

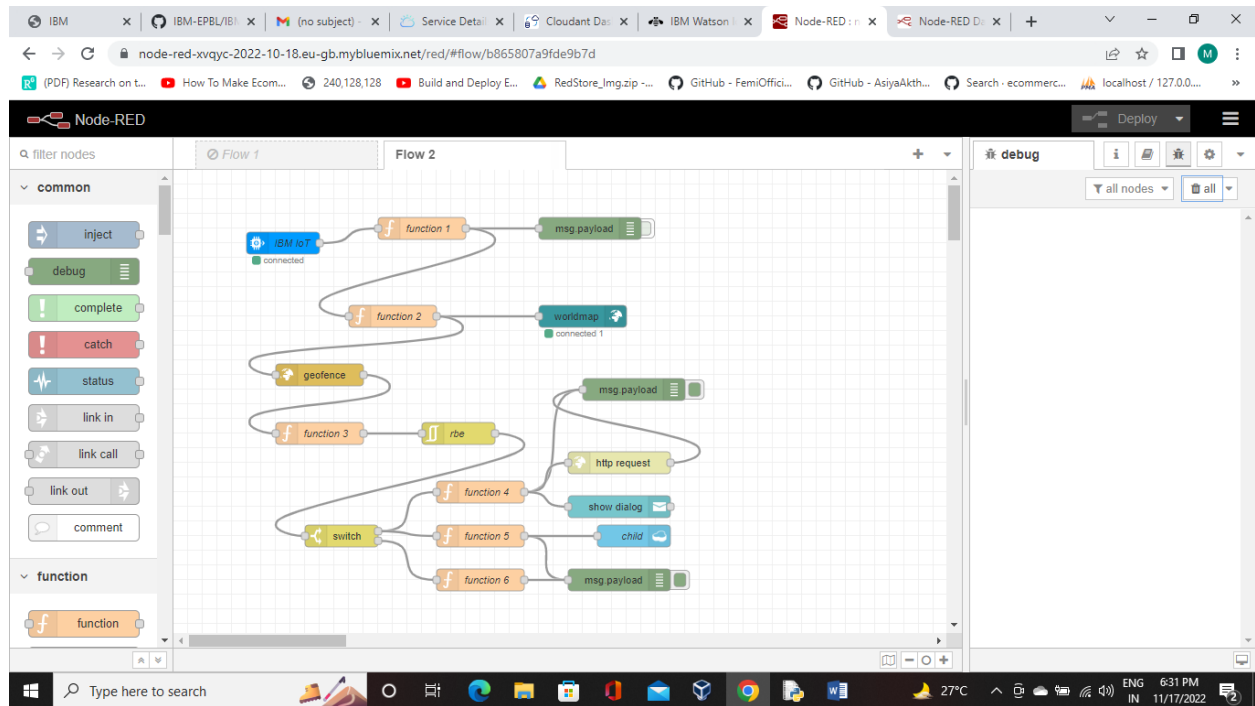
Project Development – Sprint 3

Iot Based Safety For Child Safety Monitoring & Notification

TEAM ID:PNT2022TMID23918

Creating Node-Red Service and connecting with IBM cloud

Creating Node-Red Service :



Codes in Each Node :

The screenshot shows the Node-RED web interface. The left sidebar contains a 'filter nodes' search bar and two categories: 'common' (with nodes like inject, debug, complete, catch, status, link in, link call, link out, comment) and 'function' (with a 'function' node). The main workspace displays a flow with an 'ibmiot' node connected to 'function 1', which then connects to 'function 2', 'function 3', and a 'switch' node. The 'switch' node has three outgoing connections to 'function 4', 'function 5', and 'function 6'. The right sidebar shows the 'debug' console. The 'Edit ibmiot in node' dialog is open, displaying the following properties:

- Authentication: API Key
- API Key: child_location
- Input Type: Device Event
- Device Type: ☐ All or safetygad
- Device Id: ☐ All or gad1
- Event: ☒ All or +
- Format: ☐ All or json
- QoS: 0
- Name: IBM IoT
- ☐ Enabled

The screenshot shows the Node-RED web interface with the same flow as the previous image. The 'Edit function node' dialog is open for 'function 1'. The 'Properties' section shows the name 'function 1'. The 'On Message' tab is selected, showing the following JavaScript code:

```
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;
```

IBM x IBM-EPBL/IBI x (no subject) x Service Detail x Cloudant Da x IBM Watson x Node-RED x Node-RED D x +

node-red-xvqyc-2022-10-18.eu-gb.mybluemix.net/red/#flow/b865807a9fde9b7d

(PDF) Research on t... How To Make Ecom... 240,128,128 Build and Deploy E... RedStore_img.zip ~... GitHub - FemiOffici... GitHub - AsiyaAkh... Search - ecommere... localhost / 127.0.0...

