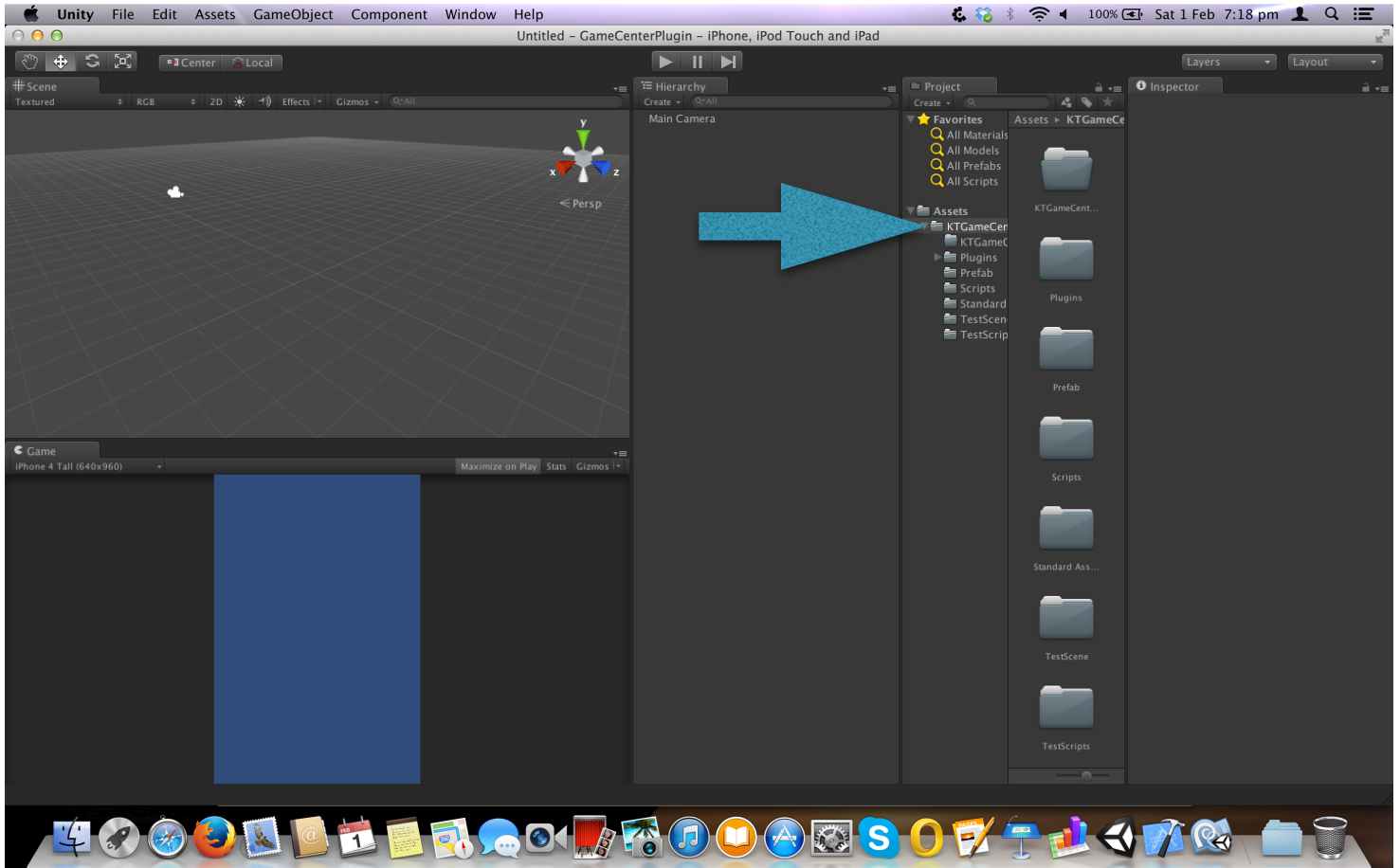


iOS Game Center Plugin

1. Uncompress the Unity Package and you will get a folder named “KTGameCenter” like in the screenshot below :

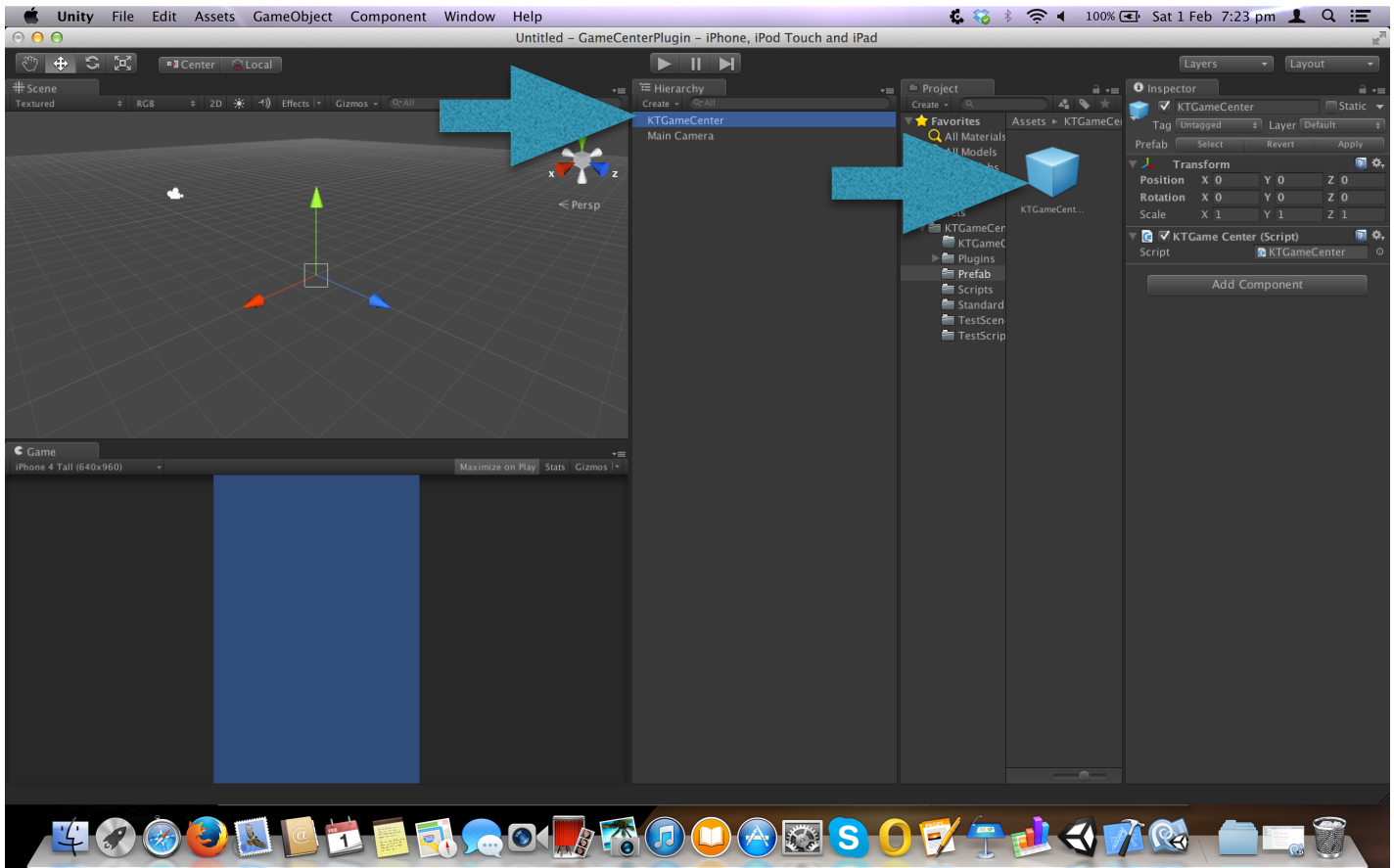


2. It will have multiple folders in it. Drag the **Plugins Folder** from **KTGameCenter/Plugins** to root Assets folder at **Assets/Plugins**. If root Assets folder already contains a Plugins Folder or Plugins/iOS folder, move all the files from **KTGameCenter/Plugins/iOS** to **Assets/Plugins/iOS**.

