# **AmuseGameSDK API Document**

# (iOS)

Name	Date	version	remark
Yuanjun	2021.09.28	2.0.0	sdk rename & xsolla
Yuanjun	2021.09.30	2.0.1	google sign in
Yuanjun	2021.10.11	2.1.0	payment
Yuanjun	2022.04.11	2.2.3	payment upgrade (add server
			notification)
Yuanjun	2022.05.16	2.2.4	user migration
Yuanjun	2022.06.15	2.2.5	add api Delete Account
Yuanjun	2022.0818	2.2.6	add custom login

# 1. Description and definition

### 1.1 API call

Import <AmuseGameSDK/AmuseGameSDK.h>

**Every API is called by** [TTkGameManager defaultManager] **instance** 

### 1.2 Callback

error is a common field for every callback class. if error equals to nil, it means the api call is success.

### 1.3 Callback classes:

### 1.3.1 Login Callback

class: TTGCUserCompletionHandler

fields:

userInfo //the user information

error

### 1.3.2 Receive Notification Callback

class: TTGCNotificationCompletionHandler

fields:

result //the notification message

error

### 1.3.3 Logout Callback

class: TTGCLogoutCompleteHandler

fields:

 ${\tt success}$  // BOOL type, indicate operation result

error

### 1.3.4 Get Friends Callback

class: TTGCFriendsCompletionHandler

fields:

list //fields list, contains from 0 -> N friend object

error

### 1.3.5 Share Callback

class: TTGCShareCompleteHandler

fields:

success // BOOL type, indicate operation result

error

### 1.3.6 Payment Callback

class: TTGCOrderProgressHandler

fields:

TTGCOderStatus //Payment order status

### 1.3.7 Payment Result Callback

class: TTGCOrderCompletionHandler

fields:

orderInfo //the payment order object

error

### 1.3.8 AppVersion Info Callback

class: TTGCVersionCompletionHandler

fields:

hasNewVersion //has new version

versionInfo //the version detail information. class model <TTGCAppVersion>

error

### 1.3.9 Common Callback

class: TTGCCompletionHandler

fields:

result //operation result

error

### 1.3.10 Account Kicked Callback

class: TTGCAccountKickedHandler

fields:

information //information of notification

### 1.3.11 Account Banned Callback

class: TTGCAccountBannedHandler

fields:

information //the reason of banned

time

### 1.4 Errors

TTGCPlatformErrorType_Unknow	unkown error
TTGCPlatformErrorType_AuthorizeFailed	authorized failed
TTGCPlatformErrorType_ForUserInfoFailed	request user data failed
TTGCPlatformErrorType_LoginFailed	login failed
TTGCPlatformErrorType_FriendsListFailed	get firends failed
TTGCPlatformErrorType_MessageSendFailed	send message failed
TTGCPlatformErrorType_PayFailed	payment failed
TTGCPlatformErrorType_ShareFailed	share failed
TTGCPlatformErrorType_NotInstall	app is not installed
TTGCPlatformErrorType_NotNetWork	network exception
TTGCPlatformErrorType_SourceError	third error
TTGCPlatformErrorType_NoPermission	no permissions
TTGCPlatformErrorType_UnauthorizedRequest	unauthorized request, need login.

# 2. Setup Initialize (must)

#### 2.1 Launch

Methods in AppDelegate are implement like below.

#### 2.1.1 Setup Configuration:

The launch animation for SDK-1.0.5 has been removed and the specific launch animation needs to be implemented by the game developers.

```
didFinishLaunchingWithOptions:(NSDictionary *)launchOptions {
    // set SDK Api Enviroment
    [[TTkGameManager defaultManager] setServerDomainTest];
    // set Pay Enviroment
    [[TTkGameManager defaultManager] setPayEnvironmentTest];
    // open log
    [[TTkGameManager defaultManager] openLogInfo];

// launch SDK
    NSString *appId = @"xxxxxx";
    NSString *appSecret = @"xxxxxx";
    NSString *gameid = @"xxxxxxx";
    [[TTkGameManager defaultManager] setupWithAppId:appId Secret:appSecret
GameId:gameid Application:application Options:launchOptions];
    return YES;
}
```

