



SDK Extension
for GameMaker Studio 1.4
and GameMaker Studio 2.1
(Android & iOS)

~ API Documentation v2.8.0 ~

by
Josep Gonzalez

INDEX

Introduction	3
GameMaker: Studio version tested	3
Current SDK version	3
Minimum OS version	3
OS version tested	3
Methods	4
admob_set_test_device_ids(testDeviceIds String)	4
admob_init_interstitial(adUnitID String)	4
admob_init_interstitial_for_designed_for_families_program(adUnitID String)	4
admob_init_interstitial_for_child_oriented(adUnitID String)	5
admob_show_interstitial()	5
admob_init_banner(adUnitID String, height GADAdSize)	5
admob_init_banner_for_designed_for_families_program(adUnitID String, height GADAdSize)	6
admob_init_banner_for_child_oriented(adUnitID String, height GADAdSize)	6
admob_show_banner_at_top()	6
admob_show_banner_at_top_under_status_bar()	7
admob_show_banner_at_bottom()	7
admob_remove_banner()	7
admob_init_rewarded_video(adUnitID String)	7
admob_init_rewarded_video_for_designed_for_families_program(adUnitID String)	8
admob_init_rewarded_video_for_child_oriented(adUnitID String)	8
admob_show_rewarded_video()	8
admob_set_application_muted(isMuted Integer)	9
admob_set_application_volume(volume Integer)	9
admob_get_version()	9
admob_has_internet_connection()	9
Delegates	10
GADDidDisplayInterstitial	10
GADDidCacheInterstitial	10
GADDidCloseInterstitial	10
GADDidFailToLoadInterstitial	10
GADDidFailToPresentInterstitial	11
GADDidClickInterstitial	11
GADDidDisplayBanner	11
GADDidCacheBanner	11
GADDidFailToLoadBanner	12
GADDidClickBanner	12

GADDidDisplayVideo	12
GADDidCacheVideo	12
GADDidFailToLoadVideo	13
GADDidClickVideo	13
GADDidEndVideo	13
GADDidRewardUserWithReward	13
GADDidOpenVideo	14
GADDidFailToConnect	14
 Ad Sizes	 15
GADAdSizeBanner	15
GADAdSizeLargeBanner	15
GADAdSizeMediumRectangle	15
GADAdSizeFullBanner	15
GADAdSizeLeaderboard	15
GADAdSizeSmartBannerPortrait	15
GADAdSizeSmartBannerLandscape	15
 Errors	 16
GADErrorNetworkError	16
GADErrorNoFill	16
GADErrorInvalidRequest	16
GADErrorServerError	16
GADErrorInternalError	17
 Usage	 17
 Extra Usage (Only Android)	 18
 IMPORTANT	 19
 Contact	 22
 Thank you for your purchase!	 22

Introduction

Firebase AdMob SDK Extension lets you display mobile ads from [Firebase AdMob](#) for Android and iOS devices. You can use just this extension to display ads, or you can even use it with other ad extensions all together.

GameMaker: Studio version tested

- v1.4.1772
- v2.1.3.273

Current SDK version

- **iOS:** 7.29.0 (*Feb. 16, 2018*)
- **Android:** 11.8.0 (*Dec. 18, 2017*)

Minimum OS version

- **iOS:** 7.0 or later
- **Android:** 4.0 (API level 14) or later

OS version tested

- **iOS:** 7.1.2, 8.4.1, 9.3.5, 10.3.3, 11.2.6
- **Android:** 4.1 (API 16), 4.4 (API 19), 5.1.1 (API 22), 6.0.1 (API 23), 7.0 (API 24), 7.1.1 (API 25), 8.0 (API 26)

(Is your game using the Firebase AdMob Extension? Do you want to place your game here? Contact me and I'll place it in the list above)

Methods

admob_set_test_device_ids(testDeviceIds String)

The alternative way of serving test ads is to keep your regular ad unit ID, but configure your device as a **test device**. When a device is configured as a test device, the Google Mobile Ads SDK automatically substitutes in the aforementioned sample ad unit ID, limiting that device to receiving test ads.

