U.LU SDK developer documentation

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Changelog：

|  |  |
| --- | --- |
| V1.1.0 | Final draft |
| V1.1.1 | Add logout interface, access firebase analysis and push |
| V1.1.2 | Increase English Internationalization |
| V1.1.3 | Add to the user center, query product information, upload role names, and open customer service |
| V1.2.0 | Optimize dialog independence, eliminate external interference from cp |
| V1.2.2 | Added support for portrait |
| V1.2.3 | Payment, upload role, incoming role id |
| V1.2.8 | SDK initialization, payment optimization, access document update |
| V2.0 | SDK refactoring |
| V2.1 | Add upltv aggregate ads twitter login |

**一、Import related libraries and parameter configuration**

Copy the ulusdk.x.x.x.arr file to the project app / libs directory, and copy the ads to the libs directory

minSDKVersion is not less than 22, targetSdkVersion is not less than 27



Application-level build.gradle

apply plugin: 'com.android.application'  
apply plugin: 'com.google.gms.google-services'  
android {  
  
  
 compileSdkVersion 28  
 defaultConfig {  
 // applicationId "com.ulusdk.demo"  
 applicationId "com.ulusdk.ulu"  
 minSdkVersion 22  
 targetSdkVersion 27  
 multiDexEnabled true  
 versionCode 11  
 versionName "2.5"  
 testInstrumentationRunner "android.support.test.runner.AndroidJUnitRunner"  
  
 }  
 buildTypes {  
 release {  
 minifyEnabled false  
 proguardFiles getDefaultProguardFile('proguard-android-optimize.txt'), 'proguard-rules.pro'  
  
 }  
 debug {  
  
 }  
 }  
 repositories {  
 flatDir {  
 dirs 'libs'，’ads’  
 }  
 }  
  
  
 dependencies {

implementation 'com.twitter.sdk.android:twitter-core:3.1.1'  
 implementation 'com.google.android.gms:play-services-auth:16.0.1'  
implementation 'com.facebook.android:facebook-login:[4,5)'  
implementation 'com.google.firebase:firebase-messaging:17.6.0'  
 implementation 'android.arch.work:work-runtime:1.0.1'  
implementation 'com.google.firebase:firebase-core:16.0.7'  
implementation 'com.appsflyer:af-android-sdk:4.9.0'  
implementation 'com.android.support:multidex:1.0.3'  
implementation fileTree(include: ['\*.aar'], dir: 'libs')  
implementation 'com.google.android.gms:play-services-ads:17.2.0'  
implementation fileTree(include: ['\*.jar'], dir: 'ads')  
implementation fileTree(include: ['\*.aar'], dir: 'ads')  
implementation 'com.android.support:recyclerview-v7:28.0.0'  
implementation 'com.android.support:support-v4:28.0.0'  
implementation 'com.android.support:appcompat-v7:28.0.0'  
implementation 'com.android.support:support-annotations:28.0.0'  
implementation 'com.android.support:customtabs:28.0.0'  
implementation 'com.android.support:cardview-v7:28.0.0'

}  
}

Project-level build.gradle

// Top-level build file where you can add configuration options common to all sub-projects/modules.  
  
buildscript {  
 repositories {  
 google()  
 jcenter()  
   
 }  
 dependencies {  
 classpath 'com.android.tools.build:gradle:3.3.2'  
 classpath 'com.google.gms:google-services:4.0.1'  
 // NOTE: Do not place your application dependencies here; they belong  
 // in the individual module build.gradle files  
 }  
}  
  
allprojects {  
 repositories {  
 google()  
 jcenter()  
   
 }  
}  
  
task clean(type: Delete) {  
 delete rootProject.buildDir  
}

### 二、Configure AndroidManifest.xml

### 2.1. Add permissions

<uses-permission android:name="android.permission.INTERNET"/>  
  
<uses-permission android:name="android.permission.ACCESS\_NETWORK\_STATE"/>  
<uses-permission android:name="android.permission.ACCESS\_WIFI\_STATE"/>  
<uses-permission android:name="android.permission.WAKE\_LOCK"/>

