



**UNIVERSITATEA TEHNICĂ**  
DIN CLUJ-NAPOCA



Facultatea de Electronică, Telecomunicații  
și Tehnologia Informației

## **DEZVOLTAREA DE APLICAȚII PENTRU TELEFOANE MOBILE**

### **TEMĂ PROIECT: LOCATION TRACKER**

Studenti:  
Vizuroiu Ionuț -Alexandru  
Marcu Vasile  
Telecomunicații  
Anul 2

## 1. Descrierea proiectului:

Aplicație pentru localizarea unui terminal mobil, respectiv trimiterea informațiilor obținute pe diferite platforme (alt terminal, facebook, twitter etc).

Pentru implementare am folosit software-ul Android Studio.

## 2. Configurația Fișierelor.

### 2.1. Fișierul activity\_main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:id="@+id/activity_main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    android:layout_gravity="center_horizontal"
    android:orientation="vertical"
    tools:context="dev.edmt.googlelocationapi.MainActivity">

    <ImageView
        android:layout_width="339dp"
        android:layout_height="89dp"
        android:layout_marginTop="10dp"
        android:src="@drawable/edmt" android:contentDescription="@string/todo" />

    <TextView
        android:id="@+id/txtLabel"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center_horizontal"
        android:layout_marginTop="10dp"
        android:text="Va aflatii aici: "
        android:textSize="25sp" />

    <TextView
        android:id="@+id/txtCoordinates"
        android:layout_marginTop="20dp"
        android:textSize="25sp"
        android:text=""
        android:layout_gravity="center_horizontal"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content" />

    <com.google.android.gms.maps.MapView
        android:layout_width="351dp"
        android:layout_height="106dp"
        android:layout_marginTop="10dp" />

    <Button
        android:id="@+id/btnTrackLocation"
        style="@style/Widget.AppCompat.Button.Colored"
        android:layout_width="352dp"
        android:layout_height="wrap_content"
        android:layout_marginTop="20dp"
        android:text="@string/activeaza_localizarea" />
```

```

<Button
    android:id="@+id/btnGetCoordinates"
    style="@style/Widget.AppCompat.Button.Colored"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="10dp"
    android:text="@string/obtime_coordonatele" />

<Button
    android:fillColor="#6b475874"
    android:pathData="M18,16.08c-0.76,0 -1.44,0.3 -1.96,0.77L8.91,12.7c0.05,-
0.23 0.09,-0.46 0.09,-0.7s-0.04,-0.47 -0.09,-0.717.05,-4.11c0.54,0.5 1.25,0.81
2.04,0.81 1.66,0 3,-1.34 3,-3s-1.34,-3 -3,-3 -3,1.34 -3,3c0,0.24 0.04,0.47
0.09,0.7L8.04,9.81C7.5,9.31 6.79,9 6,9c-1.66,0 -3,1.34 -3,3s1.34,3 3,3c0.79,0 1.5,-
0.31 2.04,-0.8117.12,4.16c-0.05,0.21 -0.08,0.43 -0.08,0.65 0,1.61 1.31,2.92
2.92,2.92 1.61,0 2.92,-1.31 2.92,-2.92s-1.31,-2.92 -2.92,-2.92z"
    android:id="@+id/mShare"
    style="@style/Widget.AppCompat.Button.Colored"
    android:layout_width="351dp"
    android:layout_height="wrap_content"
    android:layout_marginTop="10dp"
    android:icon="@drawable/ic_menu_share"
    android:text="@string/trimite_locatia_curenta"
    android:title="@string/share" />

</LinearLayout>

```

## 2.2. AndroidManifest.xml:

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="dev.edmt.googlelocationapi">

    <uses-permission android:name="android.permission.INTERNET"/>
    <uses-permission android:name="android.permission.ACCESS_NETWORK_STATE"/>
    <uses-permission android:name="android.permission.ACCESS_FINE_LOCATION"/>
    <uses-permission android:name="android.permission.ACCESS_COARSE_LOCATION"/>

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:supportRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".MainActivity">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

```

## 2.3. strings.xml:

```

<resources>
    <string name="app_name">GoogleLocationAPI</string>
    <string name="share">share</string>
    <string name="ma_aflu_la">Ma aflu la:</string>
    <string name="activeaza_localizarea">Activeaza localizarea</string>
    <string name="obtime_coordonatele">Obtime coordonatele</string>
    <string name="trimite_locatia_curenta">Trimite locatia curenta</string>
    <string name="todo">TODO</string>
</resources>

```

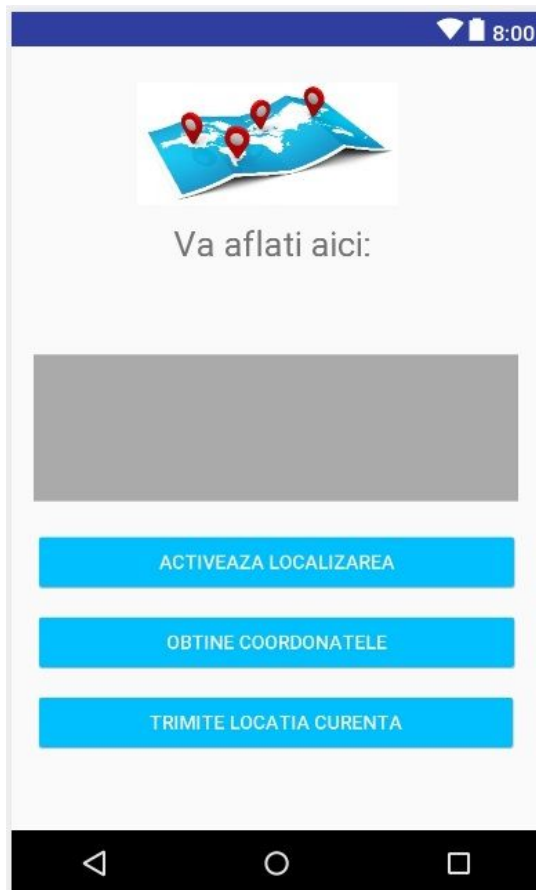
## 2.4. Styles.xml:

```
<resources>
    <!-- Base application theme. -->
    <style name="AppTheme" parent="Theme.AppCompat.Light.NoActionBar">
        <!-- Customize your theme here. -->
        <item name="colorPrimary">@color/colorPrimary</item>
        <item name="colorPrimaryDark">@color/colorPrimaryDark</item>
        <item name="colorAccent">@color/colorAccent</item>
    </style>
</resources>
```

## 2.5.Colours.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <color name="colorPrimary">#3F51B5</color>
    <color name="colorPrimaryDark">#303F9F</color>
    <color name="colorAccent">#00BFFF</color>
</resources>
```

## 3. Interfața grafică.



Aplicația realizată este destul de simplă.

Conține 3 butoane:

- Primul buton are rolul de a activa localizarea pe terminal (ACTIVEAZA LOCALIZAREA)
- Al doilea buton este pentru a obține coordonatele curente ale dispozitivului (OBTINE COORDONATELE)
- Al treilea buton este pentru sharing pe diferite platforme (facebook, twitter, sms etc).(TRIMITE LOCATIA CURENTA)

În plus, am adăugat și localizarea pe hartă, folosind google MAPS.