ToTokGameSDK API Document

(iOS)

Name	Date	version	remark
Yuanjun	2020.3.18	1.0.0	created
Yuanjun	2020.3.27	1.0.1	improvements
Yuanjun	2020.3.31	1.0.2	add game invite
Yuanjun	2020.4.07	1.0.3	add single sign-on
Yuanjun	2020.4.12	1.0.4	improvements
Yuanjun	2020.4.17	1.0.5	1.launch animation deleted (2.1.1) 2.add agreement view (4.1) & delete 4.2 of last version 3.Domain Changed 4.add login with apple (4.2)
Yuanjun	2020.4.27	1.0.6	improvements
Yuanjun	2020.5.13	1.0.7	improvements
Yuanjun	2020.5.27	1.0.8	SDK rename 1.Replace ToTokGameManager class name with TTkGameManager 2.Replace TTGCLoginType_ToTok with TTGCLoginType_TTk
Yuanjun	2020.5.29	1.1.0	improvements
Yuanjun	2020.6.24	1.1.1	1. add totok login (4.6) 2. add twitter login (4.5) 3. add totok friends and share (7.2 & 7.3 & 7.4)
Yuanjun	2020.7.06	1.1.2	add notification of account banned (1.3.11 & 4.11)

| Yuanjun | 2020.7.10 | 1.1.3 | 1. fix AppsFlyer |
| | | | 2. get available token (4.12) |

1. Description and definition

1.1 API call

Import `<TTkGameSDK/TTkGameSDK.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:

`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.

```
- (BOOL)application:(UIApplication *)application

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 = @"xxxxx";

    NSString *appSecret = @"xxxxxx";

    NSString *gameid = @"xxxxxx";

    [[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:

```
- (BOOL)application:(UIApplication *)application continueUserActivity:(NSUserActivity

*)userActivity restorationHandler:(void (^)(NSArray<id<UIUserActivityRestoring>> *

_Nullable))restorationHandler {

    return [[TTkGameManager  defaultManager] application:application

continueUserActivity:userActivity restorationHandler:restorationHandler];

}
```

2.2 Check App Version

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

```
- (void)checkVersion {

    [[TTkGameManager  defaultManager] checkAppVersionCompletion:^(BOOL hasNewVersion,

TTGCAppVersionModel * _Nullable versionInfo, NSError * _Nullable error) {

        if (hasNewVersion) {

            BOOL forceUpdate = versionInfo.forceUpdate;

            if (forceUpdate) {

                // If you need to force update, you cannot continue to use it, and you need

to jump to the appstore to update.

                // Open appstore

                [[TTkGameManager  defaultManager]

openAppStoreWithStoreIdentifier:@"xxx"];

            } else {

                // If update is not required, you can optionally prompt for an upgrade.
```

```
        }

    }

  }];

}
```

2.2.1 Check Version

Method	checkAppVersionCompletion
Callback	TTGCVersionCompletionHandler
	hasNewVersion // has new version <BOOL>
	versionInfo // the version detail information. class model <TTGCAppVersion>
	build // app build code
	version // app new version
	versionInfo // the version information
	forceUpdate // need to force upgrade <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] setPayEnvironmentTest];
```

3.6 Set Production Payment(default)

```
[[TTkGameManager  defaultManager] setPayEnvironmentProduction];
```

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

example:

```objc
- (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:

```objc
- (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

example:

```
- (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`

example:

```objc
- (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"]);

        }

    }];

}
```

4.6 Login with ToTok

Method	`loginWithTTkCompletion`
Callback	`TTGCUserCompletionHandler`

example:

```objc
- (IBAction)totokLogin:(id)sender {

    TTGCHUD_NO_Stop(@"login...")

    __weak __typeof(self)weakSelf = self;

    [[TTkGameManager defaultManager] loginWithTTkCompletion:^(id _Nonnull userInfo,
NSError * _Nonnull error) {

        if (!error) {

            //login success

            TTGCHUD_SUCCESS(@"success");

            [weakSelf closeLoginView];

        } else {
```

```
        //error info

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

    }

  }];

}
```

4.7 Login with Guest

Method	guestLoginCompletion
Callback	TTGCUserCompletionHandler

example

```
- (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

       }

   }];

}
```

4.8 Get User Info

Method	userInfoCompletion
Callback	TTGCUserCompletionHandler

Params	TTGCUserModel	
	userType	user type (TTGCLoginType by 3.7)
	userId	user's indentifier
	nickname	nickname
	photoUrl	head image url
	pushOff	push switch 0:push switch on 1:push switch off

example

```objc
- (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"]);

        }

    }];

}
```

4.9 Get Login Type

Method	loginType
Return	TTGCLoginType

Definition：

Enum	TTGCLoginType
Description	Enum type for Login
Enum Values	
TTGCLoginType_unloggedIn	not login

TTGCLoginType_TTk	ToTok user
TTGCLoginType_GameCenter	GameCenter player
TTGCLoginType_Facebook	Facebook user
TTGCLoginType_Twitter	Twitter user
TTGCLoginType_Guest	ToTokGame guest

example：

```
- (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];

        });

    }

}
```

4.10 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];

    }];
```

4.11 Notification of banned

Method	accountBannedNotification
Callback	TTGCAccountBannedHandler

example:

```objc
[[TTkGameManager defaultManager] accountBannedNotification:^(NSString * _Nullable
information, NSString * _Nullable time) {
    //Your account has been banned.
}];
```