#### 2.1.2 External Callback:

```
- (BOOL)application:(UIApplication *)app openURL:(NSURL *)url
options:(NSDictionary<UIApplicationOpenURLOptionsKey,id> *)options {
    return [[TTkGameManager defaultManager] application:app openURL:url
options:options];
}
```

#### 2.1.3 App Events:

```
- (void)applicationDidEnterBackground: (UIApplication *)application {
    [[TTkGameManager defaultManager] applicationDidEnterBackground:application];
}
- (void)applicationWillEnterForeground: (UIApplication *)application {
    [[TTkGameManager defaultManager] applicationWillEnterForeground:application];
}
- (void)applicationDidBecomeActive: (UIApplication *)application {
    [[TTkGameManager defaultManager] applicationDidBecomeActive:application];
}
- (void)applicationWillTerminate: (UIApplication *)application {
    [[TTkGameManager defaultManager] applicationWillTerminate:application];
}
```

#### 2.1.4 Push Register:

```
- (void)application:(UIApplication *)application
didRegisterForRemoteNotificationsWithDeviceToken:(NSData *)deviceToken {
    [[TTkGameManager defaultManager] registerDeviceToken:deviceToken];
}
- (void)application:(UIApplication *)application
didReceiveRemoteNotification:(NSDictionary *)userInfo fetchCompletionHandler:(void
(^)(UIBackgroundFetchResult))completionHandler {
    [[TTkGameManager defaultManager] application:application
didReceiveRemoteNotification:userInfo];
}
```

#### 2.1.5 Universal Link:

### 2.2 Check App Version (optional)

After SDK is launched, be sure to check the version to ensure that the current version is available. If you need to force upgrade, you can go to the appstore to download the latest version, otherwise the SDK function may not be available.

#### example

#### 2.2.1 Check Version

Method	checkAppVersionCompletion	
Callback	TTGCVersionCompletionHandler	
	hasNewVersion // has new version <bool></bool>	
	versionInfo // the version detail information. class model <ttgcappversion></ttgcappversion>	
	build // app build code	
	version // app new version	
	versionInfo	// the version information
	forceUpdate	// need to force upgrade <bool></bool>
	currentVersionCode // current version code	

#### 2.2.2 Open AppStore

Method	openAppStoreWithStoreIdentifier	
Params	identifier //App Store item identifier (NSNumber) of the product	

# 3. API: Configuration

### 3.1 Enbale Log Output

[[TTkGameManager defaultManager] openLogInfo];

### 3.2 Disable Log Output(default)

[[TTkGameManager defaultManager] closeLogInfo];

### 3.3 Set Test Environment

[[TTkGameManager defaultManager] setServerDomainTest];

### 3.4 Set Production Environment(default)

[[TTkGameManager defaultManager] setServerDomainProduction];

# 3.5 Set Sandbox Payment

[[TTkGameManager defaultManager] setPEnvTest];

### 3.6 Set Production Payment(default)

[[TTkGameManager defaultManager] setPEnvProduction];

### 3.7 Customer Service (Messenger)

```
[[TTkGameManager defaultManager] contactusWithMessenger];
```

# 4. API: Login&User Info

User must agree the User Agreement & Privacy before do Login action

### 4.1 Show Agreement View

```
- (IBAction)agreement:(id)sender {
    [[TTkGameManager defaultManager] showAgreementView];
}
```

# 4.2 Login with Apple

Login with Apple only supports iOS13 and higher.

Method	loginWithAppleCompletion
Callback	TTGCUserCompletionHandler

```
- (IBAction) appleLogin: (id) sender {
    TTGCHUD_NO_Stop(@"login...")
    __weak __typeof(self) weakSelf = self;
    [[TTkGameManager defaultManager] loginWithAppleCompletion:^(id __Nonnull userInfo,
NSError * _Nonnull error) {
    if (!error) {
        //login success
        TTGCHUD_SUCCESS(@"success")
        [weakSelf closeLoginView];
    } else {
        //error info
```

```
TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
}
}];
```

## 4.3 Login with GameCenter

Method	loginWithGameCenterCompletion
Callback	TTGCUserCompletionHandler

#### example:

```
- (void)gamecenterLogin {
   TTGCHUD_NO_Stop(@"login...")
   __weak __typeof(self)weakSelf = self;
   [[TTkGameManager defaultManager] loginWithGameCenterCompletion:^(id _Nonnull
userInfo, NSError * _Nonnull error) {
        if (!error) {
            //login success
            TTGCHUD_HINT(@"success")
            [weakSelf closeLoginView];
        } else {
            //error info
            TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
        }
    }
};
```