3. Move **Standard Assets** folder from **KTGameCenter/Standard Assets** to **Assets/Standard Assets**. If root Assets folder already contains Standard Assets folder, move all the files from **KTGameCenter/Standard Assets** to **Assets/Standard Assets**.

4. Now Drag the prefab “KTGameCenter” from KTGameCenter/Prefab to the first scene of your unity game. This will remain active in your entire game so it will be dragged only once in your scene (You can see which is the first scene by going to file->BuildSettings from top bar.)

5. Now the screen should like the shown below:



6. Now lets do some coding. First of all you need to “Authenticate local user” to prepare it for game center. You will need to call the function:

```
KTGameCenter.SharedCenter().Authenticate();
```

This should be called from any script you are using in your first scene. We recommend, create a new c# or javascript script and add this line to that script in **Start Function** and attach that script to your camera.

Now lets have a look at the functions available:

Show Leaderboards:

```
KTGameCenter.SharedCenter().ShowLeaderboard();
```

if you want to show specific leaderboard, use the following function:

```
KTGameCenter.SharedCenter().ShowLeaderboard(“leaderboardId”);
```

Show Achievements:

```
KTGameCenter.SharedCenter().ShowAchievements();
```

Submit Score:

```
KTGameCenter.SharedCenter().SubmitScore(110,"leaderboardIds");
```

First is the score parameter, second is the leaderboardId.

If you want to submit float or double score or time elapsed you would need to use the following function:

```
KTGameCenter.SharedCenter().SubmitFloatScore(2459.3f,2,"leaderboardId");
```

Here first parameter is the float value, second parameter is number of decimal points and third is the leaderboard Id.

Regarding time elapse you would need to pass decimal value according to the accuracy you desire.

Submit Achievement:

```
KTGameCenter.SharedCenter().SubmitAchievement(10,"achievementId",true);
```

First is the percentage of achievement completed(value from 0 to 100), second is the achievement id and third is a boolean value for showing built in banner notification when achievement is completed (its value can be either true or false).

Reset Achievements:

```
KTGameCenter.SharedCenter().ResetAchievements();
```

Delegate Methods:

Besides normal function, game center framework also exposes delegate methods which you may need.

Given below are the code examples how to use them:

C#:

```
void OnEnable () {  
    StartCoroutine(RegisterForGameCenter());  
}
```

```
void OnDisable () {  
    KTGameCenter.SharedCenter().GCUUserAuthenticated -= GCAuthentication;
```

```

        KTGameCenter.SharedCenter().GCScoreSubmitted -= ScoreSubmitted;
        KTGameCenter.SharedCenter().GCAchievementSubmitted -=
AchievementSubmitted;
        KTGameCenter.SharedCenter().GCAchievementsReset -= AchievementsReset;
    }

IEnumerator RegisterForGameCenter () {
    yield return new WaitForSeconds(0.5f);
    KTGameCenter.SharedCenter().GCUserAuthenticated += GCAuthentication;
    KTGameCenter.SharedCenter().GCScoreSubmitted += ScoreSubmitted;
    KTGameCenter.SharedCenter().GCAchievementSubmitted +=
AchievementSubmitted;
    KTGameCenter.SharedCenter().GCAchievementsReset += AchievementsReset;
}

void GCAuthentication (string status) {
    print ("delegate call back status= "+status);
}

void ScoreSubmitted (string leaderboardId,string error) {
    print ("score submitted with id "+leaderboardId +" and error= "+error);
}
void AchievementSubmitted (string achId,string error) {
    print ("achievement submitted with id "+achId +" and error= "+error);
}
void AchievementsReset (string error) {
    print ("Achievment reset with error= "+error);
}
}

