ToTokGameSDK Installation

(iOS)

Name	Date	version	remark
Yuanjun	2020.3.18	1.0.0	created

1. Register and create app

1.1 Register a new app in ToTokGame platform

Get application information such as appId, appsecret, gameid.

1.2 If you use Facebook related functions, you need to register with the Facebook development platform to create an application.

https://developers.facebook.com/apps/

2. Installation and Runtime Environment

- IDE : Xcode 10 or higher
- iOS : iOS 9.0 or higher

3. Install SDK

SDK Directory Structure :

- ToTokGameSDK
  - -Core/ToTokGameSDK.frame
  - -SocialLibraries/Facebook/

Information of third-party SDK:

Facebook：use cocoapods

'FBSDKCoreKit'　　'~> 5.13.1'

'FBSDKLoginKit'　　'~> 5.13.1'

'FBSDKShareKit'　　'~> 5.13.1'

3.1 Use Pod Install SDK（Recommend）

It is recommended to use the cocoapods install SDK. Cocoapods provides a simple dependency management system to avoid errors caused by manual import .

first you need to confirm that Cocoapods has been installed, if you have not installed Cocoapods, refer to the official website user guide:

https://cocoapods.org/.

1. In the root directory of the Xcode project, create a new Podfile.

```
$ pod init
```

Add the following to this file :

```
source 'https://github.com/CocoaPods/Specs.git'
pod 'ToTokGameSDK'
```

Setup as shown below

2. In the Podfile directory, execute the following instructions :

```
$ pod install
```

3. After executing pod install, open the project directory and find the .xcworkspace file to run.

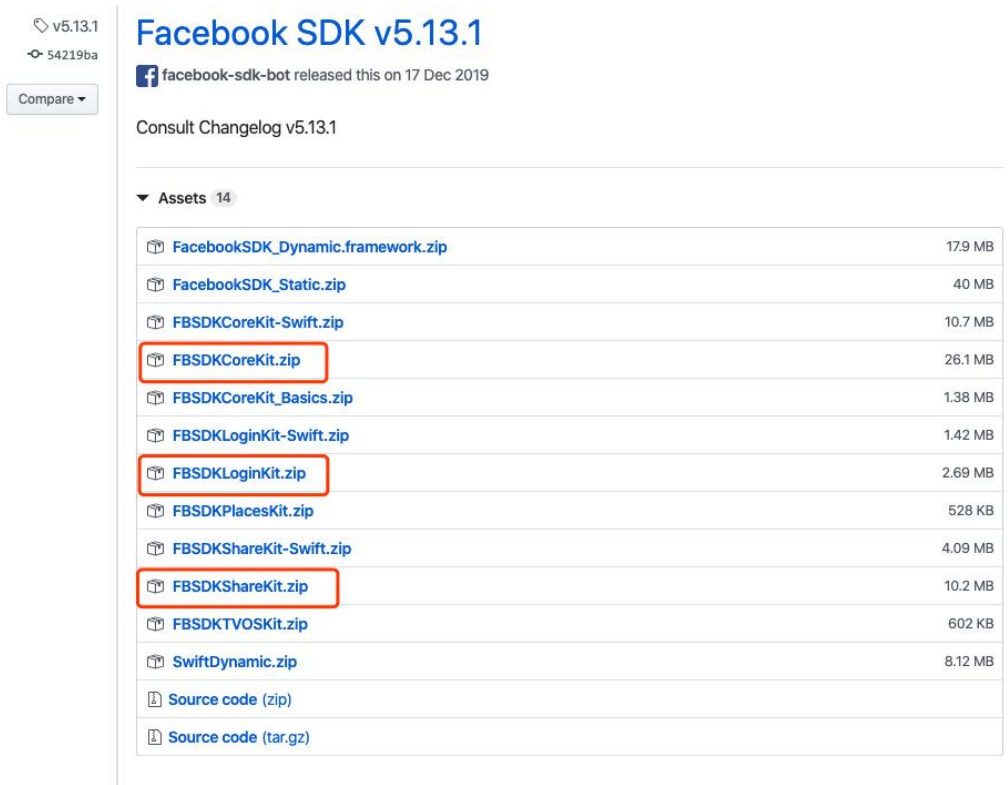
4. Future SDK upgrades can use the update command.

```
$ pod update
```

3.2 Install SDK Manually

1. Download ToTokGameSDK related releases on github
https://github.com/ToTokGames/ToTokGameSDK-iOS/releases

2. Download related FacebookSDK version 5.3.1 on github
https://github.com/facebook/facebook-ios-sdk/releases/tag/v5.13.1

