PROJECT DEVELOPMENT PHASE
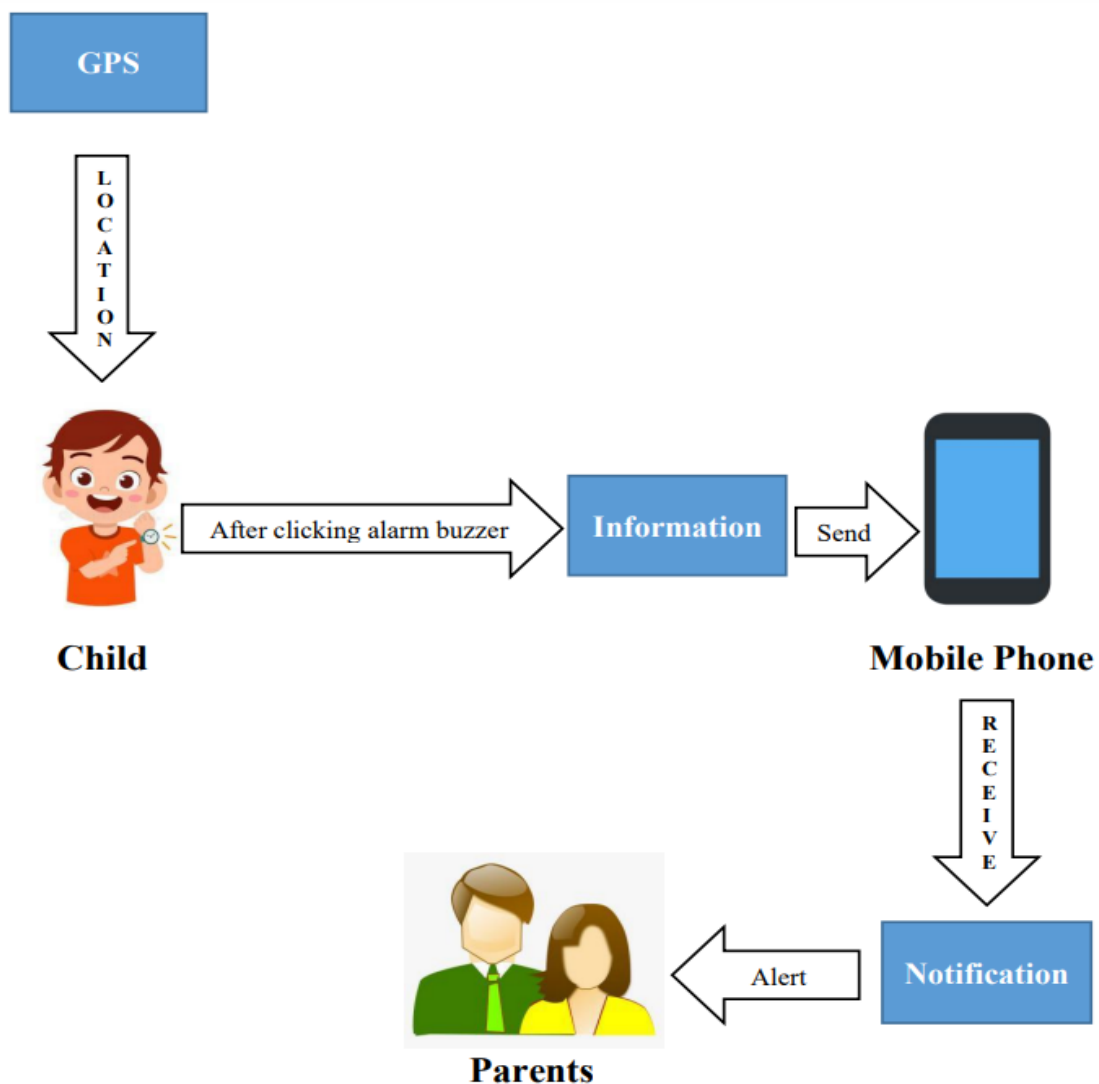
Team ID	PNT2022TMID36667
Team Members	Team lead: SINDHU.K Member2 : MAHESWARI.S Member3 : MAHALAKSHMI.S Member4 : PRADEEPA GANDHI.G Member5 : SNEHA.M
Project Name	Project – IOT-Based Safety Gadget for Child Safety Monitoring and Notification

