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2 var utc = d.getTime() + (d.getTimezoneOffset() * 60000);
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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;
```

The right sidebar shows the "info" tab with the node ID "36df960d0bd4f874" and the type "function".

Node-RED

filter nodes

Flow 1

IBM IoT

connected

function

function

function

geofence

function

switch

http request

Method: GET

URL: https://www.fast2sms.com/dev/wallet?authorizati

Payload: Ignore

Enable secure (SSL/TLS) connection

Use authentication

Enable connection keep-alive

Use proxy

Only send non-2xx responses to Catch node

Return: a UTF-8 string

Enabled

info

Search flows

Flows

Flow 1

Flow 2

Subflows

Global Configuration Nodes

http request

Node: "a43ddb0b4716e38d"

Type: http request

Node-RED

filter nodes

Flow 1

IBM IoT

connected

function

function

function

geofence

function

switch

notification

Layout: OK / Cancel Dialog

Send to all browser sessions.

Default action label: OK

Secondary action label: (optional label for Cancel button)

Accept raw HTML/JavaScript input in msg.payload to format popup.

Class: [msg.className]

Topic: [msg.topic]

Name: show dialogue

Enabled

info

Search flows

Flows

Flow 1

Flow 2

Subflows

Global Configuration Nodes

show dialogue

Node: "388bcb2648d1348b"

Type: ui_toast

Node-RED

filter nodes

Flow 1

IBM IoT

connected

function

function

function

geofence

function

switch

cloudant out

Service: Cloudant-pn-99850

Database: noderedapqzh20221108

Operation: insert

Only store msg.payload object?

Name: child

Enabled

info

Search flows

Flows

Flow 1

Flow 2

Subflows

Global Configuration Nodes

child

Node: "7f199a311bbfac36"

Type: cloudant out