#### ****2.2. Add component****

<application  
 android:allowBackup="true"  
 android:icon="@mipmap/ic\_launcher"  
 android:label="@string/app\_name"  
 android:roundIcon="@mipmap/ic\_launcher\_round"  
 android:supportsRtl="true"  
 >

<meta-data  
 android:name="com.google.android.gms.ads.APPLICATION\_ID"  
 android:value="ca-app-pub-1111111111111111~1111111111" />

<meta-data  
 android:name="channel\_id"  
 android:value="0"  
 />

<activity  
 android:name="com.ulusdk.ui.WebviewActivity" android:screenOrientation="portrait"  
 ></activity>

Setting page constant vertical screen

android:screenOrientation="portrait"

// portrait for portrait, sensorLandscape for landscape  
note! !! !! Do not set page orientation for this page. Java code sets it dynamically

<activity  
 android:name="com.ulusdk.ui.ULUMainActivity"  
 android:configChanges="orientation|keyboardHidden|screenSize"  
 android:theme="@style/ulu\_activity"  
></activity>

2.3. Setting XML Parameters

Add SDK environment configuration to Strings.xml and get google-service.json from Youlu

<!-- 1 ULUSDK sandbox environment, 0 ULUSDK production environment-->  
<string name="ulu\_env">1</string>

### 三、SDK access process

#### 3.1. Get SDK instance method

ULUManager.*getInstance*()

#### ****3.2.Sdk initialization interface (required)****

String gameId="1";  
ULUManager.*getInstance*().init(this, gameId, new ULUListener() {  
 @Override  
 public void onInitSuccess() {  
 Toast.*makeText*(MainActivity.this, getString(R.string.*init\_success*), Toast.*LENGTH\_SHORT*).show();  
  
 }  
  
 @Override  
 public void onInitFail(String errorMsg) {  
 Toast.*makeText*(MainActivity.this, getString(R.string.*init\_fail*)+ errorMsg, Toast.*LENGTH\_SHORT*).show();  
  
 }  
  
 @Override  
 public void onLogoutSuccess() {  
 Toast.*makeText*(MainActivity.this, getString(R.string.*logout\_success*), Toast.*LENGTH\_SHORT*).show();  
  
 }  
  
 @Override  
 public void onLogoutFail(String erroMsg) {  
 Toast.*makeText*(MainActivity.this, getString(R.string.*logout\_fail*)+erroMsg, Toast.*LENGTH\_SHORT*).show();  
  
 }  
  
 @Override  
 public void onLoginSuccess(ULUUser uluUser) {  
 String uid=uluUser.getUid();  
 String token=uluUser.getToken();  
 Toast.*makeText*(MainActivity.this,getString(R.string.*login\_success*),Toast.*LENGTH\_SHORT*).show();  
 }  
  
 @Override  
 public void onLoginFail(String erroMsg) {  
 Toast.*makeText*(MainActivity.this,getString(R.string.*login\_fail*)+erroMsg,Toast.*LENGTH\_SHORT*).show();  
  
 }  
});

**3.3. Add lifecycle interface (required)**

protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 ULUManager.*getInstance*().ULUOnCreat(this);

}

@Override  
protected void attachBaseContext(Context newBase) {  
 super.attachBaseContext(newBase);  
 ULUManager.*getInstance*().ULUAttachBaseContext(newBase);  
}  
  
  
@Override  
protected void onActivityResult(int requestCode, int resultCode, Intent data) {  
 super.onActivityResult(requestCode, resultCode, data);  
 ULUManager.*getInstance*().ULUOnActivityResult(requestCode, resultCode, data);  
  
}  
  
  
@Override  
public void onRequestPermissionsResult(int requestCode, @NonNull String[] permissions, @NonNull int[] grantResults) {  
 ULUManager.*getInstance*().ULUOnRequestPermissionsResult(requestCode,permissions,grantResults);  
}  
  