# 4.4 Login with Facebook

Method	loginWithFacebookCompletion
Callback	TTGCUserCompletionHandler

```
- (void)facebookLogin {
   TTGCHUD_NO_Stop(@"login...")
   __weak __typeof(self)weakSelf = self;
   [[TTkGameManager defaultManager] loginWithFacebookCompletion:^(id _Nonnull
userInfo, NSError * _Nonnull error) {
      if (!error) {
            //login success
            TTGCHUD_HINT(@"success")
            [weakSelf closeLoginView];
      } else {
            //error info
            TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
      }
    }
}];
```

# 4.5 Login with Twitter

Method	loginWithTwitterCompletion
Callback	TTGCUserCompletionHandler

```
- (IBAction) twitterLogin: (id) sender {

TTGCHUD_NO_Stop(@"login...")

__weak __typeof(self) weakSelf = self;

[[TTkGameManager defaultManager] loginWithTwitterCompletion:^(id __Nonnull userInfo,

NSError * _Nonnull error) {

if (!error) {

//登录成功

TTGCHUD_SUCCESS(@"success")

[weakSelf closeLoginView];
} else {

//查看error信息

TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
}
```

```
}1;
}
```

# 4.6 Login with Botim

Method	loginWithBotimCompletion
Callback	TTGCUserCompletionHandler

#### example:

```
- (IBAction)botimLogin:(id)sender {
    if ([[TTkGameManager defaultManager] botimIsInstall]) {
      TTGCHUD_NO_Stop(@"login...")
   __weak __typeof(self)weakSelf = self;
   [[TTkGameManager defaultManager] loginWithBotimCompletion:^(id _Nonnull userInfo,
NSError * _Nonnull error) {
      if (!error) {
          //login success
          TTGCHUD_SUCCESS(@"success");
          [weakSelf closeLoginView];
       } else {
          //error info
          TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
   }];
   } else {
      // no app please hide login button
```

# 4.7 Login with Google

Method	loginWithGoogleCompletion
Callback	TTGCUserCompletionHandler

#### example:

```
- (IBAction)googleLogin:(id)sender {
          TTGCHUD_NO_Stop(@"login...")
          _weak __typeof(self)weakSelf = self;
        [[TTkGameManager defaultManager] loginWithGoogleCompletion:^(id _Nonnull userInfo,
NSError * _Nonnull error) {
        if (!error) {
            //login success
            TTGCHUD_SUCCESS(@"success");
            [weakSelf closeLoginView];
        } else {
            //error info
            TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
        }
    }];
}
```

# 4.8 Login with Guest

Method	guestLoginCompletion
Callback	TTGCUserCompletionHandler

```
- (void)guestLogin {
    TTGCHUD_NO_Stop(@"login...")
    __weak __typeof(self)weakSelf = self;
    [[TTkGameManager defaultManager] guestLoginCompletion:^(id __Nonnull userInfo,

NSError * _Nonnull error) {
    if (!error) {
        //login success

        TTGCHUD_HINT(@"success")
        [weakSelf closeLoginView];
    } else {
```

```
//error info

TTGCHUD_Stop
}
}];
```

## 4.9 Get User Info

Method	userInfoCompletion	
Callback	TTGCUserCompletionHandler	
Params	TTGCUserModel	
	userType	user type (TTGCLoginType by 4.10)
	userId	user's indentifier
	thirdUid	third-party user indentifier
	nickname	nickname
	photoUrl	head image url
	pushOff	push switch 0:push switch on 1:push switch off

```
- (void)getUserInfo {
    TTGCHUD_NO_Stop(@"")
    [[TTkGameManager defaultManager] userInfoCompletion:^(id _Nullable userInfo,

NSError * _Nullable error) {
    if (!error) {
        TTGCHUD_HINT(@"success")

        TTGCUserModel *model = userInfo;
        [self freshUserInfo:model];
    } else {
        //error info
        TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
    }
}];
```

