

# Android Inappbilling Simple Usage

## MainActivity

```
1 public class MainActivity extends AppCompatActivity implements
2 IabBroadcastReceiver.IabBroadcastListener {
3     private InAppBillingHelper inappbillingHelper;
4     private static final int IN_APP_BILLING_REQUEST_CODE = 10001;
5     private static final String SKU_TEST = "android.test.purchased"
6     @Override
7     protected void onCreate(Bundle savedInstanceState) {
8         super.onCreate(savedInstanceState);
9         initInappBillingHelper();
10        btnClick.setOnClickListener(new View.OnClickListener() {
11            @Override
12            public void onClick(View v) {
13                inappbillingHelper.launchPurchase(SKU_TEST);
14            }
15        });
16    }
17
18    private void initInappBillingHelper() {
19        inappbillingHelper= new InAppBillingHelper(this,IN_APP_BILLING_REQUEST_CODE, new
20 InAppBillingHelperResponse() {
21            @Override
22            public void success(Purchase purchase) {
23                appBillingSuccess(purchase);
24            }
25
26            @Override
27            public void fail() {
28                appBillingFail();
29            }
30
31            @Override
32            public void onActivityResult(int requestCode, int resultCode, Intent data) {
33                MainActivity.super.onActivityResult(requestCode,resultCode,data);
34            }
35        });
36    }
37
38    private void appBillingSuccess(Purchase purchase) {
39        Toast.makeText(getApplicationContext(), "Satın alma başarılı",
40 Toast.LENGTH_LONG).show();
41    }
42    private void appBillingFail() {
43        Toast.makeText(getApplicationContext(), "Satın alma başarısız",
44 Toast.LENGTH_LONG).show();
45    }
46    public void onResume() {
47        super.onResume();
48        inAppBillingHelper.registerReceiver();
49    }
50    @Override
51    public void onPause() {
52        super.onPause();
53        inAppBillingHelper.unregisterReceiver();
54    }
```

```

@Override
protected void onActivityResult(int requestCode, int resultCode, Intent data) {
55     if (requestCode == IN_APP_BILLING_REQUEST_CODE)
56         inappbillingHelper.onActivityResult(requestCode, resultCode, data);
57     else super.onActivityResult(requestCode, resultCode, data);
58 }
@Override
59 public void receivedBroadcast() {
60     inappbillingHelper.receivedBroadcast();
61 }
}

```

## InAppBillingHelper

```

1  package com.dinibilgiyarismasiapp.Utils;
2
3  import android.app.AlertDialog;
4  import android.content.Context;
5  import android.content.Intent;
6  import android.content.IntentFilter;
7  import android.support.v7.app.AppCompatActivity;
8  import android.util.Log;
9
10 import com.dinibilgiyarismasiapp.MainActivity;
11 import com.dinibilgiyarismasiapp.R;
12 import com.dinibilgiyarismasiapp.inappbilling.IabBroadcastReceiver;
13 import com.dinibilgiyarismasiapp.inappbilling.IabHelper;
14 import com.dinibilgiyarismasiapp.inappbilling.IabResult;
15 import com.dinibilgiyarismasiapp.inappbilling.Inventory;
16 import com.dinibilgiyarismasiapp.inappbilling.Purchase;
17
18 import java.util.Date;
19 import java.util.UUID;
20
21 public class InAppBillingHelper {
22     private static final String TAG = "InAppBilling"
23     private static final String SKU_TEST = "android.test.purchased"
24     private IabBroadcastReceiver mBroadcastReceiver;
25     private IabHelper mHelper;
26     private AppCompatActivity appCompatActivity;
27     private InAppBillingHelperResponse inappbillingHelperResponse;
28     private int requestCode;
29     public InAppBillingHelper(AppCompatActivity appCompatActivity, int requestCode,
30 InAppBillingHelperResponse inappbillingHelperResponse) {
31         this.appCompatActivity= appCompatActivity;
32         this.inappbillingHelperResponse= inappbillingHelperResponse;
33         this.requestCode=requestCode;
34         initIabHelper();
35     }
36
37     public void launchPurchase(String skuType) {
38         try {
39             mHelper.launchPurchaseFlow(this.appCompatActivity, skuType, this.requestCode,
40                 mPurchaseFinishedListener, UUID.randomUUID().toString());
41         } catch (Exception e) {
42             complain(e.getMessage());
43         }
44     }
45
46     private IabHelper.OnIabPurchaseFinishedListener mPurchaseFinishedListener = new IabHelper
47         .OnIabPurchaseFinishedListener() {
48         public void onIabPurchaseFinished(IabResult result, Purchase purchase) {
49             Log.d(TAG, "Purchase finished: " + result + ", purchase: " + purchase);

