

MAP

TMap



프로젝트 생성



프로젝트 정보

- ✓ Application Name: GpsTmap01
- ✓ Minimum SDK : API 16
- ✓ Add an activity to Mobile: Blank Activity
- ✓ Activity Name: MainActivity
- ✓ Layout Name: activity_main
- ✓ Title: MainActivity
- ✓ Menu Resource Name: menu_main



```
activity_main.xml x
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:id="@+id/linear"
    android:orientation="vertical"
    tools:context=".MainActivity">

</LinearLayout>
```



```
MainActivity.java x
1 package com.example.administrator.myapplication;
2
3 import android.app.Activity;
4 import android.graphics.Bitmap;
5 import android.graphics.BitmapFactory;
6 import android.graphics.Color;
7 import android.location.Location;
8 import android.location.LocationListener;
9 import android.os.Bundle;
10 import android.util.Log;
11 import android.widget.LinearLayout;
12 import android.widget.Toast;
13
14 import com.skp.Tmap.TMapCircle;
15 import com.skp.Tmap.TMapData;
16 import com.skp.Tmap.TMapGpsManager;
17 import com.skp.Tmap.TMapMarkerItem;
18 import com.skp.Tmap.TMapPOIItem;
19 import com.skp.Tmap.TMapPoint;
20 import com.skp.Tmap.TMapPolyLine;
21 import com.skp.Tmap.TMapView;
22
23 import java.util.ArrayList;
24
```

Import 확인

```

24
25 public class MainActivity extends Activity
26     implements TMapView.OnLongClickListenerCallback,
27     LocationListener, TMapGpsManager.onLocationChangedCallback {
28
29     private TMapView tMapView = null;
30     TMapGpsManager gps = null;
31     public static String mApiKey = null;
32     public static String mBizAppID = null;
33     private static final String TAG = "TestTmap";
34     Bitmap icon1, icon2;
35     TMapCircle tCircle;
36     TMapData tMapData;
37

```

코딩

변수 정의

```
MainActivity.java x
37
38 @Override
39 protected void onCreate(Bundle savedInstanceState) {
40     super.onCreate(savedInstanceState);
41     setContentView(R.layout.activity_main);
42
43     LinearLayout liner = (LinearLayout) findViewById(R.id.liner);
44     tMapView = new TMapView(this);
45     mApiKey = "3fbf4752-cf6c-318b-a1a9-d6067bd88c79";
46     tMapView.setSKPMAPApiKey(mApiKey);
47     tMapView.setSKPMAPBizappId(mBizAppID);
48     liner.addView(tMapView);
49     setContentView(liner);
50
51     gps = new TMapGpsManager(MainActivity.this);
52     gps.setMinTime(1);
53     gps.setMinDistance(1);
54     gps.setProvider(gps.NETWORK_PROVIDER);
55     // gps.setProvider(gps.GPS_PROVIDER);
56     gps.OpenGps();
57
```

코딩

API Key

API Key setting

GPS 설정

```
57  
58 tMapData = new TMapData();  
59  
60 icon1 = BitmapFactory.decodeResource(getResources(), R.drawable.icon1);  
61 icon2 = BitmapFactory.decodeResource(getResources(), R.drawable.icon2);  
62  
63 tMapView.setZoomLevel(16);  
64 tMapView.setIconVisibility(true);  
65 tMapView.setCompassMode(true);  
66 tMapView.setSightVisible(true);  
67 tMapView.setMapPosition(TMapView.POSITION_HAVI);  
68 tMapView.setTrackingMode(true);  
69  
70 }  
71
```

- Zoom
- Icon 보이기
- 나침반 모드
- 시야 뷰
- 맵 중앙 위치
- 트래킹 모드

지도 이미지 롱 클릭 이벤트

@Override

```
public void onLongPressEvent(ArrayList<TMapMarkerItem> arrayList,
                             ArrayList<TMapPOIItem> arrayList1, TMapPoint tMapPoint) {
```

```
    Toast.makeText(getBaseContext(), String.valueOf(tMapPoint.getLatitude()) + ", "
                  + String.valueOf(tMapPoint.getLongitude()), Toast.LENGTH_SHORT).show();
```

}

@Override

```
public void onStatusChanged(String provider, int status, Bundle extras) {
```

```
    Toast.makeText(getBaseContext(), "StatusChanged", Toast.LENGTH_SHORT).show();
```

}

@Override

```
public void onProviderEnabled(String provider) {
```

```
    Toast.makeText(getBaseContext(), "ProviderEnabled", Toast.LENGTH_SHORT).show();
```

}

코딩

코딩

코딩


```
@Override
```

```
public void onProviderDisabled(String provider) {
```

```
    Toast.makeText(getBaseContext(), "ProviderDisabled", Toast.LENGTH_SHORT).show();
```

```
}
```

```
@Override
```

```
protected void onResume() {
```

```
    super.onResume();
```

```
}
```

```
@Override
```

```
protected void onPause() {
```

```
    super.onPause();
```

```
}
```

```
@Override
```

```
protected void onDestroy() {
```

```
    super.onDestroy();
```

```
    gps.CloseGps();
```

```
}
```