# 4.10 Get Login Type

Method	loginType
Return	TTGCLoginType

#### Definition:

Enum	TTGCLoginType		
Description	Enum type	for Login	
Enum Values	Enum Values		
TTGCLoginType	_unloggedIn	not login	
TTGCLoginType_TTk TT		TTk user	
TTGCLoginType_GameCenter G		GameCenter player	
TTGCLoginType	_Facebook	Facebook user	
TTGCLoginType	_Google	Google user	
TTGCLoginType	_Twitter	Twitter user	
TTGCLoginType_Guest G		Game guest	

```
- (void) showLoginView {
   if ([[TTkGameManager defaultManager] loginType] == TTGCLoginType_unloggedIn) {
        //unlogged in and show login UI
        [self backgroundUI];
        [self loginView];
    } else {
        dispatch_after(dispatch_time(DISPATCH_TIME_NOW, (int64_t)(2.5 * NSEC_PER_SEC)),
        dispatch_get_main_queue(), ^{
            [self getUserInfo];
        });
    }
}
```

### 4.11 Notification of offline

Method	accountKickedNotification
Callback	TTGCAccountKickedHandler

#### example:

```
[[TTkGameManager defaultManager] accountKickedNotification:^(NSString * _Nullable
information) {
    //Your account has been logged in on another device, please login again.
    TTGCHUD_HINT(information);
    [self showLoginView];
}];
```

### 4.12 Notification of banned

Method	accountBannedNotification
Callback	TTGCAccountBannedHandler

#### example:

### 4.13 Get Available Token

Method	getAvailableAccessToken
Callback	TTGCUserCompletionHandler

```
[[TTkGameManager defaultManager] getAvailableAccessToken:^(id _Nullable userInfo,
NSError * _Nullable error) {
   if (userInfo) {
```

```
TTGCUserModel *userModel = userInfo;

NSLog(@"userid: %@", userModel.userId);

NSLog(@"token: %@", userModel.accessToken);
}
}];
```

## 4.14 Set Migration Code

Method	setupMigCode

#### Note:

If you want to migrate users, be sure to use this API to set the migration code before logging in.

#### example:

```
[[TTkGameManager defaultManager] setupMigCode:@"Your Mig Code"];
```

# 4.15 Custom Login with UI

Method	loginWithCustomUICompletion
Callback	TTGCUserCompletionHandler

```
- (IBAction) customLogin: (id) sender {
    TTGCHUD_NO_Stop(@"login...")
    __weak __typeof(self) weakSelf = self;
    [[TTkGameManager defaultManager] loginWithCustomUICompletion:^(id __Nonnull userInfo,

NSError * _Nonnull error) {
    if (!error) {
        //登录成功
        TTGCHUD_SUCCESS(@"success")
        [weakSelf closeLoginView];
    } else {
        //查看 error 信息
```

```
TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
}
}];
```

# 5. API: Logout

Method	logout
Callback	TTGCLogoutCompleteHandler

#### example:

```
- (IBAction) logout: (id) sender {
   TTGCHUD_NO_Stop(@"logout...")

[[TTkGameManager defaultManager] logout:^(BOOL success, NSError * _Nullable error) {
   if (success) {
        TTGCHUD_HINT(@"success")
        [self showLoginView];
    } else {
        //error info
        NSLog(@"%@",error.userInfo);
        TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
   }
};
}
```

# 6. API: Game Payment

### **6.1 Product Purchase**

#### **Order Status Definition:**

TTGCOrderStatus_ProductQuerying query product	TTGCOrderStatus_ProductQuerying	query product
---	---------------------------------	---------------

TTGCOrderStatus_Generating	order init
TTGCOrderStatus_Generated	order init finish
TTGCOrderStatus_ProductPurchasing	order in trading progress
TTGCOrderStatus_ProductPurchased	order purchased
TTGCOrderStatus_ReceiptChecking	order verifying

### 6.1.1 IAP

Method	1. buyProductWithSKU: Progress: Completion:
	2. buyProductWithSKU: WithName: Progress: Completion:(v1.1.17 or
	later)
Params	
sku	String, product id
name	String, product name or description
Progress	TTGCOrderProgressHandler
Completion	TTGCOrderCompletionHandler
	class TTGCOrderModel
	orderId
	orderRef //transaction_id
	channel //1
	env //0=sandbox, 1=production
	sku //product id
	amount //price
	createTime
	payTime
	cancelTime
	status //0=order created, 1=order payed, 2=order reset