```

```

50
51 // if we were disposed of in the meantime, quit.
52 if (mHelper == null) return;
53
54 if (result.isFailure()) {
55
56     complain("Satın alma hatası: " + result);
57     setWaitScreen(false);
58     return;
59 }
60 if (!verifyDeveloperPayload(purchase)) {
61     complain("Satın alma hatası. Authenticity verification failed.");
62     setWaitScreen(false);
63     return;
64 }
65
66 Log.d(TAG, "Purchase successful.");
67 try {
68     mHelper.consumeAsync(purchase, mConsumeFinishedListener);
69 } catch (IabHelper.IabAsyncInProgressException e) {
70     complain("Another async operation in progress.");
71     setWaitScreen(false);
72 }
73 }
74 };
75 private IabHelper.OnConsumeFinishedListener mConsumeFinishedListener = new IabHelper
76     .OnConsumeFinishedListener() {
77     public void onConsumeFinished(Purchase purchase, IabResult result) {
78         Log.d(TAG, "Consumption finished. Purchase: " + purchase + ", result: " + result);
79
80         // if we were disposed of in the meantime, quit.
81         if (mHelper == null) return;
82
83         // We know this is the "gas" sku because it's the only one we consume,
84         // so we don't check which sku was consumed. If you have more than one
85         // sku, you probably should check...
86         if (result.isSuccess()) {
87             // successfully consumed, so we apply the effects of the item in our
88             // game world's logic, which in our case means filling the gas tank a bit
89             Log.d(TAG, "Consumption successful. Provisioning.");
90             paymentSuccess(purchase);
91             //mTank = mTank == TANK_MAX ? TANK_MAX : mTank + 1;
92             // saveData();
93             // alert("You filled 1/4 tank. Your tank is now " + String.valueOf(mTank) +
94             "/4
95             // full!");
96         } else {
97             complain("Error while consuming: " + result);
98             paymentFail();
99         }
100         //updateUi();
101         setWaitScreen(false);
102         Log.d(TAG, "End consumption flow.");
103     }
104 };
105
106 private void paymentSuccess(Purchase purchase) {
107     this.inappbillingHelperResponse.success(purchase);
108     alert("Payment success. " + purchase.getOrderID());
109     if (SKU_TEST.equals(purchase.getSku())) {
110         SharedPreferencesUtil.writeLong(appCompatActivity, "REKLAM_KADIRMA_ZAMANI",
111             new Date().getTime());
112     }
113 }
114
115 private void paymentFail() {
116     alert("Payment fail");

```

```

117     this.inappbillingHelperResponse.fail();
118 }
119
120 private void initIabHelper() {
121     mHelper = new IabHelper(appCompatActivity,
122 this.appCompatActivity.getString(R.string.api_key));
123     mHelper.startSetup(new IabHelper.OnIabSetupFinishedListener() {
124         public void onIabSetupFinished(IabResult result) {
125             Log.d(TAG, "Setup finished.");
126
127             if (!result.isSuccess()) {
128                 // Oh noes, there was a problem.
129                 complain("Problem setting up in-app billing: " + result);
130                 return;
131             }
132
133             // Have we been disposed of in the meantime? If so, quit.
134             if (mHelper == null) return;
135
136             // IAB is fully set up. Now, let's get an inventory of stuff we own.
137             Log.d(TAG, "Setup successful. Querying inventory.");
138             try {
139                 mHelper.queryInventoryAsync(mGotInventoryListener);
140             } catch (IabHelper.IabAsyncInProgressException e) {
141                 complain("Error querying inventory. Another async operation in
142 progress.");
143             }
144         }
145     });
146 }
147
148 private IabHelper.QueryInventoryFinishedListener mGotInventoryListener = new IabHelper
149     .QueryInventoryFinishedListener() {
150     public void onQueryInventoryFinished(IabResult result, Inventory inventory) {
151         Log.d(TAG, "Query inventory finished.");
152
153         // Have we been disposed of in the meantime? If so, quit.
154         if (mHelper == null) return;
155
156         // Is it a failure?
157         if (result.isFailure()) {
158             complain("Failed to query inventory: " + result);
159             return; //todo comment out return
160         }
161
162         Log.d(TAG, "Query inventory was successful.");
163
164         /*
165          * Check for items we own. Notice that for each purchase, we check
166          * the developer payload to see if it's correct! See
167          * verifyDeveloperPayload().
168          */
169
170         // Do we have the premium upgrade?
171         Purchase testPurchase = inventory.getPurchase(SKU_TEST);
172         boolean isTest = (testPurchase != null && verifyDeveloperPayload(testPurchase));
173
174         // Check for gas delivery -- if we own gas, we should fill up the tank immediately
175
176         if (isTest) {
177             Log.d(TAG, "We have gas. Consuming it.");
178             try {
179                 mHelper.consumeAsync(inventory.getPurchase(SKU_TEST),
180 mConsumeFinishedListener);
181             } catch (IabHelper.IabAsyncInProgressException e) {
182                 complain("Error consuming gas. Another async operation in progress.");
183             }

