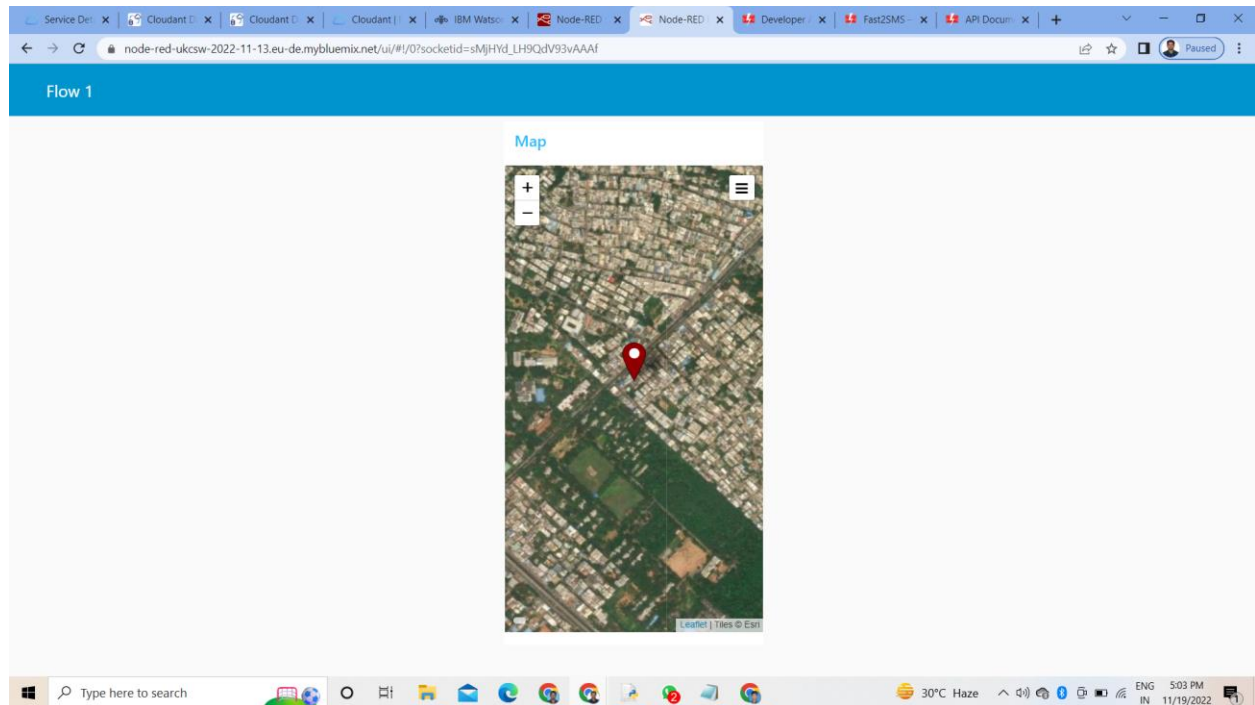


Project Development Phase

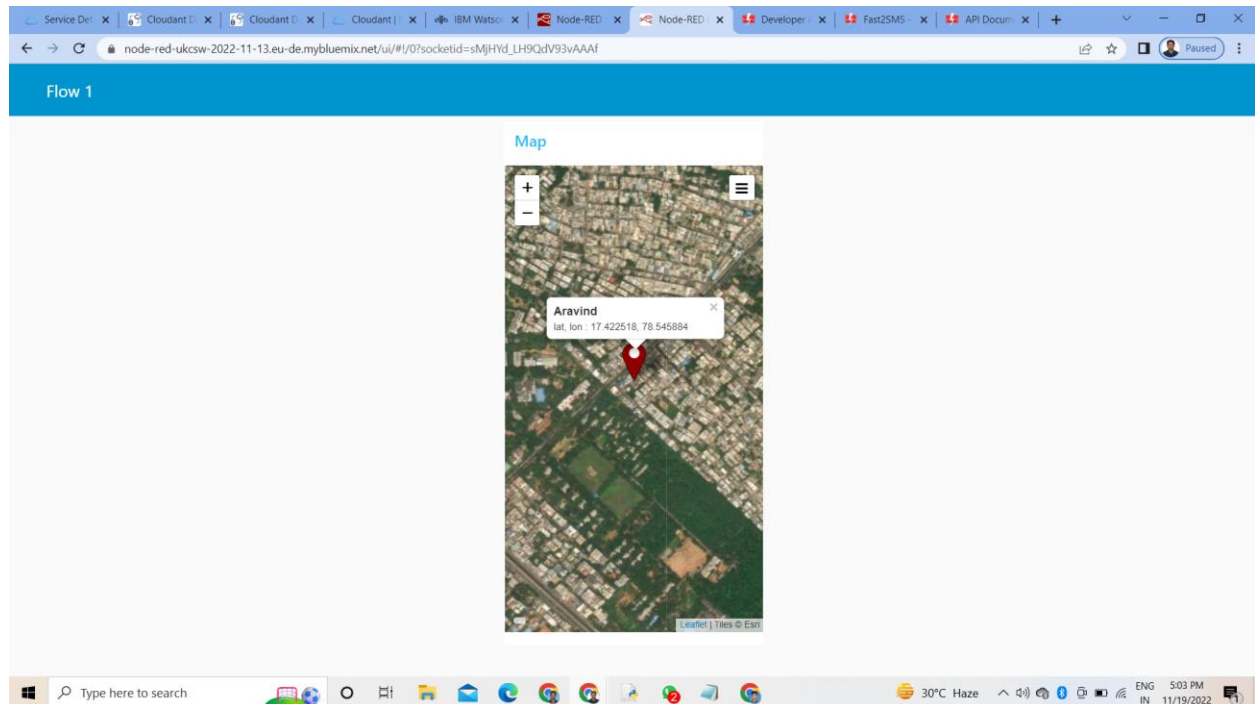
Delivery of Sprint 4

| | |
|----------------------|--|
| Date | 17 November 2022 |
| Team ID | PNT2022TMID12738 |
| Project Name | IOT based safety Gadget for child safety monitoring and notification |
| Maximum Marks | 2 |