코딩

코딩

```
@Override
```

```
public void onLocationChanged(Location location) {
```

```
}
```

```
@Override
```

```
public void onLocationChange(Location location) {
```

```
tMapView.setCenterPoint(location.getLongitude(), location.getLatitude());
```

```
tMapView.setLocationPoint(location.getLongitude(), location.getLatitude());
```

```
TMapPoint point1 = tMapView.getCenterPoint();
```

```
TMapPoint point2 = new TMapPoint(point1.getLatitude() + 0.1, point1.getLongitude() + 0.1);
```

```
tMapData.findPathDataWithType(TMapData.TMapPathType.CAR_PATH,
```

```
point1, point2, new TMapData.FindPathDataListenerCallback() {
```

```
@Override
```

```
public void onFindPathData(TMapPolyLine polyLine) {
```

```
polyLine.setLineWidth(20);
```

```
polyLine.setOutlineColor(Color.LTGRAY);
```

```
tMapView.addTMapPath(polyLine);
```

```
}
```

```
});
```

코딩

맵 중앙 위치

맵 중앙 위치 받기

임의 맵 위치 받기

Point1과 point2 위치 경로 표시(자동차/자전거/도보)

```
135
136
137
138
139
140
141
142
143
144
145
146
147

tMapData.setResponseCodeInfoCallback(new TMapData.OnResponseCodeInfoCallback() {
    @Override
    public void responseCodeInfo(String s, int i, String s1) {
        Log.d(TAG, Thread.currentThread().getStackTrace()[2].getFileName() + " / " +
            Thread.currentThread().getStackTrace()[2].getMethodName() + " / " +
            Thread.currentThread().getStackTrace()[2].getLineNumber() +
            " : API is " + s + " ResponseCode is " + i);
    }
});
CircleTmap();
}
```

Map 서버로 부터
응답 대응 메소드)

```
MainActivity.java x
143     }
144     });
145     CircleTmap();
146 }
147
148 private void CircleTmap() {
149     tCircle = new TMapCircle();
150     tCircle.setRadius(100);
151     tCircle.latitude = tMapView.getLatitude();
152     tCircle.longitude = tMapView.getLongitude();
153
154     tCircle.setAreaColor(Color.RED);
155     tCircle.setLineColor(Color.RED);
156     tCircle.setCircleWidth(5);
157     tCircle.setLineAlpha(50);
158     tCircle.setAreaAlpha(50);
159     tCircle.setRadiusVisible(true);
160     tMapView.addTMapCircle("TestCicle", tCircle);
161 }
162 }
163
```

코딩

원 그리기(중앙 설정)

영역 및 선 색상

선두께/투명도/ 원 보이기

```
AndroidManifest.xml x
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.administrator.myapplication">

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

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

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

코딩



포지션 목적지



```
MainActivity.java ×
31 public static String mApiKey = null;
32 public static String mBizAppID = null;
33 private static final String TAG = "TestTmap";
34 Bitmap icon1, icon2;
35 TMapCircle tCircle;
36 TMapData tMapData;
37 TMapPoint point2;
38
39 @Override
40 protected void onCreate(Bundle savedInstanceState) {
41     super.onCreate(savedInstanceState);
```

추가



```
MainActivity.java x
61  icon1 = BitmapFactory.decodeResource(getResources(), R.drawable.icon1);
62  icon2 = BitmapFactory.decodeResource(getResources(), R.drawable.icon2);
63
64  point2 = new TMapPoint(tMapView.getLatitude(), tMapView.getLongitude());
65
66  tMapView.setZoomLevel(16);
67  tMapView.setIconVisibility(true);
68  tMapView.setCompassMode(true);
69  tMapView.setSightVisible(true);
70  tMapView.setMapPosition(TMapView.POSITION_HAVER);
71  tMapView.setTrackingMode(true);
72
73  }
```

추가


```
73     }
74
75     @Override
76     public void onLongPressEvent(ArrayList<TMapMarkerItem> arrayList,
77                                 ArrayList<TMapPOIItem> arrayList1, TMapPoint tMapPoint) {
78
79         Toast.makeText(getBaseContext(), String.valueOf(tMapPoint.getLatitude()) + ", "
80             + String.valueOf(tMapPoint.getLongitude()), Toast.LENGTH_SHORT).show();
81
82         point2 = new TMapPoint(tMapPoint.getLatitude(), tMapPoint.getLongitude());
83
84         Toast.makeText(getBaseContext(), "목적지 등록 되었어요!", Toast.LENGTH_SHORT);
85     }
86
```

추가