Argument	Description
testDeviceIds	A string composed by at least one AdMob test device ID string. The test device IDs are separated by <i>commas</i> (.). An example could be "3c6fc6858ea922392070c33aff4c34cb,dd32c0d8b93d6b5fff513e1c6a53d56b".

Returns: N/A

admob_init_interstitial(adUnitID String)

Initializes the *Interstitial Ad* using the specified **adUnitID String**.

Argument	Description
adUnitID	Use your own Ad Unit ID string. If you don't have a Ad Unit ID or don't know how to get one, refer to the Getting Started Guide .

Returns: N/A

admob_init_interstitial_for_designed_for_families_program(adUnitID String)

Initializes the *Interstitial Ad* using the specified **adUnitID String** for the **Designed for Families program**, which helps you make your apps and games more discoverable to families.

Argument	Description
adUnitID	Use your own Ad Unit ID string. If you don't have a Ad Unit ID or don't know how to get one, refer to the Getting Started Guide .

Returns: N/A

admob_init_interstitial_for_child_oriented(adUnitID String)

Initializes the *Interstitial Ad* using the specified **adUnitID String** to make your ads child-friendly for COPPA compliance.

Argument	Description
adUnitID	Use your own Ad Unit ID string. If you don't have a Ad Unit ID or don't know how to get one, refer to the Getting Started Guide .

Returns: N/A

admob_show_interstitial()

Shows an *Interstitial Ad* loaded with the **adUnitID String** that you indicated in the **admob_init_interstitial** method.

After the ad is shown, the method **GADDidCloseIntersitial** will be called when the ad placement is closed. This callback method can be used to reward players.

Arguments: N/A

Returns: N/A

admob_init_banner(adUnitID String, height GADAdSize)

Initializes the *Banner Ad* using the specified **adUnitID String**.

Argument	Description
adUnitID	Use your own Ad Unit ID string. If you don't have a Ad Unit ID or don't know how to get one, refer to the Getting Started Guide .
height	Set the height of the banner with the GADAdSize constant. There are three different sizes.

Returns: N/A

admob_init_banner_for_designed_for_families_program(adUnitID String, height GADAdSize)

Initializes the *Banner Ad* using the specified **adUnitID String** for the **Designed for Families program**, which helps you make your apps and games more discoverable to families.

Argument	Description
adUnitID	Use your own Ad Unit ID string. If you don't have a Ad Unit ID or don't know how to get one, refer to the Getting Started Guide .
height	Set the height of the banner with the GADAdSize constant. There are three different sizes.

Returns: N/A

admob_init_banner_for_child_oriented(adUnitID String, height GADAdSize)

Initializes the *Banner Ad* using the specified **adUnitID String** to make your ads child-friendly for COPPA compliance.

Argument	Description
adUnitID	Use your own Ad Unit ID string. If you don't have a Ad Unit ID or don't know how to get one, refer to the Getting Started Guide .
height	Set the height of the banner with the GADAdSize constant. There are three different sizes.

Returns: N/A

admob_show_banner_at_top()

Shows a *Banner Ad* loaded with the **adUnitID String** and the **height** that you indicated in the **admob_init_banner** method.

The banner will be displayed at the top of the screen.

Arguments: N/A

Returns: N/A

admob_show_banner_at_top_under_status_bar()

Shows a *Banner Ad* loaded with the **adUnitID String** and the **height** that you indicated in the **admob_init_banner** method.

The banner will be displayed at the top of the screen, under the status bar. This method is specially useful for **iOS** games when the status bar is visible.

Arguments: N/A

Returns: N/A

admob_show_banner_at_bottom()

Shows a *Banner Ad* loaded with the **adUnitID String** and the **height** that you indicated in the **admob_init_banner** method.

The banner will be displayed at the bottom of the screen.

Arguments: N/A

Returns: N/A

admob_remove_banner()

Removes the banner from the screen.

Arguments: N/A

Returns: N/A

admob_init_rewarded_video(adUnitID String)

Initializes the *Rewarded Video Ad* using the specified **adUnitID String**.

