

APPENDIX

BridgeMenu.java

```
1. package com.finderapp;
2.
3. import com.baidu.navi.sdkdemo.R;
4.
5. import android.Manifest;
6. import android.annotation.TargetApi;
7. import android.app.Activity;
8. import android.content.Intent;
9. import android.content.pm.PackageManager;
10. import android.os.Build;
11. import android.os.Bundle;
12. import android.view.View;
13. import android.view.Window;
14. import android.widget.Button;
15. import android.widget.ImageView;
16.
17. public class BridgeMenu extends Activity {
18.
19.     private final static String authBaseArr[] = { Manifest.permission.WRITE_EXTERNAL_STORAGE,
20.                                                 Manifest.permission.ACCESS_FINE_LOCATION };
21.     private final static int authBaseRequestCode = 1;
22.     ImageView v1;
23.     ImageView v2;
24.
25.     @TargetApi(23)
26.     @Override
27.     protected void onCreate(Bundle savedInstanceState) {
28.         super.onCreate(savedInstanceState);
29.         this.requestWindowFeature(Window.FEATURE_NO_TITLE);
30.         setContentView(R.layout.layout_menu);
31.
32.         v1 = (ImageView) findViewById(R.id.buttonRes);
33.         v2 = (ImageView) findViewById(R.id.buttonMos);
34.
35.         v1.setOnClickListener(new View.OnClickListener() {
36.             @Override
37.             public void onClick(View v) {
38.                 Intent in = new Intent(BridgeMenu.this, MainActivity.class);
```

```
39.     in.putExtra("type", 0);
40.     startActivity(in);
41.   }
42. });
43.
44. v2.setOnClickListener(new View.OnClickListener() {
45.   @Override
46.   public void onClick(View v) {
47.     Intent in = new Intent(BridgeMenu.this, MainActivity.class);
48.     in.putExtra("type", 1);
49.     startActivity(in);
50.   }
51. });
52.
53. if (android.os.Build.VERSION.SDK_INT >= 23) {
54.
55.   if (!hasBasePhoneAuth()) {
56.     this.requestPermissions(authBaseArr, authBaserequestCode);
57.     return;
58.
59.   }
60. }
61. }
62.
63. private boolean hasBasePhoneAuth() {
64.
65.   PackageManager pm = this.getPackageManager();
66.   for (String auth : authBaseArr) {
67.     if (pm.checkPermission(auth, this.getPackageName()) != PackageManager.PERMISSION_GRANTED) {
68.       return false;
69.     }
70.   }
71.   return true;
72. }
73. }
```

