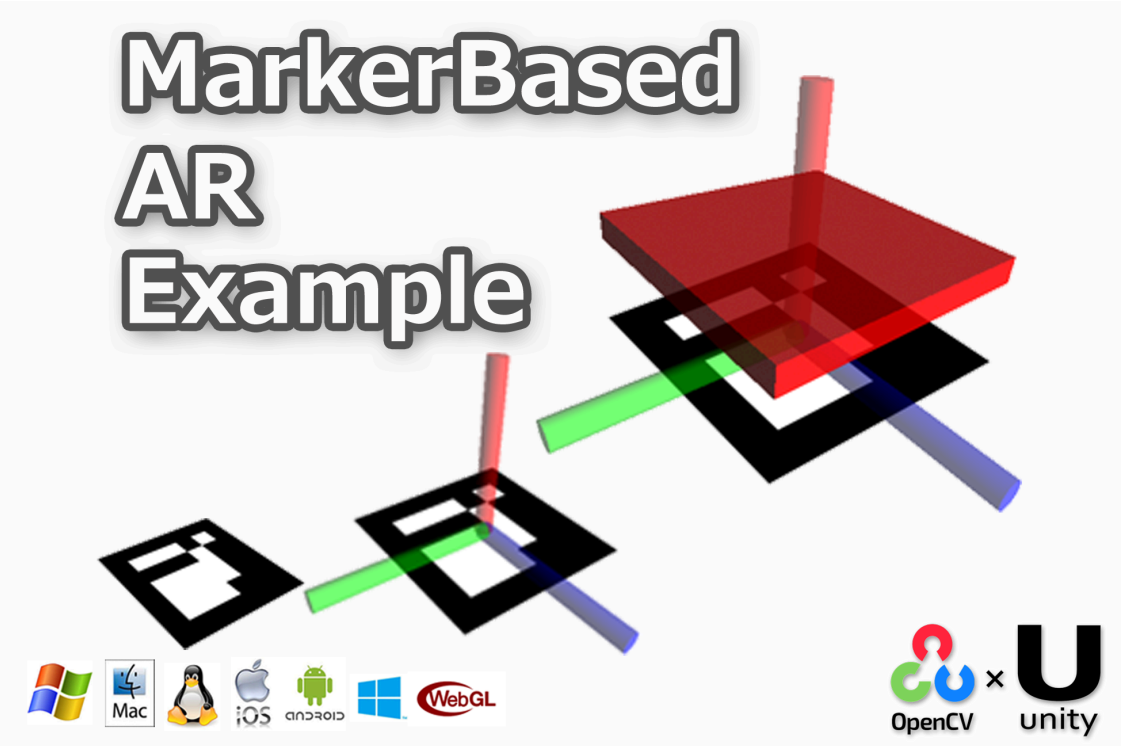
MarkerBased AR Example 1.2.8



WebGL support
iOS & **Android** support
Windows10 UWP support
Win & **Mac** & **Linux** Standalone support
Support for preview in the **Editor**
Work with Unity Free & Pro

System Requirements
Build Win Standalone & Preview Editor : Windows8 or later
Build Mac Standalone & Preview Editor : OSX 10.13 or later
Build Linux Standalone & Preview Editor : Ubuntu 18.04 or later
Build Android : API level 24 or later
Build iOS : iOS Version 9.0 or later

The execution of this asset is required "OpenCV for Unity".

This asset is an Augmented Reality Example that detect and recognize NxN block markers and display 3d model in WebCamTexture in real-time.
Code is a rewrite of https://github.com/MasteringOpenCV/code/tree/master/Chapter2_iPhoneAR using the "OpenCV for Unity".

- Texture2DMakerBasedARExample - By detecting the marker from Texture2D, display AR model.
- MultiSourceMakerBasedARExample - By detecting a marker from WebCamTexture or video file, display AR model in real-time.
- GyroSensorMakerBasedARExample - By detecting a marker from WebCamTexture or video file, display AR model in real-time with gyro sensor.