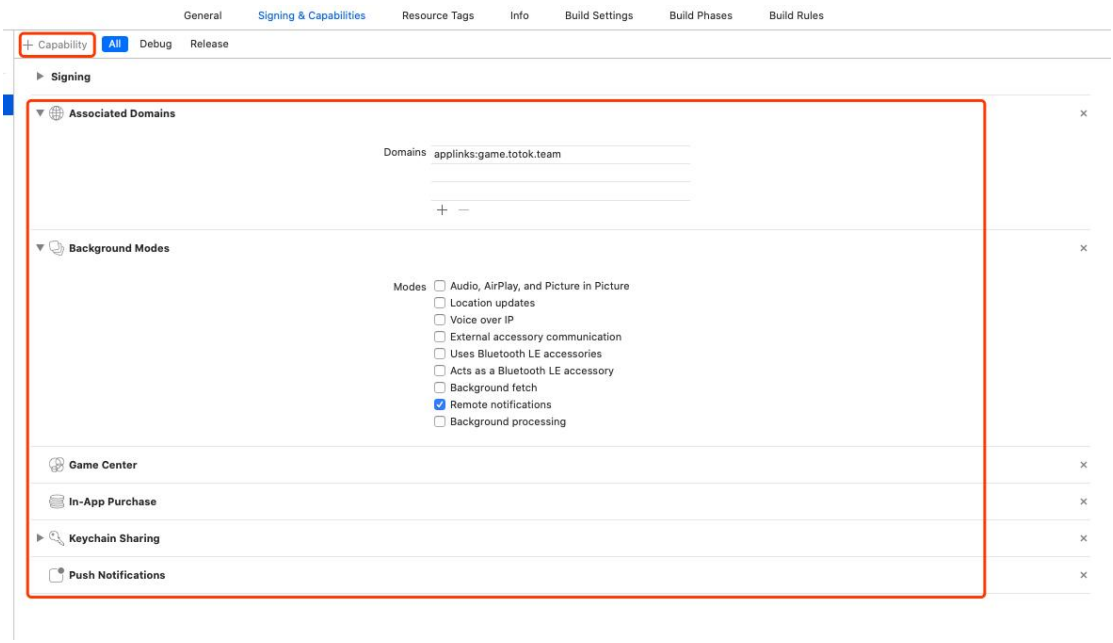


4. Project Configuration

4.1 Build Configuration

4.1.1 Apple service configuration, push, keychain, in-app purchase, and Universal Link are the services provided by Apple and need to be configured here .

as shown below



Domains:

test

applinks:game.totok.team

production

applinks:game.totok.ai

4.1.2 Set bitcode to NO (not supported by Facebook)

as shown in the below

4.1.3 Set plist.info

Relevant function configuration: Facebook related (the information marked in red color needs to be obtained from the official Facebook application)

```
<key>NSPhotoLibraryUsageDescription</key>
<string>Photo albums are required to share pictures, please allow access</string>
<key>CFBundleURLTypes</key>
<array>
<dict>
<key>CFBundleTypeRole</key>
<string>Editor</string>
<key>CFBundleURLName</key>
<string>totok</string>
<key>CFBundleURLSchemes</key>
<array>
<string>appid</string>
</array>
</dict>
<dict>
<key>CFBundleURLSchemes</key>
<array>
<string>fbxxxxxxxxx</string>
</array>
</dict>
</array>
<key>FacebookAppID</key>
<string>xxxxxxxxx</string>
<key>FacebookDisplayName</key>
<string>AppName</string>
<key>LSApplicationQueriesSchemes</key>
```

```
<array>
<string>whatsapp</string>
<string>totok</string>
<string>totoksdk</string>
<string>fbapi</string>
<string>fbapi20130214</string>
<string>fbapi20130410</string>
<string>fbapi20130702</string>
<string>fbapi20131010</string>
<string>fbapi20131219</string>
<string>fbapi20140410</string>
<string>fbapi20140116</string>
<string>fbapi20150313</string>
<string>fbapi20150629</string>
<string>fbapi20160328</string>
<string>fbauth</string>
<string>fbauth2</string>
<string>fbshareextension</string>
<string>fb-messenger-api20140430</string>
<string>fb-messenger-platform-20150128</string>
<string>fb-messenger-platform-20150218</string>
<string>fb-messenger-platform-20150305</string>
</array>
<key>NSAppTransportSecurity</key>
<dict>
<key>NSAllowsArbitraryLoads</key>
<true/>
<key>NSExceptionDomains</key>
<dict>
<key>akamaihd.net</key>
<dict>
<key>NSExceptionRequiresForwardSecrecy</key>
<false/>
<key>NSIncludesSubdomains</key>
<true/>
</dict>
```

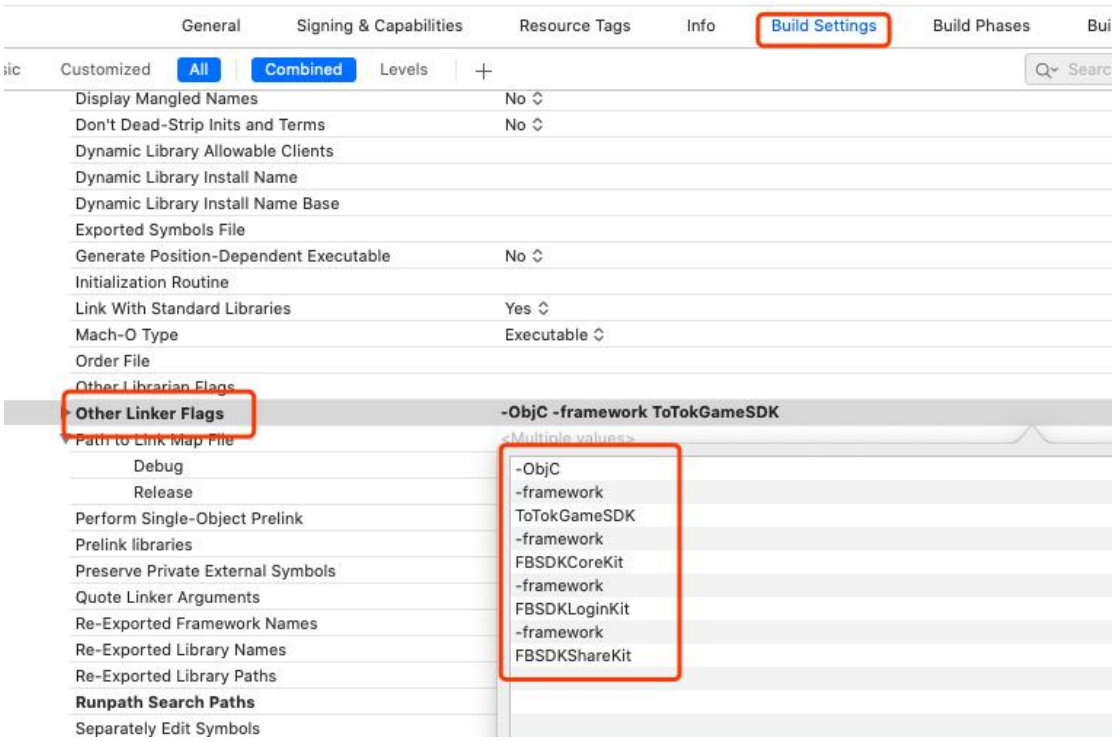
```
<key>facebook.com</key>
<dict>
<key>NSExceptionRequiresForwardSecrecy</key>
<false/>
<key>NSIncludesSubdomains</key>
<true/>
</dict>
<key>fbcdn.net</key>
<dict>
<key>NSExceptionRequiresForwardSecrecy</key>
<false/>
<key>NSIncludesSubdomains</key>
<true/>
</dict>
</dict>
</dict>
```

If it is a pod installation, the configuration is complete here.