BNaviMainActivity.java

```
1. package com.finderapp;
2.
```

```
3. import java.io.File;
4. import java.util.ArrayList;
5. import java.util.LinkedList;
6. import java.util.List;
7.
8. import com.baidu.navi.sdkdemo.R;
9. import com.baidu.navisdk.adapter.BNCommonSettingParam;
10. import com.baidu.navisdk.adapter.BNOuterLogUtil;
11. import com.baidu.navisdk.adapter.BNOuterTTSPlayerCallback;
12. import com.baidu.navisdk.adapter.BNRouteGuideManager;
13. import com.baidu.navisdk.adapter.BNRoutePlanNode;
14. import com.baidu.navisdk.adapter.BNRoutePlanNode.CoordinateType;
15. import com.baidu.navisdk.adapter.BNaviCommonParams;
16. import com.baidu.navisdk.adapter.BNaviSettingManager;
17. import com.baidu.navisdk.adapter.BaiduNaviManager;
18. import com.baidu.navisdk.adapter.BaiduNaviManager.NaviInitListener;
19. import com.baidu.navisdk.adapter.BaiduNaviManager.RoutePlanListener;

20. import com.baidu.navisdk.adapter.PackageUtil;
21. import com.baidu.navisdk.adapter.base.BaiduNaviSDKProxy;
22.
23. import android.Manifest;
24. import android.annotation.TargetApi;
25. import android.app.Activity;
26. import android.content.Intent;
27. import android.content.pm.PackageManager;
28. import android.os.Build;
29. import android.os.Bundle;
30. import android.os.Environment;
31. import android.os.Handler;
32. import android.os.Message;
33. import android.util.Log;
34. import android.view.View;
35. import android.view.View.OnClickListener;
36. import android.widget.AdapterView;
37. import android.widget.AdapterView.OnItemSelectedListener;
38. import android.widget.Button;
39. import android.widget.Spinner;
40. import android.widget.TextView;
41. import android.widget.Toast;
42.
43. @TargetApi(23)
44. public class BNaviMainActivity extends Activity {
```

```
45.    public static List<Activity> activityList = new LinkedList<Activity>();  
46.  
47.  
48.    private static final String APP_FOLDER_NAME = "BNSDKSimpleD  
emo";  
49.  
50.    private Button mWgsNaviBtn = null;  
51.    private Button mGcjNaviBtn = null;  
52.    private Button mBdmcNaviBtn = null;  
53.    private Button mDb06ll = null;  
54.    private String mSDCardPath = null;  
55.  
56.    public static final String ROUTE_PLAN_NODE = "routePlanNode";  
57.    public static final String SHOW_CUSTOM_ITEM = "showCustomlte  
m";  
58.    public static final String RESET_END_NODE = "resetEndNode";  
59.    public static final String VOID_MODE = "voidMode";  
60.  
61.    private final static String authBaseArr[] = { Manifest.permission.WRI  
TE_EXTERNAL_STORAGE,  
        Manifest.permission.ACCESS_FINE_LOCATION };  
62.  
63.    private final static String authComArr[] = { Manifest.permission.REA  
D_PHONE_STATE };  
64.    private final static int authBaseRequestCode = 1;  
65.    private final static int authComRequestCode = 2;  
66.  
67.    private boolean hasInitSuccess = false;  
68.    private boolean hasRequestComAuth = false;  
69.  
70.    @Override  
71.    protected void onCreate(Bundle savedInstanceState) {  
72.        // TODO Auto-generated method stub  
73.        super.onCreate(savedInstanceState);  
74.  
75.        activityList.add(this);  
76.  
77.        setContentView(R.layout.restaurant_layout);  
78.  
79.        Handler h = new Handler();  
80.        h.postDelayed(new Runnable() {  
81.  
82.            @Override
```

```
83. public void run() {
84.     String name = Thread.currentThread().getName();
85.     Log.i("crug", name);
86.     delayTest();
87. }
88.     }, 500);
89.
90.     if (initDirs()) {
91.         initNavi();
92.     }
93. }
94.
95. @Override
96. protected void onResume() {
97.     super.onResume();
98. }
99.
100. public void delayTest() {
101. }
102.
103. private boolean initDirs() {
104.     mSDCardPath = getSdcardDir();
105.     if (mSDCardPath == null) {
106.         return false;
107.     }
108.     File f = new File(mSDCardPath, APP_FOLDER_NAME);
109.     if (!f.exists()) {
110.         try {
111.             f.mkdir();
112.         } catch (Exception e) {
113.             e.printStackTrace();
114.             return false;
115.         }
116.     }
117.     return true;
118. }
119.
120. String authinfo = null;
121.
122. private Handler ttsHandler = new Handler() {
123.     public void handleMessage(Message msg) {
124.         int type = msg.what;
125.         switch (type) {
```

```
126.         case BaiduNaviManager.TTSPlayMsgType.PLAY_START_MSG:  
127.             {  
128.                 break;  
129.             }  
130.             case BaiduNaviManager.TTSPlayMsgType.PLAY_END_MSG: {  
131.                 break;  
132.             }  
133.             default:  
134.                 break;  
135.             }  
136.         };  
137.  
138.     private BaiduNaviManager.TTSPlayStateListener ttsPlayStateListener  
139.     = new BaiduNaviManager.TTSPlayStateListener() {  
140.         @Override  
141.         public void playEnd() {  
142.         }  
143.         @Override  
144.         public void playStart() {  
145.         }  
146.     };  
147.     };  
148.  
149.     public void showToastMsg(final String msg) {  
150.         BNaviMainActivity.this.runOnUiThread(new Runnable() {  
151.             @Override  
152.             public void run() {  
153.                 Toast.makeText(BNaviMainActivity.this, msg, Toast.LENGTH  
154.                     _SHORT).show();  
155.             }  
156.         });  
157.     }  
158.  
159.     private boolean hasBasePhoneAuth() {  
160.  
161.         PackageManager pm = this.getPackageManager();  
162.         for (String auth : authBaseArr) {  
163.             if (pm.checkPermission(auth, this.getPackageName()) != Package  
Manager.PERMISSION_GRANTED) {
```

```
164.         return false;
165.     }
166. }
167. return true;
168. }
169.
170. private boolean hasCompletePhoneAuth() {
171.     // TODO Auto-generated method stub
172.
173.     PackageManager pm = this.getPackageManager();
174.     for (String auth : authComArr) {
175.         if (pm.checkPermission(auth, this.getPackageName()) != PackageManager.PERMISSION_GRANTED) {
176.             return false;
177.         }
178.     }
179.     return true;
180. }
181.
182. private void initNavi() {
183.
184.     BNOuterTTSPlayerCallback ttsCallback = null;
185.
186.     if (android.os.Build.VERSION.SDK_INT >= 23) {
187.
188.         if (!hasBasePhoneAuth()) {
189.
190.             this.requestPermissions(authBaseArr, authBaseRequestCode);
191.             return;
192.         }
193.     }
194. }
195.
196. BaiduNaviManager.getInstance().init(this, mSDCardPath, APP_FOLDER_NAME, new NaviInitListener() {
197.     @Override
198.     public void onAuthResult(int status, String msg) {
199.         if (0 == status) {
200.             authinfo = "";
201.         } else {
202.             authinfo = "" + msg;
203.         }
204.         BNaviMainActivity.this.runOnUiThread(new Runnable() {
```

```
205.        @Override
206.        public void run() {
207.            Toast.makeText(BNaviMainActivity.this, authinfo, Toast.L
208.                ENGTH_LONG).show();
209.        }
210.    });
211. }
212.
213. public void initSuccess() {
214.     Toast.makeText(BNaviMainActivity.this, "Init Success", Toast.
215.         LENGTH_SHORT).show();
216.     hasInitSuccess = true;
217.     initSetting();
218. }
219. public void initStart() {
220.     Toast.makeText(BNaviMainActivity.this, "Init Start", Toast.LE
221.         NGTH_SHORT).show();
222. }
223. public void initFailed() {
224.     Toast.makeText(BNaviMainActivity.this, "", Toast.LENGTH_S
225.         HORT).show();
226. }
227. }, null, ttsHandler, ttsPlayStateListener);
228.
229. }
230.
231. private String getSdcardDir() {
232.     if (Environment.getExternalStorageState().equalsIgnoreCase(Environment.MEDIA_MOUNTED)) {
233.         return Environment.getExternalStorageDirectory().toString();
234.     }
235.     return null;
236. }
237.
238. private CoordinateType mCoordinateType = null;
239.
240. private void routeplanToNavi(CoordinateType coType) {
241.     mCoordinateType = coType;
242.     if (!hasInitSuccess) {
```

```
243.         Toast.makeText(BNaviMainActivity.this, "", Toast.LENGTH_SH  
ORT).show();  
244.     }  
245.  
246.     if (android.os.Build.VERSION.SDK_INT >= 23) {  
247.         if (!hasCompletePhoneAuth()) {  
248.             if (!hasRequestComAuth) {  
249.                 hasRequestComAuth = true;  
250.                 this.requestPermissions(authComArr, authComRequestCode);  
251.             return;  
252.         } else {  
253.             Toast.makeText(BNaviMainActivity.this, "", Toast.LENGTH  
_SHORT).show();  
254.         }  
255.     }  
256.  
257.     }  
258.     BNRoutePlanNode sNode = null;  
259.     BNRoutePlanNode eNode = null;  
260.  
261.     sNode = new BNRoutePlanNode(116.300821, 40.050969, "", null, c  
oType);  
262.     eNode = new BNRoutePlanNode(116.397491, 39.908749, "", null, c  
oType);  
263.  
264.     if (sNode != null && eNode != null) {  
265.  
266.         List<BNRoutePlanNode> list = new ArrayList<BNRoutePlanNod  
e>();  
267.         list.add(sNode);  
268.         list.add(eNode);  
269.  
270.         BaiduNaviManager.getInstance().launchNavigator(this, list, 1, tru  
e, new DemoRoutePlanListener(sNode),  
271.             eventListerner);  
272.         }  
273.     }  
274.  
275.     BaiduNaviManager.NavEventListerner eventListerner = new BaiduNavi  
Manager.NavEventListerner() {  
276.  
277.     @Override
```

```
278.     public void onCommonEventCall(int what, int arg1, int arg2, Bundl  
e bundle) {  
279.         BNEEventHandler.getInstance().handleNaviEvent(what, arg1, arg2,  
bundle);  
280.     }  
281. };  
282.  
283. public class DemoRoutePlanListener implements RoutePlanListener {  
284.  
285.     private BNRoutePlanNode mBNRoutePlanNode = null;  
286.  
287.     public DemoRoutePlanListener(BNRoutePlanNode node) {  
288.         mBNRoutePlanNode = node;  
289.     }  
290.  
291.     @Override  
292.     public void onJumpToNavigator() {  
293.  
294.         for (Activity ac : activityList) {  
295.  
296.             if (ac.getClass().getName().endsWith("BNDemoGuideActivity")  
) {  
297.  
298.                 return;  
299.             }  
300.         }  
301.         Intent intent = new Intent(BNaviMainActivity.this, BNaviGuideA  
ctivity.class);  
302.         Bundle bundle = new Bundle();  
303.         bundle.putSerializable(ROUTE_PLAN_NODE, (BNRoutePlanNo  
de) mBNRoutePlanNode);  
304.         intent.putExtras(bundle);  
305.         startActivity(intent);  
306.  
307.     }  
308.  
309.     @Override  
310.     public void onRoutePlanFailed() {  
311.         Toast.makeText(BNaviMainActivity.this, "失败了  
了...", Toast.LENGTH_SHORT).show();  
312.     }  
313. }
```

```
314.  
315.     private void initSetting() {  
316.         BNaviSettingManager  
317.             .setShowTotalRoadConditionBar(BNaviSettingManager.PreVie  
wRoadCondition.ROAD_CONDITION_BAR_SHOW_ON);  
318.         BNaviSettingManager.setVoiceMode(BNaviSettingManager.VoiceM  
ode.Veteran);  
319.         BNaviSettingManager.setRealRoadCondition(BNaviSettingManager.  
RealRoadCondition.NAVI_ITS_ON);  
320.         BNaviSettingManager.setIsAutoQuitWhenArrived(true);  
321.         Bundle bundle = new Bundle();  
322.         bundle.putString(BNCommonSettingParam.TTS_APP_ID, "9354030  
");  
323.         BNaviSettingManager.setNaviSdkParam(bundle);  
324.     }  
325.  
326.     private BNOouterTTSPlayerCallback mTTSCallback = new BNOouterT  
TSPlayerCallback() {  
327.  
328.         @Override  
329.         public void stopTTS() {  
330.             Log.e("test_TTS", "stopTTS");  
331.         }  
332.  
333.         @Override  
334.         public void resumeTTS() {  
335.             Log.e("test_TTS", "resumeTTS");  
336.         }  
337.  
338.         @Override  
339.         public void releaseTTSPlayer() {  
340.             Log.e("test_TTS", "releaseTTSPlayer");  
341.         }  
342.  
343.         @Override  
344.         public int playTTSText(String speech, int bPreempt) {  
345.             Log.e("test_TTS", "playTTSText" + " " + speech + " " + bPreempt  
);  
346.  
347.             return 1;  
348.         }  
349.  
350.         @Override
```

```
351.     public void phoneHangUp() {
352.         Log.e("test_TTS", "phoneHangUp");
353.     }
354.
355.     @Override
356.     public void phoneCalling() {
357.         Log.e("test_TTS", "phoneCalling");
358.     }
359.
360.     @Override
361.     public void pauseTTS() {
362.         Log.e("test_TTS", "pauseTTS");
363.     }
364.
365.     @Override
366.     public void initTTSPPlayer() {
367.         Log.e("test_TTS", "initTTSPPlayer");
368.     }
369.
370.     @Override
371.     public int getTTSState() {
372.         Log.e("test_TTS", "getTTSState");
373.         return 1;
374.     }
375. };
376.
377. @Override
378. public void onRequestPermissionsResult(int requestCode, String[] permissions, int[] grantResults) {
379.     super.onRequestPermissionsResult(requestCode, permissions, grantResults);
380.     if (requestCode == authBaserequestCode) {
381.         for (int ret : grantResults) {
382.             if (ret == 0) {
383.                 continue;
384.             } else {
385.                 Toast.makeText(BNaviMainActivity.this, "", Toast.LENGTH_SHORT).show();
386.             }
387.         }
388.     }
389.     initNavi();
390.     else if (requestCode == authComrequestCode) {
```

```
391.     for (int ret : grantResults) {  
392.         if (ret == 0) {  
393.             continue;  
394.         }  
395.     }  
396.     routeplanToNavi(mCoordinateType);  
397. }  
398.  
399. }  
400. }
```

LocationApplication.java

```
1. package com.finderapp;  
2.  
3. import com.baidu.mapapi.SDKInitializer;  
4. import com.finderapp.service.LocationService;  
5.  
6. import android.app.Application;  
7. import android.app.Service;  
8. import android.os.Vibrator;  
9.  
10. public class LocationApplication extends Application {  
11.     public LocationService locationService;  
12.     public Vibrator mVibrator;  
13.  
14.     @Override  
15.     public void onCreate() {  
16.         super.onCreate();  
17.  
18.         locationService = new LocationService(getApplicationContext());  
19.         mVibrator = (Vibrator) getApplicationContext().getSystemService(S  
ervice.VIBRATOR_SERVICE);  
20.         SDKInitializer.initialize(getApplicationContext());  
21.  
22.     }  
23. }  
24.
```