Official Site | ExampleCode | Android Demo | WebGL Demo | Demo Video

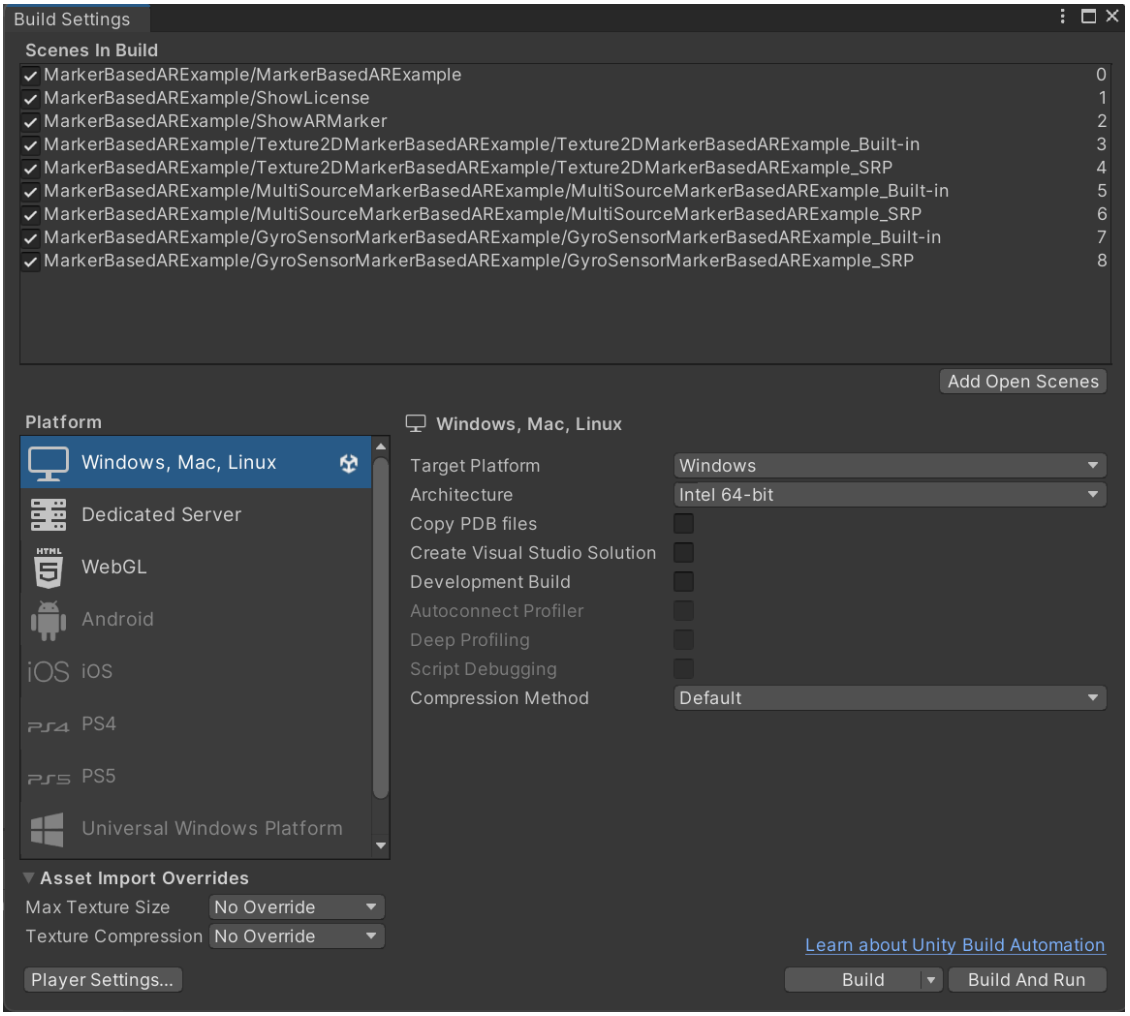
GoogleVR With OpenCV for Unity Example is available.

Version changes:
1.2.8 [Common]Updated for OpenCV for Unity v2.6.4.(This asset requires OpenCVforUnity 2.6.4 or later.)
1.2.7 [Common]Changed the minimum supported version to Unity2021.3.35f1. [Common]Separated the examples using the Built-in Render Pipeline and Scriptable Render Pipeline.
1.2.6 [Common]Updated for OpenCV for Unity v2.5.9.(This asset requires OpenCVforUnity 2.5.9 or later.)
1.2.5 [Common]Updated for OpenCV for Unity v2.5.0.(This asset requires OpenCVforUnity 2.5.0 or later.)
1.2.4 [Common]Updated for OpenCV for Unity v2.4.2.(This asset requires OpenCVforUnity 2.4.2 or later.) [Common]Refactored the script.
1.2.3 [Common]Updated for OpenCV for Unity v2.3.8.(This asset requires OpenCVforUnity 2.3.8 or later.)
1.2.2 [Common]Updated for OpenCV for Unity v2.3.3.(This asset requires OpenCVforUnity 2.3.3 or later.)
1.2.1 [Common]Fixed getMarkerId() method. [Common]Updated WebCamTextureToMatHelper.cs v1.0.1.
1.2.0 [Common]Changed the name of asset project.("Sample" to "Example")
1.1.9 [Common]Fixed WebCamTextureToMatHelper.cs.(flipVertical and flipHorizontal flag)
1.1.8 [WebGL]Added WebGL(beta) support.(Unity5.3 or later)
1.1.7 [Common]Changed namespace to OpenCVMarkerBasedAR.(To avoid namespace and classname conflict.) [Common]Fixed CS0618 warnings: `UnityEngine.Application.LoadLevel(string)' is obsolete: `Use SceneManager.LoadScene'.
1.1.6 [Common]Added namespace. [Common]Added flipVertical flag, flapHorizontal flag and GetWebCamDevice() method to WebCamTextureToMatHelper.cs.
1.1.5 [Common]Changed to methods of moving the AR object.
1.1.4 [Common]Support for “OpenCV for Unity 2.0.0”.
1.1.3 [Common]Fixed WebCamTextureToMatHelper.cs.(Add didUpdateThisFrame () method)