4.12 Get Available Token

Method	getAvailableAccessToken
Callback	TTGCUserCompletionHandler

example:

```objc
[[TTkGameManager defaultManager] getAvailableAccessToken:^(id _Nullable userInfo,
NSError * _Nullable error) {
    if (userInfo) {
        TTGCUserModel *userModel = userInfo;
        NSLog(@"userid: %@", userModel.userId);
        NSLog(@"token: %@", userModel.accessToken);
    }
}];
```

5. API: Logout

Method	logout
Callback	TTGCLogoutCompleteHandler

example:

```objc
- (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_Generating	order init
TTGCOrderStatus_ProductPurchasing	order in trading progress
TTGCOrderStatus_ProductPurchased	order purchased
TTGCOrderStatus_ReceiptChecking	order verifying

Method	buyProductWithSKU: Progress: Completion:
Params	
sku	String,product id
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

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：<ToTokGame Server API Document (to Game Developer)>

example:

```objc
- (IBAction)pay:(id)sender {

    TTGCHUD_NO_Stop(@"pay...")

    [[TTkGameManager  defaultManager] buyProductWithSKU:@"LangChaoJD001"
Progress:^(TTGCOderStatus orderStatus) {

        NSLog(@"order status: %ld",(long)orderStatus);

    } Completion:^(id  _Nullable orderInfo, NSError * _Nullable error) {

        if (orderInfo) {

            TTGCHUD_HINT(@"success")

        }

        if (error) {

            NSLog(@"%@",error.userInfo);

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

        }

    }];
```

```
}
```

6.2 Query Order

Method	queryOrderWithOrderId: Completion:
Params	
orderId	the order's id
Completion	TTGCOrderCompletionHandler TTGCOrderModel by 5.1

example:

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

    [[TTkGameManager  defaultManager] queryOrderWithOrderId:@"xxx"

Completion:^(id  _Nullable orderInfo, NSError * _Nullable error) {

        if (orderInfo) {

            //get order info

        } else {

            //error message

        }

    }];

}
```

7. API: SNS & Share

7.1 Field Description

TTGCFriendModel

Params	Note
ttkUid	totok user id
name	friend's name
photoUrl	friends' avatars

TTGCPlayingFriendModel

Params	Note
ttkUid	totok user id
userId	user id of friend
name	friend's name
photoUrl	friends' avatars

TTGCSocialTTkNotice

Params	Note
ttkUid	totok user id
title	shared title
contentString	shared text content
imageUrl	shared web picture address

TTGCSocialTTkInvite

Params	Note
ttkUid	totok user id
contenString	shared text content
imageUrl	shared web picture address
buttonTitle	shared click button name

7.2 Get ToTok Friends

Method	getFriendsFromServerCompletion
Callback	TTGCTTkFriendsCompletionHandler

example:

```
- (void)getFriends {

    [[TTkGameManager defaultManager] getFriendsFromServerCompletion:^(NSArray * _Nullable

list, NSError * _Nullable error) {

        // list of ttk friends

    }];

}
```

7.3 Get Playing Game Friends

Method	getPlayingFriendsFromServerCompletion
Callback	TTGCTTkFriendsCompletionHandler

example:

```objc
- (void)getPlayingFriends {

    [[TTkGameManager defaultManager] getPlayingFriendsFromServerCompletion:^(NSArray *
_Nullable list, NSError * _Nullable error) {

        // list of playing friends

    }];

}
```

7.4 Share (ToTok)

7.4.1 Share Invite Message

Method	sendToMessageTottk:(id)message Completion:
Callback	TTGCShareCompleteHandler

example:

```objc
- (void)inviteFriend {

    TTGCSocialTTkInvite *model = [[TTGCSocialTTkInvite alloc] init];

    model.ttkUid = @"xxxxxxxx";

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

    model.buttonTitle = @"Accept";

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

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


    }];

}
```

7.4.2 Share Notice Message

Method	`sendToMessageTottk:(id)message Completion:`
Callback	`TTGCShareCompleteHandler`

example:

```objc
- (void)sendNoticeToFriend {

    TTGCSocialTTkNotice *model = [[TTGCSocialTTkNotice alloc] init];

    model.ttkUid = @"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] sendToMessageTottk:model Completion:^(BOOL success,
NSError * _Nullable error) {


    }];

}
```

7.5 Share (Third-Party)

Share to Facebook, WhatsApp.

7.5.1 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

example:

```objc
// 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:@"totokgame_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"]);
            }
        }
    }];
}
```

7.5.2 Share To WhatsApp

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

example:

```
// share invite link to whatsApp
- (IBAction)whatsAppShare:(id)sender {
    TTGCSocialWAInvite *obj = [[TTGCSocialWAInvite alloc] init];
    obj.contentString = @"play games";
```

```objc
    [[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:@"totokgame_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"]);

            }

        }

    }];

}
```

8. API: Push

8.1 Register

in AppDelegate:

```objc
- (void)application:(UIApplication *)application

didRegisterForRemoteNotificationsWithDeviceToken:(NSData *)deviceToken {
```

```
    [[TTkGameManager  defaultManager] registerDeviceToken:deviceToken];

}
```

8.2 Receive Push Message

Method	getRemoteNotification
Callback	TTGCNotificationCompletionHandler

example:

```
- (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 ...

    }];

}
```