PoiOverlay.java

```
1. package com.finderapp;
2.
3. import android.os.Bundle;
4.
5. import com.baidu.mapapi.map.BaiduMap;
6. import com.baidu.mapapi.map.BitmapDescriptorFactory;
7. import com.baidu.mapapi.map.Marker;
8. import com.baidu.mapapi.map.MarkerOptions;
9. import com.baidu.mapapi.map.OverlayOptions;
10. import com.baidu.mapapi.map.Polyline;
11. import com.baidu.mapapi.search.poi.PoiResult;
12.
13. import java.util.ArrayList;
14. import java.util.List;
15.
16. public class PoiOverlay extends OverlayManager {
17.
18.     private static final int MAX_POI_SIZE = 10;
19.
20.     private PoiResult mPoiResult = null;
21.
22.     public PoiOverlay(BaiduMap baiduMap) {
23.         super(baiduMap);
24.     }
25.
26.     public void setData(PoiResult poiResult) {
27.         this.mPoiResult = poiResult;
28.     }
29.
30.     @Override
31.     public final List<OverlayOptions> getOverlayOptions() {
32.         if (mPoiResult == null || mPoiResult.getAllPoi() == null) {
33.             return null;
34.         }
35.         List<OverlayOptions> markerList = new ArrayList<OverlayOptions>();
36.         int markerSize = 0;
37.         for (int i = 0; i < mPoiResult.getAllPoi().size() && markerSize < MAX_POI_SIZE; i++) {
38.             if (mPoiResult.getAllPoi().get(i).location == null) {
39.                 continue;
40.             }
41.             markerSize++;
42.         }
43.     }
44.
```

```
42.     Bundle bundle = new Bundle();
43.     bundle.putInt("index", i);
44.     markerList.add(new MarkerOptions()
45.                     .icon(BitmapDescriptorFactory.fromAssetWithDpi("Icon_mar
46. k" + markerSize + ".png")).extraInfo(bundle)
47.                     .position(mPoiResult.getAllPoi().get(i).location));
48.     }
49.     return markerList;
50.   }
51.
52.   public PoiResult getPoiResult() {
53.     return mPoiResult;
54.   }
55.
56.   public boolean onPoiClick(int i) {
57.     return false;
58.   }
59.
60.   @Override
61.   public final boolean onMarkerClick(Marker marker) {
62.     if (!mOverlayList.contains(marker)) {
63.       return false;
64.     }
65.     if (marker.getExtraInfo() != null) {
66.       return onPoiClick(marker.getExtraInfo().getInt("index"));
67.     }
68.     return false;
69.   }
70.
71.   @Override
72.   public boolean onPolylineClick(Polyline polyline) {
73.     return false;
74.   }
75. }
```