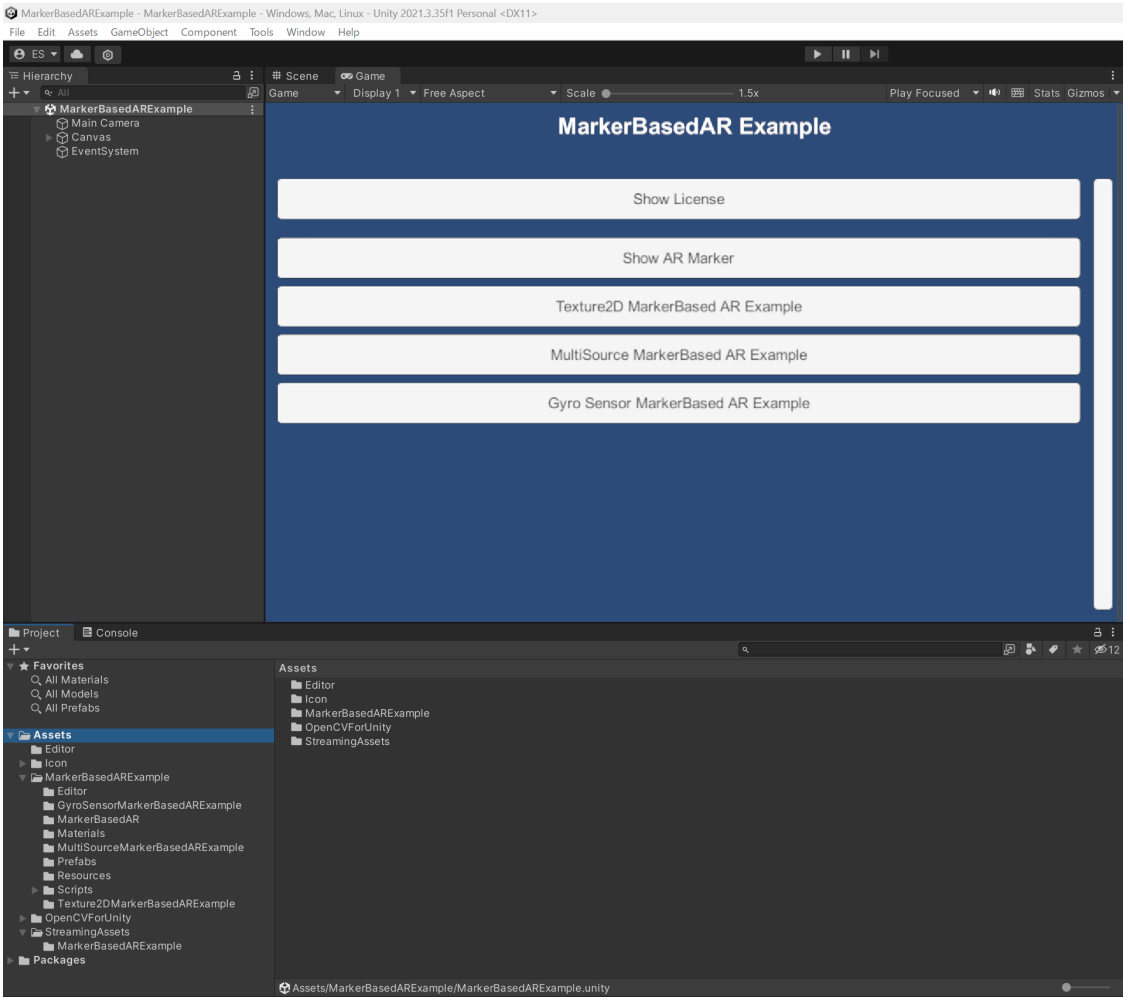
1.1.2 [Common] Renewed the samples using WebCamTextureToMatHelper.(Supports all screen orientation.)
1.1.1 [Common]Added Marker Design Inspector.(Improved procedures to change the marker image)
1.1.0 [Common]Change to use uGUI in SampleScene.
1.0.9 [iOS]Fix WebCamTexture bug of SampleScene in Unity5.2.
1.0.8 [Common]Rewrite SampleScene.
1.0.7 [Common]Add the code to support Beta Version of “OpenCV for Untiy” based on “OpenCV3.0.0”.
1.0.6 [Common]Fix SampleScene.
1.0.5 [Common]Fix SampleScene. [Common] Change Property of Platform Dependent Compilation from UNITY_IPHONE to UNITY_IOS.
1.0.4 [Common]Fix the direction of rotation of the mat that is converted from WebCamTexture.
1.0.3 [Common]Fix direction of WebCamTexture.
1.0.2 [Common]Divide asset for Unity4 and Unity5.
1.0.1 [Common]Support for “OpenCV for Unity 1.0.9”
1.0.0 Initial version

