

Final Project

Date	13 November 2022
Team ID	PNT2022TMID13499
Project Name	Project - IoT Based Safety Gadget for Child Safety Monitoring and Notification
Maximum Marks	4 Marks

IoT Based Safety Gadget for Child Safety Monitoring and Notification :

Python code for transferring latitude and longitude:

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
organization="Iz4nll"
deviceType="Child"
deviceId="12345"
authMethod="token"
authToken="12345678"
try:
    deviceOptions={"org": organization,"type": deviceType,"id": deviceId,"auth-method":
authMethod,"auth-token": authToken}
    deviceCli=ibmiotf.device.Client(deviceOptions)
except Exception as e:
    print("caught exception connecting device:%s" % str(e))
    sys.exit()
deviceCli.connect()
while True:
    #in data
    name="kishor"
    latitude=11.663579;
    longitude=78.146254;
```


PUBLISHED DATA IN IBM WATSON IOT PLATFORM:

The screenshot displays the IBM Watson IoT Platform dashboard. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. A search bar for 'Device ID' is present. The main content area shows a table of devices, with one device selected and its details expanded.

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location	Added By
12345	Connected	Child	Device	Nov 9, 2022 11:01 PM		kishormahendran6@gmail.com

The expanded view for device 12345 shows the 'Recent Events' tab. It displays a table of events:

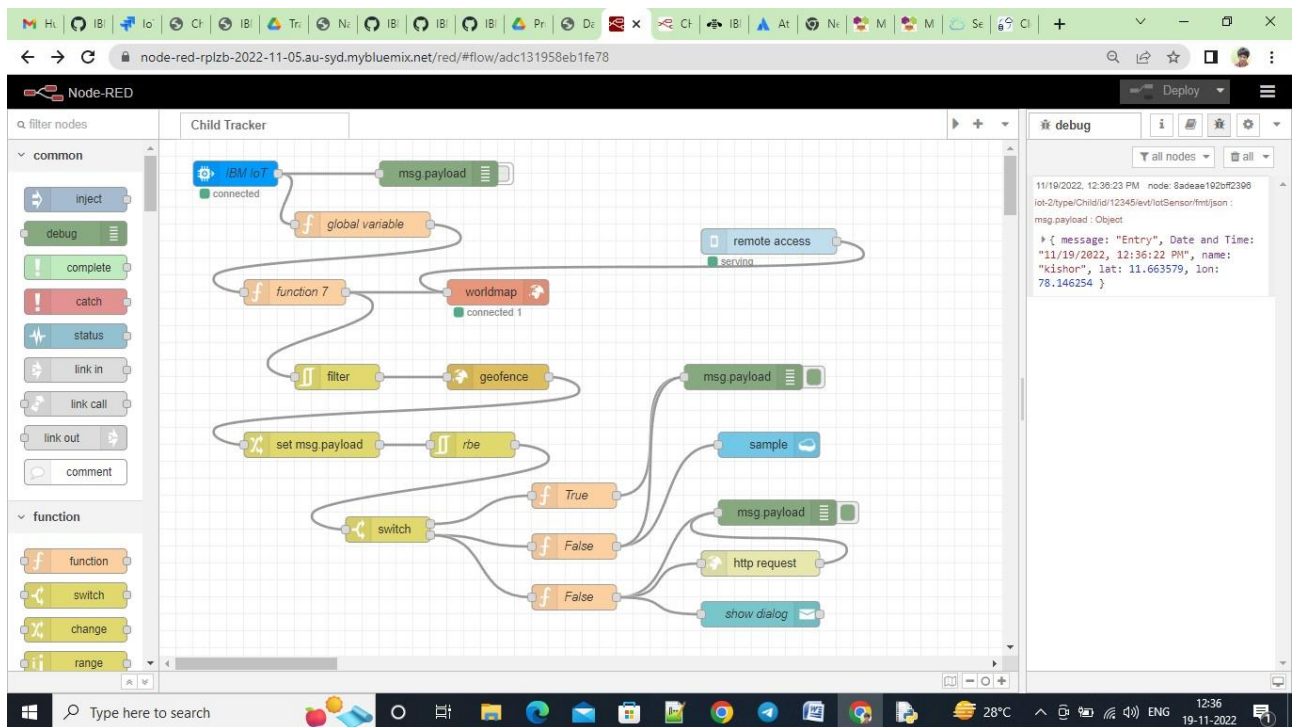
Event	Value	Format	Last Received
IotSensor	{\"lat\":\"11.663579\",\"lon\":\"78.146254\",\"name\":\"kish...\"}	json	a few seconds ago
IotSensor	{\"lat\":\"11.663579\",\"lon\":\"78.146254\",\"name\":\"kish...\"}	json	a few seconds ago
IotSensor	{\"lat\":\"11.663579\",\"lon\":\"78.146254\",\"name\":\"kish...\"}	json	a few seconds ago
IotSensor	{\"lat\":\"11.663579\",\"lon\":\"78.146254\",\"name\":\"kish...\"}	json	a few seconds ago
IotSensor	{\"lat\":\"11.663579\",\"lon\":\"78.146254\",\"name\":\"kish...\"}	json	a few seconds ago

A status bar at the bottom indicates '1 Simulation running'.

