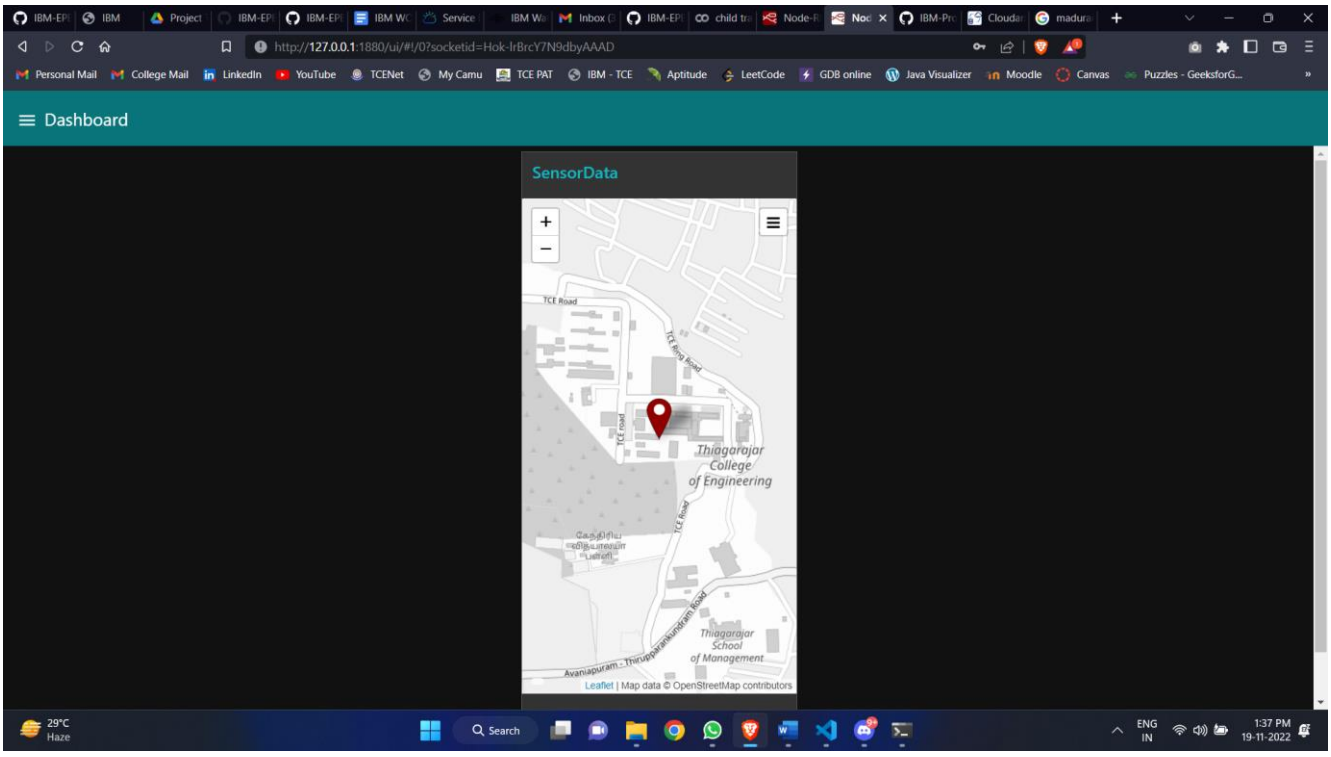
Project Development Phase
SPRINT-3

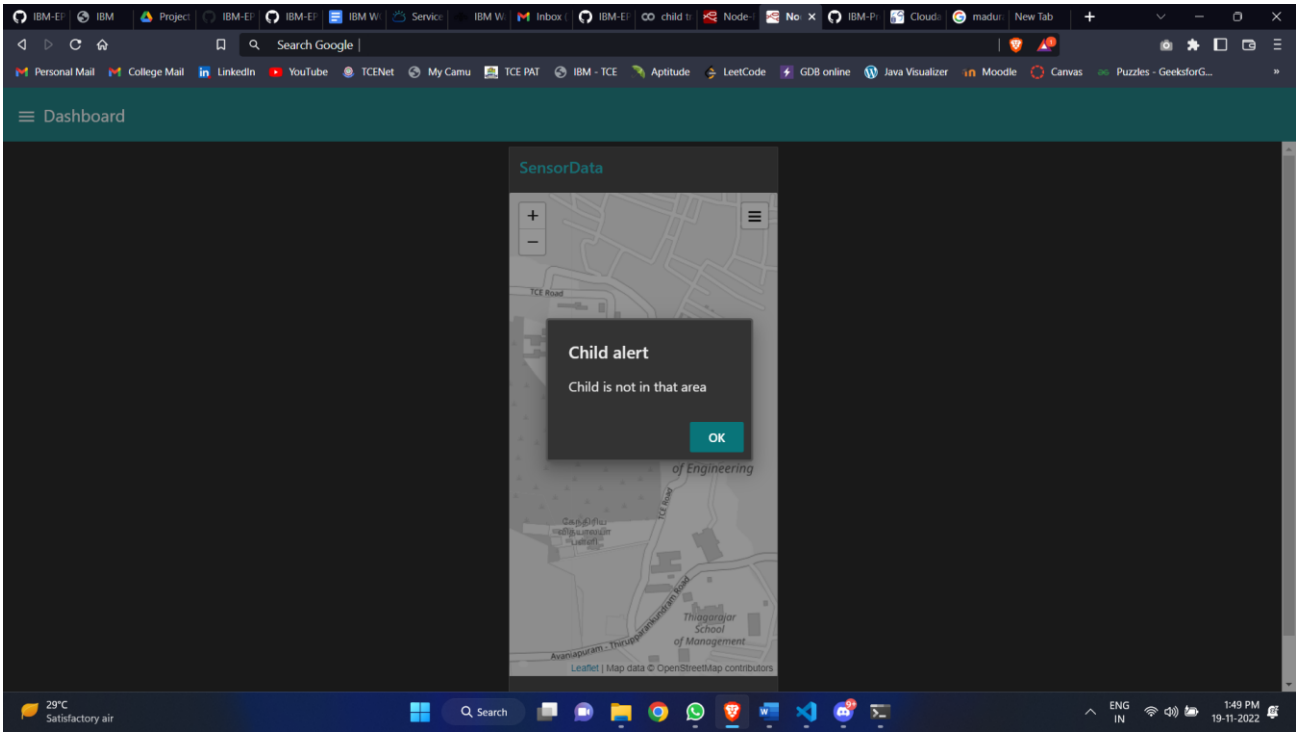
Date	13 November 2022
Team ID	PNT2022TMID21482
Project Name	IoT Based Safety Gadget for Child Safety Monitoring & Notification
Maximum Marks	20 marks

