

Optical Character Recognition for iOS

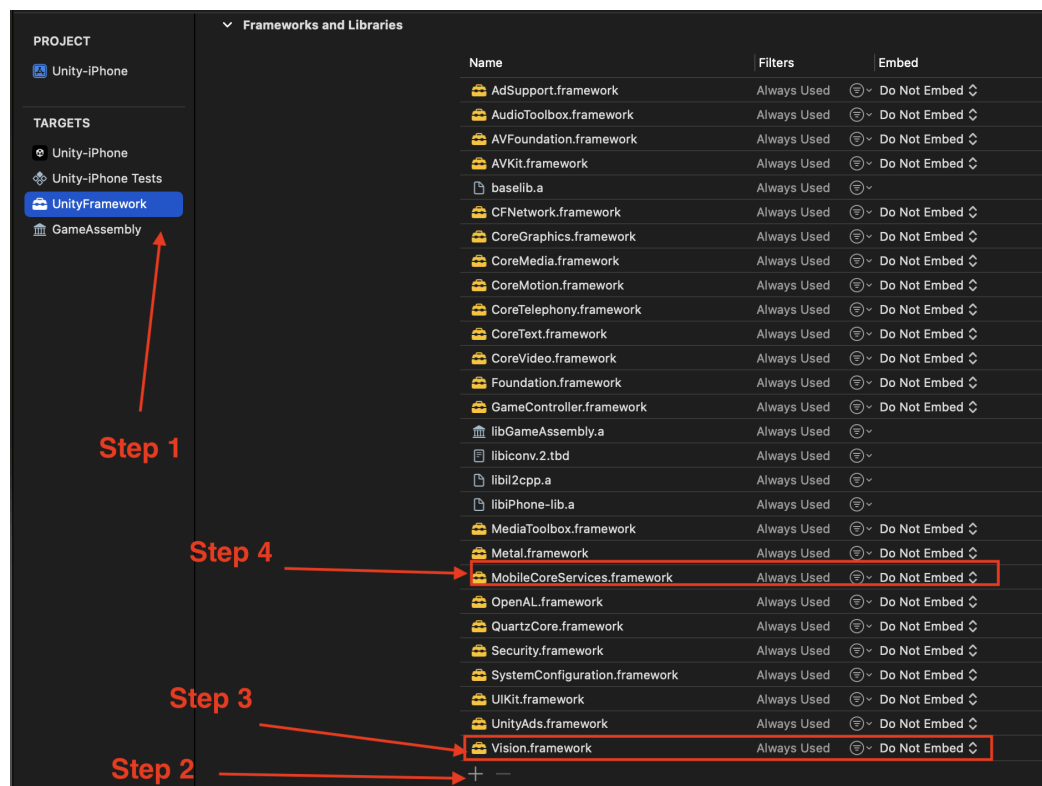
Plugin will allow developers to add OCR capability for their Unity iOS applications. Plugin provides a simple C# interface for the Optical Character Recognition. Please read the document carefully.

SetUp

Import the asset package in the assets folder. Ensure that following files exists in OCR_IOS/Plugins/iOS/ folder :

1. OcrManager.h
2. OcrManager.mm

Open the project in Xcode. Add **Vision.framework**, **MobileCoreServices.framework** in the project. To add the same click on '+' button at bottom under the **Linked Frameworks and Libraries** section in the **General** tab of the **Unity-Framework** Target. Please see screenshot below:



Then open the “.plist” file and add **“Privacy - Camera Usage Description”** key in it along with its value. These values will be used by iOS in the alert box when it asks user permission for the device camera. Please find image below for same :

Information Property List	+	Dictionary	(29 items)
CADisableMinimumFrameDuration	◇	Boolean	0
Localized resources can be mixed	◇	Boolean	YES
Localization native development region	◇	String	en
Bundle display name	◇	String	PdfConverterios
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	APPL
Bundle version string (short)	◇	String	1.0
Bundle version	◇	String	0
Application requires iPhone environment	◇	Boolean	YES
Privacy - Media Library Usage Description	◇	String	NSAppleMusicUsageDescription
> App Transport Security Settings	◇	Dictionary	(1 item)
> SKAdNetworkItems	◇	Array	(55 items)
Launch screen interface file base name	◇	String	LaunchScreen-iPhone
UILaunchStoryboardName~iphone	◇	String	LaunchScreen-iPhone
UILaunchStoryboardName~ipod	◇	String	LaunchScreen-iPhone
Icon already includes gloss effects	◇	Boolean	NO
> Required device capabilities	◇	Array	(2 items)
Requires Full Screen	◇	Boolean	YES
Application uses Wi-Fi	◇	Boolean	NO
Status bar is initially hidden	◇	Boolean	YES
Status bar style	◇	String	Default
> Supported interface orientations	◇	Array	(4 items)
Unity_LoadingActivityIndicatorStyle	◇	Number	-1
UnityCloudProjectID	◇	String	
UnityCrashSubmissionURL	◇	String	
Privacy - Camera Usage Description	◇	String	NSCameraUsageDescription

API

To set callback method :

```
OcrBridge.setCallBackMethod(string  
msgReceivingGameObjectName,string  
msgReceivingMethodName);
```

In above code **msgReceivingGameObjectName** represents the name of gameObject which will receive the message from native and **msgReceivingMethodName** represents the name of the method present in the script attached to above gameObject which will receive message from native.

//=====

To take screenshot and read characters from the it use below api:

```
StartCoroutine(OcrBridge.takeScreenshotAndReadCharaters())
```

Use this api to take a screenshot of the current scene and read characters from it. Before invoking this api developers first need to use

OcrBridge.setCallBackMethod() api described above to set the callback channel. This callback method will receive all the characters which are present in the scene one by one.

//=====

To take image from camera and read characters from the it use below api:

```
OcrBridge.takeImageFromCameraAndReadCharaters();
```

Through this api developers can add functionality to read characters from the real world. Users need to take a picture of anything from the real world and then the plugin will read characters from it and send it back to unity via a callback channel.

```
//=====
```

To take image from device library and read characters from the it use below api:

OcrBridge.takeImageFromLibraryAndReadCharaters();

Through this api developers can add functionality to read characters from an image of the library. Users need to select the picture from the library and then the plugin will read characters from it and send it back to unity via callback channel.

```
//=====
```

To set the language of OCR use following code:

OcrBridge.setLanguage(string language)

Through this api developers can add the language for OCR. Developers need to pass the language code in this api. List of possible codes are given below. Please remember plugin works best when used for a single language at a time.

Language	Code
English	en-US
French	fr-FR
Italian	it-IT
German	de-DE
Spanish	es-ES
Portuguese	pt-BR
Chinese (Simplified)	zh-Hans
Chinese (Traditional)	zh-Hant
Cantonese	yue-Hans

Korean	ko-KR
Japanese	ja-JP
Russian	ru-RU
Ukrainian	uk-UA
Thai	th-TH
Vietnamese	vi-VT

FAQ:

Q1 : Does it work on Unity Editor or only on Physical devices?

A1 : Since the plugin uses native APIs it will work only on physical devices or iOS Simulators but not on Unity Editor.

Q2 : Does it support different languages ?

A2: We have added support for multiple languages. Please refer to the table above.

Q3 : Does it use Tesseract API ?

A3: No, it uses the iOS native Vision framework.

Q4 : Does it work offline or do we need to purchase any subscription ?

A4: It works offline without any API call and you need not to purchase any subscription for it.

Please share your valuable feedback on asset store and in case of any query or clarifications contact us at **guptamayank516@gmail.com**