

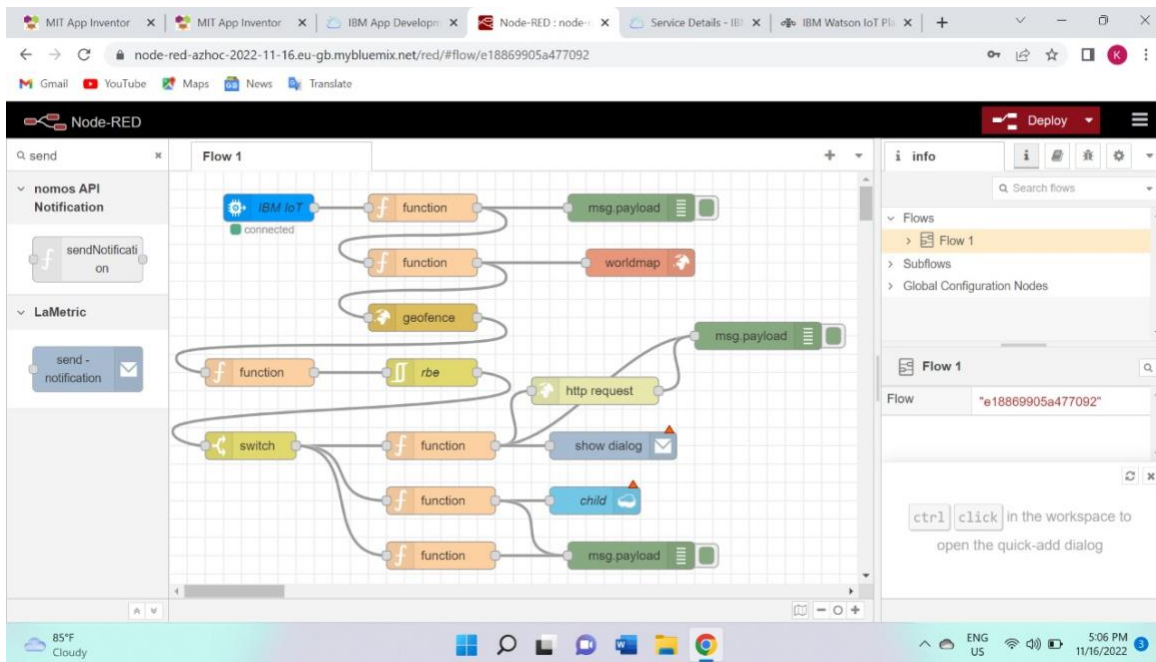
Project Development - Delivery plan sprint -2

IOT Based Safety Gadget for Child Safety Monitoring & Notification

TEAM ID : PNT2022TMID33855

Creating Node - Red service and connecting with IBM cloud

Creating Node-Red service:



Codes in each Node :

MIT App Inventor x MIT App Inventor x IBM App Develop... Node-RED : node-... Service Details - IB... IBM Watson IoT Pl... +

node-red-azhoc-2022-11-16.eu-gb.mybluemix.net/red/#flow/e18869905a477092

Gmail YouTube Maps News Translate

Node-RED

Flow 1

send

nomos API Notification

sendNotification

LaMetric

send - notification

function

switch

IBM IoT

connected

Edit ibmiot in node

Delete Cancel Done

Properties

Authentication API Key

API Key IBMIOT

Input Type Device Event

Device Type All or Testdevicetype

Device Id All or 12345

Logical Interface All or Logical Interface e.g. ITempSensor

Rule Id All or Rule Id e.g. ab03effb45cf66

Event All or +

Enabled

info

Search flows

Flows

Flow 1

Subflows

Global Configuration Nodes

IBM IoT

Node "c1127d2f5eda4c88"

Type ibmiot in

show more

Search for nodes using ctrl-f

85°F Cloudy

ENG US 5:06 PM 11/16/2022

Node-RED x Service Del... IBM Watson x spyder py... (1) Whats... Node-RED x Welcome t... IBM x +

node-red-cbtai-2022-11-17.eu-gb.mybluemix.net/red/#flow/cfe33199ccd2f3db

Gmail YouTube Maps News Translate New folder Node-RED : node-r... Node-RED : node-r...