If you manually drag in the package, continue the following process.

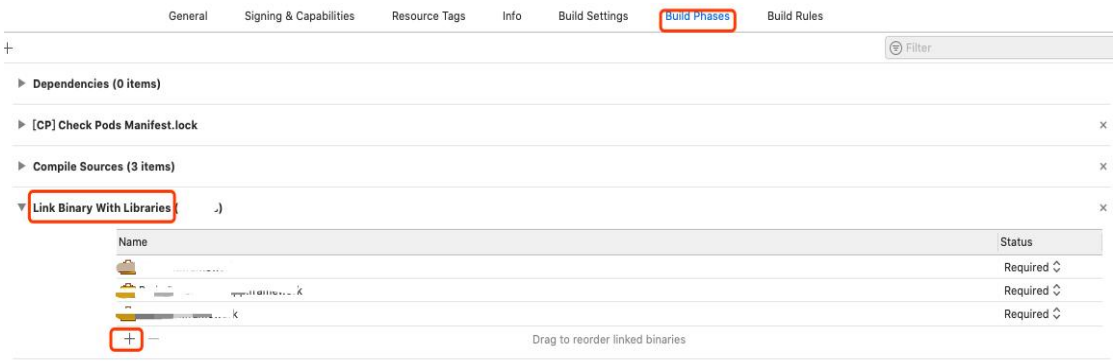
4.1.4 Build configuration

Add Other Linker Flags （Pay attention to case）



4.1.5 The system libraries used by related SDKs need to be configured as follows.

'sqlite3', 'UIKit', 'StoreKit', 'GameKit', 'WebKit', 'UserNotifications', 'Photos', 'ImageIO', 'Foundation', 'CoreFoundation', 'QuartzCore', 'CoreGraphics', 'AVFoundation', 'CoreTelephony', 'Security', 'CoreMotion', 'ExternalAccessory', 'SystemConfiguration', 'Accounts', 'Social', 'AudioToolbox', 'Accelerate'



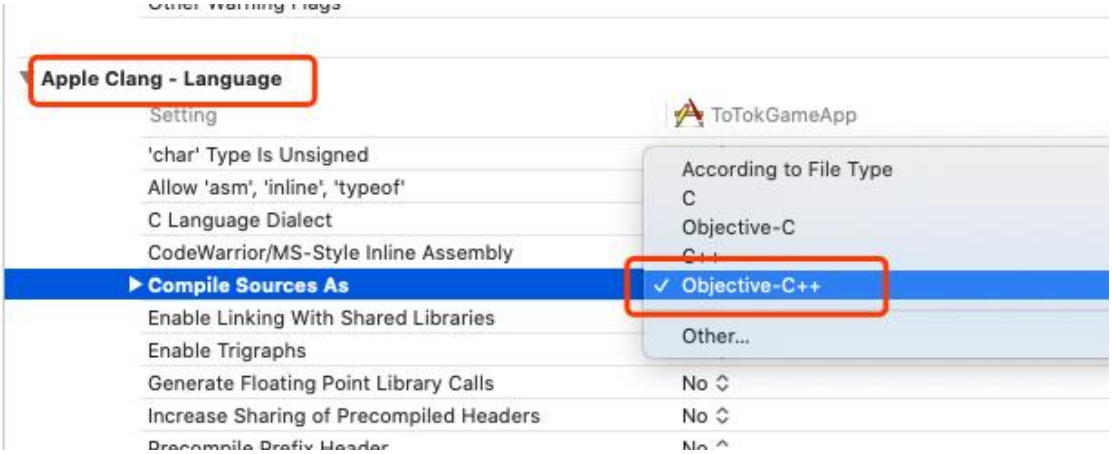
Add the system library required above here.

4.1.6 Compiling FBSDK requires setting compiling C++

Also set in build phases

Set Apple Clang - Language

as shown below

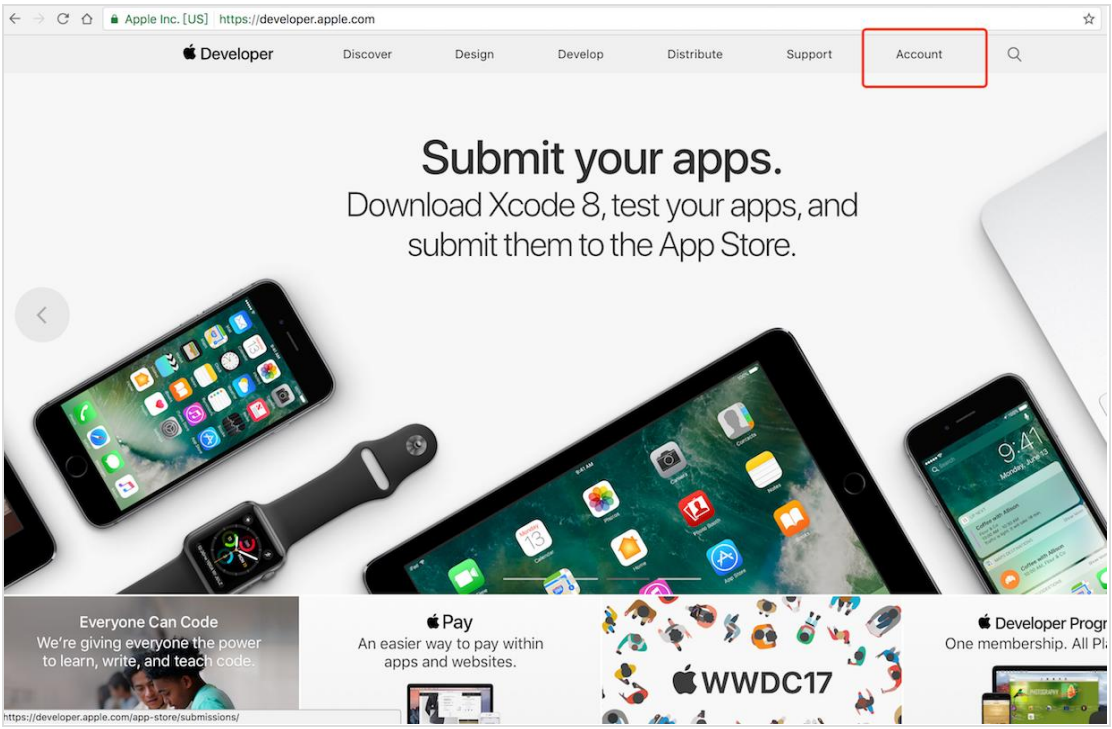


Compile configuration is over here.