Node-RED

filter nodes

common

- inject
- debug
- complete
- catch
- status
- link in
- link call
- link out
- comment

function

- function

Flow 1

IBM IoT

connected

geofence

function 3

switch

Edit function node

Delete Cancel Done

Properties

Name function 2

Setup On Start On Message On Stop

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

Enabled

debug

all nodes all

Type here to search

27°C

6:34 PM

11/17/2022

IBM x IBM-EPBL/IBI x (no subject) x Service Detail x Cloudant Da x IBM Watson x Node-RED x Node-RED D x +

node-red-xvqyc-2022-10-18.eu-gb.mybluemix.net/red/#flow/b865807a9fde9b7d

(PDF) Research on t... How To Make Ecom... 240,128,128 Build and Deploy E... RedStore_img.zip ~... GitHub - FemiOffici... GitHub - AsiyaAkh... Search - ecommere... localhost / 127.0.0...

Node-RED

filter nodes

common

- inject
- debug
- complete
- catch
- status
- link in
- link call
- link out
- comment

function

- function

Flow 1

IBM IoT

connected

geofence

function 3

switch

Edit geofence node

Delete Cancel Done

Properties

Map

Leaflet | Map data © OpenStreetMap contributors

_Floor ground _Ceiling infinity

Enabled

debug

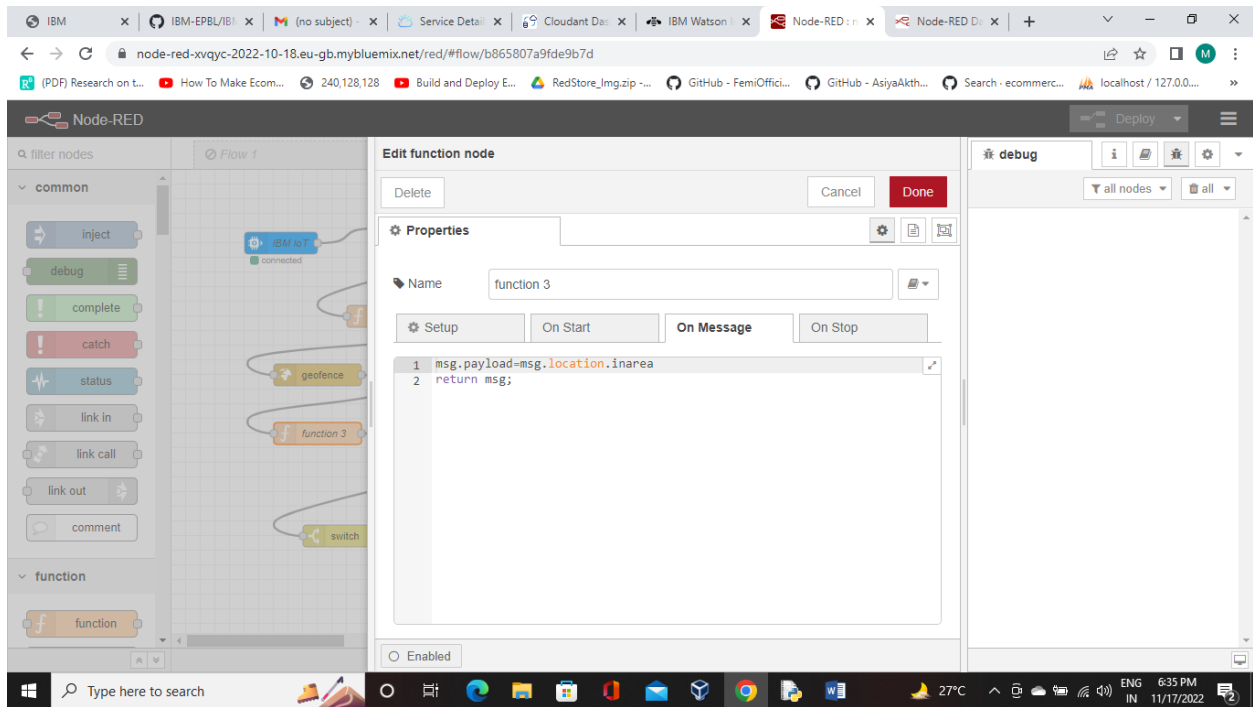
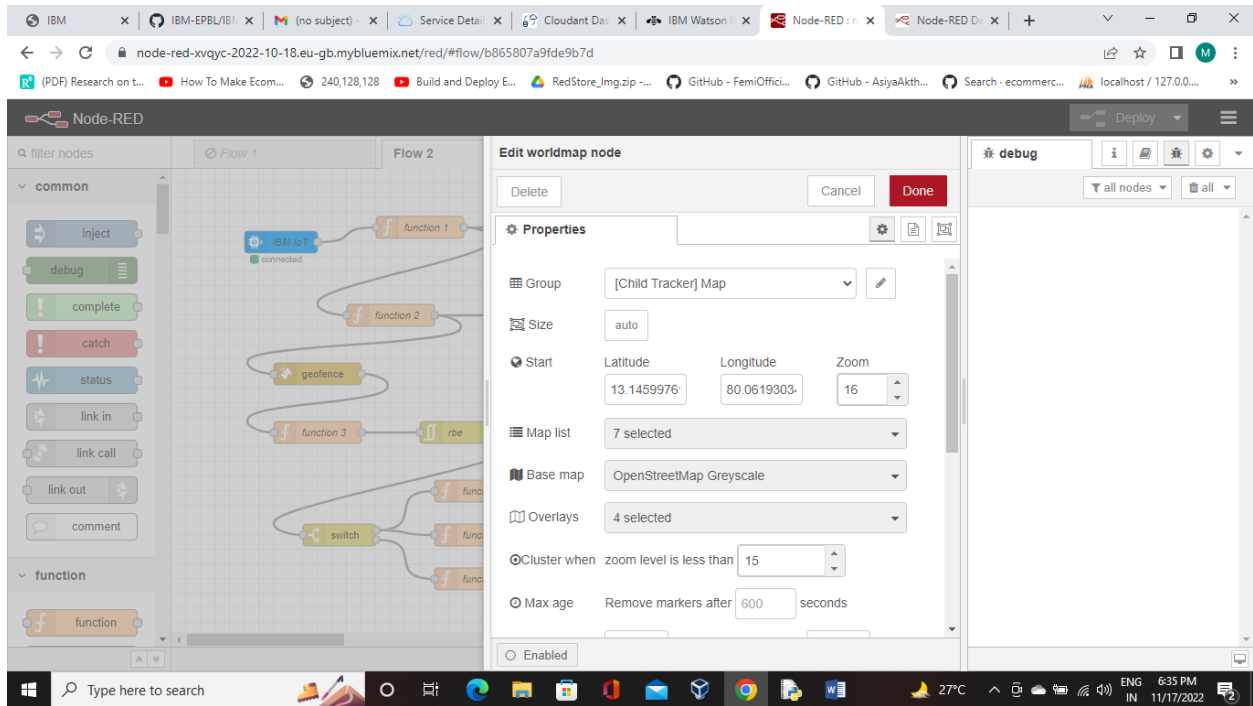
all nodes all