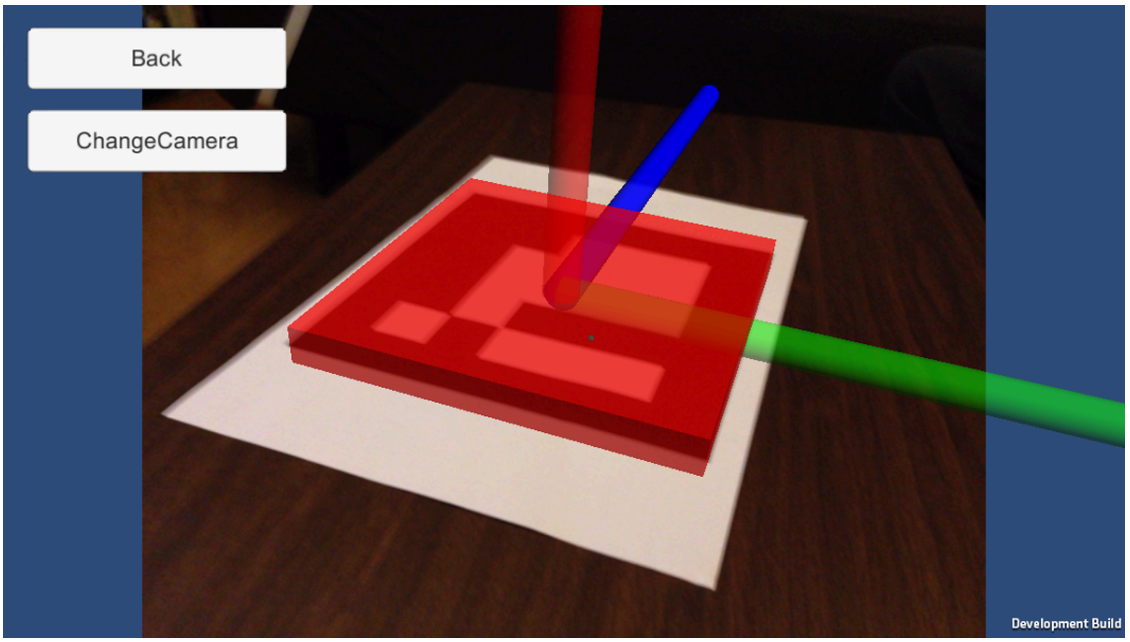
Quick setup procedure to run the example scenes:

1. Import "OpenCVForUnity".
2. Add all of the "***.unity" in the "MarkerBasedARExample" folder to [Build Settings] –[Scene In Build].