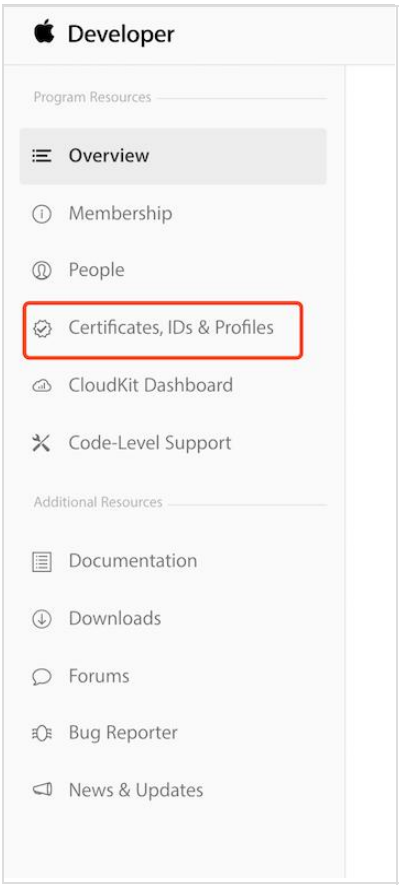
5. Push configuration

5.1 Certificate configuration

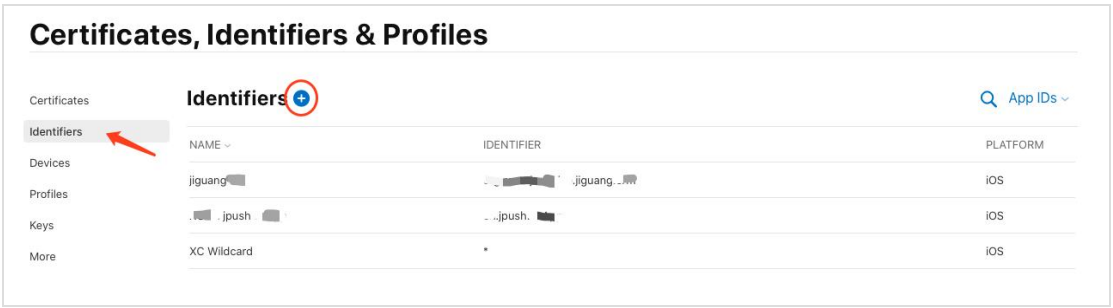
- Log in to the Apple Developer Website and enter your developer account.



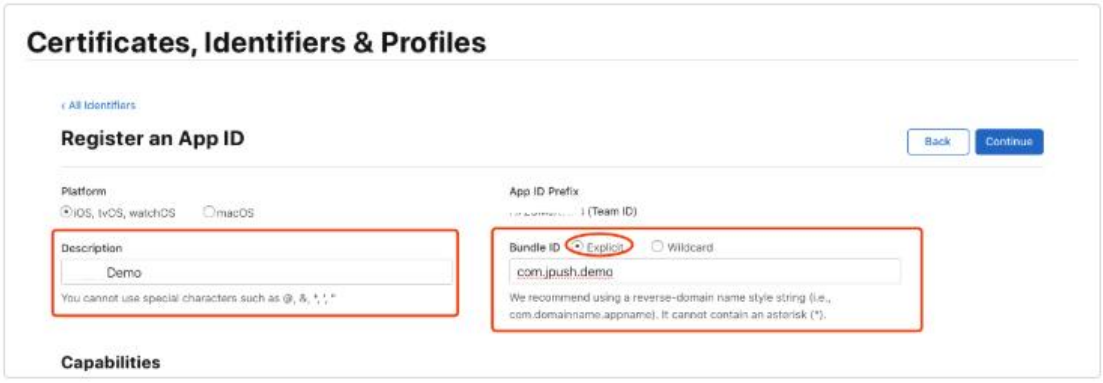
- Go to the “Certificates, IDs & Profiles” page from the left entry of the developer account page.



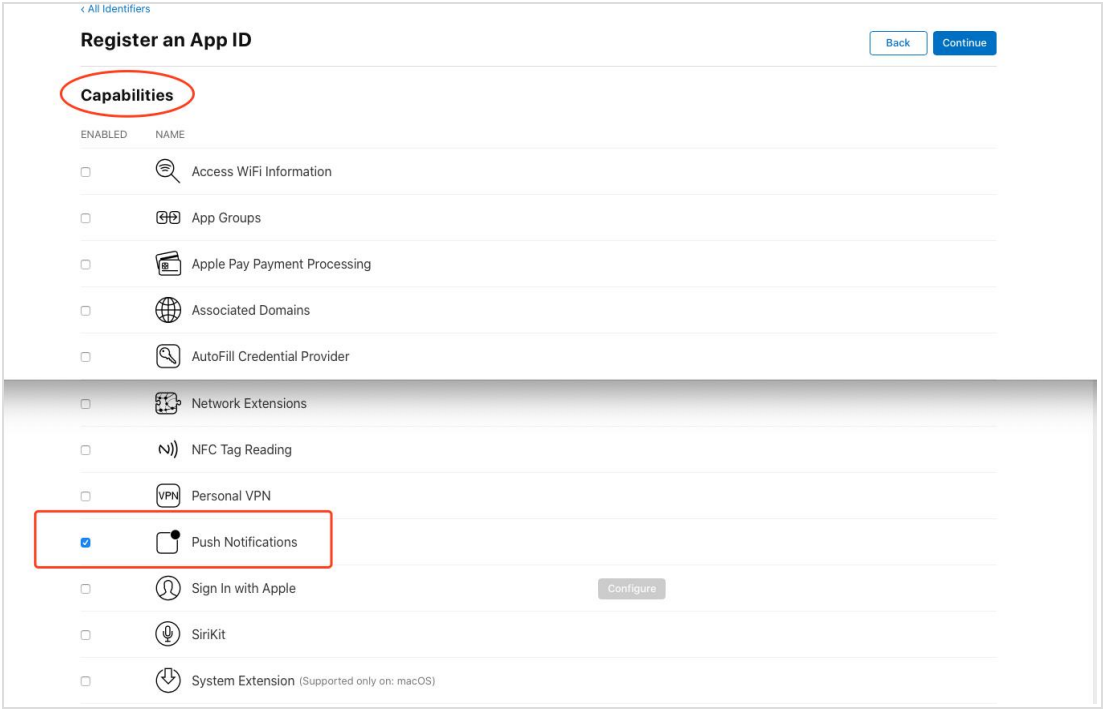
- Create an App ID, fill in the name of the App ID and the Bundle ID (skip this step if the ID already exists).