SPRINT-4

Project Diagrammatic Structure& Code:
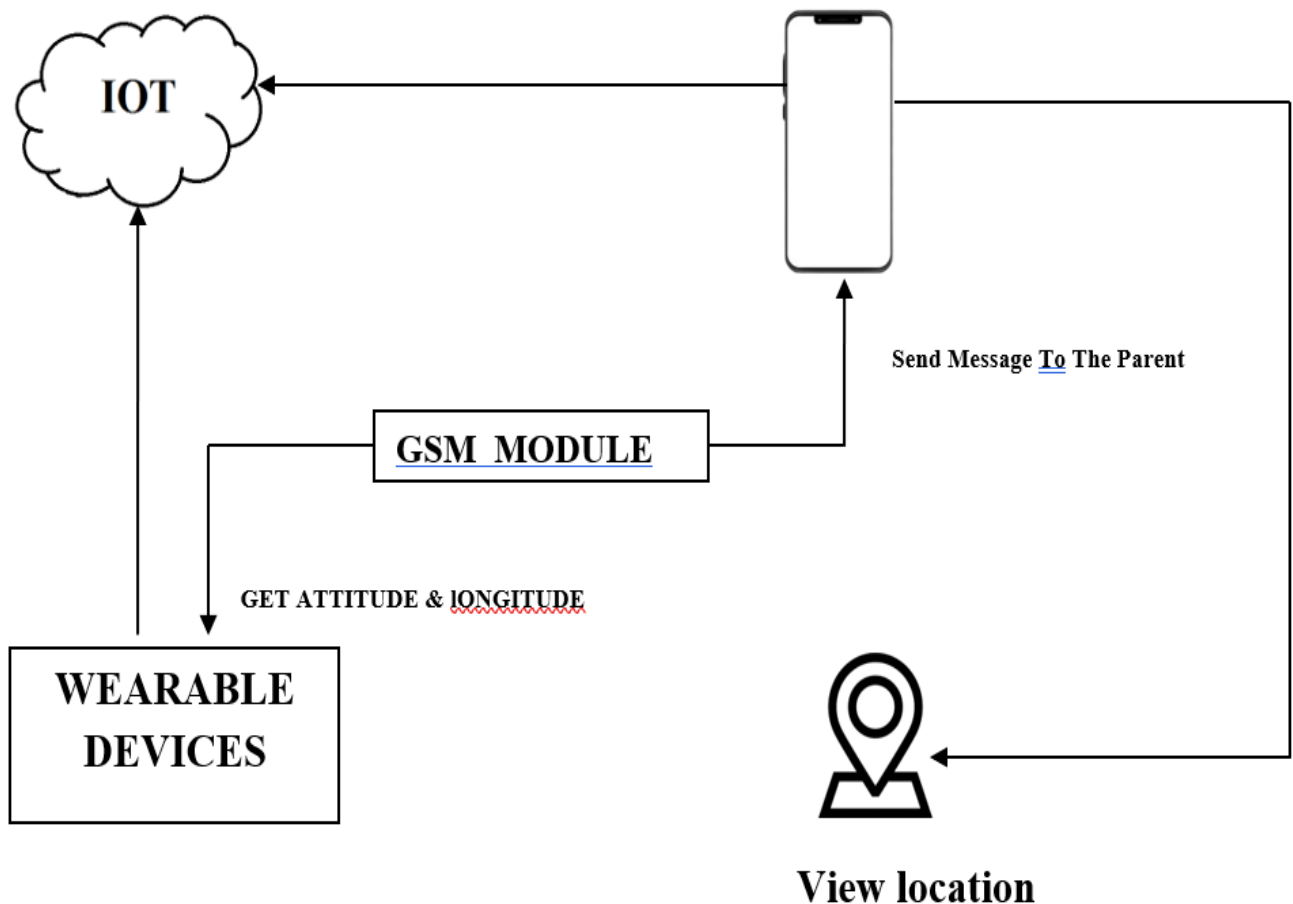
➤ Parent mobile and wearable devices are connected with the help of cloud.
➤ If child was lost , the parent can access the location of child through the mobile application with the help of GSM module.
➤ Then, we can view the location of child with the help of mobile application.
➤

GPS

LOCATION

Child

After clicking alarm buzzer

Information

Send

Mobile Phone

RECEIVE

Parents

Alert

Notification

CODE:

#Source code for GPS Location:

```python
import phonenumbers
import opencage
import folium
import webbrowser
number = "+916385571249"
from phonenumbers import geocoder  # is a function
par_number = phonenumbers.parse(number)
location = geocoder.description_for_number(par_number, "en")
print(location)
# to see the service provider name
from phonenumbers import carrier
service_par = phonenumbers.parse(number)
S_provider=  carrier.name_for_number(service_par, "en")
print(S_provider)
# opencage is for to view the location.
from opencage.geocoder import OpenCageGeocode
key = "7098ec840cb24aa9a5c38cce49fb3b81"
geocoder = OpenCageGeocode(key)
query = str(location)
result = geocoder.geocode(query)
#print(result)
lat = result[0]['geometry']['lat']
lng = result[0]['geometry']['lng']
print(lat, lng)
####
```

```python
mymap = folium.Map(location=[lat, lng], zoom_start=9)

folium.Marker([lat, lng], popup=location).add_to(mymap)

mymap.save("mylocation.html")

webbrowser.open_new_tab("mylocation.html")
```

#Source code for Mobile Call:

```python
from twilio.rest import Client

account_SID = "AC89d677f42205372d8c7467d77f8124a5"

auth_token = "8d60fae39b28beaed14514b8d1cbf812"

client = Client(account_SID, auth_token)

call = client.calls.create(
        from_='+12136932446',
        to='+918438106497',

url='https://handler.twilio.com/twiml/EH7fcba664228739cbc7d1e517
93d42420'
        )
print(call.sid)
```
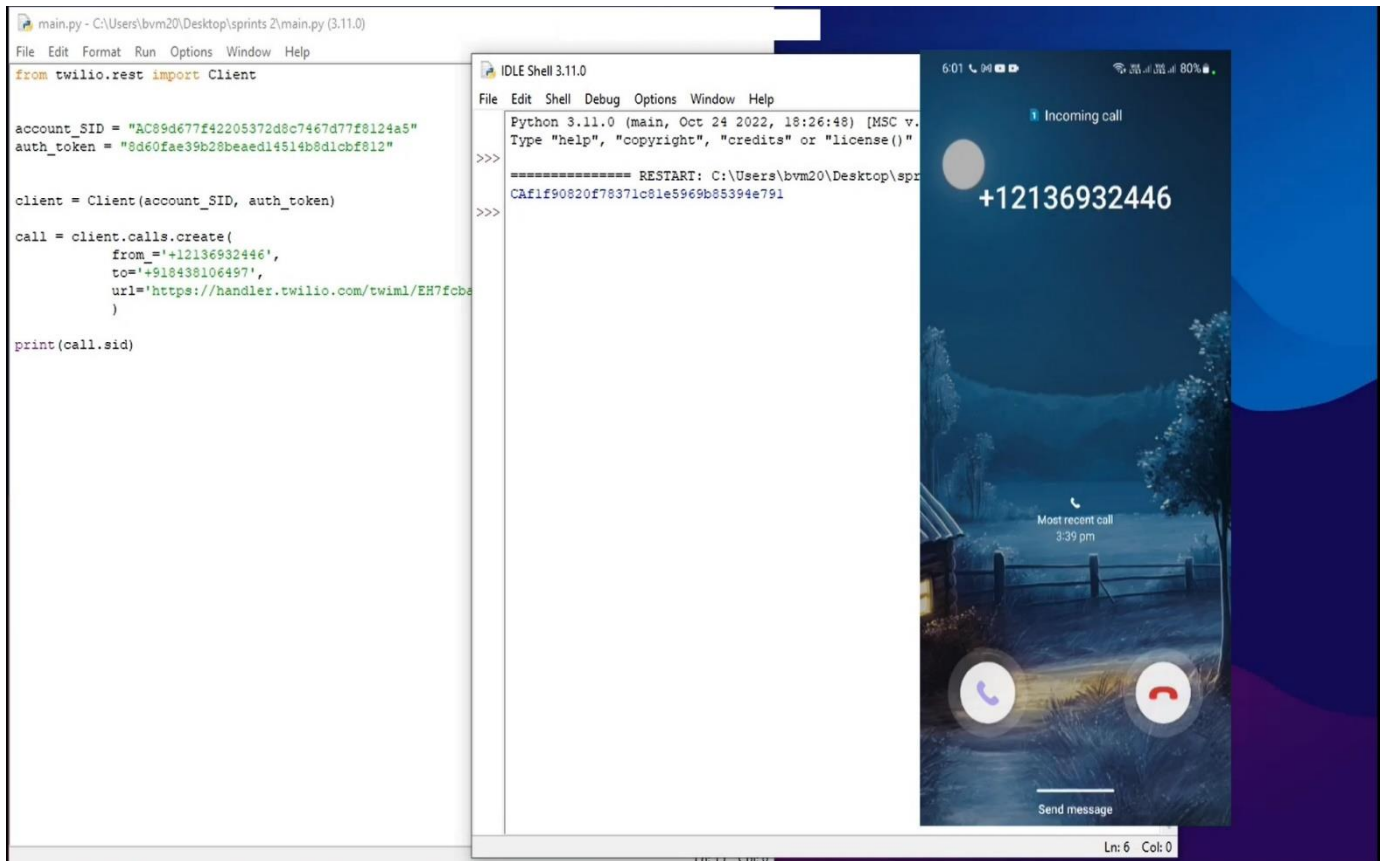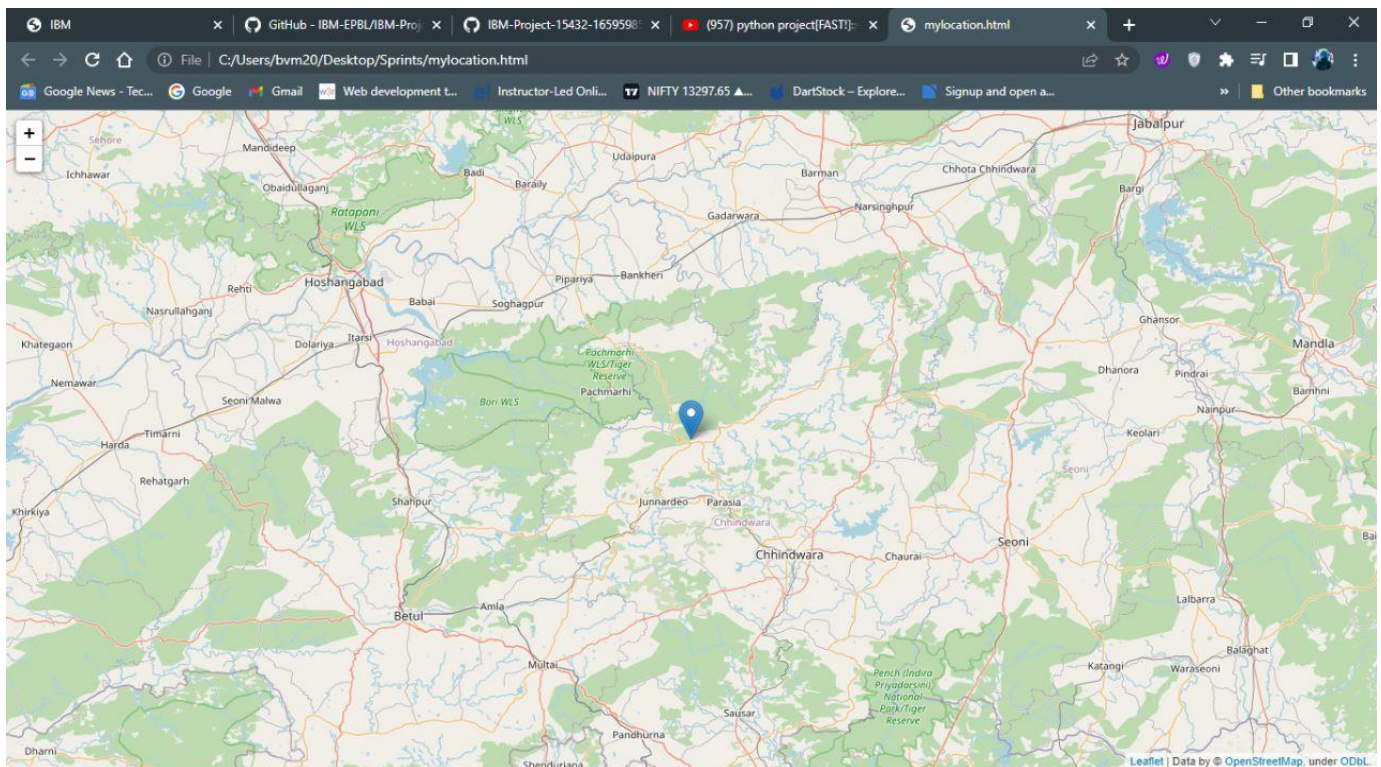
#Source code for Notification (Alert Message):

```python
from twilio.rest import Client

account_SID = "AC89d677f42205372d8c7467d77f8124a5"

auth_token = "8d60fae39b28beaed14514b8d1cbf812"

client = Client(account_SID, auth_token)

message = client.messages.create(
        from_ ='+12136932446',
        to = '+918438106497',
        body='Hi from Twilio'
    )
```

print(message.sid)