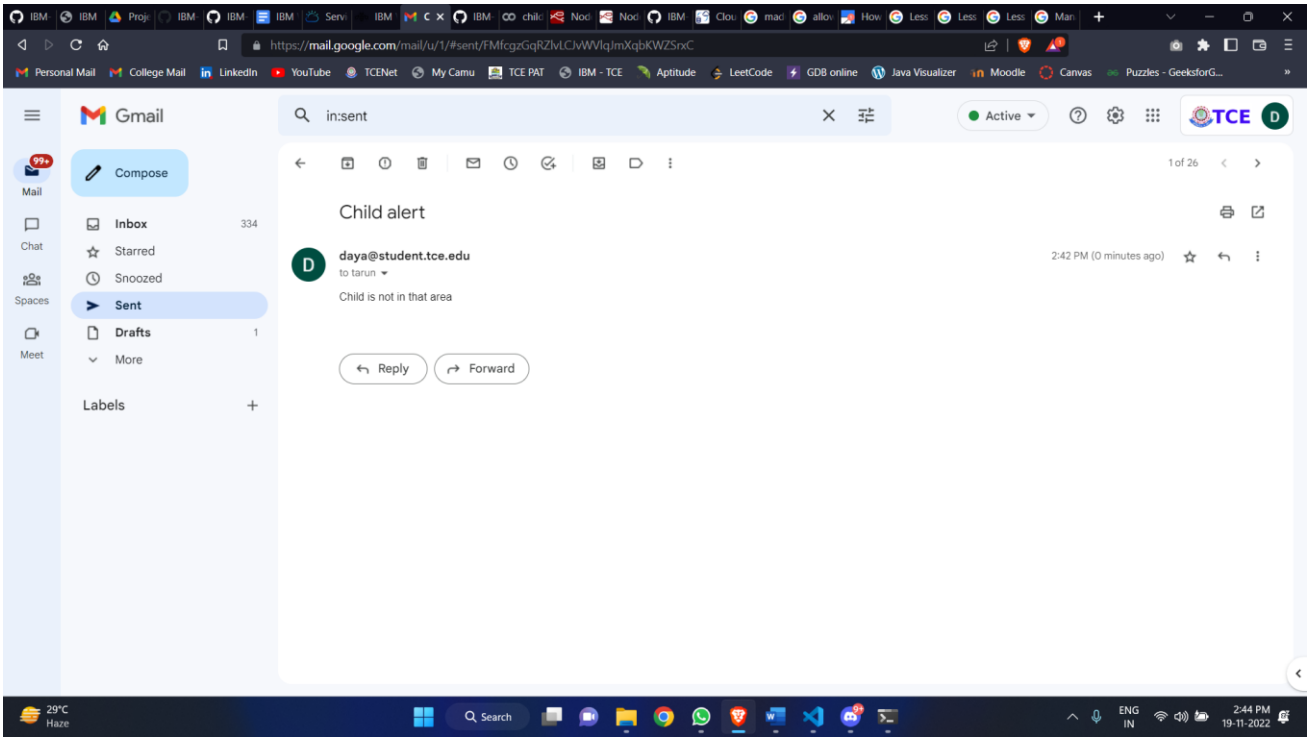
Functional Requirements to be completed:

