

ABSTRACT

Project Title: - “**SAFE ME**” Android Application.

WHY WE HAVE CHOSEN “SAFE ME”??

In the present age, just as technology is advancing, so is antisocial activity in society.

Through various social media everyday such an event comes to our ears. Most of the time girls of the society who are affected mostly.

So, we think if there an application that can protect that girls in dangerous situation. There are more such applications in the market than ever before, but in those applications

you can send SMS to your trusted person by pressing the power button repeatedly in times of

danger. But the thing to worry about is that there is a dangerous time when it's difficult to

find the time to press the power button repeatedly.

That's why we have created an application to come out of this problem, there is no need to

press the power button, just shake the phone a little and your current location will send your

trusted person that your trusted person can know that you are in danger find you as soon as possible.



PRESS

SHAKE

INTRODUCTION

This is an Android App named "Safe Me" developed by a group of Siliguri Government Polytechnic College, 3rd year Computer Science & Technology department students. "Safe Me" is a SOS application, just start the app service and shake the device, Safe Me will send a SMS with your current location to the emergency number that you registered

REQUIREMENTS

Hardware Requirements

- ❖ An Android Device minimum version-6.
- ❖ A Laptop minimum 8gb RAM.

Software Requirements

- ❖ Android Studio for develop the application.
- ❖ Adobe Photoshop for design the app logo.

Other Requirements

- ❖ On service sim card.
- ❖ Internet Connection.

CODING

SPLASH SCREEN

Java

```
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_splash_screen);

    new CountDownTimer(1000,500){
        @Override
        public void onTick(long millisUntilFinished) {

        }

        @Override
        public void onFinish() {
            startActivity(new Intent(SplashScreen.this,MainActivity.class));
            SplashScreen.this.finish();
        }
    }.start();

}
```

XML

```
<ImageView
    android:id="@+id/girlVector"
    android:layout_width="356dp"
    android:layout_height="210dp"
    android:layout_centerInParent="true"
    android:layout_marginBottom="20dp"
    android:src="@drawable/logosafe"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.432" />

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Feel Safe Everywhere"
    android:fontFamily="@font/varela_round"
    android:textSize="28sp"
    android:layout_below="@+id/girlVector"
    app:layout_constraintTop_toBottomOf="@+id/girlVector"
```

```
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    android:layout_centerHorizontal="true"/>
```

REGISTRATION SCREEN

Java

```
public void saveNumber(View view) {
    String numberString = number.getText().toString();
    if(numberString.length()==10){
        SharedPreferences sharedpreferences =
getSharedPreferences("MySharedPref", MODE_PRIVATE);
        SharedPreferences.Editor myEdit = sharedpreferences.edit();
        myEdit.putString("ENUM", numberString);
        myEdit.apply();
        RegisterNumberActivity.this.finish();
    }else {
        Toast.makeText(this, "Enter Valid Number!", Toast.LENGTH_SHORT).show();
    }
}
```

XML

```
<RelativeLayout
    android:layout_width="match_parent"
    android:layout_height="578dp"
    android:layout_marginTop="200dp"
    android:background="@drawable/background">

    <TextView
        android:id="@+id/text1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerHorizontal="true"
        android:layout_margin="60dp"
        android:fontFamily="@font/varela_round"
        android:text="Enter Number To\nSend SMS\nor\nEMERGENCY!"
        android:textAlignment="center"
        android:textColor="@color/black"
        android:textSize="19sp" />

    <com.google.android.material.textfield.TextInputLayout
        android:id="@+id/number"
        style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"
        android:layout_width="250dp"
        android:layout_height="wrap_content"
        android:layout_below="@id/text1"
        android:layout_centerHorizontal="true"
        android:layout_margin="10dp">

        <com.google.android.material.textfield.TextInputEditText
            android:id="@+id/numberEdit"
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:fontFamily="@font/varela_round" />
    
```

```

        android:hint="Number"
        android:inputType="numberDecimal"
        android:maxLength="10"
        android:textAlignment="center" />
    </com.google.android.material.textfield.TextInputLayout>

    <com.google.android.material.button.MaterialButton
        android:layout_width="200dp"
        android:layout_height="60dp"
        android:layout_below="@+id/number"
        android:layout_centerHorizontal="true"
        android:layout_margin="10dp"
        android:backgroundTint="#ffffff"
        android:fontFamily="@font/varela_round"
        android:onClick="saveNumber"
        android:text="Finish"
        android:textColor="@color/black"
        app:cornerRadius="10dp" />

</RelativeLayout>