### 6.1.2 Xsolla

Method	xslBuyProductWithSKU: Currency: Completion:(v2.0.0 or later)
Params	
sku	String, product id
currency	String, pay currency
Completion	TTGCOrderCompletionHandler
	class TTGCOrderModel
	orderId
	orderRef //transaction_id
	channel //1
	env //0=sandbox, 1=production
	sku //product id
	amount //price
	createTime
	payTime
	cancelTime
	status //0=order created, 1=order payed, 2=order reset

# 6.1.3 Payment Selector (recommend 2)

Method	1. selectBWithProductSKU: Name: Currency: Completion: (v2.1.0 or later)
	Note: The following methods require the game's order id, which is used for server notification. (v2.2.3 or later)
	2. selectBWithProductSKU: Name: Currency: GameOrder: Progress:
	Completion:
Params	
sku	String, product id
name	String, product name

currency	String, pay currency
gameOrder	String, game order id
progress	TTGCOrderProgressHandler
Completion	TTGCOrderCompletionHandler
	class TTGCOrderModel
	orderId //SDK order id
	orderRef //transaction_id
	cpOrderId //game order id
	channel //1
	env //0=sandbox, 1=production
	sku //product id
	amount //price
	createTime
	payTime
	cancelTime
	status //0=order created, 1=order payed, 2=order reset

#### remark:

the Game Server should send the product to user's account after the order be payed, then check the order status by server api, Order status check is necessary for anti-spam

#### Server API: <AmuseGame Server API Document (to Game Developer)>

```
[[TTkGameManager defaultManager] selectBWithProductSKU:@"com.amuse.game.coin"
Name:@"ios(apple)" Currency:@"AED" GameOrder:@"123456" Progress:^(TTGCOderStatus
orderStatus) {
    NSLog(@"order status: %ld",(long)orderStatus);
} Completion:^(id _Nullable orderInfo, NSError * _Nullable error) {
    if (error) {
        NSLog(@"pay error\n%@\n",error);
    } else {
        if (orderInfo) {
```

```
TTGCOrderModel *model = orderInfo;

NSLog(@" orderId : %@", model.orderId);

NSLog(@" orderRef : %@", model.orderRef);

NSLog(@" cpOrderId : %@", model.cpOrderId);

NSLog(@" channel : %@", model.channel);

NSLog(@" sku : %@", model.sku);

NSLog(@" status : %@", model.status);

}

}];
```

# **6.2 Query Order**

Method	queryOrderWithOrderId: Completion:
Params	
orderId	the order's id
Completion	TTGCOrderCompletionHandler
	TTGCOrderModel by 6.1

```
- (IBAction) query: (id) sender {
    [[TTkGameManager defaultManager] queryOrderWithOrderId:@"xxx"

Completion:^(id _Nullable orderInfo, NSError * _Nullable error) {
    if (orderInfo) {
        //get order info
    } else {
        //error message
    }
};
```

### 6.3 Get Product Info

Method	getProductDetailWithSKU: Completion:
Params	
sku	String, product id
Completion	TTGCProductCompletionHandler
	class TTGCProductModel
	sku; //The string that identifies the product to the Apple App Store.
	price; //The cost of the product in the local currency.
	localeCurrency; //The currency code associated with the locale.
	localizedTitle; //The name of the product.
	localizedDescription; //A description of the product.

```
- (void)getInfo: (NSString *) sku {
    [[TTkGameManager defaultManager] getProductDetailWithSKU:sku

Completion:^(id _Nullable productInfo, NSError * _Nullable error) {
    if (productInfo) {
        TTGCProductModel *model = productInfo;
        NSLog(@" sku : %@", model.sku);
        NSLog(@" price : %@", model.price);
        NSLog(@" localeCurrency : %@", model.localeCurrency);
        NSLog(@" localizedTitle : %@", model.localizedTitle);
        NSLog(@" localizedDescription : %@", model.localizedDescription);
    } else {
        // error info
    }
};
```

# 7. API: SNS & Share

# 7.1 Field Description

#### TTGCBotimFriendModel

Params	Note
bimUid	botim user id
name	friend's name
photoUrl	friends' avatars

#### TTGCBotimPlayingFriendModel

Params	Note
bimUid	botim user id
userId	user id of friend
name	friend's name
photoUrl	friends' avatars

#### TTGCSocialBimMessage

Params	Note
bimUid	botim user id
contenString	shared text content
imageUrl	shared web picture address
title	shared title

# 7.2 Share (Third-Party)

Share to Facebook, WhatsApp.