Argument	Description
adUnitID	Use your own Ad Unit ID string. If you don't have a Ad Unit ID or don't know how to get one, refer to the Getting Started Guide .

Returns: N/A

admob_init_rewarded_video_for_designed_for_families_program(adUnitID String)

Initializes the *Rewarded Video Ad* using the specified **adUnitID String** for the **Designed for Families program**, which helps you make your apps and games more discoverable to families.

Argument	Description
adUnitID	Use your own Ad Unit ID string. If you don't have a Ad Unit ID or don't know how to get one, refer to the Getting Started Guide .

Returns: N/A

admob_init_rewarded_video_for_child_oriented(adUnitID String)

Initializes the *Rewarded Video Ad* using the specified **adUnitID String** to make your ads child-friendly for COPPA compliance.

Argument	Description
adUnitID	Use your own Ad Unit ID string. If you don't have a Ad Unit ID or don't know how to get one, refer to the Getting Started Guide .

Returns: N/A

admob_show_rewarded_video()

Shows a *Rewarded Video Ad* loaded with the **adUnitID String** that you indicated in the **admob_init_rewarded_video** method.

After the ad is shown, the method **GADDidEndVideo** will be called when the ad placement is closed. This callback method can be used to reward players.

Arguments: N/A

Returns: N/A

admob_set_application_muted(isMuted Integer)

Set the current app mute state. Unmuting the app volume reverts it to the previously set level. By default, the app volume for the Google Mobile Ads SDK is set to **1** (the current device volume).

Argument	Description
isMuted	1 if the app is muted, 0 otherwise.

Returns: N/A

admob_set_application_volume(volume Integer)

Set the current app volume. If your app has its own volume controls (such as custom music or sound effect volumes), disclosing app volume to the Google Mobile Ads SDK allows video ads to respect app volume settings. This ensures users receive video ads with the expected audio volume.

The device volume, controlled through volume buttons or OS-level volume slider, determines the volume for device audio output. However, apps can independently adjust volume levels relative to the device volume to tailor the audio experience. You can report the relative app volume to the Mobile Ads SDK through the static **admob_set_application_volume()** method.

Argument	Description
volume	Valid ad volume values range from 0 (silent) to 100 (current device volume).

Returns: N/A

admob_get_version()

Arguments: N/A

Returns: String. Returns the *Firebase AdMob SDK* version as a string.

admob_has_internet_connection()

Arguments: N/A

Returns: Double. Returns **(1)** if the device has internet connection or **(0)** if not.

Delegates

GADDidDisplayInterstitial

Implement to be notified of when a *Interstitial Ad* did display on the screen. You can then resume things like play effects and sounds.

Argument	Description
type	The constant type of the Delegate method that the Social Asynchronous Event has received.

GADDidCacheInterstitial

Called after a *Interstitial Ad* has been loaded from the *Firebase AdMob API* servers and cached locally.

Argument	Description
type	The constant type of the Delegate method that the Social Asynchronous Event has received.

GADDidCloseInterstitial

Called after a *Interstitial Ad* has been closed.

Argument	Description
type	The constant type of the Delegate method that the Social Asynchronous Event has received.

GADDidFailToLoadInterstitial

In addition to error logs, this method is called when an error occurs with *Firebase AdMob*. This method can be used to assist in debugging efforts, as well as for collect statistics on various failure scenarios.

Argument	Description
type	The constant type of the Delegate method that the

	Social Asynchronous Event has received.
error	The Firebase AdMob error that occurred. See GADError constants.
description	A description of the error that occurred.

GADDidFailToPresentInterstitial

In addition to error logs, this method is called when an error occurs displaying an *Interstitial Ad*. This method can be used to assist in debugging efforts, as well as for collect statistics on various failure scenarios.

Argument	Description
type	The constant type of the Delegate method that the Social Asynchronous Event has received.
error	The Firebase AdMob error that occurred. See GADError constants.
description	A description of the error that occurred.

GADDidClickInterstitial

Called after a *Interstitial Ad* has been clicked.

Argument	Description
type	The constant type of the Delegate method that the Social Asynchronous Event has received.