Node-RED

Flow 1

filter nodes

common

inject

debug

complete

catch

status

link in

link call

link out

comment

function

IBM IoT

disconnected

function

function

geofence

Edit ibmiot in node > Edit ibmiot node

Delete Cancel Update

Properties

Name IBMIOT

API Key a-1e5zwd-8ois7yhyuh

API Token

Server-Name orgid.messaging.internetofthings.ibmcloud.com

Scalable Application ID

Keep Alive 60 Seconds Use Clean Session

Enabled 1 node uses this config On all flows

info

Search flows

Flows

Flow 1

Subflows

Global Configuration Nodes

IBMIOT

Node "d2bdbc9db792b4bb"

Type ibmiot

show more

83°F Haze

ENG US 5:18 PM 11/17/2022

MIT App Inventor x MIT App Inventor x IBM App Develop... Node-RED : node- x Service Details - IBM x IBM Watson IoT P...

node-red-azhoc-2022-11-16.eu-gb.mybluemix.net/red/#flow/e18869905a477092

Gmail YouTube Maps News Translate

Node-RED

Filter nodes

common

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

function

Flow 1

IBM IoT

connected

function

switch

Edit function node

Delete Cancel Done

Properties

Name

Setup On Start On Message On Stop

```
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;
```

Enabled

info

Search flows

Flows

- Flow 1

Subflows

Global Configuration Nodes

function: e1a0fe7e191d15db

Node "e1a0fe7e191d15db"

Type function

show more

Pressing **enter** will edit the first node in the current selection

83°F Haze

ENG US

5:12 PM 11/16/2022

MIT App Inventor x MIT App Inventor x IBM App Develop... Node-RED : node- x Service Details - IBM x IBM Watson IoT P...

node-red-azhoc-2022-11-16.eu-gb.mybluemix.net/red/#flow/e18869905a477092

Gmail YouTube Maps News Translate

Node-RED

Filter nodes

common

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

function

Flow 1

IBM IoT

connected

function

switch

Edit debug node

Delete Cancel Done

Properties

Output msg.payload

To ☒ debug window ☐ system console ☐ node status (32 characters)

Name

Enabled

info

Search flows

Flows

- Flow 1

Subflows

Global Configuration Nodes

msg.payload

Node "d84ae2b2b8c2dade"

Type debug

show more

Export the selected nodes, or the current tab with **ctrl-e**

83°F Haze

ENG US

5:13 PM 11/16/2022

cloud.ibm.com x MIT App Inventor x MIT App Inventor x IBM App Developer x Node-RED: no x Service Details x 1e5zwdIntern x +

node-red-azhoc-2022-11-16.eu-gb.mybluemix.net/red/#flow/e18869905a477092

Gmail YouTube Maps News Translate

Node-RED

filter nodes

Flow 1

common

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

function


function

switch

Edit geofence node

Delete Cancel Done

Properties



Enabled

info

Search flows

- Flows
 - Flow 1
- Subflows
- Global Configuration Nodes

geofence

Node "a02d38e3dd8a0ad8"

Type geofence

show more

Move the selected nodes using the keys. Hold to nudge them further

81°F Cloudy

ENG US 7:03 PM 11/16/2022

cloud.ibm.com x MIT App Inventor x MIT App Inventor x IBM App Developer x Node-RED: no x Service Details x 1e5zwdIntern x +

node-red-azhoc-2022-11-16.eu-gb.mybluemix.net/red/#flow/e18869905a477092

Gmail YouTube Maps News Translate

Node-RED

filter nodes

Flow 1

common

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

function

function

switch

Edit function node

Delete Cancel Done

Properties

Name Name

Setup On Start On Message On Stop

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

Enabled

info

Search flows

- Flows
 - Flow 1
- Subflows
- Global Configuration Nodes

function: 2f226a3bf6f0658a

Node "2f226a3bf6f0658a"

Type function

show more

Your flow configuration nodes are listed in the sidebar panel. It can be accessed from the menu or with

81°F Cloudy

ENG US 7:04 PM 11/16/2022

cloud.ibm.com x MIT App Inven x MIT App Inven x IBM App Deve x Node-RED : n x Service Detai x 1e5zwd.intern x + -

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Gmail YouTube Maps News Translate