MainActivity.java

```
1. package com.finderapp;
2.
```

```
3. import android.annotation.TargetApi;
4. import android.app.Activity;
5. import android.content.Intent;
6. import android.os.Bundle;
7. import android.os.Environment;
8. import android.os.Handler;
9. import android.os.Message;
10. import android.support.v4.app.FragmentActivity;
11. import android.text.Editable;
12. import android.text.TextWatcher;
13. import android.util.Log;
14. import android.view.View;
15. import android.view.Window;
16. import android.view.View.OnClickListener;
17. import android.widget.ArrayAdapter;
18. import android.widget.AutoCompleteTextView;
19. import android.widget.Button;
20. import android.widget.EditText;
21. import android.widget.ImageView;
22. import android.widget.Toast;
23. import com.baidu.location.BDLocation;
24. import com.baidu.location.BDLocationListener;
25. import com.baidu.mapapi.map.BaiduMap;
26. import com.baidu.mapapi.map.BitmapDescriptor;
27. import com.baidu.mapapi.map.BitmapDescriptorFactory;
28. import com.baidu.mapapi.map.MapStatusUpdate;
29. import com.baidu.mapapi.map.MapStatusUpdateFactory;
30. import com.baidu.mapapi.map.MarkerOptions;
31. import com.baidu.mapapi.map.OverlayOptions;
32. import com.baidu.mapapi.map.SupportMapFragment;
33. import com.baidu.mapapi.model.LatLng;
34. import com.baidu.mapapi.model.LatLngBounds;
35. import com.baidu.mapapi.search.core.CityInfo;
36. import com.baidu.mapapi.search.core.PoiInfo;
37. import com.baidu.mapapi.search.core.SearchResult;
38. import com.baidu.mapapi.search.poi.OnGetPoiSearchResultListener;
39. import com.baidu.mapapi.search.poi.PoiCitySearchOption;
40. import com.baidu.mapapi.search.poi.PoiDetailResult;
41. import com.baidu.mapapi.search.poi.PoiDetailSearchOption;
42. import com.baidu.mapapi.search.poi.PoiIndoorResult;
43. import com.baidu.mapapi.search.poi.PoiNearbySearchOption;
44. import com.baidu.mapapi.search.poi.PoiResult;
45. import com.baidu.mapapi.search.poi.PoiSearch;
```

```
46. import com.baidu.mapapi.search.poi.PoiSortType;
47. import com.baidu.mapapi.search.sug.OnGetSuggestionResultListener;
48. import com.baidu.mapapi.search.sug.SuggestionResult;
49. import com.baidu.mapapi.search.sug.SuggestionSearch;
50. import com.baidu.mapapi.search.sug.SuggestionSearchOption;
51. import com.baidu.navi.sdkdemo.R;
52. import com.baidu.navisdk.adapter.BNCommonSettingParam;
53. import com.baidu.navisdk.adapter.BNOuterLogUtil;
54. import com.baidu.navisdk.adapter.BNOuterTTSPlayerCallback;
55. import com.baidu.navisdk.adapter.BNRoutePlanNode;
56. import com.baidu.navisdk.adapter.BNRoutePlanNode.CoordinateType;
57. import com.baidu.navisdk.adapter.BNaviSettingManager;
58. import com.baidu.navisdk.adapter.BaiduNaviManager.NaviInitListener;
59. import com.baidu.navisdk.adapter.BaiduNaviManager.RoutePlanListener;

60. import com.finderapp.service.LocationService;
61. import com.baidu.navisdk.adapter.BaiduNaviManager;
62. import java.io.File;
63. import java.util.ArrayList;
64. import java.util.LinkedList;
65. import java.util.List;
66.
67. public class MainActivity extends FragmentActivity
68.     implements OnGetPoiSearchResultListener, OnGetSuggestionResult
   Listener {
69.
70.     private final String TAG = MainActivity.this.getPackageName();
71.     private LocationService locationService;
72.     private PoiSearch mPoiSearch = null;
73.     private SuggestionSearch mSuggestionSearch = null;
74.     private BaiduMap mBaiduMap = null;
75.     private List<String> suggest;
76.     // -----
77.     public static List<Activity> activityList = new LinkedList<Activity>();

78.     private static final String APP_FOLDER_NAME = "BNSDKSimpleD
emo";
79.     private String mSDCardPath = null;
80.     public static final String ROUTE_PLAN_NODE = "routePlanNode";
81.     public static final String SHOW_CUSTOM_ITEM = "showCustomIte
m";
82.     public static final String RESET_END_NODE = "resetEndNode";
83.     public static final String VOID_MODE = "voidMode";
```

```
84. private final static int authBaseRequestCode = 1;
85. private final static int authComRequestCode = 2;
86. private boolean hasInitSuccess = false;
87.
88. private ImageView img;
89.
90. // ----- Location -----
91.
92. private EditText editCity = null;
93. private AutoCompleteTextView keyWorldsView = null;
94. private ArrayAdapter<String> sugAdapter = null;
95. private int loadIndex = 0;
96. LatLng center = new LatLng(32.0616667, 118.7777778);
97. int radius = 2000;
98. LatLng southwest = new LatLng(32.0616667, 118.7777778);
99. LatLng northeast = new LatLng(32.0616667, 118.7777778);
100. LatLngBounds searchbound = new LatLngBounds.Builder().include(southwest).include(northeast).build();
101. int searchType = 0;
102. private BDLocation mLocation = null;
103.
104. @Override
105. protected void onCreate(Bundle savedInstanceState) {
106.     // TODO Auto-generated method stub
107.     super.onCreate(savedInstanceState);
108.
109.     activityList.add(this);
110.     Intent t = this.getIntent();
111.     final int typeA = t.getIntExtra("type", 0);
112.     if (typeA == 0) {
113.         setContentView(R.layout.restaurant_layout);
114.
115.     } else {
116.         setContentView(R.layout.mosque_layout);
117.     }
118.
119.     img = (ImageView) this.findViewById(R.id.imageView1);
120.     img.setOnClickListener(new OnClickListener() {
121.
122.         @Override
123.         public void onClick(View v) {
124.             gotoMyLocation();
125.         }
126.     });
127.
```

```
126.  
127.    });  
128.  
129.    Button b1 = (Button) this.findViewById(R.id.buttonList);  
130.    b1.setOnClickListener(new View.OnClickListener() {  
131.        @Override  
132.        public void onClick(View v) {  
133.            Intent in = new Intent(MainActivity.this, Recommend_List.class);  
134.            in.putExtra("type", typeA);  
135.            startActivity(in);  
136.        }  
137.    });  
138.  
139.    Handler h = new Handler();  
140.    h.postDelayed(new Runnable() {  
141.        @Override  
142.        public void run() {  
143.            String name = Thread.currentThread().getName();  
144.            Log.i("crug", name);  
145.        }  
146.    }, 500);  
147.  
148.  
149.    BNOuterLogUtil.setLogSwitcher(true);  
150.  
151.    if (initDirs()) {  
152.        initNavi();  
153.    }  
154.  
155.    mPoiSearch = PoiSearch.newInstance();  
156.    mPoiSearch.setOnGetPoiSearchResultListener(this);  
157.  
158.    mSuggestionSearch = SuggestionSearch.newInstance();  
159.    mSuggestionSearch.setOnGetSuggestionResultListener(this);  
160.  
161.    editCity = (EditText) findViewById(R.id.city);  
162.    keyWorldsView = (AutoCompleteTextView) findViewById(R.id.searchkey);  
163.    sugAdapter = new ArrayAdapter<String>(this, android.R.layout.simple_dropdown_item_1line);  
164.    keyWorldsView.setAdapter(sugAdapter);  
165.    keyWorldsView.setThreshold(1);
```

```
166.     mBaiduMap = ((SupportMapFragment) (getSupportFragmentManager())
167.             .findFragmentById(R.id.map))).getBaiduMap();
168.     keyWorldsView.addTextChangedListener(new TextWatcher() {
169.
170.         @Override
171.         public void afterTextChanged(Editable arg0) {
172.
173.     }
174.
175.         @Override
176.         public void beforeTextChanged(CharSequence arg0, int arg1, int
177.             arg2, int arg3) {
178.     }
179.
180.         @Override
181.         public void onTextChanged(CharSequence cs, int arg1, int arg2, i
182.             nt arg3) {
183.             if (cs.length() <= 0) {
184.                 return;
185.             }
186.             mSuggestionSearch.requestSuggestion(
187.                 (new SuggestionSearchOption()).keyword(cs.toString()).cit
188.                     y(editCity.getText().toString()));
189.             });
190.
191.             // Location=====
```

```
192.             locationService = ((LocationApplication) getApplication()).locationS
193.                 ervice;
194.                 locationService.registerListener(mListener);
195.                 int type = getIntent().getIntExtra("from", 0);
196.                 if (type == 0) {
197.                     locationService.setLocationOption(locationService.getDefaultLoca
198.                         tionClientOption());
199.                 } else if (type == 1) {
200.                     locationService.setLocationOption(locationService.getOption());
201.                 }
202.             locationService.start();
```

```
202.    }
203.    // Location-----
204.
205.    private BDLocationListener mListener = new BDLocationListener() {
206.
207.        @Override
208.        public void onReceiveLocation(BDLocation location) {
209.            // TODO Auto-generated method stub
210.            if (null != location && location.getLocType() != BDLocation.Type
211.                eServerError) {
212.                mLocation = location;
213.                myLocation();
214.                locationService.stop();
215.                locationService.unregisterListener(this);
216.            }
217.        };
218.
219.        // method draw and move location to center
220.        // screen-----
221.        private void myLocation() {
222.            if (mLocation != null) {
223.                LatLng point = new LatLng(mLocation.getLatitude(), mLocation.g
224.                    etLongitude());
225.                BitmapDescriptor bitmap = BitmapDescriptorFactory.fromResourc
226.                    e(R.drawable.your_location);
227.                OverlayOptions option = new MarkerOptions().position(point).ico
228.                    n(bitmap);
229.                mBaiduMap.addOverlay(option);
230.                gotoMyLocation();
231.            }
232.        }
233.        private void gotoMyLocation() {
234.            if (mLocation != null) {
235.                LatLng point = new LatLng(mLocation.getLatitude(), mLocation.g
236.                    etLongitude());
237.                MapStatusUpdate status = MapStatusUpdateFactory.newLatLng(p
238.                    oint);
239.                mBaiduMap.animateMapStatus(status);
```

```
238.     } else {
239.         Log.d(TAG, "location");
240.     }
241. }
242.
243. // -----
244. protected void onDestroy() {
245.     mBaiduMap.setMyLocationEnabled(false);
246.     mBaiduMap = null;
247.     super.onDestroy();
248. }
249.
250. // -----Search City-----
251. public void searchButtonProcess(View v) {
252.     searchType = 1;
253.     String citystr = editCity.getText().toString();
254.     String keystr = keyWorldsView.getText().toString();
255.     mPoiSearch.searchInCity((new PoiCitySearchOption()).city(citystr).k
eyword(keystr).pageNum(loadIndex));
256. }
257.
258. public void goToNextPage(View v) {
259.     loadIndex++;
260.     searchButtonProcess(null);
261. }
262.
263. // -----Search Nearby-----
264. public void searchNearbyProcess(View v) {
265.     searchType = 2;
266.     PoiNearbySearchOption nearbySearchOption = new PoiNearbySearc
hOption()
267.         .keyword(keyWorldsView.getText().toString()).sortType(PoiSort
Type.distance_from_near_to_far)
268.         .location(new LatLng(mLocation.getLatitude(), mLocation.getL
ongitude())).radius(radius)
269.         .pageNum(loadIndex);
270.     mPoiSearch.searchNearby(nearbySearchOption);
271. }
272.
273. // response from baidu get the place
274. // response-----
275. public void onGetPoiResult(PoiResult result) {
```

```
276.     if (result == null || result.error == SearchResult.ERRORNO.RESULT  
_NOT_FOUND) {  
277.         Toast.makeText(MainActivity.this, "No results found", Toast.LENGTH  
GTH_LONG).show();  
278.         return;  
279.     }  
280.     if (result.error == SearchResult.ERRORNO.NO_ERROR) {  
281.         PoiOverlay overlay = new MyPoiOverlay(mBaiduMap);  
282.         mBaiduMap.setOnMarkerClickListener(overlay);  
283.         overlay.setData(result);  
284.         overlay.addToMap();  
285.         overlay.zoomToSpan();  
286.     }  
287.     if (result.error == SearchResult.ERRORNO.AMBIGUOUS_KEYWO  
RD) {  
288.         String strInfo = "在";  
289.         for (CityInfo cityInfo : result.getSuggestCityList()) {  
290.             strInfo += cityInfo.city;  
291.             strInfo += ",";  
292.         }  
293.         strInfo += "找到结果";  
294.         Toast.makeText(MainActivity.this, strInfo, Toast.LENGTH_LON  
G).show();  
295.     }  
296. }  
297. }  
298.  
299. // get detail name of place  
300. public void onGetPoiDetailResult(PoiDetailResult result) {  
301.     if (result.error != SearchResult.ERRORNO.NO_ERROR) {  
302.         Toast.makeText(MainActivity.this, "Sorry, no results found", Toas  
t.LENGTH_SHORT).show();  
303.     } else {  
304.         if (BaiduNaviManager.isNaviInited()) {  
305.             routeplanToNavi(CoordinateType.WGS84,  
306.                             new LatLng(result.getLocation().latitude, result.getLocatio  
n().longitude));  
307.         }  
308.     }  
309.     Toast.makeText(MainActivity.this, result.getName() + ": Location  
: " + result.getAddress(),
```

```
311.         Toast.LENGTH_SHORT).show();
312.         Toast.makeText(MainActivity.this, "Please Wait...", Toast.LENGTH_
H_LONG).show();
313.         // -----
314.     }
315. }
316.
317. // show red icon after search
318. private class MyPoiOverlay extends PoiOverlay {
319.
320.     public MyPoiOverlay(BaiduMap baiduMap) {
321.         super(baiduMap);
322.     }
323.
324.     @Override
325.     public boolean onPoiClick(int index) {
326.         super.onPoiClick(index);
327.         PoiInfo poi = getPoiResult().getAllPoi().get(index);
328.         mPoiSearch.searchPoiDetail((new PoiDetailSearchOption()).poiUi
d(poi.uid));
329.         return true;
330.     }
331. }
332.
333. @Override
334. public void onGetSuggestionResult(SuggestionResult res) {
335.     if (res == null || res.getAllSuggestions() == null) {
336.         return;
337.     }
338.     suggest = new ArrayList<String>();
339.     for (SuggestionResult.SuggestionInfo info : res.getAllSuggestions())
{
340.         if (info.key != null) {
341.             suggest.add(info.key);
342.         }
343.     }
344.     sugAdapter = new ArrayAdapter<String>(MainActivity.this, android
.R.layout.simple_dropdown_item_1line, suggest);
345.     keyWorldsView.setAdapter(sugAdapter);
346.     sugAdapter.notifyDataSetChanged();
347. }
348.
349. private boolean initDirs() {
```

```
350.     mSDCardPath = getSdcardDir();
351.     if (mSDCardPath == null) {
352.         return false;
353.     }
354.     File f = new File(mSDCardPath, APP_FOLDER_NAME);
355.     if (!f.exists()) {
356.         try {
357.             f.mkdir();
358.         } catch (Exception e) {
359.             e.printStackTrace();
360.             return false;
361.         }
362.     }
363.     return true;
364. }
365.
366. String authinfo = null;
367.
368. private Handler ttsHandler = new Handler() {
369.     public void handleMessage(Message msg) {
370.         int type = msg.what;
371.         switch (type) {
372.             case BaiduNaviManager.TTSPlayMsgType.PLAY_START_MSG:
373.                 break;
374.             }
375.             case BaiduNaviManager.TTSPlayMsgType.PLAY_END_MSG:
376.                 break;
377.             }
378.             default:
379.                 break;
380.             }
381.         };
382.     };
383.
384.     private BaiduNaviManager.TTSPlayStateListener ttsPlayStateListener
385. = new BaiduNaviManager.TTSPlayStateListener() {
386.
387.     @Override
388.     public void playEnd() {
389.     }
```

```
390.     @Override
391.     public void playStart() {
392.     }
393. };
394.
395. public void showToastMsg(final String msg) {
396.     MainActivity.this.runOnUiThread(new Runnable() {
397.
398.         @Override
399.         public void run() {
400.             Toast.makeText(MainActivity.this, msg, Toast.LENGTH_SHO
RT).show();
401.         }
402.     });
403. }
404.
405. @TargetApi(23)
406. private void initNavi() {
407.
408.     BNOuterTTSPlayerCallback ttsCallback = null;
409.
410.     BaiduNaviManager.getInstance().init(this, mSDCardPath, APP_FOL
DER_NAME, new NaviInitListener() {
411.
412.         public void initSuccess() {
413.             Toast.makeText(MainActivity.this, "Init Success", Toast.LENG
TH_SHORT).show();
414.             hasInitSuccess = true;
415.             initSetting();
416.         }
417.
418.         public void initStart() {
419.             Toast.makeText(MainActivity.this, "Init Start", Toast.LENGTH
_SHORT).show();
420.         }
421.
422.         public void initFailed() {
423.             Toast.makeText(MainActivity.this, "Init Failed", Toast.LENGT
H_SHORT).show();
424.         }
425.
426.         @Override
427.         public void onAuthResult(int arg0, String arg1) {
```

```

428.     }
429. }
430.
431.     }, null, ttsHandler, ttsPlayStateListener);
432.
433. }
434.
435. private String getSdcardDir() {
436.     if (Environment.getExternalStorageState().equalsIgnoreCase(Environment.MEDIA_MOUNTED)) {
437.         return Environment.getExternalStorageDirectory().toString();
438.     }
439.     return null;
440. }
441.
442. private CoordinateType mCoordinateType = null;
443.
444. // Navigation function
445. @TargetApi(23)
446. private void routeplanToNavi(CoordinateType coType, LatLng endNo
de) {
447.     mCoordinateType = coType;
448.     if (!hasInitSuccess) {
449.         Toast.makeText(MainActivity.this, "Success", Toast.LENGTH_S
HORT).show();
450.     }
451.
452.     BNRoutePlanNode sNode = null;
453.     BNRoutePlanNode eNode = null;
454.
455.     // -----navigation place-----
456.     sNode = new BNRoutePlanNode(116.30142, 40.05087, "", null, coT
ype);
457.     eNode = new BNRoutePlanNode(endNode.longitude, endNode.latitu
de, "", null, coType);
458.
459.     if (sNode != null && eNode != null) {
460.         List<BNRoutePlanNode> list = new ArrayList<BNRoutePlanNod
e>();
461.         list.add(sNode);
462.         list.add(eNode);
463.