```

HOME SCREEN

Java

```

String ENUM = sharedpreferences.getString("ENUM", "NONE");
if(ENUM.equalsIgnoreCase("NONE")){
    startActivity(new Intent(this, RegisterNumberActivity.class));
} else {
    TextView textView = findViewById(R.id.textNum);
    textView.setText("SOS Will Be Sent To\n"+ENUM);
}

public void stopService(View view) {

    Intent notificationIntent = new Intent(this, ServiceMine.class);
    notificationIntent.setAction("stop");
    if (Build.VERSION.SDK_INT >= Build.VERSION_CODES.O) {
        getApplicationContext().startForegroundService(notificationIntent);
        Snackbar.make(findViewById(android.R.id.content), "Service Stopped!", Snackbar.LENGTH_LONG).show();
    }
}

public void startServiceV(View view) {

    if (ContextCompat.checkSelfPermission(this, Manifest.permission.SEND_SMS) ==
    PackageManager.PERMISSION_GRANTED && ContextCompat.checkSelfPermission(this,
    Manifest.permission.ACCESS_COARSE_LOCATION) == PackageManager.PERMISSION_GRANTED &&
    ContextCompat.checkSelfPermission(this, Manifest.permission.ACCESS_FINE_LOCATION) ==
    PackageManager.PERMISSION_GRANTED ) {
        Intent notificationIntent = new Intent(this, ServiceMine.class);
        notificationIntent.setAction("Start");
        if (Build.VERSION.SDK_INT >= Build.VERSION_CODES.O) {
            getApplicationContext().startForegroundService(notificationIntent);
            Snackbar.make(findViewById(android.R.id.content), "Service Started!", Snackbar.LENGTH_LONG).show();
        }
    }
}

```

```

        Snackbar.LENGTH_LONG).show();
    }
} else{
    multiplePermissions.launch(new
String[]{Manifest.permission.SEND_SMS,Manifest.permission.ACCESS_COARSE_LOCATION,Manifest.permission.ACCESS_FINE_LOCATION});
}
}

```

XML

```

<RelativeLayout
    android:layout_width="match_parent"
    android:layout_height="580dp"
    android:layout_marginTop="40dp"
    android:layout_alignParentBottom="true"
    android:background="@drawable/background">

    <TextView
        android:id="@+id/textNum"
        android:layout_width="266dp"
        android:layout_height="90dp"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="70dp"
        android:layout_marginEnd="64dp"
        android:text="SOS Will Be Sent To\n"
        android:textAlignment="center"
        android:textSize="24sp" />

    <com.google.android.material.button.MaterialButton
        android:id="@+id/start"
        android:layout_width="200dp"
        android:layout_height="60dp"
        android:layout_below="@+id/textNum"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="104dp"
        android:layout_marginEnd="104dp"
        android:layout_marginBottom="10dp"
        android:backgroundTint="#ffffff"
        android:onClick="startServiceV"
        android:text="Start"
        android:textColor="@color/black"
        app:cornerRadius="10dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <com.google.android.material.button.MaterialButton
        android:id="@+id/stop"
        android:layout_width="200dp"
        android:layout_height="60dp"
        android:layout_below="@+id/start"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="45dp"
        android:layout_marginEnd="106dp"
        android:backgroundTint="#ffffff"
        android:onClick="stopService"