```

Javascript:

```

function OnEnable () {
    StartCoroutine(RegisterForGameCenter());
}
function OnDisable () {
    KTGameCenter.SharedCenter().GCUserAuthenticated -= GCAuthentication;
    KTGameCenter.SharedCenter().GCScoreSubmitted -= ScoreSubmitted;
    KTGameCenter.SharedCenter().GCAchievementSubmitted -=
AchievementSubmitted;
    KTGameCenter.SharedCenter().GCAchievementsReset -= AchievementsReset;
}

function RegisterForGameCenter () {
    yield WaitForSeconds(0.5f);
    KTGameCenter.SharedCenter().GCUserAuthenticated += GCAuthentication;
    KTGameCenter.SharedCenter().GCScoreSubmitted += ScoreSubmitted;
    KTGameCenter.SharedCenter().GCAchievementSubmitted +=
AchievementSubmitted;
    KTGameCenter.SharedCenter().GCAchievementsReset += AchievementsReset;
}

function GCAuthentication (status : String) {
    print ("delegate call back status= "+status);
}
function ScoreSubmitted (leaderboardId : String, error : String) {
    print ("score submitted with id "+leaderboardId +" and error= "+error);
}
function AchievementSubmitted (achId : String,error : String) {
    print ("achievement submitted with id "+achId +" and error= "+error);
}
function AchievementsReset (error : String) {
    print ("Achievment reset with error= "+error);
}
}

```

Getting Player Attributes:

You can get user alias, name and id from the following calls.

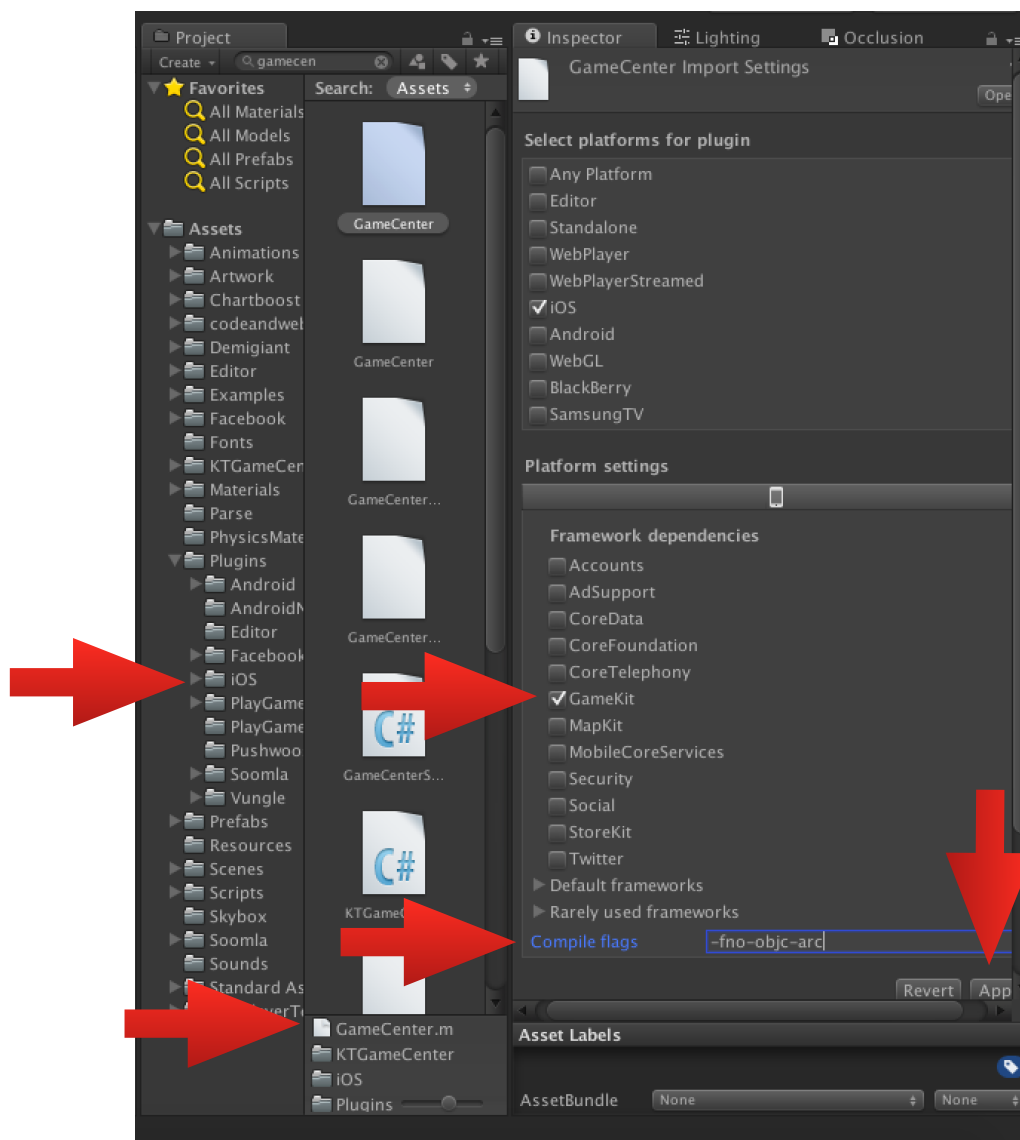
```
Player Alias: KTGameCenter.SharedCenter().PlayerAlias;  
Player Name: KTGameCenter.SharedCenter().PlayerName;  
Player Id: KTGameCenter.SharedCenter().PlayerId;
```