```

```
464.     BaiduNaviManager.getInstance().launchNavigator(this, list, 1, true
465.             e, new DemoRoutePlanListener(sNode),
466.             eventListerner);
467.         }
468.
469.     BaiduNaviManager.NavEventListerner eventListerner = new BaiduNavi
        Manager.NavEventListerner() {
470.
471.         @Override
472.         public void onCommonEventCall(int what, int arg1, int arg2, Bundl
            e bundle) {
473.             BNEventHandler.getInstance().handleNaviEvent(what, arg1, arg2,
            bundle);
474.         }
475.     };
476.
477.     public class DemoRoutePlanListener implements RoutePlanListerner {
478.
479.         private BNRoutePlanNode mBNRoutePlanNode = null;
480.
481.         public DemoRoutePlanListener(BNRoutePlanNode node) {
482.             mBNRoutePlanNode = node;
483.         }
484.
485.         @Override
486.         public void onJumpToNavigator() {
487.             for (Activity ac : activityList) {
488.                 if (ac.getClass().getName().endsWith("BNDemoGuideActivity"))
489.             ) {
490.                     return;
491.                 }
492.             Intent intent = new Intent(MainActivity.this, BNaviGuideActivity.
            class);
493.             Bundle bundle = new Bundle();
494.             bundle.putSerializable(ROUTE_PLAN_NODE, (BNRoutePlanNo
            de) mBNRoutePlanNode);
495.             intent.putExtras(bundle);
496.             startActivity(intent);
497.
498.         }
```

```
499.  
500.    @Override  
501.    public void onRoutePlanFailed() {  
502.        Toast.makeText(MainActivity.this, "Route Plan Failed", Toast.LENGTH_SHORT).show();  
503.    }  
504. }  
505.  
506.    private void initSetting() {  
507.        BNaviSettingManager  
508.            .setShowTotalRoadConditionBar(BNaviSettingManager.PreViewRoadCondition.ROAD_CONDITION_BAR_SHOW_ON);  
509.        BNaviSettingManager.setVoiceMode(BNaviSettingManager.VoiceMode.Veteran);  
510.        BNaviSettingManager.setRealRoadCondition(BNaviSettingManager.RealRoadCondition.NAVI_ITS_ON);  
511.        BNaviSettingManager.setIsAutoQuitWhenArrived(true);  
512.        Bundle bundle = new Bundle();  
513.  
514.        bundle.putString(BNCommonSettingParam.TTS_APP_ID, "9354030");  
515.        BNaviSettingManager.setNaviSdkParam(bundle);  
516.    }  
517.  
518.    @TargetApi(23)  
519.    @Override  
520.    public void onRequestPermissionsResult(int requestCode, String[] permissions, int[] grantResults) {  
521.        super.onRequestPermissionsResult(requestCode, permissions, grantResults);  
522.        if (requestCode == authBaserequestCode) {  
523.            for (int ret : grantResults) {  
524.                if (ret == 0) {  
525.                    continue;  
526.                } else {  
527.                    Toast.makeText(MainActivity.this, "", Toast.LENGTH_SHORT).show();  
528.                }  
529.            }  
530.        }  
531.        initNavi();  
532.    } else if (requestCode == authComrequestCode) {  
533.        for (int ret : grantResults) {
```

```
534.         if (ret == 0) {  
535.             continue;  
536.         }  
537.     }  
538.     routeplanToNavi(mCoordinateType, null);  
539. }  
540.  
541. }  
542.  
543. @Override  
544. public void onGetPoiIndoorResult(PoiIndoorResult arg0) {  
545. }  
546. }
```