```

```
        android:text="stop"
        android:textColor="@color/black"
        app:cornerRadius="10dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/start" />

    </RelativeLayout>
```

DEVELOPER SCREEN

Java

```
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.about);
}
```

XML

```
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="96dp"
    android:background="@drawable/background"
    android:orientation="vertical">

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:layout_marginLeft="30dp"
        android:layout_marginTop="5dp"
        android:layout_marginRight="30dp"
        android:orientation="horizontal">

        <LinearLayout
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:orientation="vertical">

            <TextView
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="Smriti Roy"
                android:textColor="#FFFFFF"
                android:textSize="25dp" />

            <TextView
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_marginTop="10dp"
                android:text="CST , 3rd Year"
                android:textSize="15dp" />
        
```

```

        </LinearLayout>

        <RelativeLayout
            android:layout_width="match_parent"
            android:layout_height="match_parent">

            <ImageView
                android:layout_width="80dp"
                android:layout_height="100dp"
                android:layout_alignParentRight="true"
                app:srcCompat="@drawable/smrity" />
        </RelativeLayout>
    </LinearLayout>
</LinearLayout>
```

ABOUT SCREEN

Java

```

protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.about_app);
}

public void Got2(View view){
    setContentView(R.layout.activity_main);
}
```

XML

```

<RelativeLayout
    android:layout_width="match_parent"
    android:layout_height="590dp"
    android:layout_marginTop="210dp"
    android:background="@drawable/background">

    <TextView
        android:id="@+id/text1"
        android:layout_width="368dp"
        android:layout_height="wrap_content"
        android:layout_centerHorizontal="true"
        android:layout_marginStart="6dp"
        android:layout_marginTop="60dp"
        android:layout_marginEnd="60dp"
        android:layout_marginBottom="60dp"
        android:fontFamily="@font/varela_round"
        android:text=" "
        android:textColor="@color/black"
        android:textSize="18sp" />

    <com.google.android.material.button.MaterialButton
        android:layout_width="200dp"
        android:layout_height="60dp"
```

```

        android:layout_marginLeft="100dp"
        android:layout_marginTop="380dp"
        android:backgroundTint="#ffffffff"
        android:fontFamily="@font/varela_round"
        android:onClick="Got2"
        android:text="Got It"
        android:textColor="@color/black"
        app:cornerRadius="10dp" />

    </RelativeLayout>

```

POPUP SCREEN

Java

```

public void PopupMenu(View view) {
    PopupMenu popupMenu = new PopupMenu(MainActivity.this,view);
    popupMenu.getMenuInflater().inflate(R.menu.popup,popupMenu.getMenu());
    popupMenu.setOnMenuItemClickListener(new PopupMenu.OnMenuItemClickListener() {
        @Override
        public boolean onMenuItemClick(MenuItem item) {
            if(item.getItemId() == R.id.changenumber){
                startActivity(new Intent(MainActivity.this,RegisterNumberActivity.class));
            }
            if(item.getItemId() == R.id.about){
                startActivity(new Intent(MainActivity.this,About.class));
            }
            if(item.getItemId() == R.id.how_to){
                startActivity(new Intent(MainActivity.this,Got_It.class));
            }
            if(item.getItemId() == R.id.share){
                startActivity(new Intent(MainActivity.this,Share.class));
            }
            if(item.getItemId() == R.id.abou_app){
                startActivity(new Intent(MainActivity.this,About_App.class));
            }
            return true;
        }
    });
    popupMenu.show();
}

```

XML

```

<menu xmlns:android="http://schemas.android.com/apk/res/android">

    <item
        android:title="@string/change_number"
        android:id="@+id/changenumber"/>

</menu>