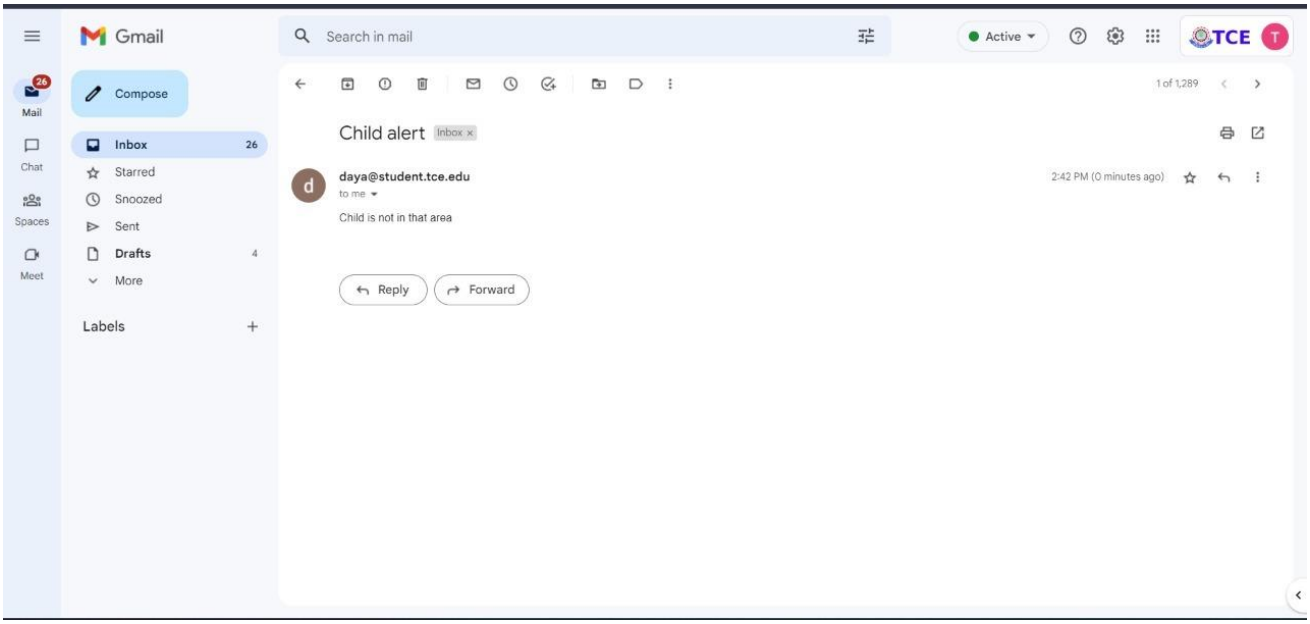
Sprint-3	Notification	USN-9	As a user, I can receive notification when child goes out of range	2	High	Daya Anand C H, Eniyan M S
Sprint 3	Network connection	USN-10	The device should be connected to internet always	1	Medium	Manoj A, Tarun Kishore G T

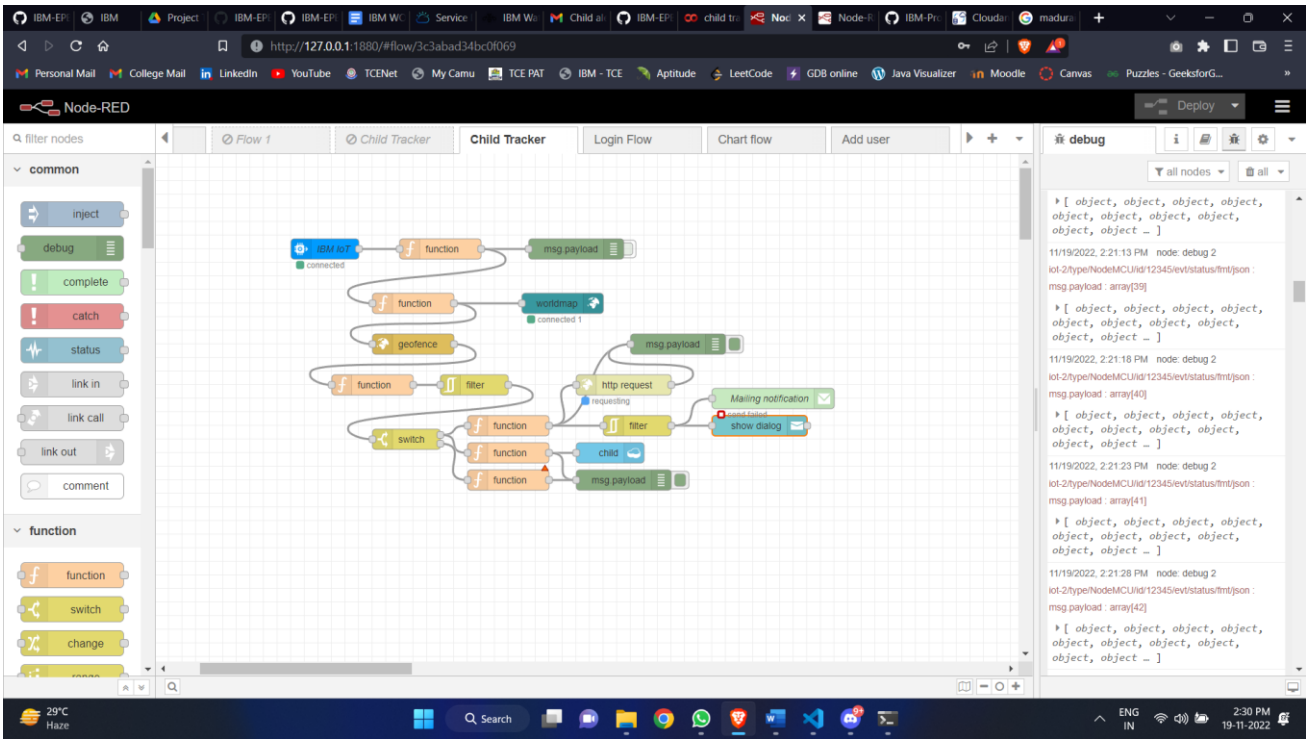
Screenshots:

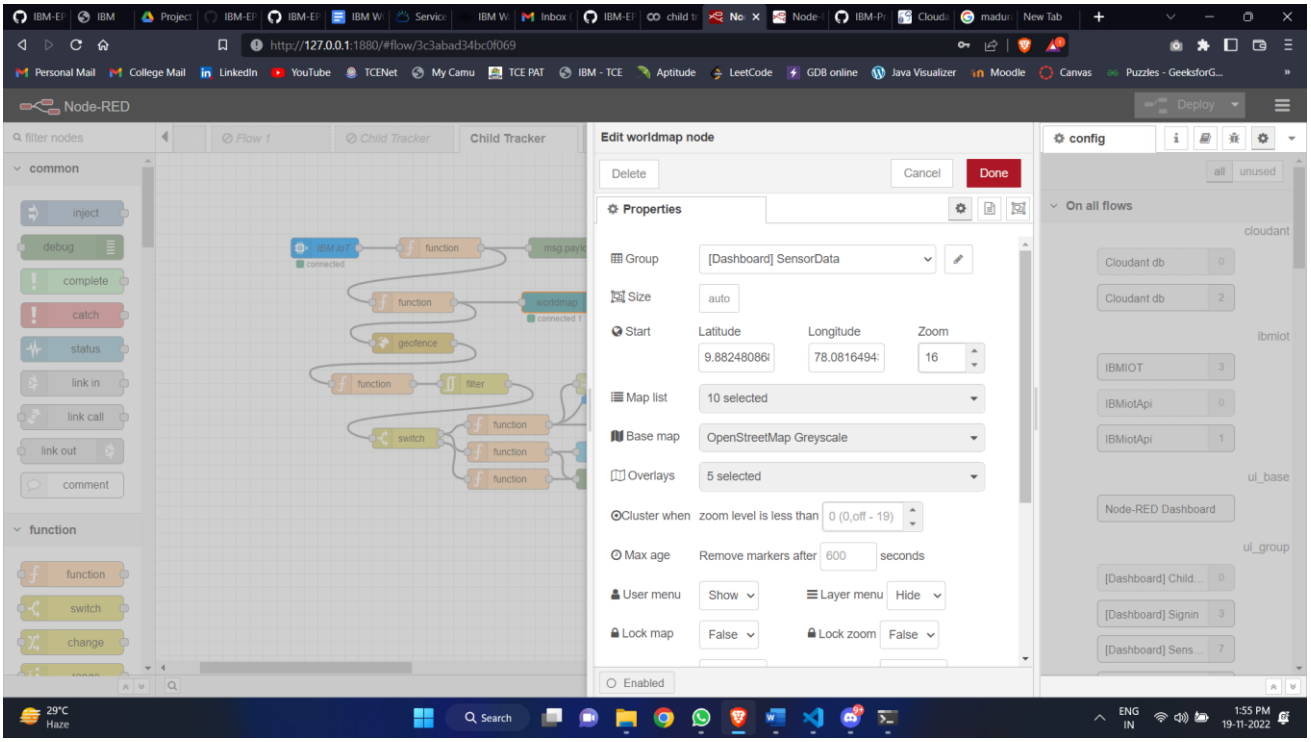


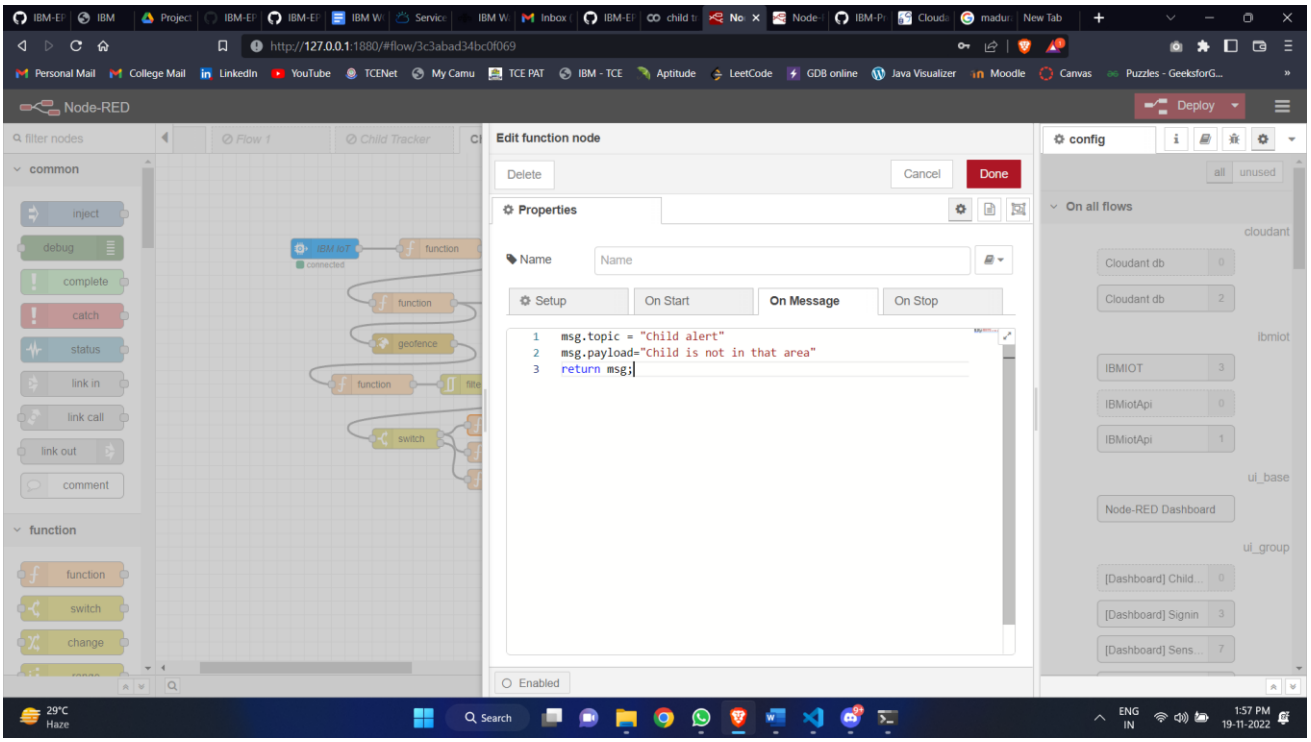

Dashboard
SensorData
Child alert
Child is not in that area
OK
TCE Road
of Engineering
Thiagarajar School of Management
Leaflet | Map data © OpenStreetMap contributors
29°C
Satisfactory air
Search
ENG
IN
1:49 PM
19-11-2022