```

```

184         return;
185     }
186
187     setWaitScreen(false);
188     Log.d(TAG, "Initial inventory query finished; enabling main UI.");
189 }
190 };
191
192 boolean verifyDeveloperPayload(Purchase p) {
193     String payload = p.getDeveloperPayload();
194
195     /*
196     * TODO: verify that the developer payload of the purchase is correct. It will be
197     * the same one that you sent when initiating the purchase.
198     *
199     * WARNING: Locally generating a random string when starting a purchase and
200     * verifying it here might seem like a good approach, but this will fail in the
201     * case where the user purchases an item on one device and then uses your app on
202     * a different device, because on the other device you will not have access to the
203     * random string you originally generated.
204     *
205     * So a good developer payload has these characteristics:
206     *
207     * 1. If two different users purchase an item, the payload is different between them,
208     * so that one user's purchase can't be replayed to another user.
209     *
210     * 2. The payload must be such that you can verify it even when the app wasn't the
211     * one who initiated the purchase flow (so that items purchased by the user on
212     * one device work on other devices owned by the user).
213     *
214     * Using your own server to store and verify developer payloads across app
215     * installations is recommended.
216     */
217
218     return true;
219 }
220
221 void setWaitScreen(boolean set) {
222     // findViewById(R.id.screen_main).setVisibility(set ? View.GONE : View.VISIBLE);
223     //findViewById(R.id.screen_wait).setVisibility(set ? View.VISIBLE : View.GONE);
224 }
225
226 void complain(String message) {
227     Log.e(TAG, "**** TrivialDrive Error: " + message);
228     alert("Error: " + message);
229 }
230
231 void alert(String message) {
232     AlertDialog.Builder bld = new AlertDialog.Builder(appCompatActivity);
233     bld.setMessage(message);
234     bld.setNeutralButton("Tamam", null);
235     Log.d(TAG, "Showing alert dialog: " + message);
236     bld.create().show();
237 }
238
239 public void onActivityResult(int requestCode, int resultCode, Intent data) {
240     Log.d(TAG, "onActivityResult(" + requestCode + "," + resultCode + "," + data);
241     if (mHelper == null) return;
242
243     // Pass on the activity result to the helper for handling
244     if (!mHelper.handleActivityResult(requestCode, resultCode, data)) {
245         // not handled, so handle it ourselves (here's where you'd
246         // perform any handling of activity results not related to in-app
247         // billing...
248         inappbillingHelperResponse.onActivityResult(requestCode, resultCode, data);
249     } else {
250         Log.d(TAG, "onActivityResult handled by IABUtil.");

```

```

    }
}

251 public void receivedBroadcast() {
252     Log.d(TAG, "Received broadcast notification. Querying inventory.");
253     try {
254         mHelper.queryInventoryAsync(mGotInventoryListener);
255     } catch (IabHelper.IabAsyncInProgressException e) {
256         complain("Error querying inventory. Another async operation in progress.");
257     }
258 }
259 public void registerReceiver(){
260     mBroadcastReceiver = new
261 IabBroadcastReceiver((IabBroadcastReceiver.IabBroadcastListener) appCompatActivity);
262     IntentFilter broadcastFilter = new IntentFilter(IabBroadcastReceiver.ACTION);
263     appCompatActivity.registerReceiver(mBroadcastReceiver,broadcastFilter);
264 }
265 public void unregisterReceiver(){
    appCompatActivity.unregisterReceiver(mBroadcastReceiver);
}
}

```

## InAppBillingHelperResponse

```

1 package com.dinibilgiyarismasiapp.Utils;
2
3 import android.content.Intent;
4
5 import com.dinibilgiyarismasiapp.inappbilling.Purchase;
6
7 public interface InAppBillingHelperResponse {
8     void success(Purchase purchase);
9     void fail();
10    void onActivityResult(int requestCode, int resultCode, Intent data);
11 }

```