Type here to search

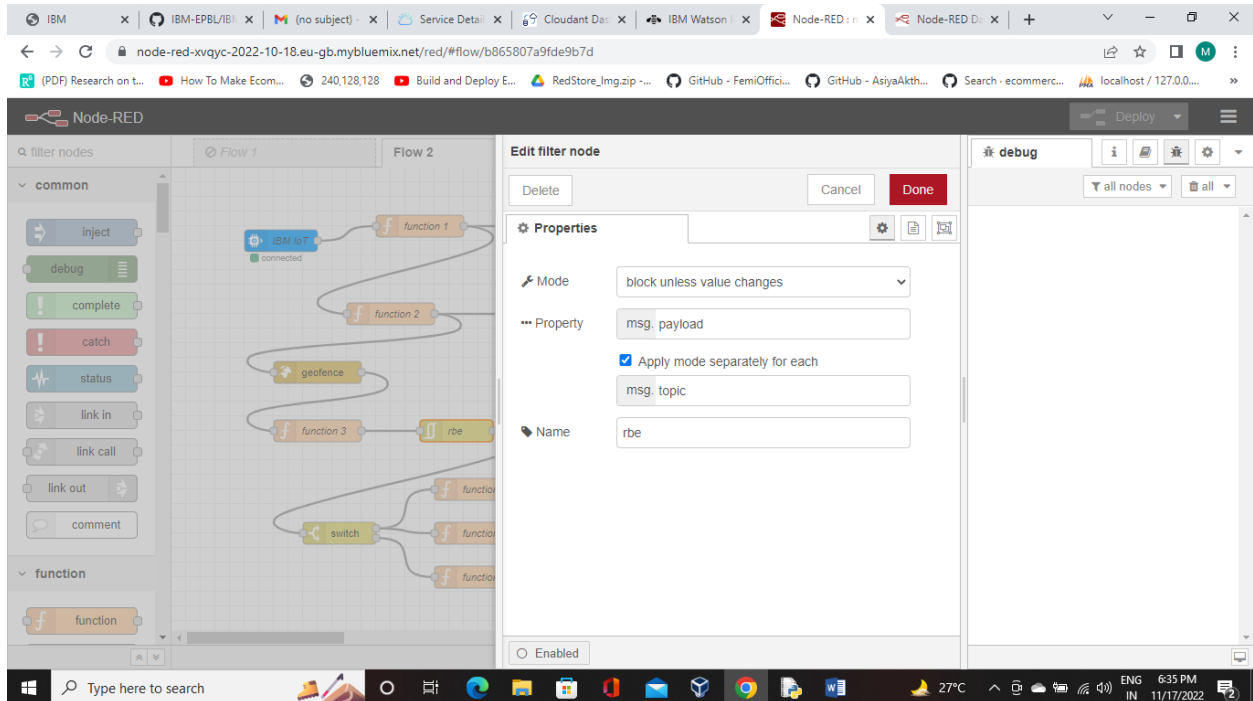
27°C

6:34 PM

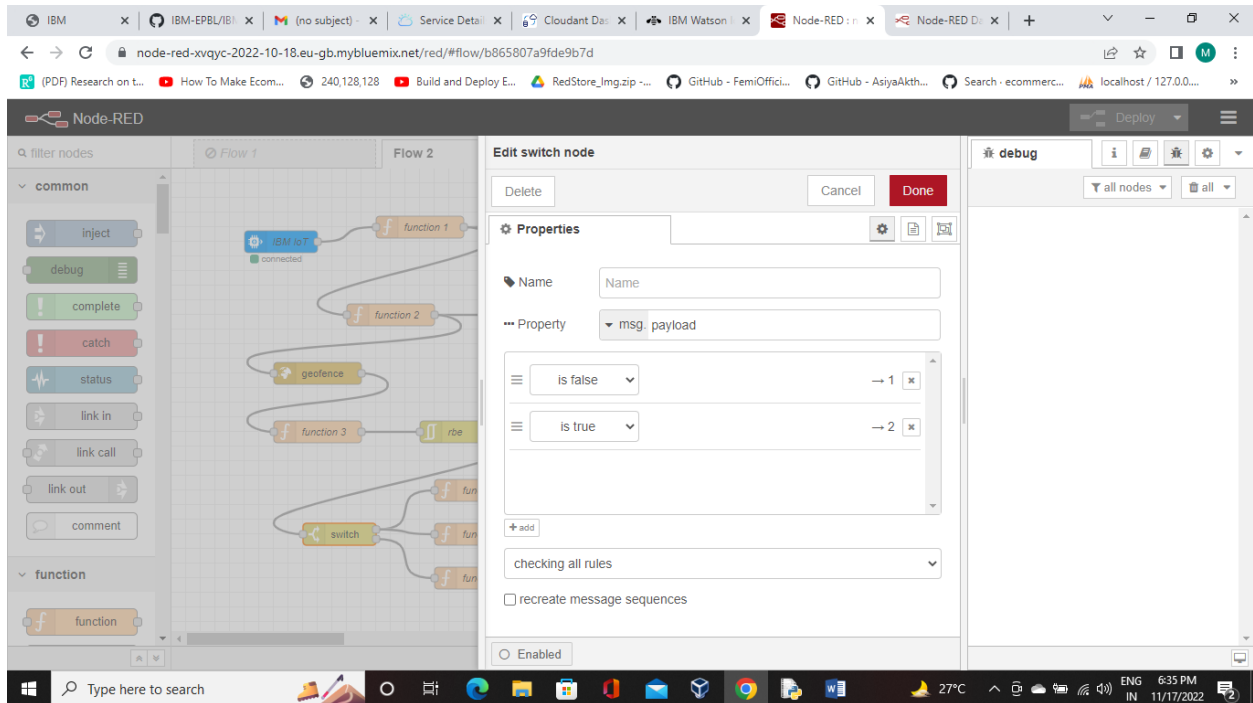
11/17/2022



Node-RED interface showing a flow with nodes: inject, debug, complete, catch, status, link in, link call, link out, comment, function, and a switch node. The 'Edit filter node' dialog is open, showing properties: Mode (block unless value changes), Property (msg.payload), Apply mode separately for each (checked), msg.topic, and Name (rbe).



Node-RED interface showing the same flow. The 'Edit switch node' dialog is open, showing properties: Name (Name), Property (msg.payload), and two rules: 'is false' (output 1) and 'is true' (output 2). The 'checking all rules' checkbox is checked.



IBM x IBM-EPBL/IB... x (no subject) x Service Detail x Cloudant Da... x IBM Watson x Node-RED x Node-RED D... x

node-red-xvqyc-2022-10-18.eu-gb.mybluemix.net/red/#flow/b865807a9fde9b7d

Node-RED

filter nodes

common

- inject
- debug
- complete
- catch
- status
- link in
- link call
- link out
- comment

function

- function

Flow 1

IBM IoT

connected

geofence

function 3

switch

Edit function node

Delete Cancel Done

Properties

Name function 5

Setup On Start On Message On Stop

```
1 var d = new Date();
2
3 var utc = d.getTime() + (d.getTimezoneOffset() * 60000);
4
5 var offset = 5.5;
6
7 newDate = new Date(utc +(360000*offset));
8
9 msg.payload = {
10   "message": "Exit",
11   "Time": newDate.toLocaleString(),
12   "name": global.get('name'),
13   "lat": global.get('latitude'),
14   "lon": global.get('longitude')
15 };
16
17 return msg;
```

Enabled

debug

all nodes all

Type here to search

27°C

6:36 PM

11/17/2022

IBM x IBM-EPBL/IB... x (no subject) x Service Detail x Cloudant Da... x IBM Watson x Node-RED x Node-RED D... x

