FaceTracker Example 1.1.6

iOS & **Android** support
WindowsStoreApps8.1 & **WindowsPhone8.1** & **Windows10 UWP(beta)** support
Win & **Mac** & **Linux** Standalone support
Support for preview in the **Editor**
Work with Unity Free & Pro

System Requirements
Build Win Standalone & Preview Editor : Windows7 or later
Build Mac Standalone & Preview Editor : OSX 10.8 or later

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

This asset is the Non-rigid Face Tracking Example that can model and track the many complex parts of a person's face in WebCamTexture in real-time.
Code is the rewrite of https://github.com/MasteringOpenCV/code/tree/master/Chapter6_NonRigidFaceTracking using the "OpenCV for Unity".

- Texture2DFaceTrackerExample - By detecting and tracking face from Texture2D, draw face's points and connections.
- WebCamTextureFaceTrackerExample - By detecting and tracking face from WebCamTexture, draw face's points and connections.
- FaceTrackerARExample - By using the tracking points of the face, display AR Object.

Official Site | ExampleCode | Android Demo | Demo Video

Version changes

1.1.6 [Common]Changed the name of asset project.("Sample" to "Example") [Common]Fixed WebCamTextureHelper.cs.

1.1.5 [Common]Updated WebCamTextureToMatHelper.cs.

1.1.4 [Common]Added AutoResetMode.

1.1.3 [Common]Improved the processing speed slightly.

1.1.2 [Common]Changed namespace to OpenCVFaceTracker.(To avoid namespace and classname conflict.) [Common]Fixed CS0618 warnings: `UnityEngine.Application.LoadLevel(string)' is obsolete: `Use SceneManager.LoadScene'.

1.1.1 [Common]Added namespace. [Common]Added flipVertical flag, flapHorizontal flag and GetWebCamDevice() method to WebCamTextureToMatHelper.cs.

1.1.0 [Common]Changed to methods of moving the AR object.

1.0.9 [Common]Support for “OpenCV for Unity 2.0.0”.

1.0.8 [Common]Fixed WebCamTextureToMatHelper.cs.(Add didUpdateThisFrame () method)

1.0.7 [Common] Renewed the samples using WebCamTextureToMatHelper.(Supports all screen orientation.)

1.0.6 [Common]Change to use uGUI in SampleScene.

1.0.5 [iOS]Fix WebCamTexture bug of SampleScene in Unity5.2.

1.0.4 [Common]Rewrite SampleScene.

1.0.3 [Common]Add the code to support Beta Version of “OpenCV for Untiy” based on “OpenCV3.0.0”.

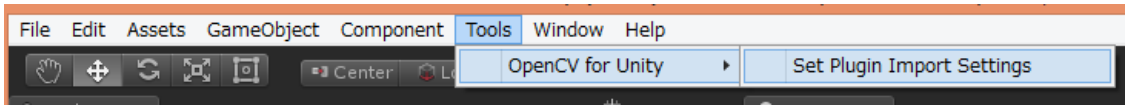
1.0.2 [Common]Fix SampleScene.

1.0.1 [Common]Fix SampleScene. [Common] Change Property of Platform Dependent Compilation from UNITY_IPHONE to UNITY_IOS.