@Override  
protected void onStart() {  
 super.onStart();  
 ULUManager.*getInstance*().ULUOnStart(this);  
}  
  
@Override  
protected void onStop() {  
 super.onStop();  
 ULUManager.*getInstance*().ULUOnStop(this);  
}  
  
@Override  
protected void onPause() {  
 super.onPause();  
 ULUManager.*getInstance*().ULUOnPause(this);  
}  
  
@Override  
protected void onResume() {  
 super.onResume();  
 ULUManager.*getInstance*().ULUOnResume(this);  
}  
  
@Override  
protected void onDestroy() {  
 super.onDestroy();  
 ULUManager.*getInstance*().ULUOnDestory(this);  
   
}

**3.4.Sdk login interface (required)**

ULUManager.*getInstance*().login();

**3.5.Sdk payment interface (required)**

If payment fails, "-2" means googleplay is not logged in

ULUOrder uluOrder=new ULUOrder();  
uluOrder.setExtraData("ExtraData");  
uluOrder.setUluProductId(SKU\_GAS);  
  
ULURole uluRole=new ULURole();  
uluRole.setRoleName("RoleName");  
uluRole.setServerName("ServerName");  
uluRole.setServerId("ServerId");  
uluRole.setRoleId("roleId");  
ULUManager.*getInstance*().pay(uluOrder,uluRole,new ULUPayListenter() {  
  
 @Override  
 public void onPaySuccess(String orderId) {  
 Toast.*makeText*(MainActivity.this,getString(R.string.*pay\_success*),Toast.*LENGTH\_SHORT*).show();  
  
 }  
  
 @Override  
 public void onPayFail(String orderId, String errorMsg) {  
 Toast.*makeText*(MainActivity.this,getString(R.string.*pay\_fail*)+errorMsg,Toast.*LENGTH\_SHORT*).show();  
  
 }  
  
  
});

#### ****3.7.**** ****Enter the user center (required)****

uluRole = new ULURole();  
uluRole.setRoleLevel("RoleLevel");  
uluRole.setRoleName("RoleName");  
uluRole.setServerName("ServerName");  
uluRole.setServerId("ServerId");  
uluRole.setVipLevel(1);  
uluRole.setRoleId("RoleId");  
ULUManager.*getInstance*().openUserCenter(uluRole);

#### ****3.8.**** ****Query all product information of Inland Purchase (optional)****

The query fails and returns "-2", indicating that googleplay is not logged in

ArrayList<String> skuList = new ArrayList<String> ();  
skuList.add(SKU\_GAS);  
ULUManager.*getInstance*().getProductList(skuList, new ULUGetProductListener() {  
 @Override  
 public void onQuerySuccess(List<ULUProduct> list) {  
 Toast.*makeText*(MainActivity.this,getString(R.string.*query\_success*)+" list.size()==="+list.size(),Toast.*LENGTH\_SHORT*).show();  
  
 }  
  
  
 @Override  
 public void onQueryFail(String errorMsg) {  
 Toast.*makeText*(MainActivity.this,getString(R.string.*query\_fail*),Toast.*LENGTH\_SHORT*).show();  
  
 }  
});

#### ****3.9.**** ****Check if there are missing orders (optional)****

ULUManager.*getInstance*().checkOrder(new ULUcheckOrderListenter() {  
 @Override  
 public void onCheckOrderSuccess(boolean hasOrder) {  
//true Indicates that there is a missing order, and the background delivery has been notified

//false Indicates no missing orders Toast.*makeText*(MainActivity.this,getString(R.string.*check\_order\_success*)+ " hasOrder=="+hasOrder, Toast.*LENGTH\_SHORT*).show();  
  
 }  
  
 @Override  
 public void onCheckOrderFail(String erroMsg) {  
 Toast.*makeText*(MainActivity.this, getString(R.string.*check\_order\_fail*)+" erroMsg=="+erroMsg, Toast.*LENGTH\_SHORT*).show();  
  
 }  
});