node-red-xvqyc-2022-10-18.eu-gb.mybluemix.net/red/#flow/b865807a9fde9b7d

Node-RED

filter nodes

common

- inject
- debug
- complete
- catch
- status
- link in
- link call
- link out
- comment

function

- function

Flow 1

IBM IoT

connected

geofence

function 3

switch

Edit function node

Delete Cancel Done

Properties

Name function 6

Setup On Start On Message On Stop

```
1 var d = new Date();
2
3 var utc = d.getTime() + (d.getTimezoneOffset() * 60000);
4
5 var offset = 5.5;
6
7 newDate = new Date(utc +(360000*offset));
8
9 msg.payload = {
10   "message": "Entry",
11   "Time": newDate.toLocaleString(),
12   "name": global.get('name'),
13   "lat": global.get('latitude'),
14   "lon": global.get('longitude')
15 };
16
17 return msg;
```

Enabled

debug

all nodes all

Type here to search

27°C

6:36 PM

11/17/2022

node-red-xvqyc-2022-10-18.eu-gb.mybluemix.net/red/#flow/b865807a9fde9b7d

Node-RED

Filter nodes: common, function

Flow 1: IBM IoT -> function 1 -> function 2 -> geofence -> function 3 -> rbe -> switch -> function 4 -> function 5 -> function 6

Flow 2: function 1 -> function 2 -> function 3 -> function 4 -> function 5 -> function 6

Edit notification node

Properties:

- 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: Name

Enabled

node-red-xvqyc-2022-10-18.eu-gb.mybluemix.net/red/#flow/b865807a9fde9b7d

Node-RED

Filter nodes: common, function

Flow 1: IBM IoT -> function 1 -> function 2 -> geofence -> function 3 -> rbe -> switch -> function 4 -> function 5 -> function 6

Flow 2: function 1 -> function 2 -> function 3 -> function 4 -> function 5 -> function 6

Edit cloudant out node

Properties:

- Service: node-red-xvqyc-2022-cloudant-1666110236
- Database: tracker
- Operation: insert
- Only store msg.payload object?: ☒
- Name: child

Enabled