```

TESTING

CASES



1. If enter <10 digits number Yes ✓ / No



Error

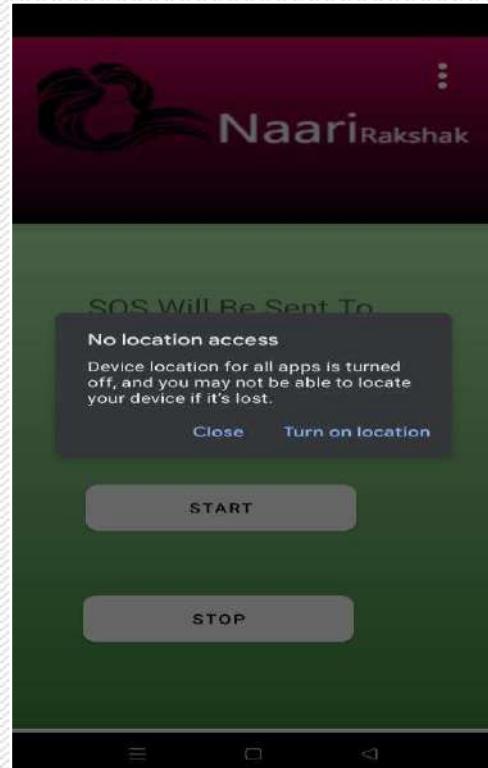
2. If the number is not active Yes ✓ / No