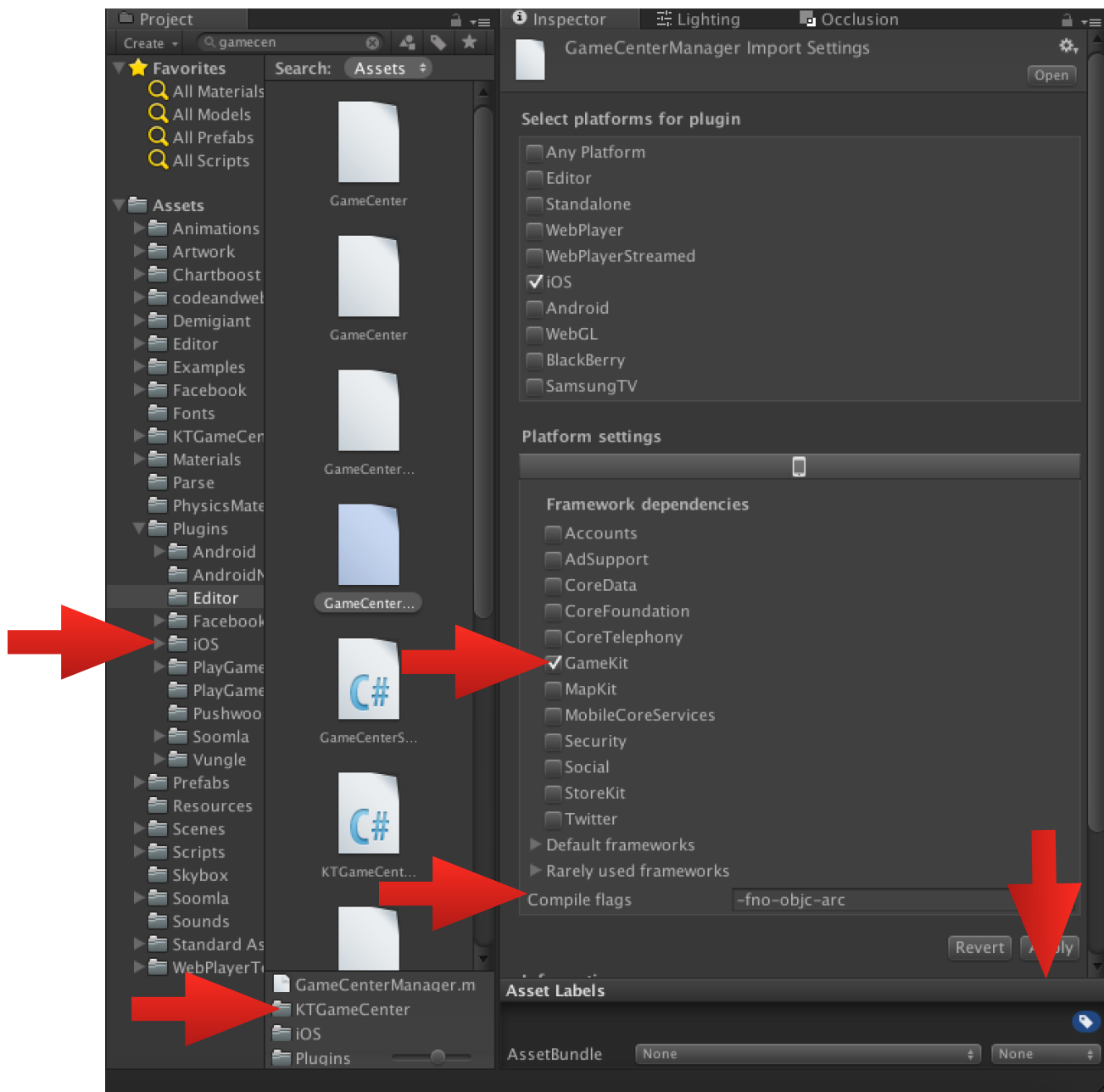
Example scenes and example code scripts are given in the Game Center Plugin in TestScene and TestScripts folders respectively.