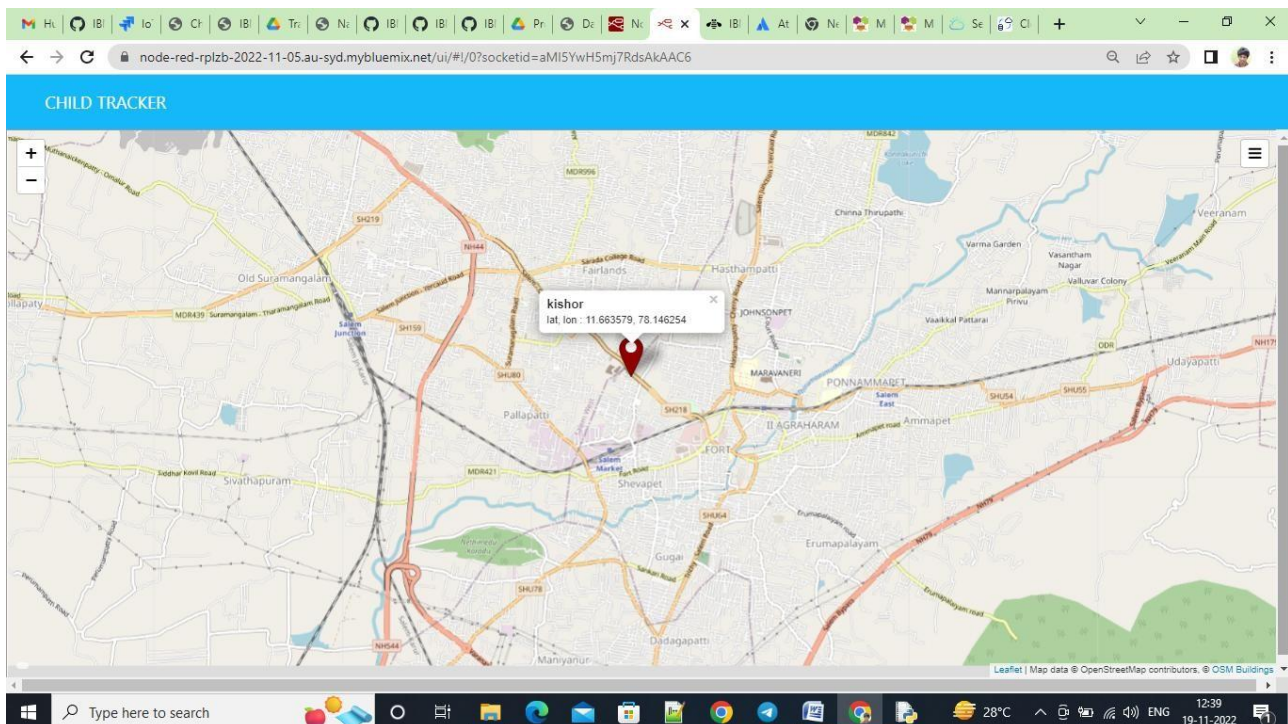
WEB APPLICATION USING NODE-RED:

The screenshot shows the Node-RED web application interface. The left sidebar contains a 'filter nodes' search bar and a list of nodes categorized under 'common' and 'function'. The main workspace displays a flow diagram titled 'Child Tracker'. The flow starts with an 'IBM IoT' node connected to a 'msg.payload' node. This is followed by a 'global variable' node, then a 'function 7' node. The flow then branches into two paths: one leading to a 'worldmap' node and another to a 'geofence' node. The 'geofence' node is connected to a 'rbe' node, which then connects to a 'switch' node. The 'switch' node has three outputs: 'True', 'False', and 'False'. Each output leads to a different set of nodes: 'True' leads to a 'sample' node and a 'msg.payload' node; 'False' leads to an 'http request' node and a 'show dialog' node. The 'False' output also leads to a 'remote access' node. The right sidebar shows a 'debug' console and a 'Deploy' button.