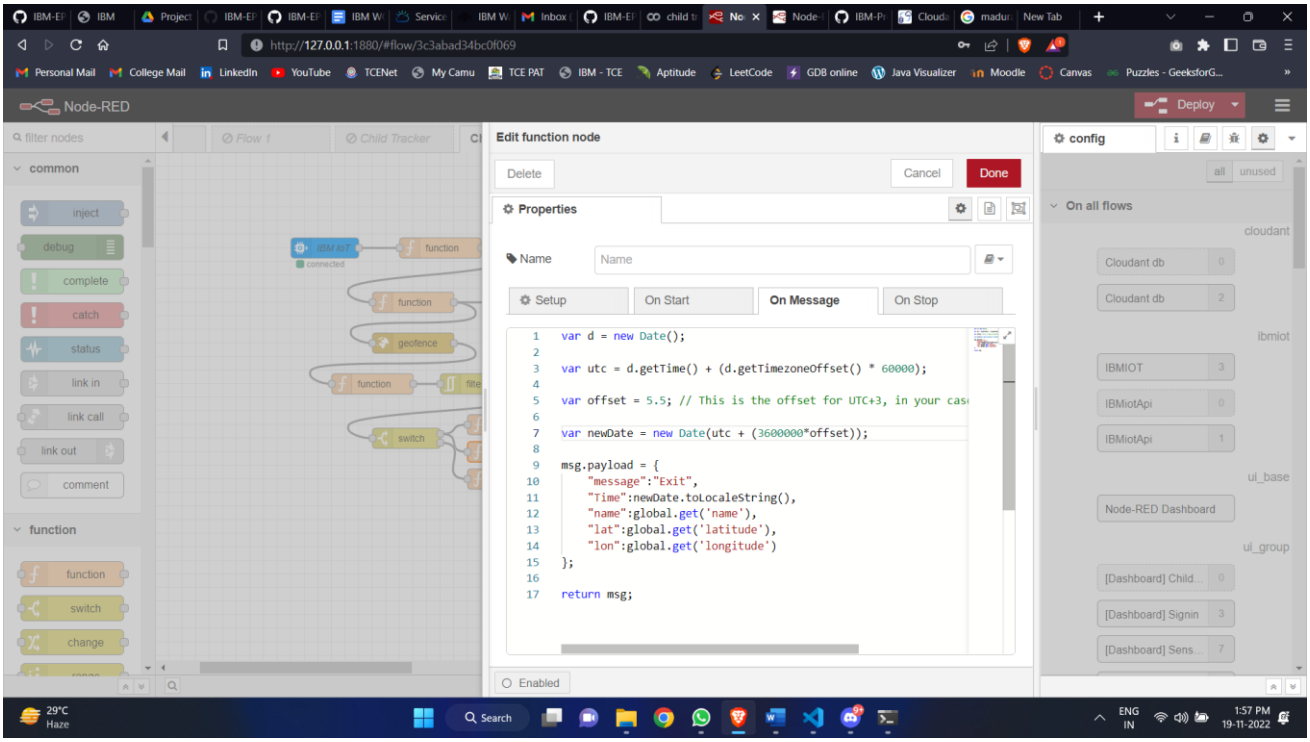

Gmail
in:sent
Compose
Inbox 334
Starred
Snoozed
Sent
Drafts 1
More
Labels
Child alert
daya@student.tce.edu
to tarun
2:42 PM (0 minutes ago)
Child is not in that area
Reply
Forward
29°C
Haze
Search
ENG
IN
2:44 PM
19-11-2022