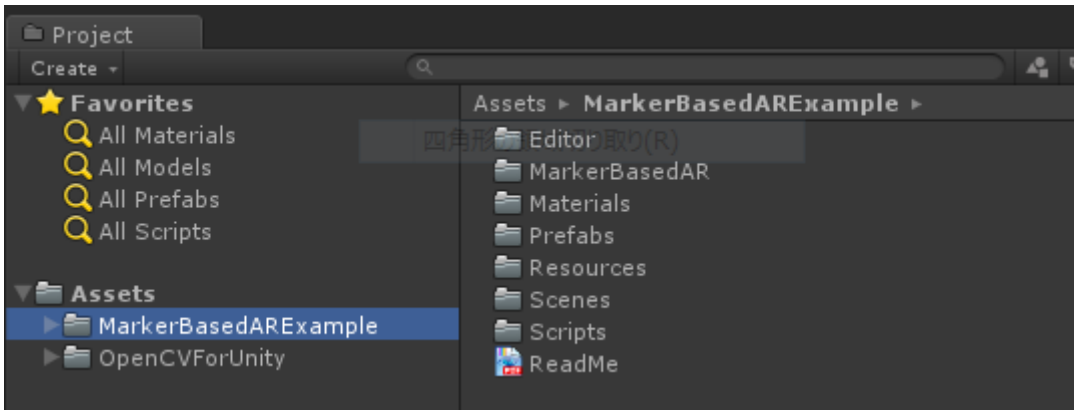
3. Run the MarkerBasedARExample scene.





4. Print the marker image (MarkerBasedARExample/Resources/maker.png).

Screenshot after the setup



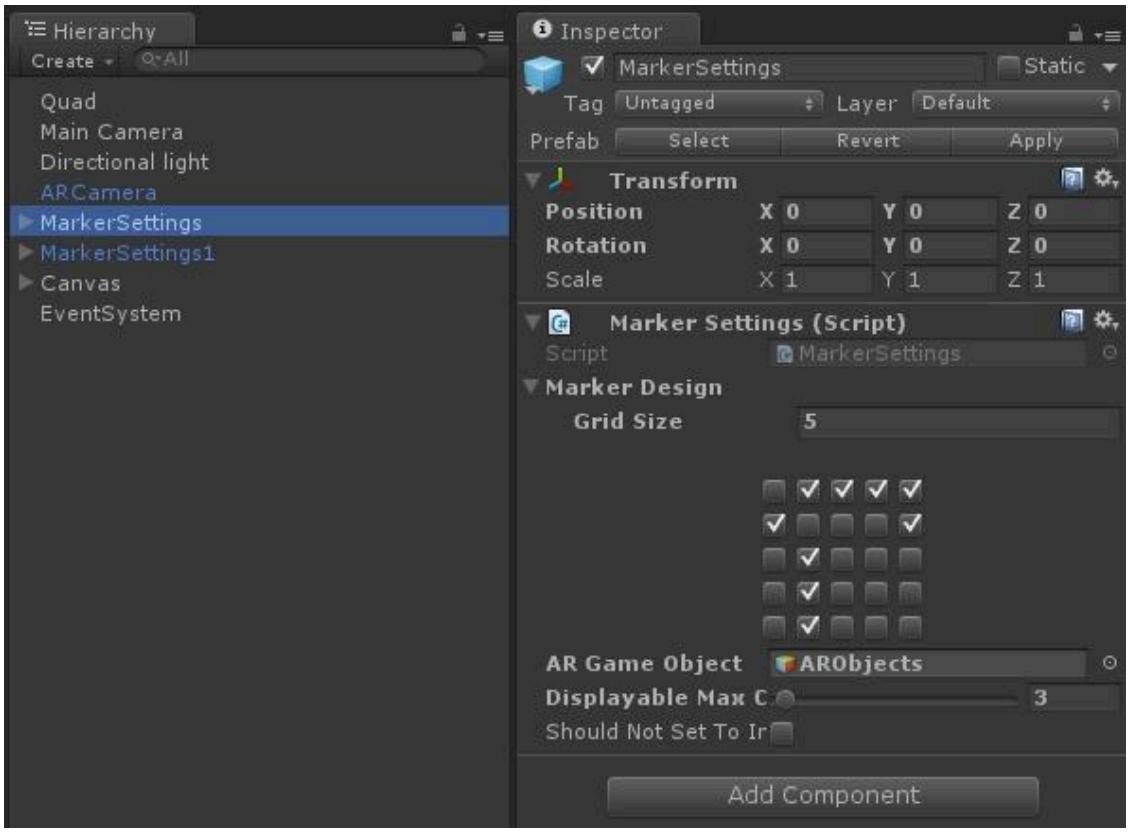
Q&A

Q.

I want to change the Marker Image.

A.

Marker design is changeable from the Inspector.


Hierarchy
Create
All
Quad
Main Camera
Directional light
ARCamera
MarkerSettings
MarkerSettings1
Canvas
EventSystem
Inspector
MarkerSettings
Static
Tag
Untagged
Layer
Default
Prefab
Select
Revert
Apply
Transform
Position
Rotation
Scale
Marker Settings (Script)
Script
MarkerSettings
Marker Design
Grid Size
5
AR Game Object
ARObjects
Displayable Max C
3
Should Not Set To Ir
Add Component