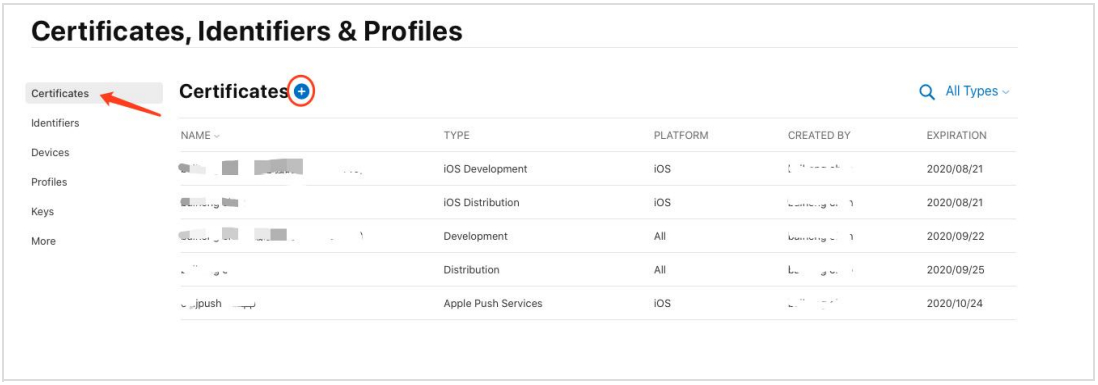
Note: You need to specify the specific bundle ID here. Do not use wildcard characters.



- Enable Push Notification for the app. If the App ID has already been created, you can also enable the Push Notification function through settings.

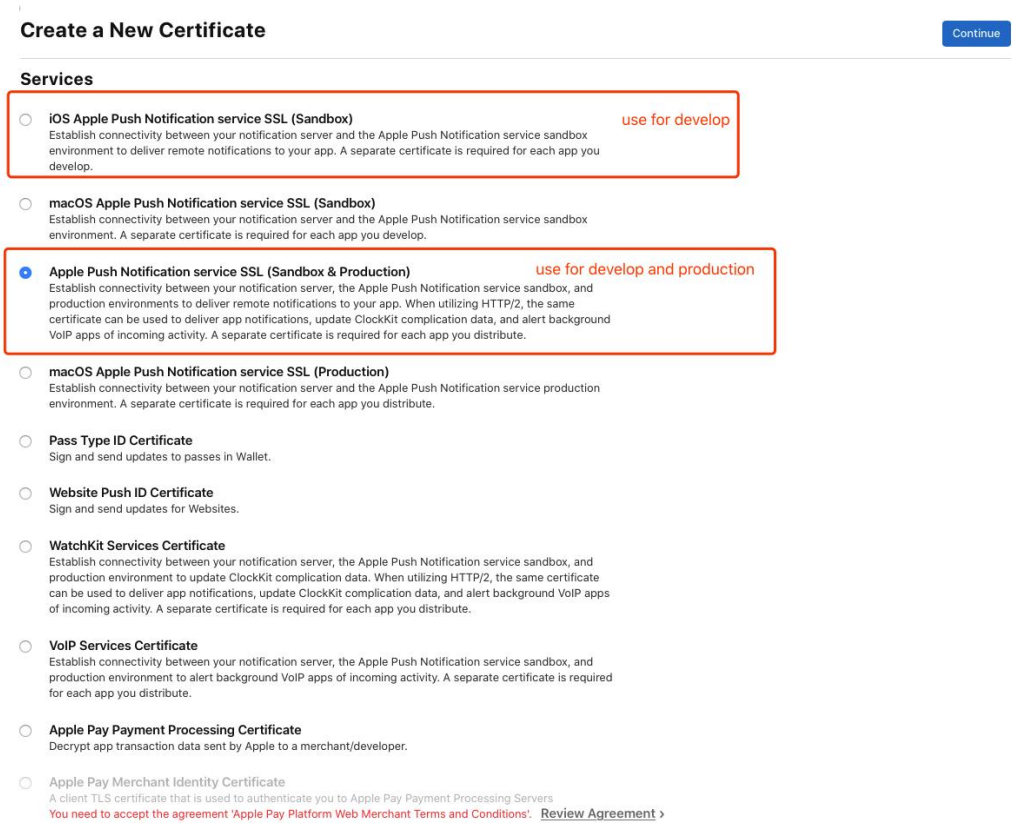


- After filling in the above attributes, click “Continue” to confirm the correctness of the AppId attribute, and click “Register” to register the AppId successfully.
- If you haven't created a Push certificate before or want to re-create a new one, please create a new one below the certificate list.