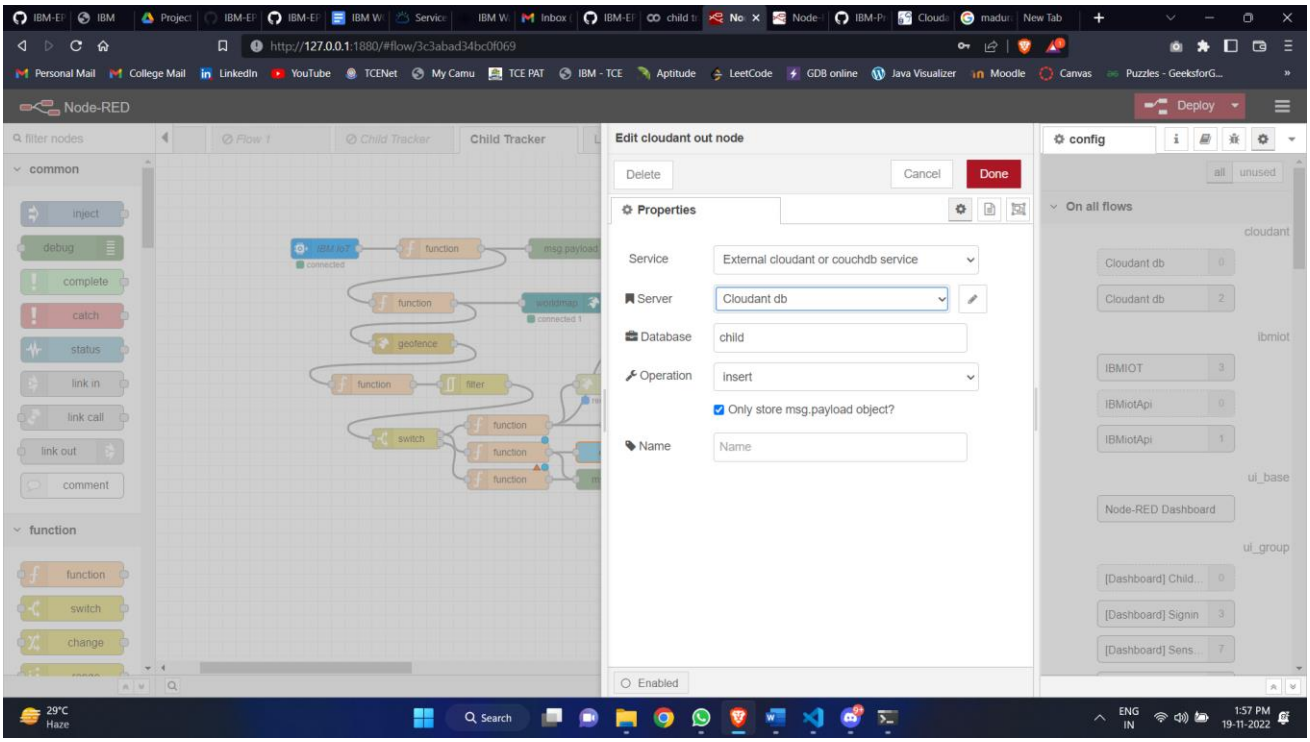

Gmail
Search in mail
Active
TCE
Compose
Inbox 26
Starred
Snoozed
Sent
Drafts 4
More
Labels
Mail
Chat
Spaces
Meet
1 of 1,289
Child alert
Inbox
daya@student.tce.edu
to me
2:42 PM (0 minutes ago)
Child is not in that area
Reply
Forward