Recommend_List.java

```
1. package com.finderapp;  
2.  
3. import java.util.ArrayList;  
4. import java.util.HashMap;  
5. import com.baidu.navi.sdkdemo.R;  
6. import android.os.Bundle;  
7. import android.view.View;  
8. import android.widget.AdapterView;  
9. import android.widget.AdapterView.OnItemClickListener;  
10. import android.widget.ListView;  
11. import android.widget.SimpleAdapter;  
12. import android.widget.TextView;  
13. import android.widget.Toast;  
14. import android.app.Activity;  
15. import android.content.Context;  
16. import android.content.Intent;  
17.  
18. public class Recommend_List extends Activity {  
19.  
20.     ListView lv;  
21.     String [] result;  
22.     Context context;  
23.  
24.     protected void onCreate(Bundle savedInstanceState) {  
25.         super.onCreate(savedInstanceState);  
26.     }
```

```
27.     setContentView(R.layout.list_view_activity);
28.
29.     final int type=this.getIntent().getIntExtra("type", 0);
30.
31.     lv = (ListView) findViewById(R.id.listView1);
32.
33.     ArrayList<HashMap<String, Comparable>> list = new ArrayList<Ha
shMap<String, Comparable>>();
34.
35.
36.     if(type==0){
37.         HashMap<String, Comparable> hm = new HashMap<String, Com
parable>();
38.         hm.put("photo", R.drawable.saishan);
39.         hm.put("name", "塞上人家 \nSaishang Renjia");
40.         list.add(hm);
41.
42.         HashMap<String, Comparable> hm2 = new HashMap<String, Co
mparable>();
43.         hm2.put("photo", R.drawable.aladin);
44.         hm2.put("name", "阿拉丁风味餐
厅 \nAlading Fengwei Canting");
45.         list.add(hm2);
46.
47.         HashMap<String, Comparable> hm3 = new HashMap<String, Co
mparable>();
48.         hm3.put("photo", R.drawable.anlenyuan2);
49.         hm3.put("name", "清真安乐园菜
馆 \nQingzhen Anleyuan Caiguan");
50.         list.add(hm3);
51.
52.         HashMap<String, Comparable> hm4= new HashMap<String, Com
parable>();
53.         hm4.put("photo", R.drawable.lishi);
54.         hm4.put("name", "李氏清真馆 \nLishi Qingzhenguan");
55.         list.add(hm4);
56.
57.         HashMap<String, Comparable> hm5 = new HashMap<String, Co
mparable>();
58.         hm5.put("photo", R.drawable.liuju);
```

```
59. hm5.put("name", "绿柳居 \nLüv Liu Ju");
60.     list.add(hm5);
61. }else{
62.
63.     HashMap<String, Comparable> hm = new HashMap<String, Comparable>();
64.     hm.put("photo", R.drawable.jingjue);
65.     hm.put("name", "Nanjing Jingjue Mosque");
66.     list.add(hm);
67.
68.     HashMap<String, Comparable> hm2 = new HashMap<String, Comparable>();
69.     hm2.put("photo", R.drawable.caoqiao);
70.     hm2.put("name", "Nanjing Caoqiao Mosque");
71.     list.add(hm2);
72.
73.     HashMap<String, Comparable> hm3 = new HashMap<String, Comparable>();
74.     hm3.put("photo", R.drawable.hanximen);
75.     hm3.put("name", "Nanjing Hanximen Mosque");
76.     list.add(hm3);
77.
78.     HashMap<String, Comparable> hm4= new HashMap<String, Comparable>();
79.     hm4.put("photo", R.drawable.jizhaoying);
80.     hm4.put("name", "Nanjing Jizhaoying Mosque");
81.     list.add(hm4);
82. }
83.
84.
85. SimpleAdapter adapter = new SimpleAdapter(
86.         this,
87.         list,
88.         R.layout.recommend_list,
89.         new String[]{"photo", "name", "street"},
90.         new int[]{R.id.imageView1, R.id.textView1}
91. );
92.
93. lv.setAdapter(adapter);
94.
95. lv.setOnItemClickListener(new OnItemClickListener(){
96.
```

```
97.     @Override  
98.     public void onItemClick(AdapterView<?> parent, View view, int  
position, long id) {  
99.         Intent i=new Intent(Recommend_List.this,Recommend_Explain  
.class);  
100.        i.putExtra("position", position);  
101.        i.putExtra("type", type);  
102.        Recommend_List.this.startActivity(i);  
103.    }  
104.  
105.};  
106.  
107.}  
108.}
```

Recommend_Explain.java

```
1. package com.finderapp;  
2.  
3. import java.io.File;  
4. import java.util.ArrayList;  
5. import java.util.LinkedList;  
6. import java.util.List;  
7.  
8. import com.baidu.mapapi.model.LatLng;  
9. import com.baidu.navi.sdkdemo.R;  
10. import com.baidu.navisdk.adapter.BNCommonSettingParam;  
11. import com.baidu.navisdk.adapter.BNOuterTTSPlayerCallback;  
12. import com.baidu.navisdk.adapter.BNRoutePlanNode;  
13. import com.baidu.navisdk.adapter.BNaviSettingManager;  
14. import com.baidu.navisdk.adapter.BaiduNaviManager;  
15. import com.baidu.navisdk.adapter.BNRoutePlanNode.CoordinateType;  
16. import com.baidu.navisdk.adapter.BaiduNaviManager.NaviInitListener;  
17. import com.baidu.navisdk.adapter.BaiduNaviManager.RoutePlanListener;  
18.  
19. import android.Manifest;  
20. import android.annotation.TargetApi;  
21. import android.app.Activity;  
22. import android.content.Intent;
```

```
23. import android.content.pm.PackageManager;
24. import android.os.Bundle;
25. import android.os.Environment;
26. import android.os.Handler;
27. import android.os.Message;
28. import android.util.Log;
29. import android.view.View;
30. import android.view.View.OnClickListener;
31. import android.widget.Button;
32. import android.widget.ImageView;
33. import android.widget.TextView;
34. import android.widget.Toast;
35.
36. public class Recommend_Explain extends Activity {
37.     private Button btn;
38.     private TextView v;
39.     private TextView v2;
40.     private ImageView img;
41.
42.     private List<String> list1, list2, button;
43.     private List<LatLng> location_list;
44.     private List<Integer> imglist;
45.
46.     private Button btn_nav;
47.
48. // -----
49.     public static List<Activity> activityList = new LinkedList<Activity>();
50.
51.     private static final String APP_FOLDER_NAME = "BNSDKSimpleD
emo";
52.     private String mSDCardPath = null;
53.     public static final String ROUTE_PLAN_NODE = "routePlanNode";
54.     public static final String SHOW_CUSTOM_ITEM = "showCustomIte
m";
55.     public static final String RESET_END_NODE = "resetEndNode";
56.     public static final String VOID_MODE = "voidMode";
57.     private final static String authComArr[] = { Manifest.permission.REA
D_PHONE_STATE };
58.     private final static int authBaseRequestCode = 1;
59.     private final static int authComRequestCode = 2;
60.     private boolean hasInitSuccess = false;
61.     private boolean hasRequestComAuth = false;
```

```
62.     protected void onCreate(Bundle savedInstanceState) {  
63.         super.onCreate(savedInstanceState);  
64.         setContentView(R.layout.recommend_explain);  
65.  
66.         imglist = new ArrayList<Integer>();  
67.         list1 = new ArrayList<String>();  
68.         list2 = new ArrayList<String>();  
69.         button = new ArrayList();  
70.  
71.         location_list = new ArrayList<LatLng>();  
72.  
73.         final Intent t = this.getIntent();  
74.  
75.         int type = t.getIntExtra("type", 0);  
76.         if (type == 0) {  
77.             location_list.add(new LatLng(32.047072, 118.79148));  
78.             location_list.add(new LatLng(32.041066, 118.771169));  
79.             location_list.add(new LatLng(32.034929, 118.776866));  
80.             location_list.add(new LatLng(32.029589, 118.780208));  
81.             location_list.add(new LatLng(32.034342, 118.792285));  
82.  
83.             imglist.add(R.drawable.saishan);  
84.             list1.add("\n 塞上人家 Saishang Renjia\n");  
85.             list2.add(  
86.                 "Recommended dishes: \nXinjiang-style braised chicken (大盘鸡), mutton kebab (羊肉串), braised noodles pieces with vegetables (烩面), fried lamb with cumin (孜然羊肉), beef in mini hotpot (牛肉锅仔), sheet of starch jelly in spicy sauce (大拉皮), sautéed mutton with pickled cabbage (酸菜牛肉), and sautéed shredded potatoes with chili and vinegar sauce (酸辣土豆丝).\n\n"  
87.                 + "Average price per person: \n43 yuan\n\n"  
88.                 + "Opening hours: \n11:00-14:00, 17:00-21:00\n\n"  
89.                 + "Address: \n55 Weigang, Zhongshanmen Avenue, Xuanwu District (玄武区中山门大街卫岗 55 号)\n\n"  
90.                 + "Transportation: \nTake Subway line 2 and get off at Mu Xu Yuan,, the restaurant is approximately 5-
```

mintue minute walk from there; or take bus 5, 36, 49, 142, 163, 805, or 814, and get off at Weigang (卫岗).
91. button.add("Navigate!");
92.
93. imglist.add(R.drawable.aladin);
94. list1.add("\n 阿拉丁风味餐厅 Alading Fengwei Canting\n");
95. list2.add(
96. "Recommended dishes: \nyogurt (酸奶), mutton kebab (羊肉串), special-flavored sautéed lamb with naan -bread (风味馕炒肉), Xinjiang-style braised chicken (大盘鸡), roast lamb chops (烤羊排), roasted leg of lamb (烤羊腿), noodles in spicy sauce (拌面), mashed potato with blueberry sauce (蓝莓土豆泥), grenadine juice (石榴汁), grilled buns (烤包子), stir-fried noodles pieces (丁丁炒面), and mutton soup (羊肉汤).\n\n"
97. + "Average price per person: \n43 yuan\n\n"
98. + "Opening hours: \n11:00-14:00, 17:00-21:00\n\n"
99. + "Address: \n43 Luolang Lane, Hanzhong Road, Baixia District (白下区汉中路罗廊巷 43号)\n\n"
100. + "Transportation: \nTake Subway Line 2, get off at Exit 3 at Shanghai stop, and walk to the first crossroad. The restaurant is approximately 20 meters from there on left.\n\n");
101. button.add("Navigate!");
102.
103. imglist.add(R.drawable.anlenyuan2);
104. list1.add("\n 清真安乐园菜馆 Qingzhen Anleyuan Caiguan\n");
105. list2.add(
106. "Recommended dishes: \nBuns stuffed with beef (牛肉包子), buns stuffed with vegetables (菜包), beef meat balls (牛肉丸子), buns stuffed with red beanm paste (豆沙包), roast lamb chops (烤羊排), buns stuffed filled with beef and juicy soup (牛肉汤包), steamed dumplings (蒸饺), steamed dumplings stuffed with mustard (芥菜蒸饺), roasted leg of lamb (烤羊腿), and beef wontons stuffed with beef (牛肉馄饨).\n\n"

107. + "Average price per person: \n22 yuan\n\n"

108. + "Address: \n138 Wangfu Avenue, Baxia District ((白下区王府大街 138 号)\n\n"

109. + "Transportation: \nTake bus 43 and get off at Wangfu Dajie (Wangfu Avenue/王府大街), or take bus 43 or 306, and get off at Chaotiangong Dong (east of Chao tian Palace/朝天宫东).\n\n");

110. button.add("Navigate!");

111.