Node-RED

filter nodes

common

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

function

Flow 1

IBM IoT

connected

function

switch

Edit filter node

Delete Cancel Done

Properties

Mode block unless value changes

Property msg. payload

Apply mode separately for each

msg. topic

Name rbe

Enabled

info

Search flows

Flows

- Flow 1
- Subflows
- Global Configuration Nodes

rbe

Node "4f99b1c02802fc05"

Type rbe

show more

Hold down when you click on a node to also select all of its connected nodes

81°F Cloudy

ENG US 7:05 PM 11/16/2022

cloud.ibm.com x MIT App Inven x MIT App Inven x IBM App Deve x Node-RED : n x Service Detai x 1e5zwd.intern x + -

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Node-RED

filter nodes

common

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

function

Flow 1

IBM IoT

connected

function

switch

Edit switch node

Delete Cancel Done

Properties

Name Name

Property msg. payload

is false → 1

is true → 2

add

checking all rules

recreate message sequences

Enabled

info

Search flows

Flows

- Flow 1
- Subflows
- Global Configuration Nodes

switch

Node "29c2f10938960eb4"

Type switch

show more

You can remove the selected nodes or links with delete

81°F Cloudy

ENG US 7:07 PM 11/16/2022

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Node-RED

filter nodes

common

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

function

Flow 1

Edit function node

Delete Cancel Done

Properties

Name

Setup On Start On Message On Stop

```
3 var utc = d.getTime() + (d.getTimezoneOffset() * 60000);
4
5 var offset = 5.5;
6
7 newDate = new Date(utc + (3600000 * 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

info

Search flows

- Flows
- Flow 1
- Subflows
- Global Configuration Nodes

function: bc2bd5e850f35c07

Node "bc2bd5e850f35c07"

Type function

Search for nodes using

80°F Partly cloudy

ENG US 7:18 PM 11/16/2022

cloud.ibm.com x MIT App Inventor x MIT App Inventor x IBM App Developer x Node-RED: no x Service Details x 1e5zwdIntern x +

node-red-azhoc-2022-11-16.eu-gb.mybluemix.net/#flow/e18869905a477092

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Node-RED

filter nodes

common

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

function

Flow 1

Edit function node

Delete Cancel Done

Properties

Name

Setup On Start On Message On Stop

```
2 var utc = d.getTime() + (d.getTimezoneOffset() * 60000);
3
4 var offset = 5.5;
5
6 newDate = new Date(utc + (3600000 * offset));
7
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

info

Search flows

- Flows
- Flow 1
- Subflows
- Global Configuration Nodes

function: 55df4654334dc482

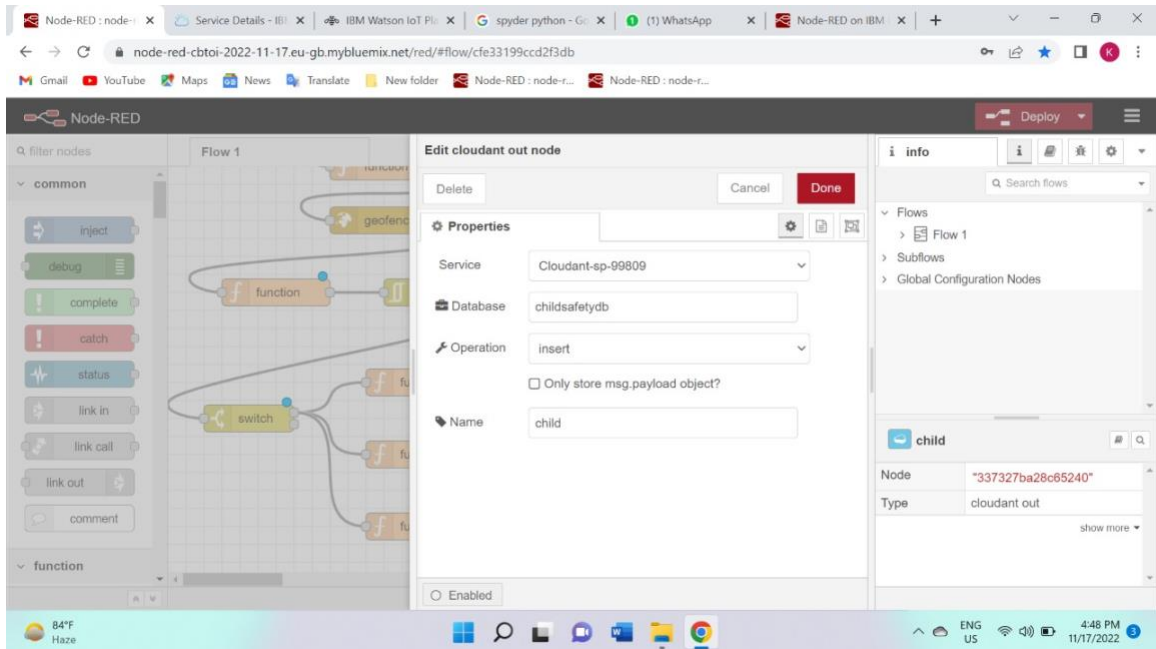
Node "55df4654334dc482"