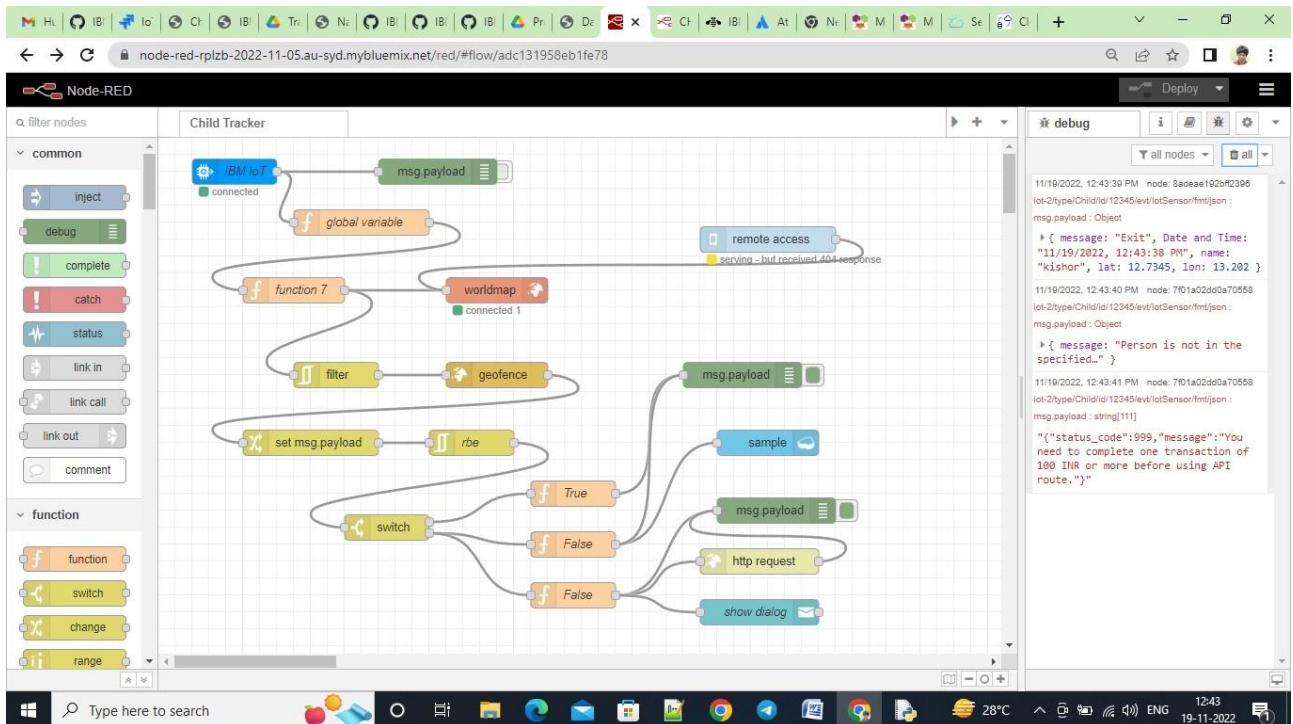
WHEN WE GIVE IN AREA LOCATION:



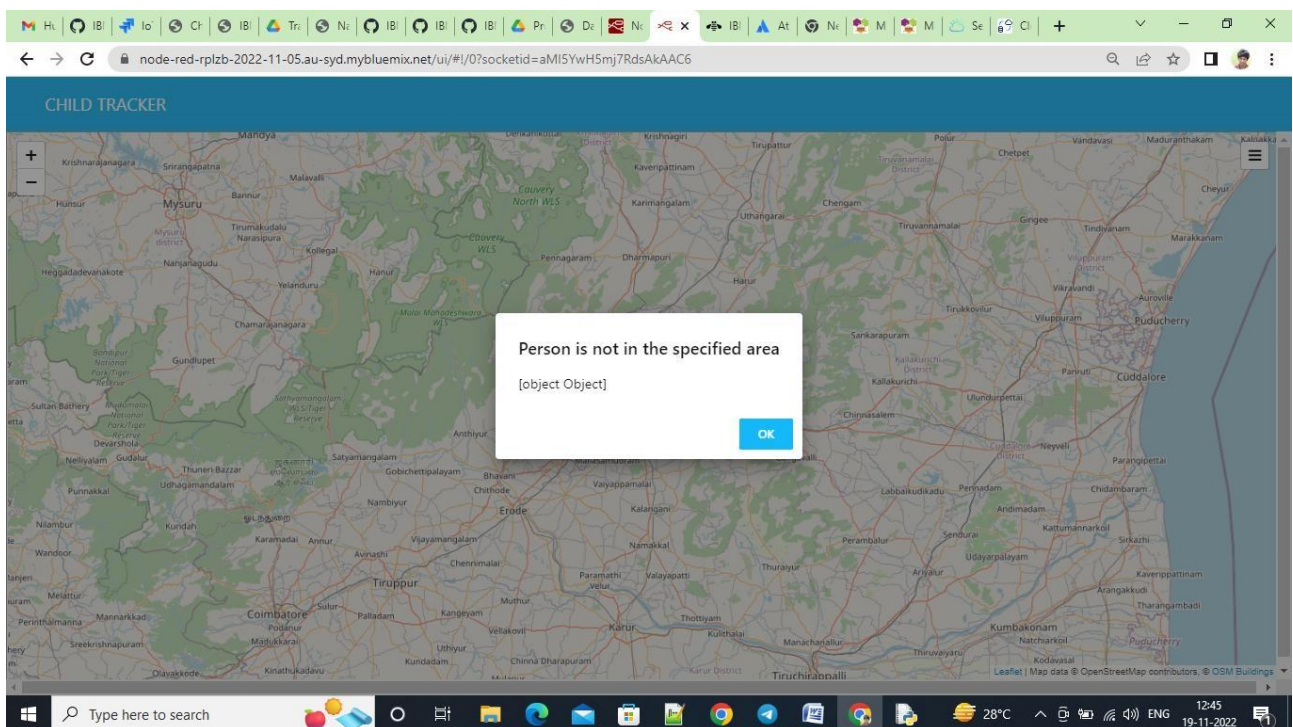
OUTPUT:



WHEN WE GIVE OUT AREA LOCATION:



OUTPUT :



STORED DATA IN THE DATABASE WE HAVE CREATED:

The screenshot shows a web browser window displaying a document in a database. The URL is `bbd54b5f-6512-4b15-be68-529e4eb0f1e7-bluemix.cloudant.com/dashboard.html#database/sample/894032d81af8a842c080c977bce06a2a`. The document is titled "sample" and has a unique ID "894032d81af8a842c080c977bce06a2a". The document content is a JSON object with the following fields:

```
{
  "_id": "894032d81af8a842c080c977bce06a2a",
  "_rev": "1-39f0b36ca55df5c22600fbf69a81e1ee",
  "message": "Exit",
  "Date and Time": "11/19/2022, 12:36:45 PM",
  "name": "kishor",
  "lat": 12.7345,
  "lon": 13.202
}
```

The interface includes a sidebar with various icons, a top bar with "Save Changes" and "Cancel" buttons, and a bottom bar with "Upload Attachment", "Clone Document", and "Delete" buttons. The status bar at the bottom shows the date and time as 12:57 on 19-11-2022.