112. imglist.add(R.drawable.lishi);

113. list1.add("\n 李氏清真馆 Lishi Qingzhenguan\n");

114. list2.add(

115. "Recommended dishes: \npot-stickerFried dumplings stuffed with beef (牛肉锅贴), wonton wontons stuffed with beef (牛肉馄饨), beef soup (牛肉汤), fried buns stuffed with beef (牛肉煎包), ox sweetbread soup (牛杂汤), marinated beef in spiced sauce (卤牛肉), dried spicy roast beef (牛肉干), plain noodles (阳春面), noodles with beef (牛肉面), and spicy diced bean curd (兰花干).\n\n"

116. + "Average price per person: \n11 yuan\n\n" + "Opening hours: \n05:30-19:30\n\n"

117. + "Address: \n1 Dading Lane, Pingshi Street, Baxia District (白下区评事街打钉巷 1 号)\n\n"

118. + "Transportation: \nTake bus 4, 7, 23, 35, 37, or 62, and get off at Pingshi Jie (Pingshi Street/评事街), or take bus 43, 128, or 313, and get off at Dingxin Lu (Dingxin Road).\n\n");

119. button.add("Navigate!");

120.

121. imglist.add(R.drawable.liuju);

122. list1.add("\n 绿柳居 Lüv Liu Ju\n");

123. list2.add(

124. "Recommended dishes: \nbuns stuffed with vegetables (素菜包), pot-stickerfried beef dumplings stuffed with beef (牛肉锅

贴), sliced lotus roots in honey sauce (蜜汁糖藕), deep-fried dried bean curd stuffed with thin mushrooms and carrots (素烧鹅), buns with diced chicken, beef, and green asparagus (三丁包), wontons stuffed with beef (牛肉馄饨), deep-fried dried bean curd stuffed with dried black mushrooms and black fungus (素烧鸭), fried buns stuffed with beef (牛肉煎包), stir-fried vegetables (罗汉观斋), and marinated dried bean curd in spiced sauce (回卤干).
125. + "Average price per person: \n24 yuan\n\n" + "Opening hours: \n07:00 — 20:00\n\n"
126. + "Address: \n248 Taiping South Road, Baxia District (白下区太平南路 248 号)\n\n"
127. + "Transportation: \nTake bus 1, Travel 2, 15, 31, 80, 31
3, 801, or 802, and get off at Yanggong Jing (Bei) (Yanggong Well (North)/杨公井(北)).\n\n";
128. button.setOnClickListener(new View.OnClickListener() {
129. @Override
130. public void onClick(View v) {
131. Intent intent = new Intent(Intent.ACTION_VIEW, Uri.parse("http://www.google.com/maps/place/32.029376,118.778304"));
132. startActivity(intent);
133. }
134. });
135. }
136.
137. location_list.add(new LatLng(32.023994, 118.78324));
138. location_list.add(new LatLng(32.029376, 118.778304));
139. location_list.add(new LatLng(32.029477, 118.777898));
140. location_list.add(new LatLng(32.052116, 118.785385));
141. list1.add("Nanjing Jingjue Mosque");
142. list2.add("The Nanjing Jingjue mosque, also known as Sanshan Street mosque, dates back to Hongwu Ming Dynasty. It is the most time-honored mosque in Nanjing, which was rebuilt in the early of 4th century under the advise of a famous Chinese voyager, Zhenghe.\n\n");
143. + "Covering an area of 4000 square meters, the mosque includes a brick gate, a balcony, a prayer room, a reception room and a guest room etc. The gate is a brick architecture with rare carvings, looking divine. While the most famous remains in Jingjue mosque is the epigraphs from emperors of the Ming and Qing Dynasty, which is a symbol of great honor.\n\n"

```
142.           + "Address :\n" + "SanShan Street, Baixia District, Nanji  
ng, Jiangsu, P.R. China\n\n" + "Transportation :\n" + "Bus : 37, 7, 166.\n" + "Metro : Line 1 ShanShan Jie Station Exit 3\n\n");  
145. button.add("Navigate!");  
146.  
147. imglist.add(R.drawable.caoqiao);  
148. list1.add("\nNanjing Caoqiao Mosque\n");  
149. list2.add("Nanjing Caoqiao mosque is named after the place where  
it located. \n\n" + "There were 33 mosques in Nanjing in 1958, and Caoqiao  
mosque was the important one of them. It was built in Qing Dynasty(1736  
- 1795), then unfortunately get destroyed when Taiping Heavenly Kingdom  
came in power. The mosque was rebuilt in Tongzhi Qing Dynasty.\n\n" + "The main buildings of the mosque are in traditional Chinese  
architectural style, including 5 main halls, 6 Lecture halls relatively located  
in north and south of the yard, 3 Water halls and other facilities. A large  
number of muslim living in this area, where Caoqiao mosque is the prime  
place for muslims to pray.\n\n" + "Address :\n" + "No. 20 Dading Lane, Qinhui District, Nanjing, Jiangsu, P.R. China\n\n" + "Transportation :\n" + "Bus : 28, 16, 302, 33, 100, 35\n" + "Metro : Line 1 ZhangFuYuan Station Exit 3\n\n");  
155. button.add("Navigate!");  
156.  
157. imglist.add(R.drawable.hanximen);  
158. list1.add("\nNanjing Hanximen Mosque\n");  
159. list2.add("Hanximen Mosque dates back to Tianqi Ming Dynasty featuring  
Chinese classical architectural style with walls and doors in Arabic style. The main hall covers an area of 320 square meters.\n\n" + "It was once destroyed when Taiping Heavenly Kingdom came in power, and get reconstructed in the Tongzhi Qing Dynasty.\n\n" + "In 1915, Mr Mayanshu raised funds to rebuild the prayer hall, also built memorial archway, moon floor, Jingshui hall, lecture hall, dormitories and other buildings.\n\n" + "Address :\n" + "No. 43 Jizhaoying (Fish Street Alley), Nanjing, Jiangsu, P.R. China\n\n" + "Transportation :\n" + "Bus : 100, 25\n" + "Metro : Line 1 ZhuJiangLu Station, Exit 3\n\n");  
166. button.add("Navigate!");
```

```

167.
168.     imglist.add(R.drawable.jizhaoying);
169.     list1.add("\nNanjing Jizhaoying Mosque\n");
170.     list2.add(
171.         "Nanjing Jizhaoying Mosque covers an area of 815.1 square
 meters. Although there are no written record about the exactly time when t
 he mosque built, it is believed that the mosque was constructed in the midd
 le of the Qing Dynasty.\n\n"
172.         + "The ancient mosque was once burned when Taiping H
 eavenly Kingdom ( 1853-
1864) came in power. However, it still strived functioning effectively. The
 religious activities last for decades under very difficult circumstances.\n\n"
173.         + "In the beginning of the Republic of China, some celeb
 rities raised money and rebuilt the the prayer hall in 1912. In 1987, the Urb
 an Islamic Association in Nanning invested 30,000 yuan to repair the mos
 que in total. It is with efforts of oodles of kind people, the old mosque can
 still functions well. \n\n"
174.         + "Address : \n" + "No. 43, Jizhaoying, Xuanwu District,
 Nanjing, Jiangsu, P.R. China\n\n");
175.         button.add("Navigate!");
176.
177.     }
178.
179.     v = (TextView) findViewById(R.id.textView1);
180.     v2 = (TextView) findViewById(R.id.textView2);
181.     img = (ImageView) findViewById(R.id.imageView1);
182.     btn = (Button) findViewById(R.id.button1);
183.
184.     img.setImageResource(imglist.get(t.getIntExtra("position", 0)));
185.     v.setText(list1.get(t.getIntExtra("position", 0)));
186.     v2.setText(list2.get(t.getIntExtra("position", 0)));
187.     btn.setText(button.get(t.getIntExtra("position", 0)));
188.
189.     btn_nav = (Button) findViewById(R.id.button1);
190.     btn_nav.setOnClickListener(new OnClickListener() {
191.
192.         @Override
193.         public void onClick(View v) {
194.             if (BaiduNaviManager.isNaviInitiated()) {
195.                 routeplanToNavi(CoordinateType.WGS84, location_list.get(t.
 getIntExtra("position", 0)));
196.