3. Enter 10-digit number Yes / No ✗

4. If there is no network Yes ✓ / No

5. If location is off its works Yes / No ✗

Turn on location



6. It's supports WIFI, hotspot

Yes/No

7. After shaking the device it will
send SMS

Yes /No

Shake

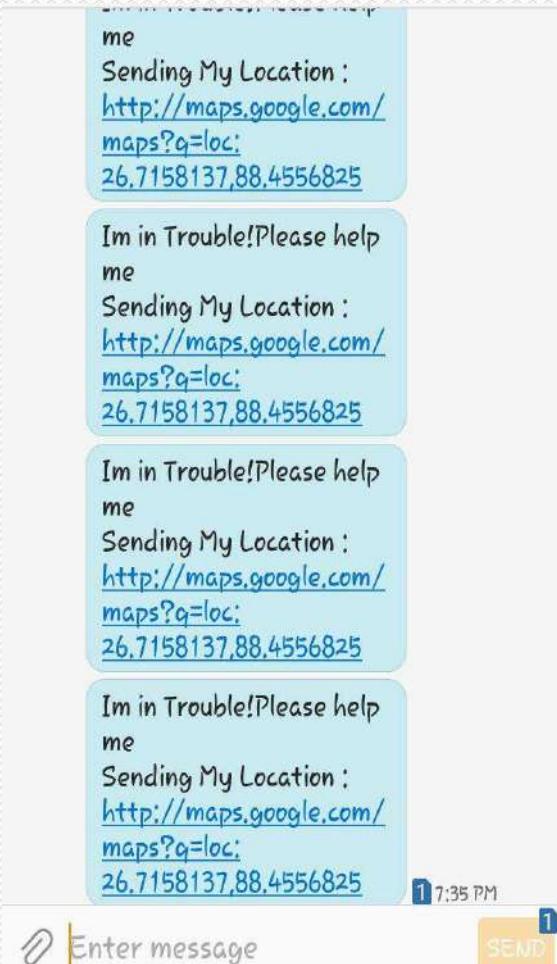


Shake



8. SMS sends to emergency number

Yes ✓ / No



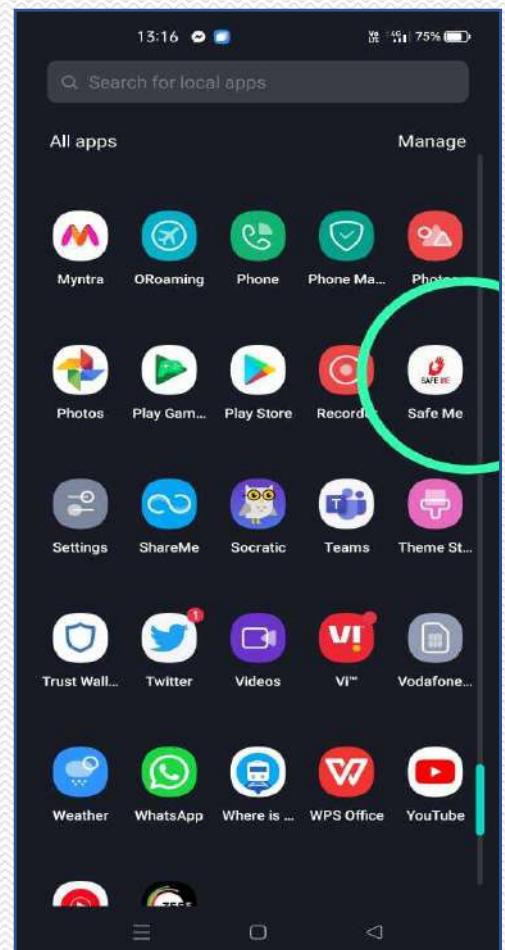
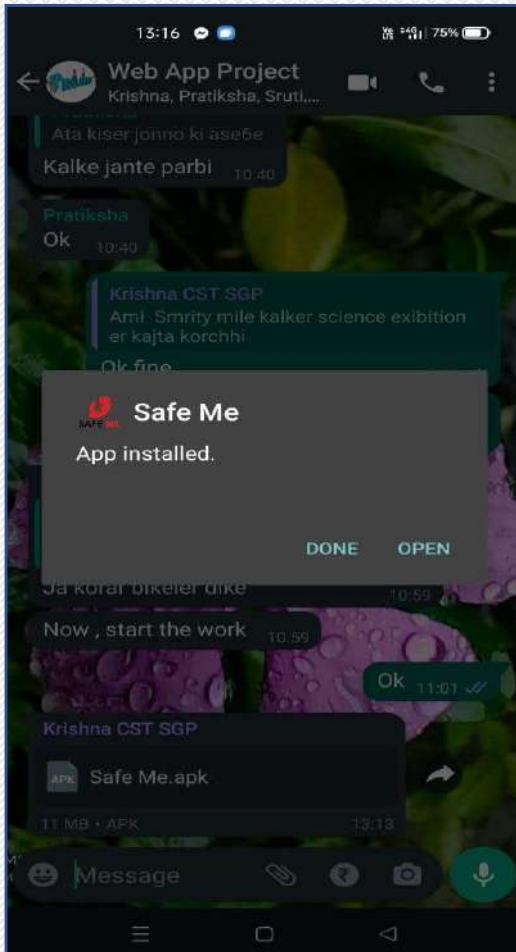
Click on

Link

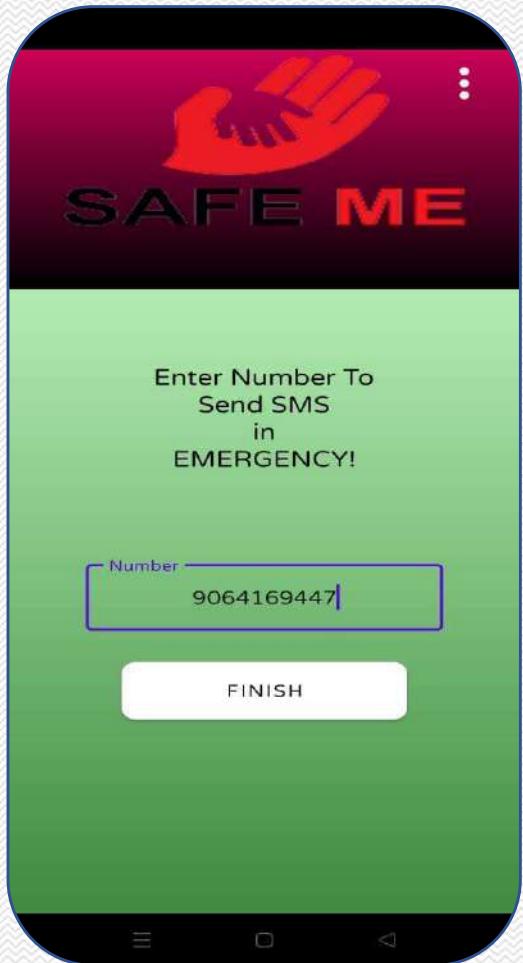


How To Use “SAFE ME”