GPS location motoring by using Node Red Service



Setting up the Home location of the child



- GPS tracking is a concept where a mobile device is tracked using a Global positioning system. Our system is built on the concept of battery powered asset tracking.
- GPS tracking is a common method to get location information of a user or an asset in real-time planning. GPS tracking system is an open source software and easy to manage user interface via web server with google maps .

Python Code for child location Fetching and Publing the the child's Location

```
Child.py - C:\Users\LENOVO\AppData\Local\Programs\Python\Python37\Child.py (3.7.4)
File Edit Format Run Options Window Help

import json
import wiotp.sdk.device
import time

myConfig = {
    "identity":{
        "orgId": "cr4s7d",
        "typeId": "NodeMCU",
        "deviceId": "2461"
    },
    "auth": {
        "token": "12345678"
    }
}

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while 1:
    name="Aravind"
    #in area location

    latitude = 17.4225176
    longitude = 78.5458842

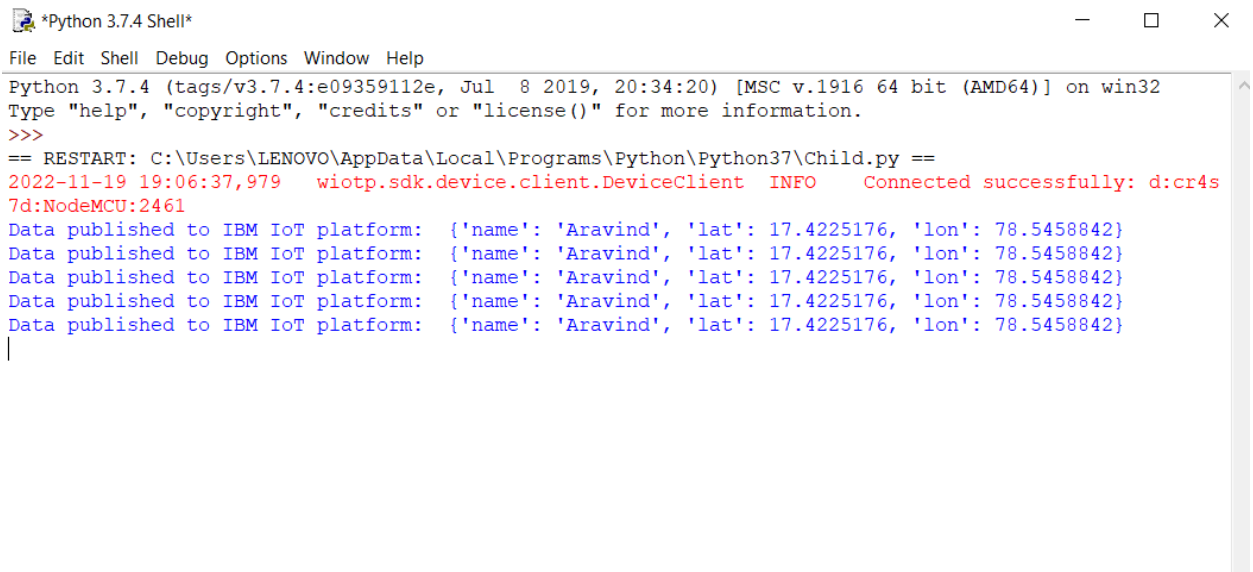
    #out area location

    #latitude = 17.4219272
    #longitude = 78.5488783

    myData={'name':name, 'lat':latitude,'lon':longitude}
    client.publishEvent(eventId="status",msgFormat="json", data=myData, qos=0, o
    print("Data published to IBM IoT platform: ",myData)
    time.sleep(5)

client.disconnect()
```

Output screen of the Python Program



The screenshot shows a Python 3.7.4 Shell window with the following content:

```
*Python 3.7.4 Shell*
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 20:34:20) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:\Users\LENOVO\AppData\Local\Programs\Python\Python37\Child.py ==
2022-11-19 19:06:37,979 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:cr4s
7d:NodeMCU:2461
Data published to IBM IoT platform: {'name': 'Aravind', 'lat': 17.4225176, 'lon': 78.5458842}
Data published to IBM IoT platform: {'name': 'Aravind', 'lat': 17.4225176, 'lon': 78.5458842}
Data published to IBM IoT platform: {'name': 'Aravind', 'lat': 17.4225176, 'lon': 78.5458842}
Data published to IBM IoT platform: {'name': 'Aravind', 'lat': 17.4225176, 'lon': 78.5458842}
Data published to IBM IoT platform: {'name': 'Aravind', 'lat': 17.4225176, 'lon': 78.5458842}
```