```
MainActivity.java x
122
123     @Override
124     public void onLocationChange(Location location) {
125         tMapView.setCenterPoint(location.getLongitude(), location.getLatitude());
126         tMapView.setLocationPoint(location.getLongitude(), location.getLatitude());
127
128         TMapPoint point1 = tMapView.getCenterPoint();
129         //TMapPoint point2 = new TMapPoint(point1.getLatitude() + 0.1, point1.getLongitude() + 0.1);
130
131         tMapData.findPathDataWithType(TMapData.TMapPathType.CAR_PATH,
132             point1, point2, new TMapData.FindPathDataListenerCallback() {
133             @Override
134             public void onFindPathData(TMapPolyLine polyLine) {
135                 polyLine.setLineWidth(20);
136             }
137         });
138     }
139 }
```

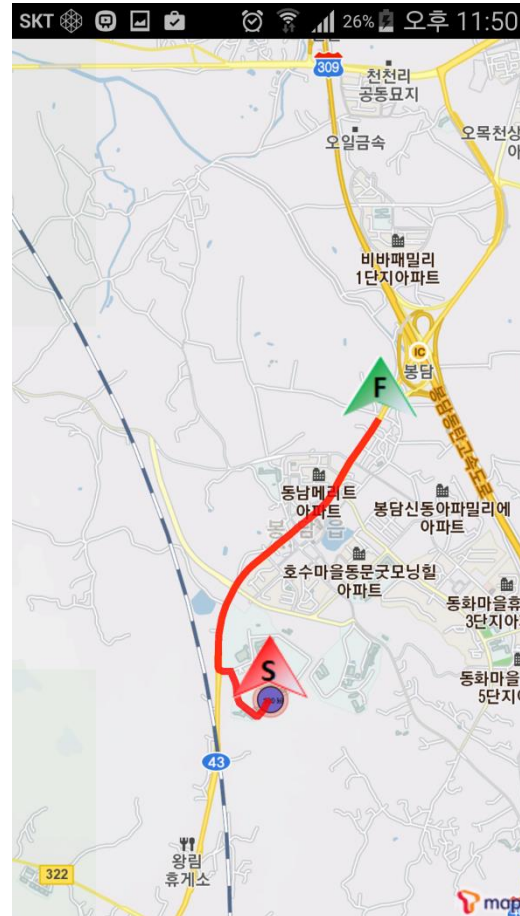
주석 처리

롱 클릭



```
123      @Override
124      public void onLocationChange(Location location) {
125          tMapView.setCenterPoint(location.getLongitude(), location.getLatitude());
126          tMapView.setLocationPoint(location.getLongitude(), location.getLatitude());
127
128          TMapPoint point1 = tMapView.getCenterPoint();
129          tMapView.setTMapPathIcon(icon1, icon2);
130          //TMapPoint point2 = new TMapPoint(point1.getLatitude() + 0.1, point1.getLongitude() + 0.1);
131
132          tMapData.findPathDataWithType(TMapData.TMapPathType.CAR_PATH,
133              point1, point2, new TMapData.FindPathDataListenerCallback() {
134                  @Override
135                  public void onFindPathData(TMapPolyLine polyLine) {
136                      polyLine.setLineWidth(20);
137                      polyLine.setOutlineColor(Color.LTGRAY);
138                      tMapView.addTMapPath(polyLine);
139                  }
140              });
```

추가



```
MainActivity.java x
129 tMapView.setLocationPoint(location.getLongitude(), location.getLatitude());
130
131 TMapPoint point1 = tMapView.getCenterPoint();
132 tMapView.setTMapPathIcon(icon1, icon2);
133 //TMapPoint point2 = new TMapPoint(point1.getLatitude() + 0.1, point1.getLongitude() + 0.1);
134
135 tMapData.findPathDataWithType(TMapData.TMapPathType.BICYCLE_PATH,
136 point1, point2, new TMapData.FindPathDataListenerCallback() {
137     @Override
138     public void onFindPathData(TMapPolyLine polyLine) {
139         polyLine.setLineWidth(20);
140         polyLine.setOutlineColor(Color.LTGRAY);
141         tMapView.addTMapPath(polyLine);
142     }
143 });
```

자전거 경로

```
129 tMapView.setLocationPoint(location.getLongitude(), location.getLatitude());
130
131 TMapPoint point1 = tMapView.getCenterPoint();
132 tMapView.setTMapPathIcon(icon1, icon2);
133 //TMapPoint point2 = new TMapPoint(point1.getLatitude() + 0.1, point1.getLongitude() + 0.1);
134
135 tMapData.findPathDataWithType(TMapData.TMapPathType.PEDESTRIAN_PATH,
136 point1, point2, new TMapData.FindPathDataListenerCallback() {
137     @Override
138     public void onFindPathData(TMapPolyLine polyLine) {
139         polyLine.setLineWidth(20);
140         polyLine.setOutlineColor(Color.LTGRAY);
141         tMapView.addTMapPath(polyLine);
142     }
143 });
```

보행자 경로