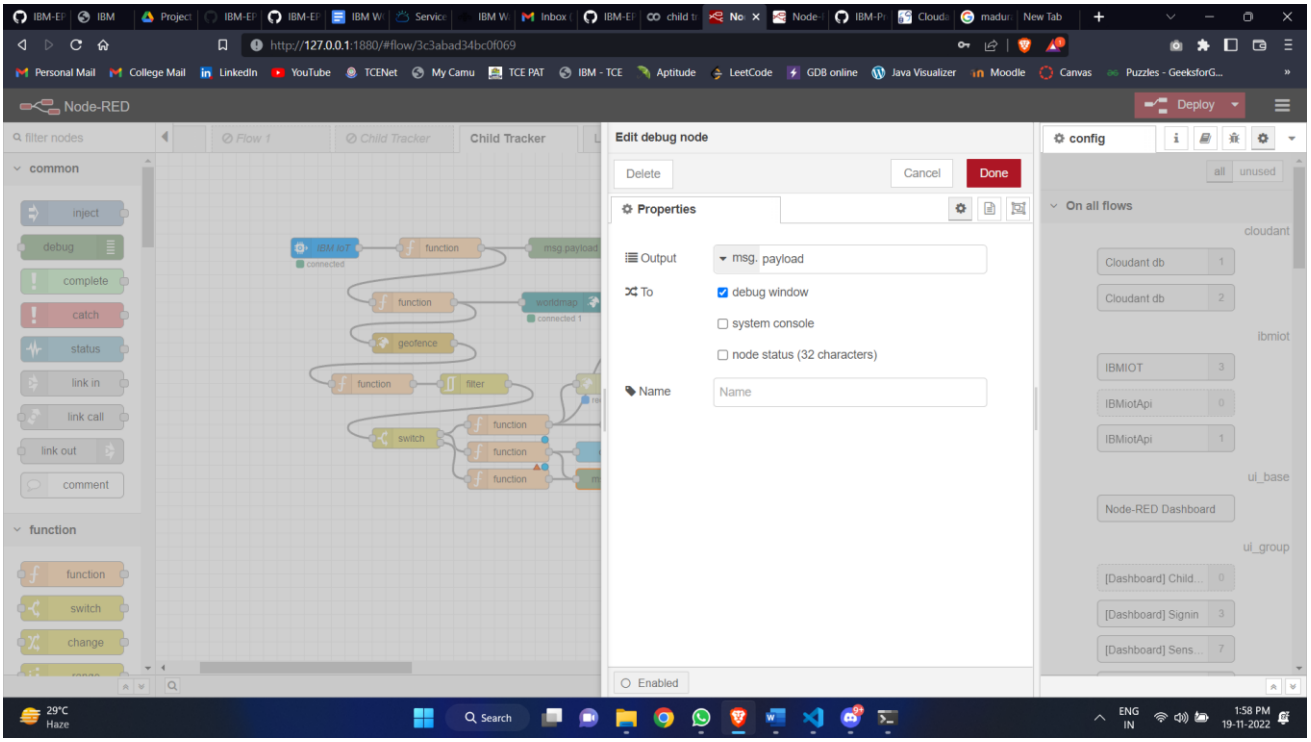

http://127.0.0.1:1880/#flow/3c3abad34bc0f069
Node-RED
Deploy
Flow 1
Child Tracker
Child Tracker
Login Flow
Chart flow
Add user
common
inject
debug
complete
catch
status
link in
link call
link out
comment
function
function
switch
change
IBM IoT
connected
function
msg.payload
function
worldmap
connected 1
geofence
msg.payload
function
filter
http request
requesting
Mailing notification
send failed
function
filter
show dialog
switch
function
child
function
msg.payload
debug
all nodes
[object, object, object, object, object, object, object, object, object, object …]
11/19/2022, 2:21:13 PM node: debug 2
iot-2/type/NodeMCU/id/12345/evt/status/fmt/json : msg.payload : array[39]
11/19/2022, 2:21:18 PM node: debug 2
iot-2/type/NodeMCU/id/12345/evt/status/fmt/json : msg.payload : array[40]
11/19/2022, 2:21:23 PM node: debug 2
iot-2/type/NodeMCU/id/12345/evt/status/fmt/json : msg.payload : array[41]
11/19/2022, 2:21:28 PM node: debug 2
iot-2/type/NodeMCU/id/12345/evt/status/fmt/json : msg.payload : array[42]
29°C
Haze
Search
ENG
IN
2:30 PM
19-11-2022

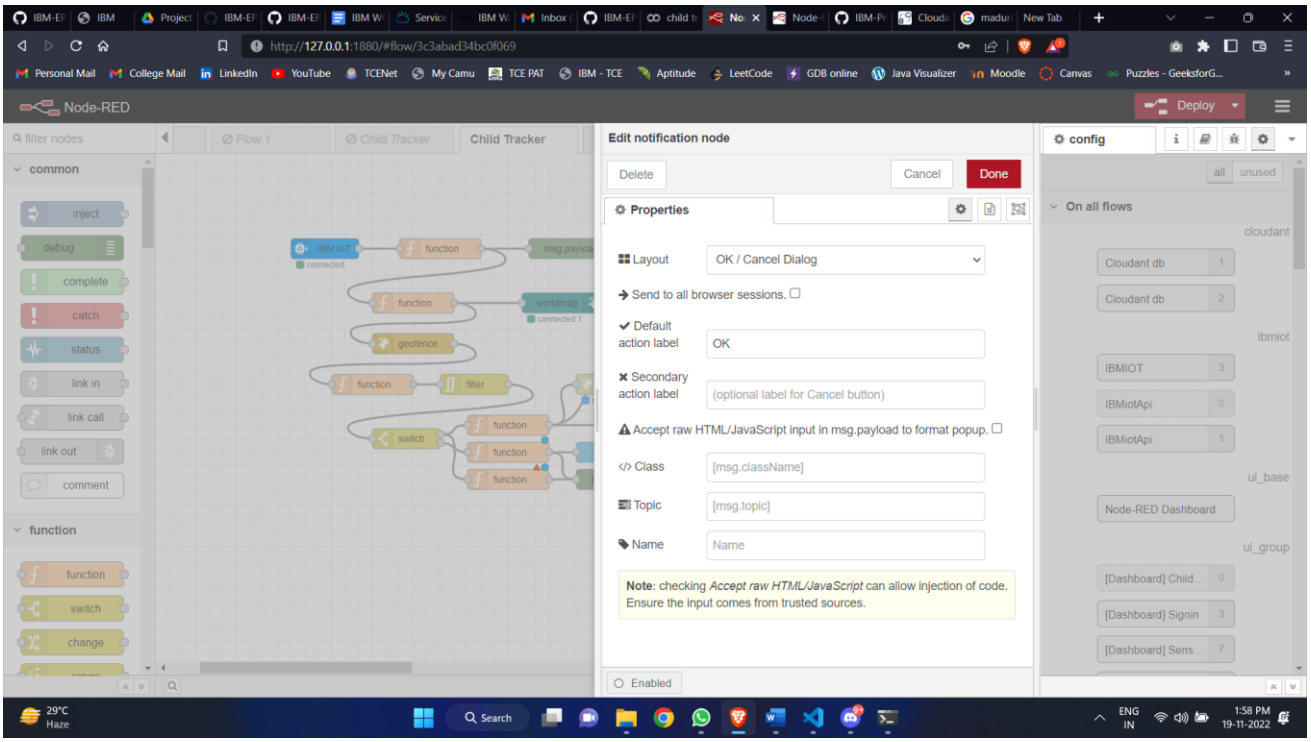

Node-RED
Deploy
Edit worldmap node
Delete
Cancel
Done
Properties
Group
[Dashboard] SensorData
Size
auto
Start
Latitude
Longitude
Zoom
9.88248086
78.0816494
16
Map list
10 selected
Base map
OpenStreetMap Greyscale
Overlays
5 selected
Cluster when
zoom level is less than
0 (0,off - 19)
Max age
Remove markers after
600
seconds
User menu
Show
Layer menu
Hide
Lock map
False
Lock zoom
False
Enabled
config
On all flows
Child Tracker
common
function
cloudant
ibmiot
ui_base
ui_group