GADDidDisplayBanner

Implement to be notified of when a *Banner Ad* did display on the screen. You can then resume things like play effects and sounds.

Argument	Description
type	The constant type of the Delegate method that the Social Asynchronous Event has received.

GADDidCacheBanner

Called after a *Banner Ad* has been loaded from the *Firebase AdMob API* servers and cached locally.

Argument	Description
type	The constant type of the Delegate method that the Social Asynchronous Event has received.

GADDidFailToLoadBanner

In addition to error logs, this method is called when an error occurs with *Firebase AdMob*. This method can be used to assist in debugging efforts, as well as for collect statistics on various failure scenarios.

Argument	Description
type	The constant type of the Delegate method that the Social Asynchronous Event has received.
error	The <i>Firebase AdMob</i> error that occurred. See GADError constants.
description	A description of the error that occurred.

GADDidClickBanner

Called after a *Banner Ad* has been clicked.

Argument	Description
type	The constant type of the Delegate method that the Social Asynchronous Event has received.

GADDidDisplayVideo

Implement to be notified of when a *Rewarded Video Ad* did display on the screen. You can then resume things like play effects and sounds.

Argument	Description
type	The constant type of the Delegate method that the Social Asynchronous Event has received.

GADDidCacheVideo

Called after a *Rewarded Video Ad* has been loaded from the *Firebase AdMob API* servers and cached locally.

Argument	Description
type	The constant type of the Delegate method that the Social Asynchronous Event has received.

GADDidFailToLoadVideo

In addition to error logs, this method is called when an error occurs with *Firebase AdMob*. This method can be used to assist in debugging efforts, as well as for collect statistics on various failure scenarios.

Argument	Description
type	The constant type of the Delegate method that the Social Asynchronous Event has received.
error	The <i>Firebase AdMob</i> error that occurred. See GADError constants.
description	A description of the error that occurred.

GADDidClickVideo

Called after a *Rewarded Video Ad* has been clicked.

Argument	Description
type	The constant type of the Delegate method that the Social Asynchronous Event has received.

GADDidEndVideo

Called after a *Rewarded Video Ad* has been ended.

Argument	Description
type	The constant type of the Delegate method that the Social Asynchronous Event has received.

GADDidRewardUserWithReward

Called after a rewarded video has been viewed completely and user is eligible for reward.

Argument	Description
type	The constant type of the Delegate method that the Social Asynchronous Event has received.
rewarded	The rewarded status after the user has watched a video. It returns (1) if the user has been rewarded or (0) if not.
reward	The reward amount (Int) that the user has to received as a result.
rewardCurrency	A string containing the title of the currency that you've set up in your Dashboard.

GADDidOpenVideo

Called after a *Rewarded Video Ad* has been opened.

Argument	Description
type	The constant type of the Delegate method that the Social Asynchronous Event has received.

GADDidFailToConnect

Called when you try to get some kind of resource, and the device doesn't have internet connection .

Argument	Description
type	The constant type of the Delegate method that the Social Asynchronous Event has received.
error	The Firebase AdMob error that occurred. See GADError constants.
message	A description of the error that occurred.

Ad Sizes

The **GADAdSize** constants support three ad sizes to be used in your `AdView`. The Banner unit's width is flexible with a minimum of 320px, and only the height is defined.

GADAdSizeBanner

Standard Banner (320x50): This banner is best suited to phones.

GADAdSizeLargeBanner

Large Banner (320x100): This banner is best suited to tablets and larger devices.

GADAdSizeMediumRectangle

Medium Rectangle (300x250): This format is best suited for scrollable feeds or end-of-level screens.

GADAdSizeFullBanner

Standard Banner (468x60): This banner is best suited to tablets, it's displayed at full size.

GADAdSizeLeaderboard

Large Banner (728x90): This banner is best suited to tablets.

GADAdSizeSmartBannerPortrait

Width screen (32 | 50 | 90): Smart banner that will be fit at the best size on phones and tablets. Recommended for Portrait orientations.

GADAdSizeSmartBannerLandscape

Width screen (32 | 50 | 90): Smart banner that will be fit at the best size on phones and tablets. Recommended for Landscape orientations.