OUTPUT:

6:01

Incoming call

+12136932446

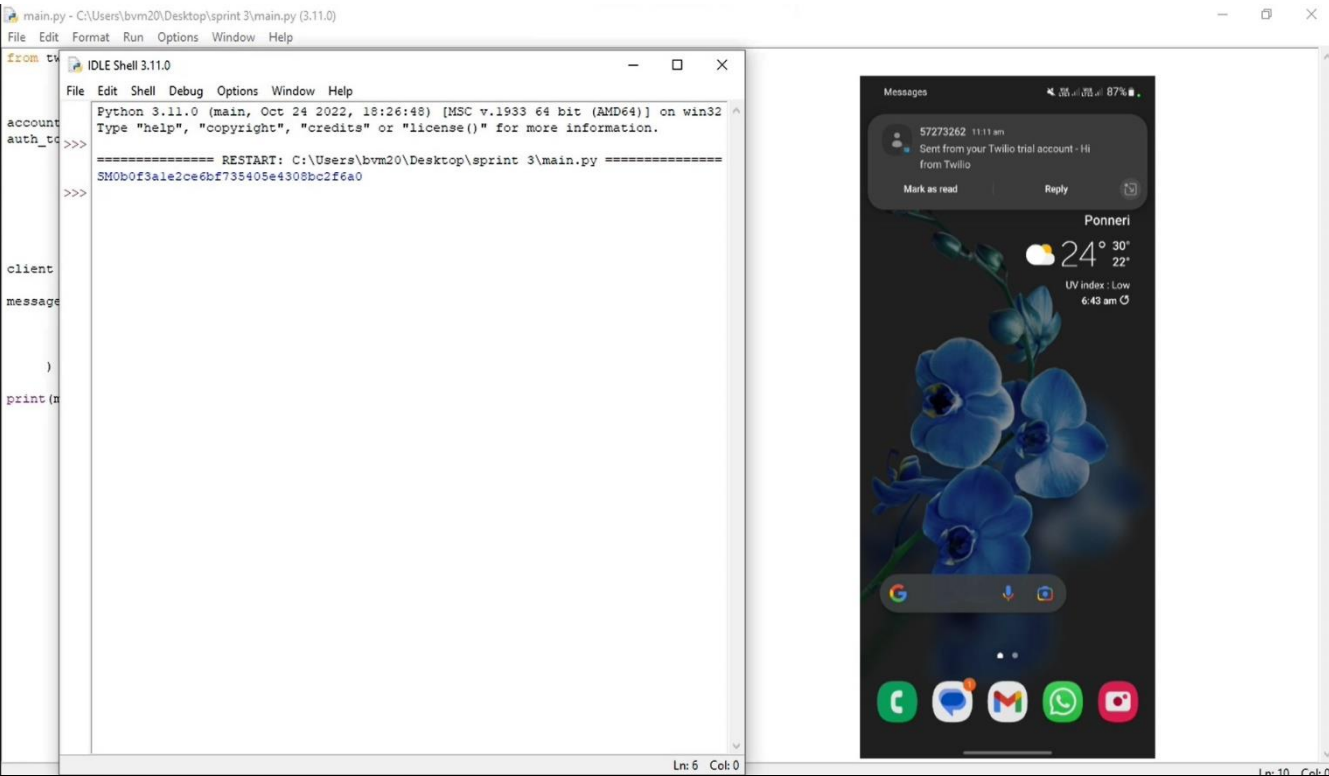Most recent call
3:39 pm

Send message

Alert   Message   from   your   Child

57273262

11:07 am

Texting with 57273262 (SMS/MMS)

Sent from your Twilio trial account - Hi from Twilio

Sent from your Twilio trial account - Hi from Twilio

54 min · airtel

Text (airtel)