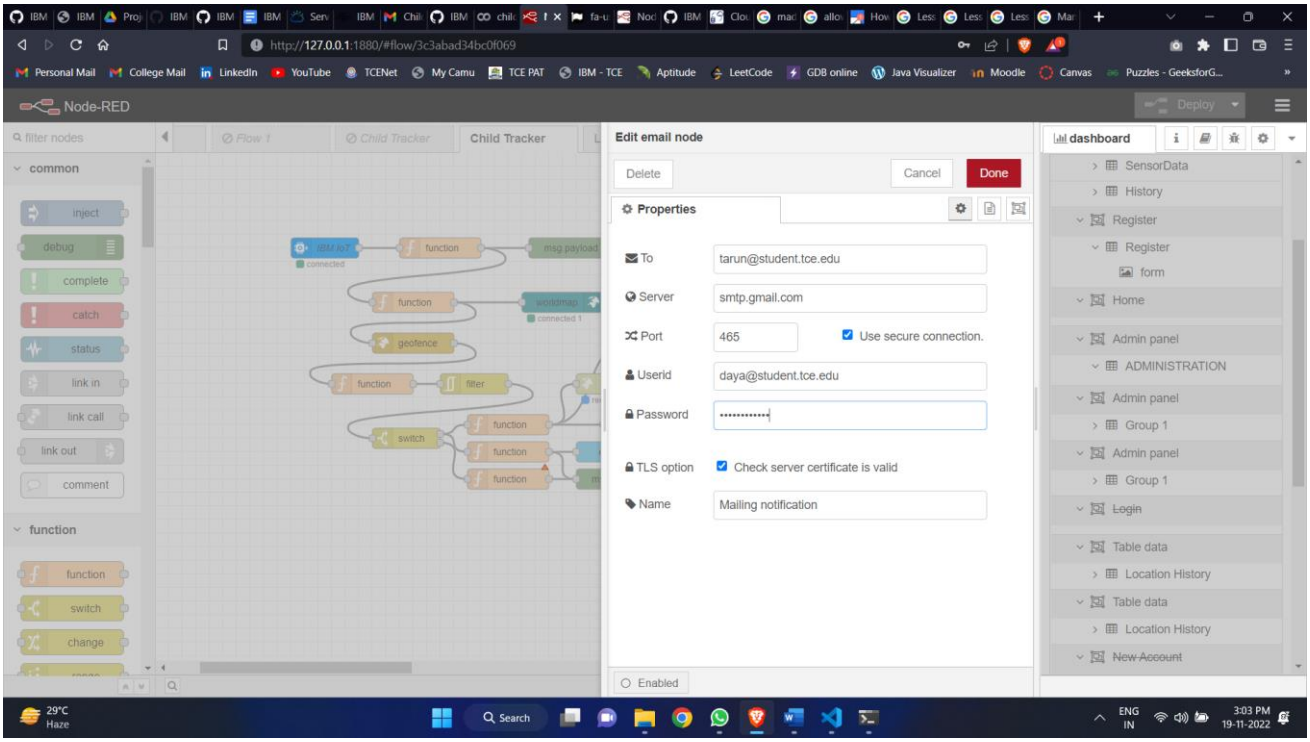

Node-RED
Deploy
Edit function node
Delete
Cancel
Done
Properties
Name
Setup
On Start
On Message
On Stop
msg.topic = "Child alert"
msg.payload="Child is not in that area"
return msg;
Enabled
config
On all flows
common
function
cloudant
ibmiot
ui_base
ui_group


Node-RED
Deploy
Edit function node
Delete
Cancel
Done
Properties
Name
Setup
On Start
On Message
On Stop
var d = new Date();
var utc = d.getTime() + (d.getTimezoneOffset() * 60000);
var offset = 5.5; // This is the offset for UTC+3, in your cas
var newDate = new Date(utc + (3600000*offset));
msg.payload = {
"message":"Exit",
"Time":newDate.toLocaleString(),
"name":global.get('name'),
"lat":global.get('latitude'),
"lon":global.get('longitude')
};
return msg;
Enabled
config
On all flows


Node-RED
Deploy
Edit cloudant out node
Delete
Cancel
Done
Properties
Service
External cloudant or couchdb service
Server
Cloudant db
Database
child
Operation
insert
Only store msg.payload object?
Name
Enabled
config
On all flows


Node-RED
Deploy
Edit debug node
Delete
Cancel
Done
Properties
Output
msg. payload
To
debug window
system console
node status (32 characters)
Name
Enabled
config
On all flows
Child Tracker
common
function
inject
debug
complete
catch
status
link in
link call
link out
comment
switch
change
Cloudant db
IBMIOT
IBMiotApi
Node-RED Dashboard
[Dashboard] Child...
[Dashboard] Signin
[Dashboard] Sens...
29°C
Haze
Search
ENG
IN
1:58 PM
19-11-2022


Node-RED
Deploy
Edit notification node
Delete
Cancel
Done
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
Note: checking Accept raw HTML/JavaScript can allow injection of code. Ensure the input comes from trusted sources.
Enabled
config
On all flows
Child Tracker
common
function
Cloudant db
IBMIOT
IBMiotApi
Node-RED Dashboard
[Dashboard] Child...
[Dashboard] Signin
[Dashboard] Sens...
29°C
Haze
Search
ENG
IN
1:58 PM
19-11-2022


http://127.0.0.1:1880/#flow/3c3abad34bc0f069
Node-RED
Deploy
Child Tracker
Edit email node
Delete
Cancel
Done
Properties
To
tarun@student.tce.edu
Server
smtp.gmail.com
Port
465
Use secure connection.
Userid
daya@student.tce.edu
Password
TLS option
Check server certificate is valid
Name
Mailing notification
Enabled
dashboard
SensorData
History
Register
form
Home
Admin panel
ADMINISTRATION
Group 1
Login
Table data
Location History
New Account
common
inject
debug
complete
catch
status
link in
link call
link out
comment
function
switch
change
29°C
Haze
Search
ENG
IN
3:03 PM
19-11-2022