Type function

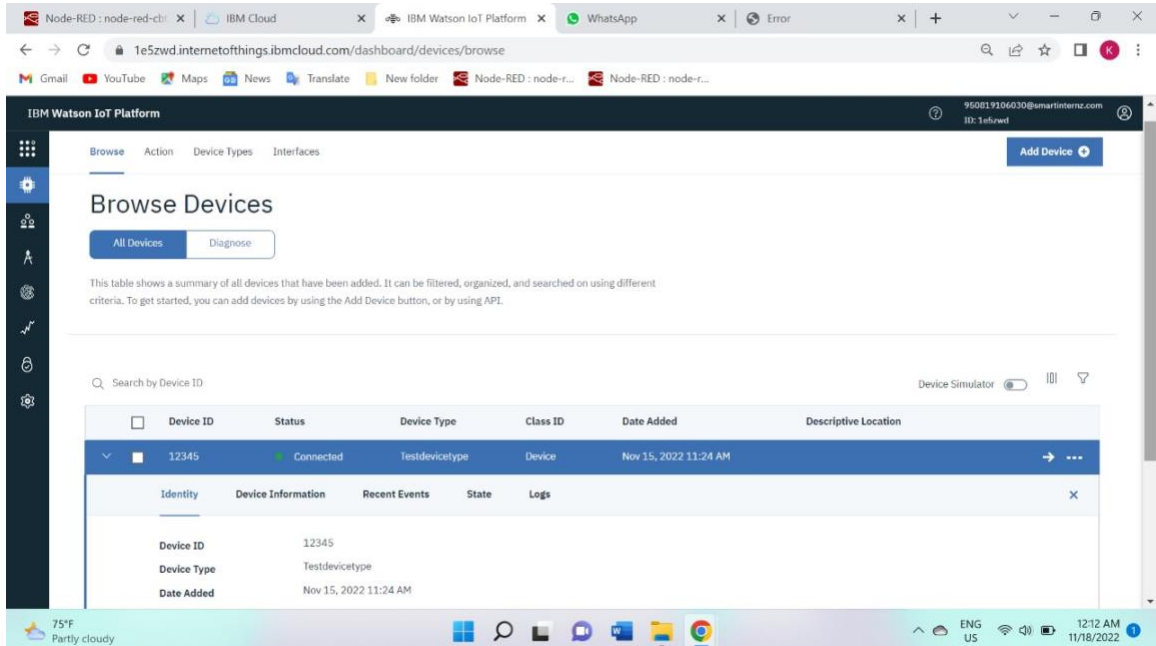
ctrl-space will toggle the view of this sidebar