### 7.2.1 Share To Facebook

Method	facebookShareMessage: completion:
Params	

```
Message 1.TTGCSocialFBInvite
quote //message text

2.TTGCSocialFBImages
photoImage //photo image <UIImage>

3.TTGCSocialFBFriendsGameInvite
inviteString //invite message text

completion TTGCShareCompleteHandler
```

```
// share invite link to facebook
- (IBAction) fbShare: (id) sender {
   TTGCSocialFBInvite *obj = [[TTGCSocialFBInvite alloc] init];
   obj.quote = @"Join us";
   [[TTkGameManager defaultManager] facebookShareMessage:obj completion:^(BOOL success,
NSError * _Nullable error) {
      if (success) {
      } else {
          if (error) {
              TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
   }];
//share image to facebook
- (IBAction) fbpic: (id) sender {
   UIImage *image = [UIImage imageNamed:@"game_logo_1024"];
   TTGCSocialFBImages *obj = [[TTGCSocialFBImages alloc] init];
   obj.photoImage = image;
   [[TTkGameManager defaultManager] facebookShareMessage:obj completion:^(BOOL success,
NSError * _Nullable error) {
      if (success) {
       } else {
          if (error) {
              TTGCHUD HINT([error.userInfo objectForKey:@"errorMsg"]);
```

```
}];
//send invite to facebook friends(This feature is only available if you are logged in with
Facebook)
- (IBAction) fbGameInviteFriends: (id) sender {
   TTGCSocialFBFriendsGameInvite *obj = [[TTGCSocialFBFriendsGameInvite alloc] init];
   obj.inviteString = @"join us";
   [[TTkGameManager defaultManager] facebookShareMessage:obj completion:^(BOOL success,
NSError * _Nullable error) {
       if (success) {
          TTGCHUD_SUCCESS(@"sent the message");
       } else {
           if (error) {
              TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
   }];
```

# 7.2.2 Share To WhatsApp

Method	whatsAppShareMessage: completion:
Params	
Message	1.TTGCSocialWAInvite
	contentString // whatsApp message text
	2.TTGCSocialWAImages
	photos //NSArray image <uiimage></uiimage>
completion	TTGCShareCompleteHandler

```
// share invite link to whatsApp
```

```
- (IBAction) whatsAppShare: (id) sender {
   TTGCSocialWAInvite *obj = [[TTGCSocialWAInvite alloc] init];
   obj.contentString = @"play games";
   [[TTkGameManager defaultManager] whatsAppShareMessage:obj completion:^(BOOL success,
NSError * _Nullable error) {
      if (success) {
       } else {
          if (error) {
              TTGCHUD HINT([error.userInfo objectForKey:@"errorMsg"]);
   }];
// share picture to whatsApp
- (IBAction)wapic:(id)sender {
   TTGCSocialWAImages *obj = [[TTGCSocialWAImages alloc] init];
   UIImage *image = [UIImage imageNamed:@"game logo 1024"];
   obj.photos = @[image];
   [[TTkGameManager defaultManager] whatsAppShareMessage:obj completion:^(BOOL success,
NSError * _Nullable error) {
      if (success) {
       } else {
          if (error) {
              TTGCHUD_HINT([error.userInfo objectForKey:@"errorMsg"]);
   }];
```

# 7.3 Share (Botim)

### 7.3.1 Get Botim Friends

Callback

 ${\tt TTGCBimFriendsCompletionHandler}$ 

#### example:

### 7.3.2 Get Botim Playing Game Friends

Method	getPlayingFriendsFromBotimCompletion
Callback	TTGCBimFriendsCompletionHandler

#### example:

## 7.3.3 Share Botim Message

Method	sendToMessageToBotim:(id)message Completion:
Callback	TTGCShareCompleteHandler

```
- (void) sendMessageToFriend {
   TTGCSocialBimMessage *model = [[TTGCSocialBimMessage alloc] init];
```

```
model.bimUid = @"xxxxxxxxx";

model.contentString = @"come and join us";

model.title = @"play game";

model.imageUrl =

@"http://t8.baidu.com/it/u=1484500186,1503043093&fm=79&app=86&f=JPEG?w=1280&h=853";

[[TTkGameManager defaultManager] sendToMessageToBotim:model Completion:^(BOOL success,
NSError * _Nullable error) {

}];

}
```