Errors

The enumerator **GADError** is used to describe errors that may occur with *Firebase AdMob*. Errors are reported by implementations of the **Delegate methods** received in the **Asynchronous Social Events**.

GADErrorNetworkError

1000 - Network Error

- The Firebase AdMob SDK could not reach admob.com (<http://admob.com/>)
- Your application should attempt to make another request until the network can be reached. We recommend making incremental requests until a connection is reestablished or you declare a timeout.

GADErrorNoFill

1001 - No Fill

May be due to one or more of the following:

- Limit Ad Tracking turned on (iOS)
- Opt out of interest-based ads turned on (Android)
- No Ad Inventory for current user
- Your application should attempt to make another request after 30 seconds.

GADErrorInvalidRequest

1002 - Invalid Request

Possibly due to:

- Invalid Ad Unit ID - Each Ad and Type has an Unique ID
- Unsupported or Outdated version of the SDK
- Improper call/usage of the loadAd method. We suggest placing breakpoints on loadAd and any associated methods/callbacks
- Your application should attempt to make another request after 30 seconds.

GADErrorServerError

2000 - Server Error

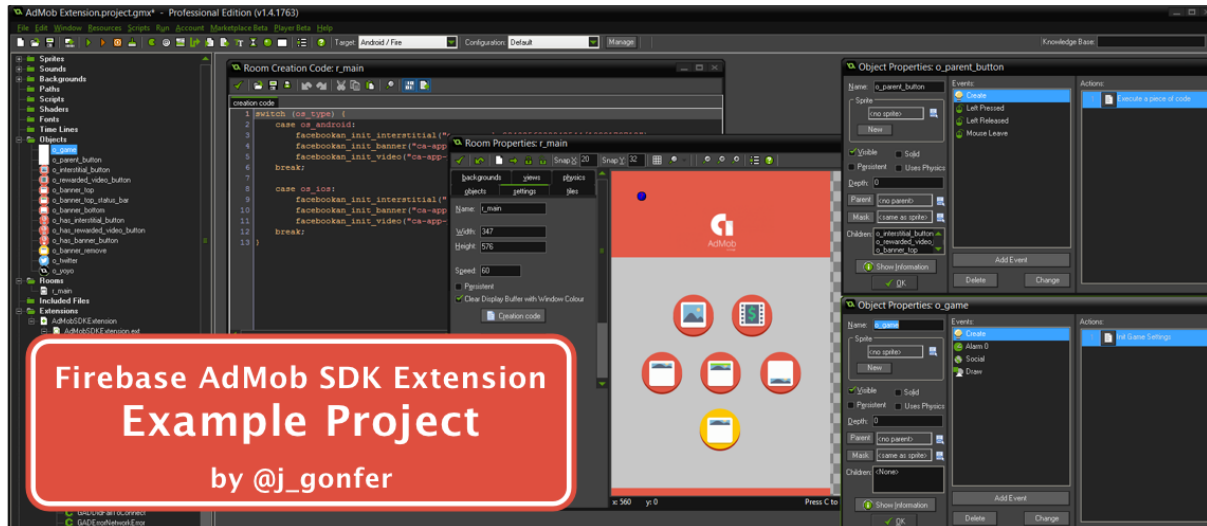
- The ad server experienced a failure processing the request.

GADErrorInternalError

2001 - Internal Error

- The Firebase AdMob SDK was unable to process a response from `admob.com`
- Your application should attempt to make another request after 30 seconds.
- If this happens consistently, please file a bug report with us.

Usage



Firebase AdMob SDK Extension comes with a great example project to show how you should use all the functions included in the extension.

- Use the function **`admob_init_interstitial`** to initialize the Interstitial Ads.
- Use the function **`admob_init_banner`** to initialize the Banner Ads.
- Use the function **`admob_init_rewarded_video`** to initialize the Rewarded Video Ads.
- Use the function **`admob_show_interstitial`** to display an Interstitial Ad.
- Use the functions **`admob_show_banner_top`**, **`admob_show_banner_top_status_bar`** or **`admob_show_banner_bottom`** to display a Banner Ad.
- Use the function **`admob_show_rewarded_video`** to display a Rewarded Video Ad.
- (Optional) Use the **`admob_has_internet_connection`** function to know if there is *Internet Connection* or not and the game will be able to get Ads or initialize the SDK.