Javascript sample script: <https://www.dropbox.com/s/6kb4b2x5yxsaai/TestScriptJSGC.js?dl=0>

If you are using Unity 5 or higher project and you do not have compiler flags added to below mentioned files, you would need to do the following things:

1. Go to Plugins/iOS/KTGameCenter.
2. Find files GameCenter.m and GameCenterManager.m
3. In platform settings, framework dependencies select GameKit for both of these files.
4. In compile flags, add -fno-objc-arc for both of these files and click Apply.





Upgrade Instructions for Unity 5:

Unity 5 does not overwrite older times rather it places duplicates. So, if you are upgrading on Unity 5 and above, you must delete all previous files before importing new ones.

Extras:

1. To test game centre on iOS 8 and above, you need to enable sandbox mode. To enable it go to settings->Game Center->Under developer, toggle sandbox. (To see this option you have to be signed into game center).

2. If you see the following errors:

Undefined symbols for architecture armv7:

"_OBJC_CLASS_\$_GKAchievement", referenced from:

objc-class-ref in GameCenterManager.o

"_OBJC_CLASS_\$_GKScore", referenced from:

objc-class-ref in GameCenterManager.o

"_OBJC_CLASS_\$_GKPlayer", referenced from:

objc-class-ref in GameCenterManager.o

"_OBJC_CLASS_\$_GKLeaderboard", referenced from:

objc-class-ref in GameCenterManager.o

"_GKPlayerAuthenticationDidChangeNotificationName", referenced from:

-[GameCenter init] in GameCenter.o

"_OBJC_CLASS_\$_GKAchievementViewController", referenced from:

objc-class-ref in GameCenter.o

"_OBJC_CLASS_\$_GKLeaderboardViewController", referenced from:

objc-class-ref in GameCenter.o

"_OBJC_CLASS_\$_GKLocalPlayer", referenced from:

objc-class-ref in GameCenter.o

objc-class-ref in GameCenterManager.o

ld: symbol(s) not found for architecture armv7

clang: error: linker command failed with exit code 1 (use -v to see invocation)

it means GameKit.framework is missing in your Xcode project, so add it.

I have tried my best to make it as simple as possible for you guys.

If you like this plugin, do give us a review, it will help make the product better.

If you are having some difficulties, you can contact me at kashif@kashiftasneem.com.

Have a wonderful Day! :)