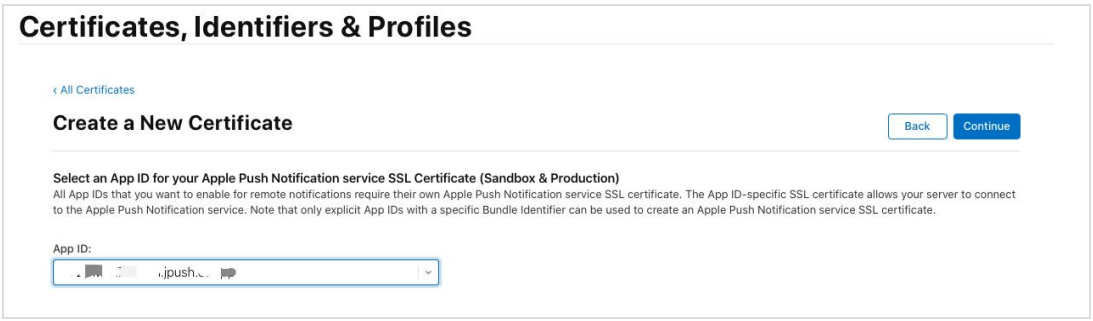


- When creating a new certificate, you need to choose the type of APNs certificate. As shown in the figure APNs certificate has two types of development (development) and production (production).

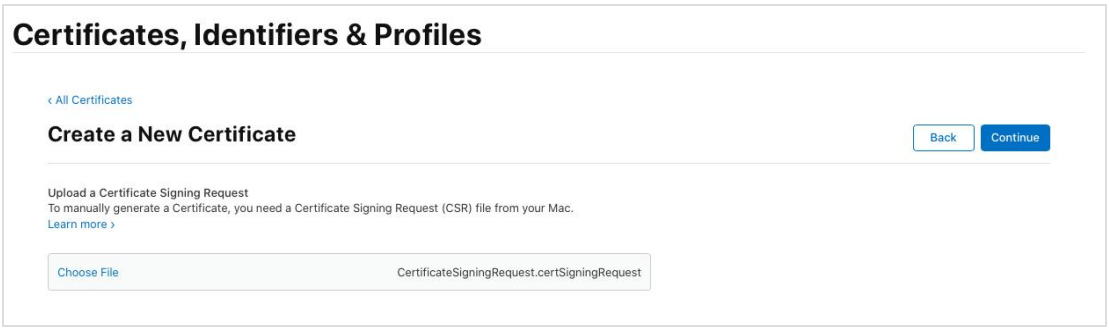
Note: The development certificate is used for development and debugging; the production certificate can be used for both development and debugging and product release. Here we choose the production certificate as an example.



- Click "Continue", then select the certificate and the AppID to be bound.

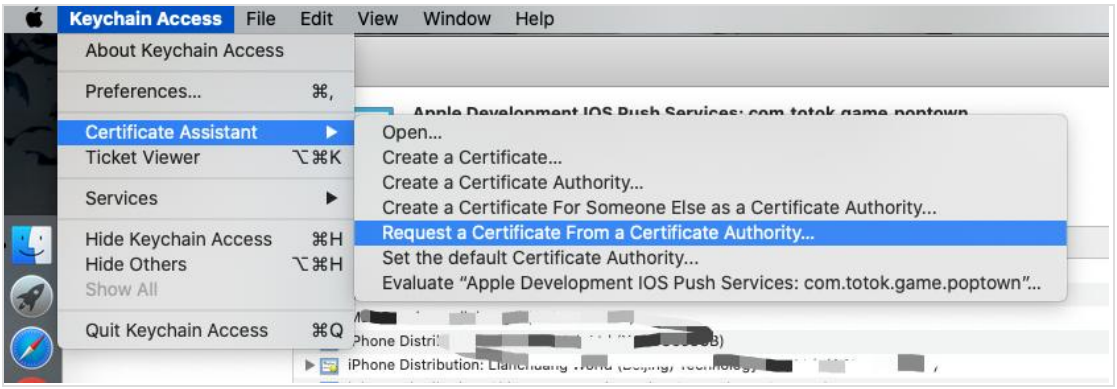


- Clicking "Continue" again will let you upload the CSR file. (CSR file will be created in the next step)



- Open KeychainAccess that comes with the mac system to create a Certificate Signing Request.

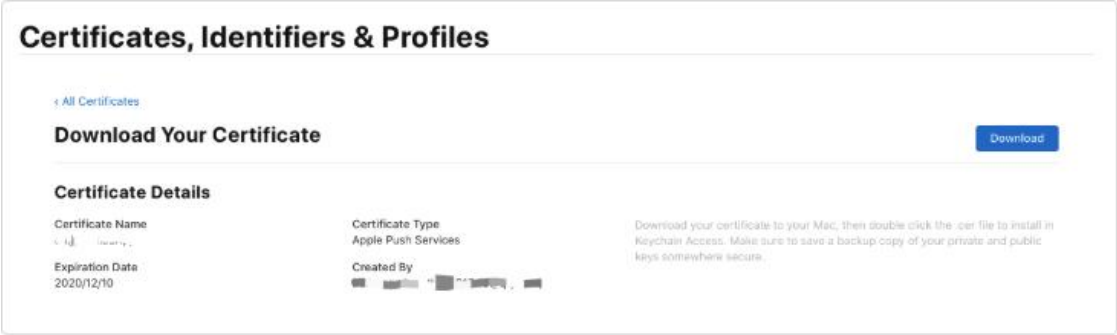
Operate as shown below:



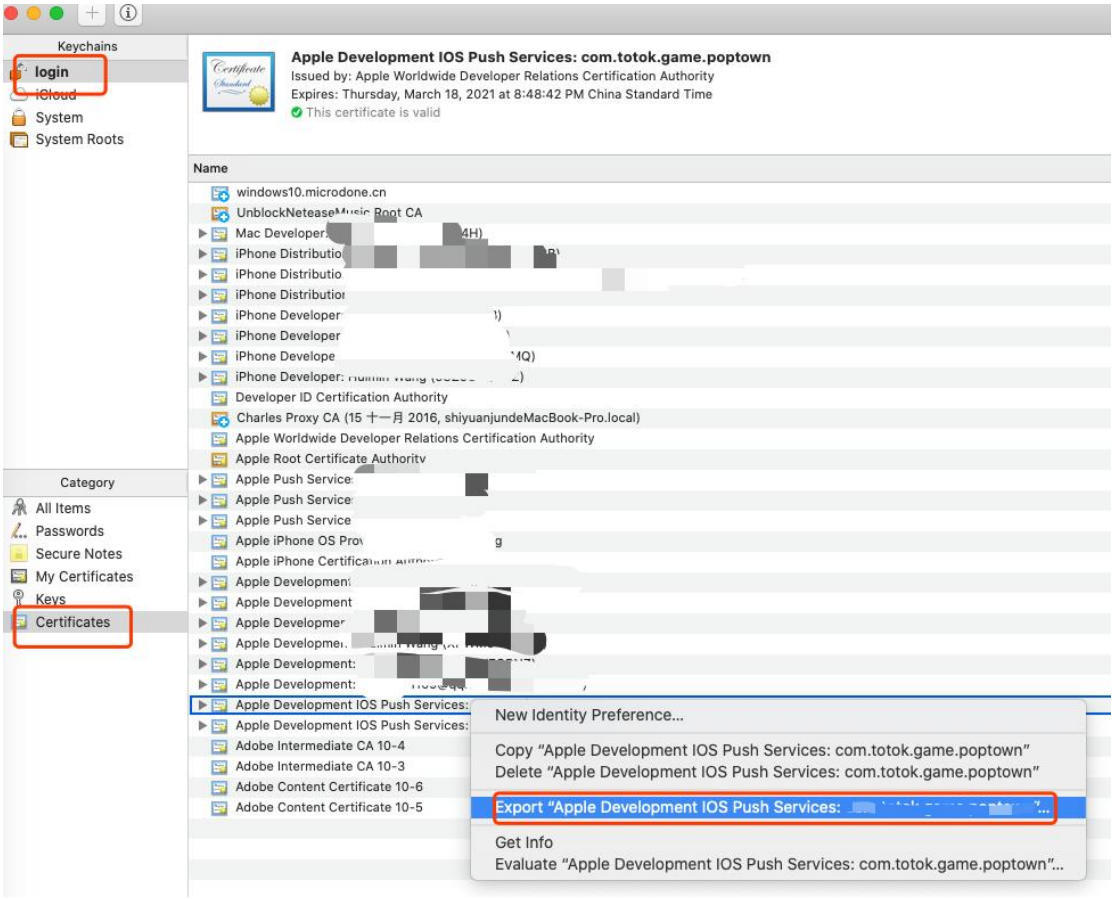
- Fill in "User Email" and "Common Name" and select "Save to Disk". The certificate file suffix is .certSigningRequest.

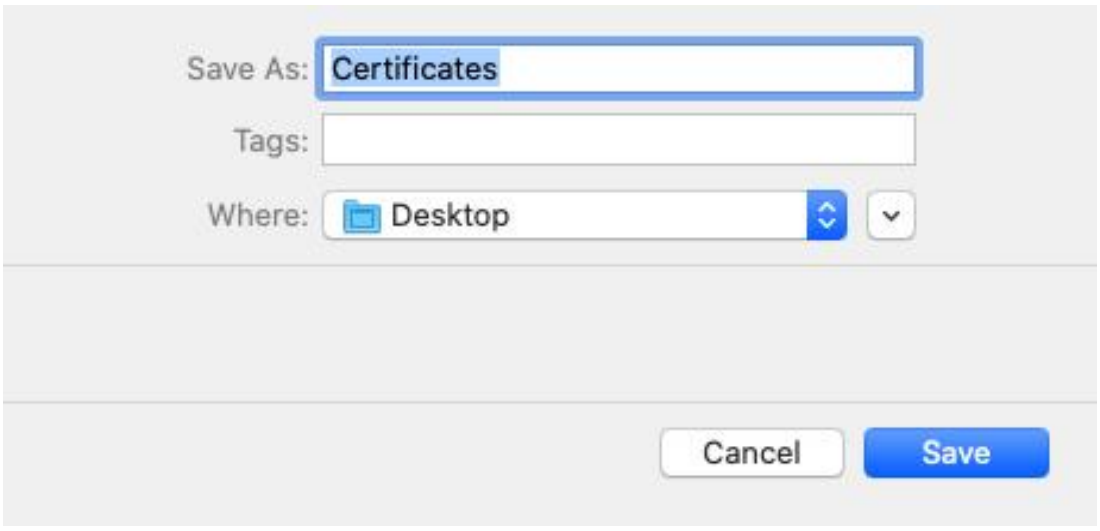
- Go back to the CSR upload page in your browser and upload the file with the suffix .certSigningRequest just generated.

- After the certificate is generated successfully, click the "Download" button to download the certificate. It is a file with the extension .cer.



- After double-clicking the certificate, it will open in "KeychainAccess", select "Login" in the "Keychain" list on the left, and "My certificate" in the "Type" list, find the certificate you just downloaded, and export it as a .p12 file. As shown below:

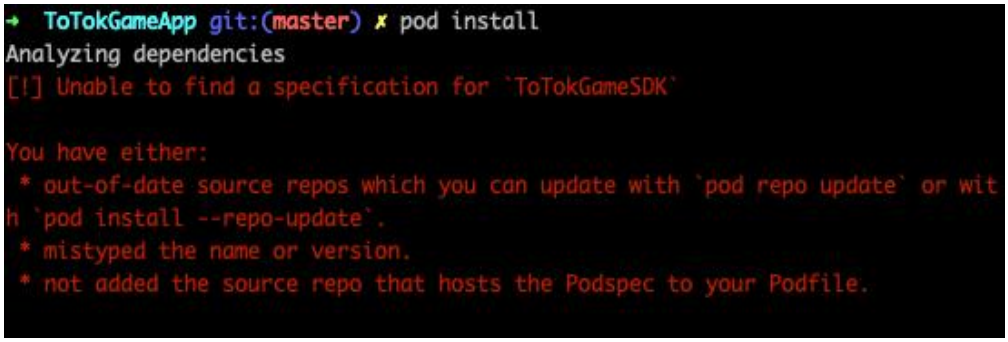

Keychains
login
iCloud
System
System Roots
Category
All Items
Passwords
Secure Notes
My Certificates
Keys
Certificates
Apple Development IOS Push Services: com.totok.game.poptown
Issued by: Apple Worldwide Developer Relations Certification Authority
Expires: Thursday, March 18, 2021 at 8:48:42 PM China Standard Time
This certificate is valid
Name
windows10.microdone.cn
Developer ID Certification Authority
Charles Proxy CA (15 十一月 2016, shiyuanjundeMacBook-Pro.local)
Apple Worldwide Developer Relations Certification Authority
Apple Root Certificate Authority
Adobe Intermediate CA 10-4
Adobe Intermediate CA 10-3
Adobe Content Certificate 10-6
Adobe Content Certificate 10-5
New Identity Preference...
Copy "Apple Development IOS Push Services: com.totok.game.poptown"
Delete "Apple Development IOS Push Services: com.totok.game.poptown"
Export "Apple Development IOS Push Services:
Get Info
Evaluate "Apple Development IOS Push Services: com.totok.game.poptown"...


Save As: Certificates
Tags:
Where: Desktop
Cancel
Save

• Common Problem

1. pod related

If you have a pod installed, running pod install directly may cause the following problems



Need to update the pod repo

```
$ pod install --repo-update
```

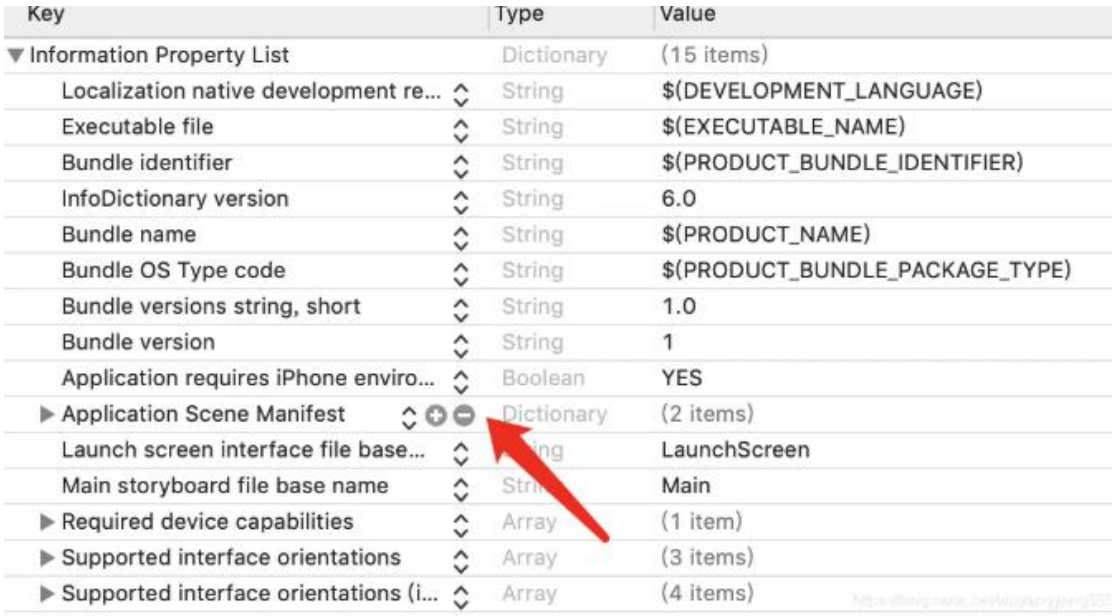
2. Project related

If you use xcode11 to create a new project, the iOS13 + real machine or simulator has a black screen

Reason: For the multi-window function of the iPad, the life cycle has changed. At present, the SDK does not support the multi-window function, so developer who use the SDK can change the project to the previous structure.

Specific steps are as follows:

1. First delete the Application Scene Manifest column from info.plist



Key	Type	Value
▼ Information Property List	Dictionary	(15 items)
Localization native development re...	String	$(DEVELOPMENT_LANGUAGE)
Executable file	String	$(EXECUTABLE_NAME)
Bundle identifier	String	$(PRODUCT_BUNDLE_IDENTIFIER)
InfoDictionary version	String	6.0
Bundle name	String	$(PRODUCT_NAME)
Bundle OS Type code	String	$(PRODUCT_BUNDLE_PACKAGE_TYPE)
Bundle versions string, short	String	1.0
Bundle version	String	1
Application requires iPhone enviro...	Boolean	YES
▶ Application Scene Manifest	Dictionary	(2 items)
Launch screen interface file base...	ing	LaunchScreen
Main storyboard file base name	Stri	Main
▶ Required device capabilities	Array	(1 item)
▶ Supported interface orientations	Array	(3 items)
▶ Supported interface orientations (i...	Array	(4 items)

2. In the project directory, delete the Scenedelegate.h and Scenedelegate.m files

3. Then enter AppDelegate.m to comment or delete the content shown below

```
#pragma mark - UISceneSession lifecycle


- (UISceneConfiguration *)application:(UIApplication *)application
    configurationForConnectingSceneSession:(UISceneSession
    *)connectingSceneSession options:(UISceneConnectionOptions
    *)options {
    // Called when a new scene session is being created.
    // Use this method to select a configuration to create the new
        scene with.
    return [[UISceneConfiguration alloc] initWithName:@"Default
        Configuration" sessionRole:connectingSceneSession.role];
}


- (void)application:(UIApplication *)application
    didDiscardSceneSessions:(NSSet<UISceneSession *> *)sceneSessions {
    // Called when the user discards a scene session.
    // If any sessions were discarded while the application was not
        running, this will be called shortly after
        application:didFinishLaunchingWithOptions.
    // Use this method to release any resources that were specific to
        the discarded scenes, as they will not return.
}
```

4. The last step is to add the window property in AppDelegate.h

```
@property (strong, nonatomic) UIWindow * window;
```