# 8. API: Push

### 8.1 Register

#### in AppDelegate:

```
- (void) application: (UIApplication *) application
didRegisterForRemoteNotificationsWithDeviceToken: (NSData *) deviceToken {
    [[TTkGameManager defaultManager] registerDeviceToken:deviceToken];
}
```

# 8.2 Receive Push Message

Method	getRemoteNotification
Callback	TTGCNotificationCompletionHandler

```
- (void)recieveMessage {
    [[TTkGameManager defaultManager] getRemoteNotification:^(id _Nullable result,

NSError * _Nullable error) {
        //Receive a push message and can customize the event based on the message.
        //Do something ...
```

# 9. API: Track

# 9.1 Field Description

#### TTGCTrackEvent (NS\_ENUM)

Params	Note
TTGCTrackEvent_Activity	activity event
TTGCTrackEvent_Guide	guide event
TTGCTrackEvent_GuideCompletion	guide completion event
TTGCTrackEvent_Reward	reward event
TTGCTrackEvent_Rank	rank event
TTGCTrackEvent_VipInfo	vip info event
TTGCTrackEvent_AdClick	ad click event
TTGCTrackEvent_Other	other event

#### **Track Event Param Keys**

Keys Define	Values
TTGCTrackParamActivityId	af_activity_id
TTGCTrackParamActivityAction	af_activity_action
TTGCTrackParamGuideId	af_tutorial_id
TTGCTrackParamGuideDetail	af_tutorial_detail
TTGCTrackParamGuideSuccess	af_success
TTGCTrackParamRewardId	af_reward_id
TTGCTrackParamUserVip	af_user_vip
TTGCTrackParamAdId	af_ad_id

### 9.2 Track Event

|--|

```
- (IBAction)activity: (id) sender {
   [[TTkGameManager defaultManager] tracker event:TTGCTrackEvent Activity
withValues:@{TTGCTrackParamActivityId:@"activity1",
      TTGCTrackParamActivityAction:@"click"}];
}
- (IBAction) guide1: (id) sender {
   [[TTkGameManager defaultManager] tracker_event:TTGCTrackEvent_Guide
withValues:@{TTGCTrackParamGuideId:@"guide test1",
       TTGCTrackParamGuideDetail:@"guide1"}];
- (IBAction)guide2:(id)sender {
   [[TTkGameManager defaultManager] tracker_event:TTGCTrackEvent_Guide
withValues:@{TTGCTrackParamGuideId:@"guide test2",
       TTGCTrackParamGuideDetail:@"guide2"}];
- (IBAction) guideCompletion: (id) sender {
   [[TTkGameManager defaultManager] tracker event:TTGCTrackEvent GuideCompletion
withValues:@{TTGCTrackParamGuideId:@"guide test",
    TTGCTrackParamGuideSuccess:@YES,
    TTGCTrackParamGuideDetail:@"test finish",}];
- (IBAction) reward: (id) sender {
   [[TTkGameManager defaultManager] tracker event:TTGCTrackEvent Reward
withValues:@{TTGCTrackParamRewardId:@"reward 222"}];
- (IBAction) rank: (id) sender {
   [[TTkGameManager defaultManager] tracker event:TTGCTrackEvent Rank
withValues:@{@"af rank":@"RO"}];
```

```
- (IBAction)vip:(id)sender {
    [[TTkGameManager defaultManager] tracker_event:TTGCTrackEvent_VipInfo
withValues:@{TTGCTrackParamUserVip:@"Vip5"}];
}
- (IBAction)ad:(id)sender {
    [[TTkGameManager defaultManager] tracker_event:TTGCTrackEvent_AdClick
withValues:@{TTGCTrackParamAdId:@"ad_222"}];
}
```

# 9.3 Track Event(Customized)

Method tracker\_eventName: withValues:

# 10. API: Customer Service

### 10.1 Contact us With Messenger

Method contactusWithMessenger

#### example:

[[TTkGameManager defaultManager] contactusWithMessenger];