```

```
197.     }
198. }
199. }
200. });
201. });
202. }
203. }
204. }
205. private boolean initDirs() {
206.     mSDCardPath = getSdcardDir();
207.     if (mSDCardPath == null) {
208.         return false;
209.     }
210.     File f = new File(mSDCardPath, APP_FOLDER_NAME);
211.     if (!f.exists()) {
212.         try {
213.             f.mkdir();
214.         } catch (Exception e) {
215.             e.printStackTrace();
216.             return false;
217.         }
218.     }
219.     return true;
220. }
221. }
222. String authinfo = null;
223. }
224. private Handler ttsHandler = new Handler() {
225.     public void handleMessage(Message msg) {
226.         int type = msg.what;
227.         switch (type) {
228.             case BaiduNaviManager.TTSPlayMsgType.PLAY_START_MSG:
229.                 break;
230.             }
231.             case BaiduNaviManager.TTSPlayMsgType.PLAY_END_MSG: {
232.                 break;
233.             }
234.             default:
235.                 break;
236.             }
237. }
```

```
238.    };
239.
240.    private BaiduNaviManager.TTSPlayStateListener ttsPlayStateListener
241.        = new BaiduNaviManager.TTSPlayStateListener() {
242.            @Override
243.            public void playEnd() {
244.            }
245.
246.            @Override
247.            public void playStart() {
248.            }
249.        };
250.
251.        public void showToastMsg(final String msg) {
252.            Recommend_Explain.this.runOnUiThread(new Runnable() {
253.
254.                @Override
255.                public void run() {
256.                    Toast.makeText(Recommend_Explain.this, msg, Toast.LENGTH_
257.                        H_SHORT).show();
258.                }
259.            });
260.
261.        private boolean hasCompletePhoneAuth() {
262.            PackageManager pm = this.getPackageManager();
263.            for (String auth : authComArr) {
264.                if (pm.checkPermission(auth, this.getPackageName()) != Package
265.                    Manager.PERMISSION_GRANTED) {
266.                        return false;
267.                    }
268.            }
269.            return true;
270.        }
271.        @TargetApi(23)
272.        private void initNavi() {
273.
274.            BNOuterTTSSPlayerCallback ttsCallback = null;
275.
276.            BaiduNaviManager.getInstance().init(this, mSDCardPath, APP_FOL
277.                DER_NAME, new NaviInitListener() {
```

```
277.public void initSuccess() {  
278.    Toast.makeText(Recommend_Explain.this, "Init Success", Toast.LENGTH_SHORT).show();  
280.    hasInitSuccess = true;  
281.    initSetting();  
282.}  
283.  
284. public void initStart() {  
285.    Toast.makeText(Recommend_Explain.this, "Init Start", Toast.LENGTH_SHORT).show();  
286.}  
287.  
288. public void initFailed() {  
289.    Toast.makeText(Recommend_Explain.this, "Init Failed", Toast.LENGTH_SHORT).show();  
290.}  
291.  
292.    @Override  
293.    public void onAuthResult(int arg0, String arg1) {  
294.  
295.    }  
296.  
297.    }, null, ttsHandler, ttsPlayStateListener);  
298.  
299.}  
300.  
301. private String getSdcardDir() {  
302.    if (Environment.getExternalStorageState().equalsIgnoreCase(Environment.MEDIA_MOUNTED)) {  
303.        return Environment.getExternalStorageDirectory().toString();  
304.    }  
305.    return null;  
306.}  
307.  
308. private CoordinateType mCoordinateType = null;  
309.  
310.    @TargetApi(23)  
311.    private void routeplanToNavi(CoordinateType coType, LatLng endNode) {  
312.        mCoordinateType = coType;  
313.        if (!hasInitSuccess) {
```

```

314.         Toast.makeText(Recommend_Explain.this, "Success", Toast.LENGTH_SHORT).show();
315.     }
316.
317.     BNRoutePlanNode sNode = null;
318.     BNRoutePlanNode eNode = null;
319.
320.     // -----navigation place-----
321.     sNode = new BNRoutePlanNode(116.30142, 40.05087, "", null, coType);
322.     eNode = new BNRoutePlanNode(endNode.longitude, endNode.latitude, "", null, coType);
323.
324.     if (sNode != null && eNode != null) {
325.         List<BNRoutePlanNode> list = new ArrayList<BNRoutePlanNode>();
326.         list.add(sNode);
327.         list.add(eNode);
328.
329.         BaiduNaviManager.getInstance().launchNavigator(this, list, 1, true,
330.             new DemoRoutePlanListener(sNode),
331.             eventListerner);
332.
333.     }
334.
335.     BaiduNaviManager.NavEventListerner eventListerner = new BaiduNaviManager.NavEventListerner() {
336.
337.         @Override
338.         public void onCommonEventCall(int what, int arg1, int arg2, Bundle bundle) {
339.             BNEventHandler.getInstance().handleNaviEvent(what, arg1, arg2, bundle);
340.         }
341.     };
342.
343.     public class DemoRoutePlanListener implements RoutePlanListerner {
344.
345.         private BNRoutePlanNode mBNRoutePlanNode = null;
346.
347.         public DemoRoutePlanListener(BNRoutePlanNode node) {

```

```
348.     mBNRoutePlanNode = node;
349. }
350.
351.     @Override
352.     public void onJumpToNavigator() {
353.         for (Activity ac : activityList) {
354.             if (ac.getClass().getName().endsWith("BNDemoGuideActivity"))
355.                 return;
356.         }
357.     }
358.     Intent intent = new Intent(Recommend_Explain.this, BNaviGuide
Activity.class);
359.     Bundle bundle = new Bundle();
360.     bundle.putSerializable(ROUTE_PLAN_NODE, (BNRoutePlanNo
de) mBNRoutePlanNode);
361.     intent.putExtras(bundle);
362.     startActivity(intent);
363.
364. }
365.
366.     @Override
367.     public void onRoutePlanFailed() {
368.         Toast.makeText(Recommend_Explain.this, "Route Plan Failed", T
oast.LENGTH_SHORT).show();
369.     }
370. }
371.
372.     private void initSetting() {
373.         BNaviSettingManager
374.             .setShowTotalRoadConditionBar(BNaviSettingManager.PreVie
wRoadCondition.ROAD_CONDITION_BAR_SHOW_ON);
375.         BNaviSettingManager.setVoiceMode(BNaviSettingManager.VoiceM
ode.Veteran);
376.         BNaviSettingManager.setRealRoadCondition(BNaviSettingManager.
RealRoadCondition.NAVI_ITS_ON);
377.         BNaviSettingManager.setIsAutoQuitWhenArrived(true);
378.         Bundle bundle = new Bundle();
379.
380.         bundle.putString(BNCommonSettingParam.TTS_APP_ID, "9354030
");
381.         BNaviSettingManager.setNaviSdkParam(bundle);
382.     }
```

```
383.  
384.     private BNOuterTTSPlayerCallback mTTSCallback = new BNOuterT  
385.             TSPlayerCallback() {  
386.                 @Override  
387.                     public void stopTTS() {  
388.                         Log.e("test_TTS", "stopTTS");  
389.                     }  
390.                 @Override  
391.                     public void resumeTTS() {  
392.                         Log.e("test_TTS", "resumeTTS");  
393.                     }  
394.                 @Override  
395.                     public void releaseTTSPlayer() {  
396.                         Log.e("test_TTS", "releaseTTSPlayer");  
397.                     }  
398.                 @Override  
399.                     public int playTTSText(String speech, int bPreempt) {  
400.                         Log.e("test_TTS", "playTTSText" + " " + speech + " " + bPreemp  
t);  
401.                         return 1;  
402.                     }  
403.                 @Override  
404.                     public void phoneHangUp() {  
405.                         Log.e("test_TTS", "phoneHangUp");  
406.                     }  
407.                 @Override  
408.                     public void phoneCalling() {  
409.                         Log.e("test_TTS", "phoneCalling");  
410.                     }  
411.                 @Override  
412.                     public void pauseTTS() {  
413.                         Log.e("test_TTS", "pauseTTS");  
414.                     }  
415.                 @Override
```

```
424.     public void initTTSPlayer() {
425.         Log.e("test_TTS", "initTTSPlayer");
426.     }
427.
428.     @Override
429.     public int getTTSState() {
430.         Log.e("test_TTS", "getTTSState");
431.         return 1;
432.     }
433. };
434.
435. @TargetApi(23)
436. @Override
437. public void onRequestPermissionsResult(int requestCode, String[] permissions, int[] grantResults) {
438.     super.onRequestPermissionsResult(requestCode, permissions, grantResults);
439.     if (requestCode == authBaseRequestCode) {
440.         for (int ret : grantResults) {
441.             if (ret == 0) {
442.                 continue;
443.             } else {
444.                 Toast.makeText(Recommend_Explain.this, "", Toast.LENGTH_SHORT).show();
445.             }
446.         }
447.     }
448.     initNavi();
449. } else if (requestCode == authComRequestCode) {
450.     for (int ret : grantResults) {
451.         if (ret == 0) {
452.             continue;
453.         }
454.     }
455.     routeplanToNavi(mCoordinateType, null);
456. }
457.
458. }
459. }
```