#### ****4.0.**** ****Open customer service (required)****

uluRole = new ULURole();  
uluRole.setRoleLevel("RoleLevel");  
uluRole.setRoleName("RoleName");  
uluRole.setServerName("ServerName");  
uluRole.setServerId("ServerId");  
uluRole.setVipLevel(1);  
uluRole.setRoleId("RoleId");  
ULUManager.*getInstance*().openCustomerService(uluRole);

#### ****4.1.**** ****RBI (required)****

ULURole uluRole = new ULURole();  
 uluRole.setRoleName("RoleName");  
 uluRole.setServerName("ServerName");  
 uluRole.setServerId("ServerId");  
 uluRole.setVipLevel(1);  
 uluRole.setRoleId("RoleId0731");  
 Map<String,String> map=new HashMap<String,String>();  
 map.put("enventKey","enventValue");  
 ULUManager.*getInstance*().uluTrackEvent(uluRole,"envent",map);

#### ****4.2.**** ****Share (facebook, instagram picture, link, video)****

ULUManager.*getInstance*().setULUShareListener(MainActivity.this);  
ULUManager.*getInstance*().shareImage();

ULUManager.*getInstance*().shareVideo();

ULUManager.*getInstance*().shareLink("https://www.baidu.com");

#### ****4.3.upltv banner Interstitial ads, video ads****

//banner advertising

ULUManager.*getInstance*().showBannerAd(ll\_banner, new ULUBannerAdListener() {  
 @Override  
 public void onClicked() {  
 Toast.*makeText*(MainActivity.this,"onClicked",Toast.*LENGTH\_SHORT*).show();  
 }  
  
 @Override  
 public void onDisplayed() {  
 Toast.*makeText*(MainActivity.this,"onDisplayed",Toast.*LENGTH\_SHORT*).show();  
 }  
},"10003");

// Interstitial

ULUManager.*getInstance*().showInterstitialAd(new ULUInterstitialAdListener() {  
 @Override  
 public void onClicked() {  
 Toast.*makeText*(MainActivity.this,"mInterstitialAd is clicked",Toast.*LENGTH\_SHORT*).show();  
  
 }  
  
 @Override  
 public void onClosed() {  
 Toast.*makeText*(MainActivity.this,"mInterstitialAd is closed",Toast.*LENGTH\_SHORT*).show();  
  
 }  
  
 @Override  
 public void onDisplayed() {  
 Toast.*makeText*(MainActivity.this,"mInterstitialAd is displayed ",Toast.*LENGTH\_SHORT*).show();  
  
 }

@Override  
public void onDisplayFail() {  
 Toast.*makeText*(MainActivity.this,"mInterstitialAd is onDisplayFail ",Toast.*LENGTH\_SHORT*).show();  
}

},"10002");

// Video Incentives

ULUManager.*getInstance*().showVideoAd(new ULURewardVideoAdListener() {  
 @Override  
 public void onVideoAdClicked() {  
 Toast.*makeText*(MainActivity.this,"onVideoAdClicked",Toast.*LENGTH\_SHORT*).show();  
 }  
  
 @Override  
 public void onVideoAdClosed() {  
 Toast.*makeText*(MainActivity.this,"onVideoAdClosed",Toast.*LENGTH\_SHORT*).show();  
 }  
  
 @Override  
 public void onVideoAdDisplayed() {  
 Toast.*makeText*(MainActivity.this,"onVideoAdDisplayed",Toast.*LENGTH\_SHORT*).show();  
 }  
  
 @Override  
 public void onVideoAdReward() {  
 Toast.*makeText*(MainActivity.this,"onVideoAdReward",Toast.*LENGTH\_SHORT*).show();  
  
 }  
  
 @Override  
 public void onVideoAdDontReward(String reason) {  
 Toast.*makeText*(MainActivity.this,"onVideoAdDontReward",Toast.*LENGTH\_SHORT*).show();  
  
 }

@Override  
public void onDisplayFail() {  
 Toast.*makeText*(MainActivity.this,"VideoAd is onDisplayFail ",Toast.*LENGTH\_SHORT*).show();  
}

},"10001");