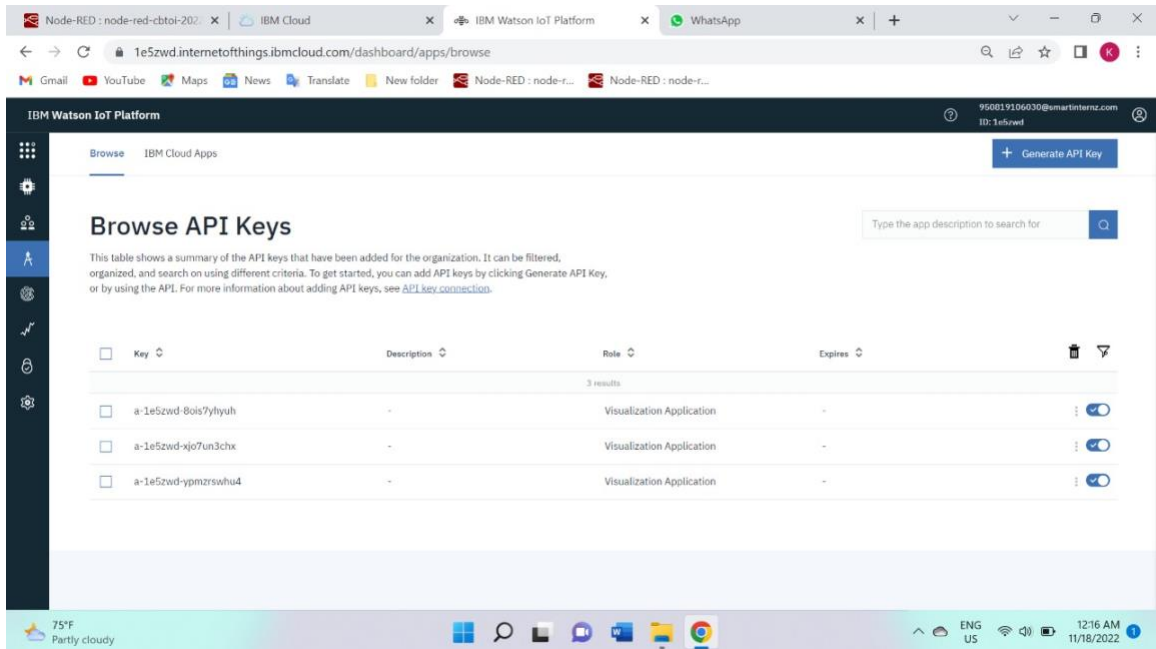
80°F Partly cloudy

ENG US 7:20 PM 11/16/2022

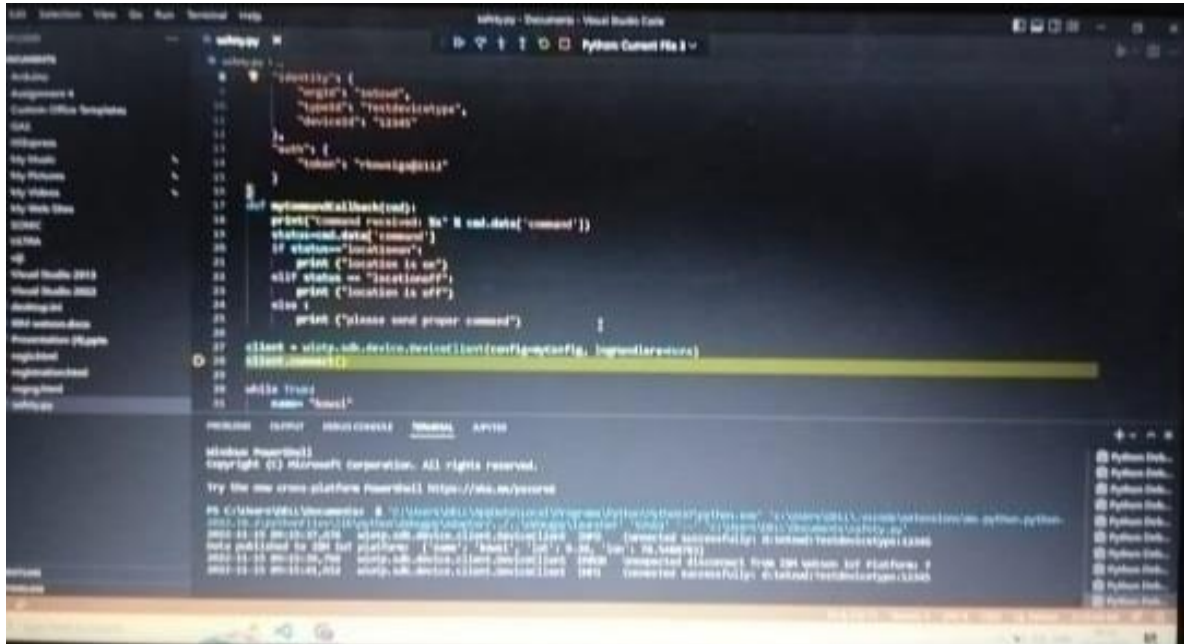


Connecting with IBM IOT node through the API key





Transferring values from Python Code:



Node-Red