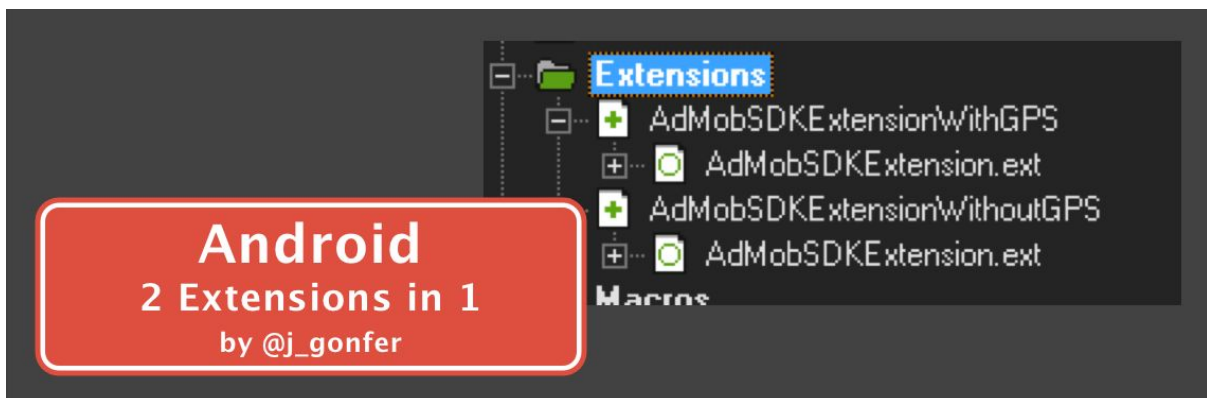
You'll find the code in the following objects:

- Rooms **`r_main`**: initialization code for all ads in both platforms (Android & iOS).
- Objects **`o_game`**: object core of the main room. The most important event is **`Social`**, where you'll find all the delegate events are handled.
- Objects **`o_button`**: almost every function is represented by a button to let you run the script inside the **`Left released`** event.




- The delegate methods will trigger a **Social asynchronous event**. Check the **Example Project** to know how you can handle the **Social asynchronous event** properly.

Extra Usage (Only Android)

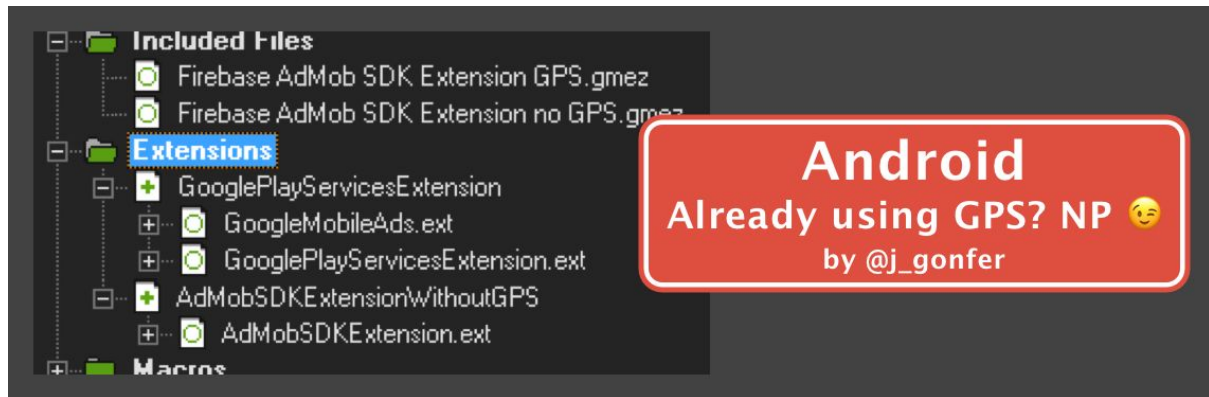


Firebase AdMob SDK Extension includes two extensions in the **Included Files folder**. Let's see which fits better your necessities:



- **Firebase AdMob SDK Extension GPS.gmez:** This file extension uses Gradle injection to import *Google Play Services* library. When you tap the  **Create Executable for Target** button, an alert box will be displayed for download and install the **GooglePlayServices Extension**. This step isn't necessary because the extension has already imported the library via Gradle injection. You need to the

the **No** button and save the APK file wherever you want. Choose this extension if you are using just this extension in your project or the other extensions you have don't use *Google Play Services*.



- **Firebase AdMob SDK Extension no GPS.gmez:** When you are already using an extension like the *Google Play Services* from *YoYo Games* or another one that includes the *Google Play Services* library from *Google*, you have to choose this extension in order to avoid conflicts when you run your project.

IMPORTANT

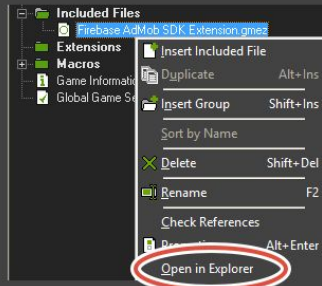
- The **Example Project** uses example Ad Unit IDs. Please, replace them by your own Ad Unit ID Strings. Create an account if you don't have it: [AdMob Homepage](#).
- Setup a **New App** to display ads.
- If you've never used before **Firebase AdMob**, check the official **Getting Started** guide: [Firebase AdMob Getting Started](#).
- **Extension file** is in the **Included Files** folder, IMPORT it to the extensions first:

Import Extension

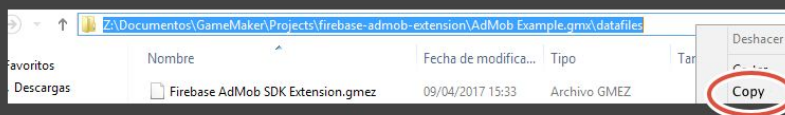
Firestore AdMob SDK Extension.gmez

by @j_gonfer

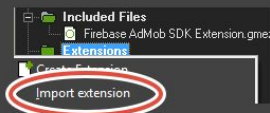
1 Right click, select "Open in Explorer"



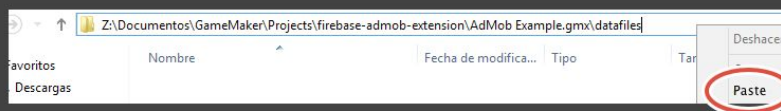
2 Copy the directory path



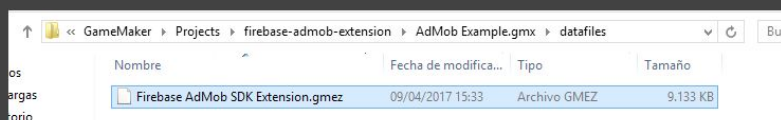
3 Right click, select "Import extension"



4 Paste the directory path into the path field



5 Select the "Firestore AdMob SDK Extension.gmez"



1. Right click on **Firestore AdMob SDK Extension.gmez** in **Included files** and select **Open in Explorer** option.
2. Copy the directory path from the Path field in the Explorer.

3. Right click on **Extensions** and select **Import extension** option.
4. Paste the directory path that you have in the Clipboard into the Path field in the Explorer.
5. Select the **Firebase AdMob SDK Extension.gmez** file.

Contact

Feel free to write me if you have any question or problem, or just to say 'hello!'.

- **Trello:** Check the current state of this project in the public [Trello board](#). I'm using this great tool to manage new tasks, versions and changelogs in real time.
- **Twitter:** Follow me on Twitter ([@j_gonfer](#)) to get the latest updates of the *Firebase AdMob SDK Extension* or even to know things related to GameMaker: Studio and other stuff.



Thank you for your purchase!

Last but not least, if you enjoy this extension it'd be great getting a comment from you in the YoYo Marketplace and help other users like you to find this Extension.