1. At first download the app“Safe Me”.



2. Open the app, enter valid 10 digits number and click to 'START' button.



Click on Start

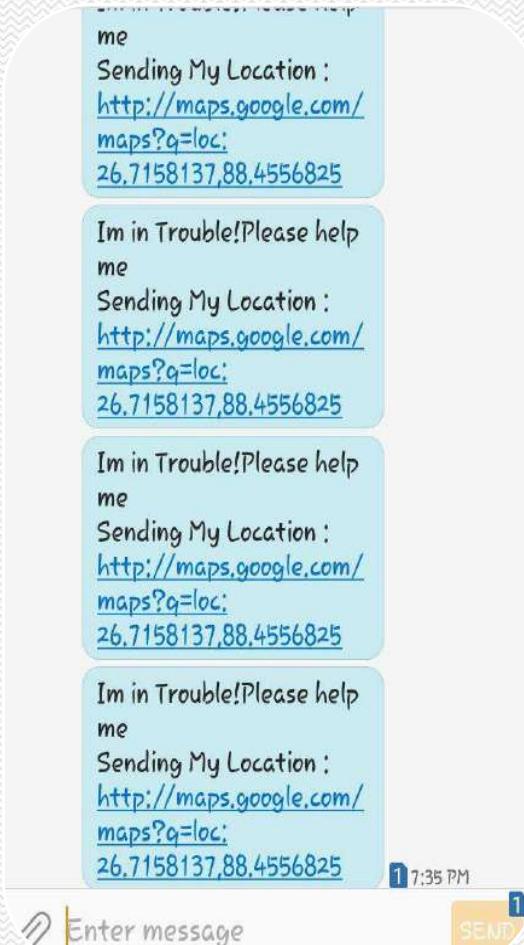


3. After clicking the start button shake the device.

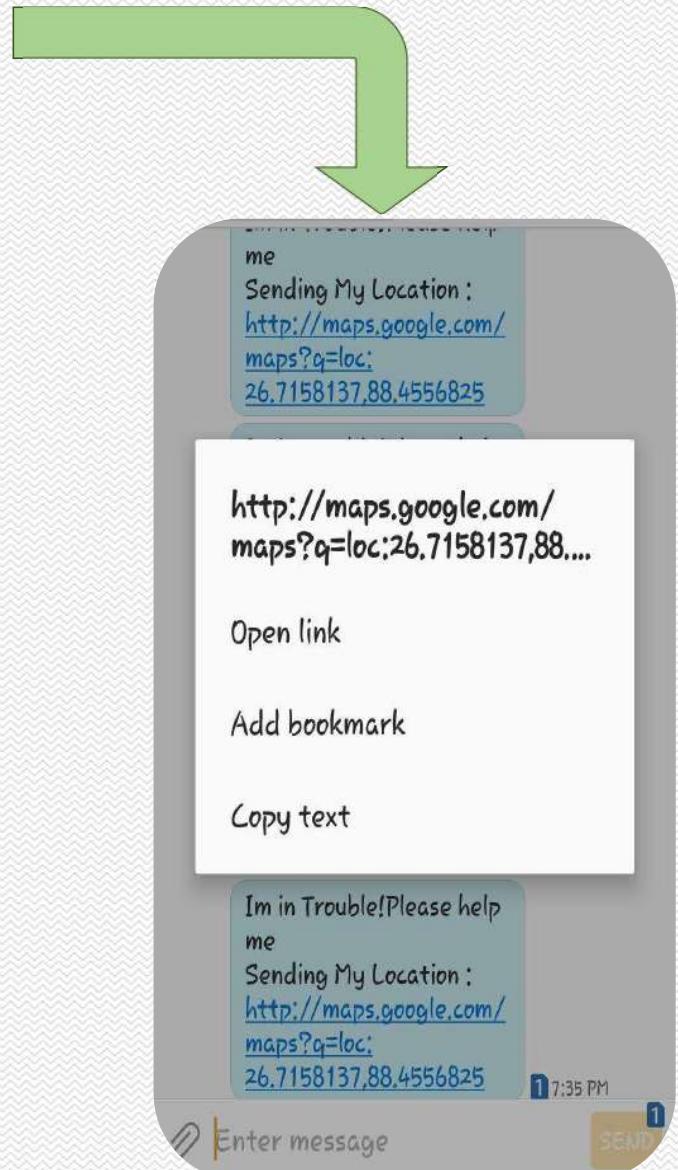


Shake ✓

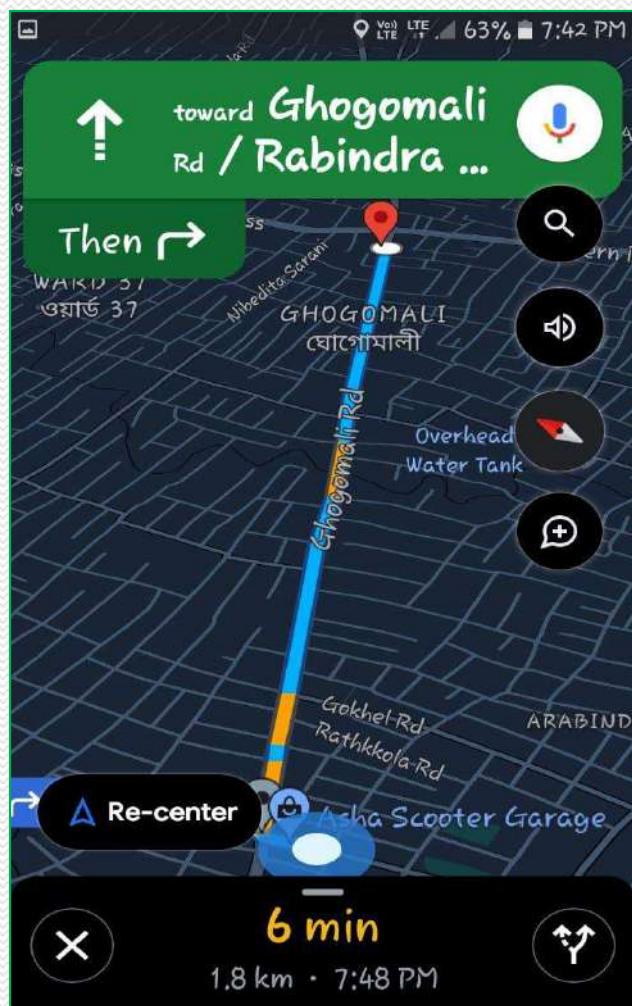
4. It will send SMS to the emergency number with current location.



Click on
Open Link



5. Click the link and follow the map to rescue.



FEATURES

- **Easy to use:** This app is very easy to use very user friendly and easily understandable.
- **Location:** Easily send the current location to your emergency number.
- **Shaking:** You can easily send your emergency message by just shaking your device.
- **Recharge:** No recharge required in your emergency number.

FUTURE SCOPE

- **Live Location:** For track the person who is in emergency.
- **Multiple Person:** For send the message to the more persons at a time.
- **Alert Sound:** For easily understand the emergency message.

CONCLUSION

The purpose of this project was to create an emergency android application which can helps persons who are in emergency by well implementing of our coding knowledge. We got a lot to bugs in the development process but we together fixed them. Now based on the project, we can conclude that we have achieved the main purpose of our project and we will update our project website in future with above mentioned interesting features.

REFERENCE

