IoT Based Safety Gadget for Child SafetyMonitoring & Notification

Bachelor of Engineering

Computer Science and Engineering

Vel Tech Multi Tech Dr. Rangarajan Dr. Sakunthala Engineering College

TEAM ID: PNT2022TMID22325

SOURCE CODE:

MAIN CODE:

import json

import wiotp.sdk.device

import time

import ibmiotf.application

import ibmiotf.device

myConfig = {

```python
    "identity": {
        "orgId": "046bct",
        "typeId": "DEVICE1",
        "deviceId": "12345"
    },
    "auth": {
        "token": "123456789"
    }
}


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

while True:
    name= "Logesh"

    latitude= 11.055712
    longitude= 76.804089
    mydata={'name': name, 'lat':latitude,'lon':longitude}
    client.publishEvent(eventId="status", msgFormat="json", data=mydata, qos=0, onPublish=None)
    print("Data published to IBM IoT platform: ",mydata)
    time.sleep(20)

client.disconnect()
```

Code if the child is inside the geofence:

```
var d = new Date();

var utc = d.getTime() + (d.getTimezoneOffset() * 60000);

var offset = 5.5;

newDate = new Date(utc +(3600000 * offset));

msg.payload = {
    "message":"Entry",
    "Time":newDate.toLocaleString(),
    "name":global.get("name"),
    "lat":global.get("latitude"),
    "lon":global.get("longitude")
};

return msg;
```

Code if the child is outside the geofence:

```
var d = new Date();

var utc = d.getTime() + (d.getTimezoneOffset() * 60000);
```

```javascript
var offset = 5.5;

newDate = new Date(utc +(3600000 * offset));

msg.payload = {
    "message":"child crossed the geofence",
    "Time":newDate.toLocaleString(),
    "name":global.get("name"),
    "lat":global.get("latitude"),
    "lon":global.get("longitude")
};

return msg;
```

Code to return the current location:

```javascript
var name = msg.payload.name
var lat = msg.payload.lat
var lon = msg.payload.lon

var alarm = 0
global.set('alarm',alarm)


global.set("latitude", lat)
```

```
global.set("longitude", lon)
global.set("name", name)
return msg;
```