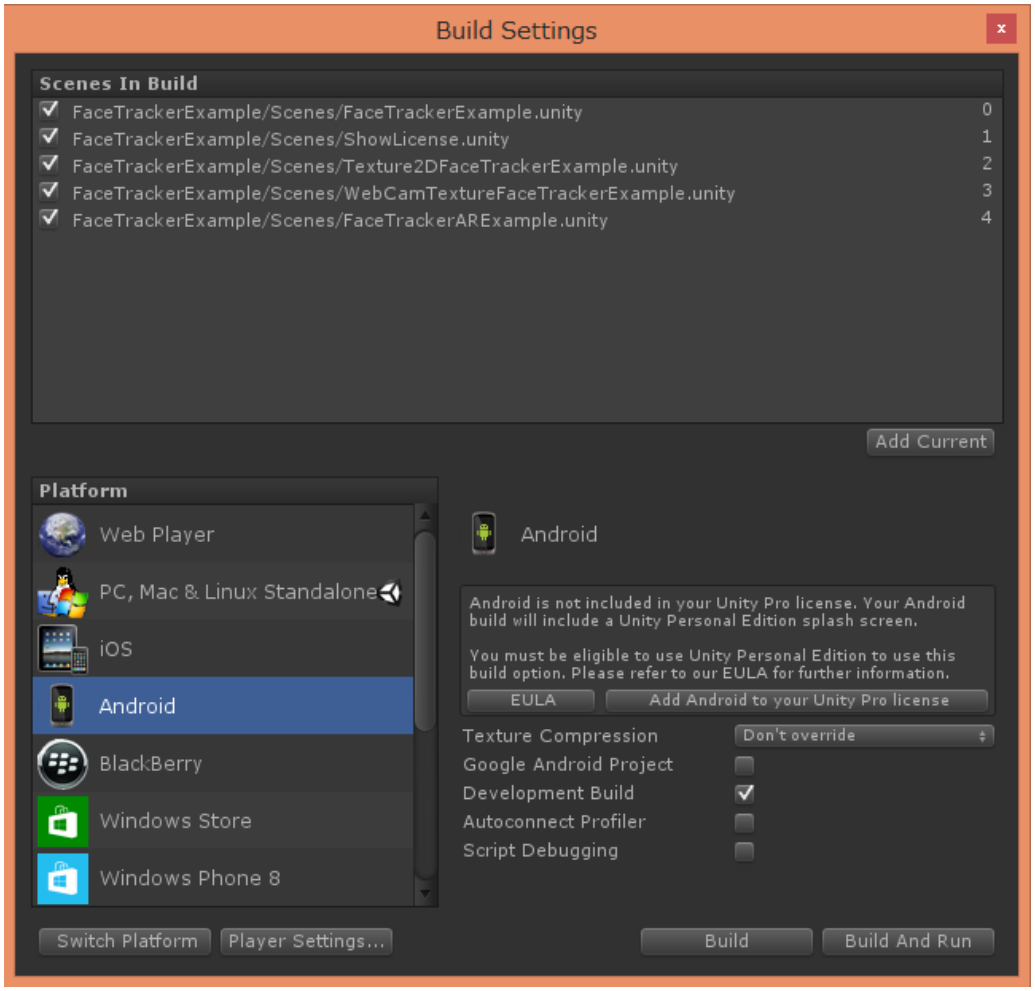
1.0.0 Initial version

Quick setup procedure to run the example scene:

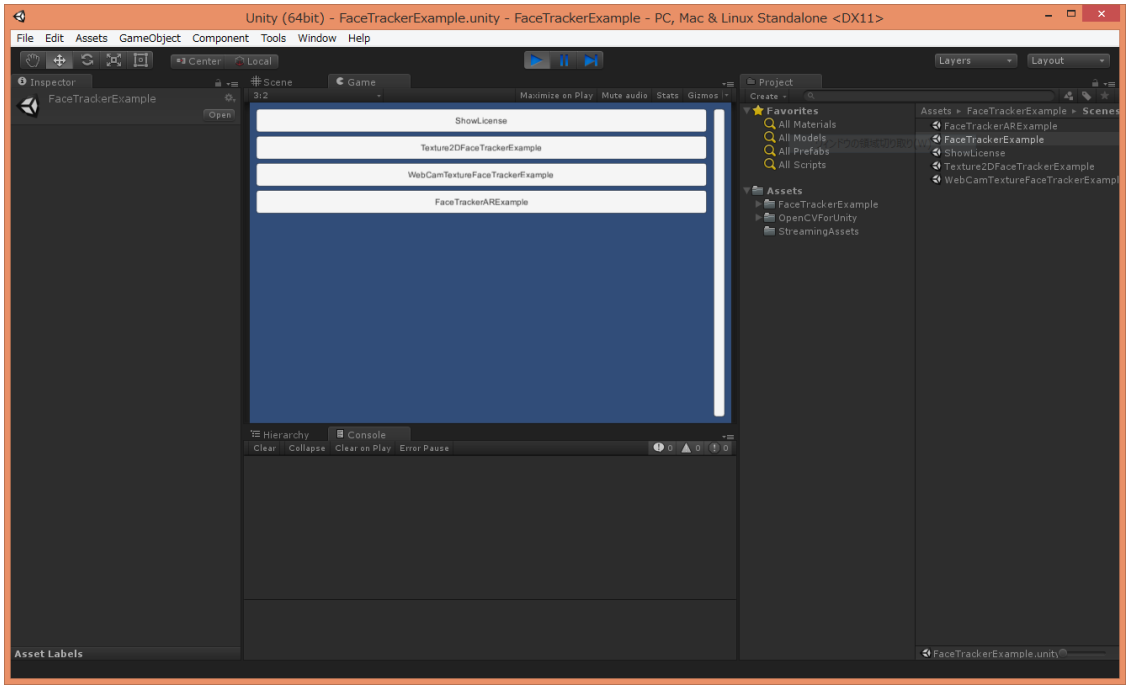
1. Import "OpenCVForUnity".
2. Select MenuItem[Tools/OpenCV for Unity/Set Plugin Import Settings].



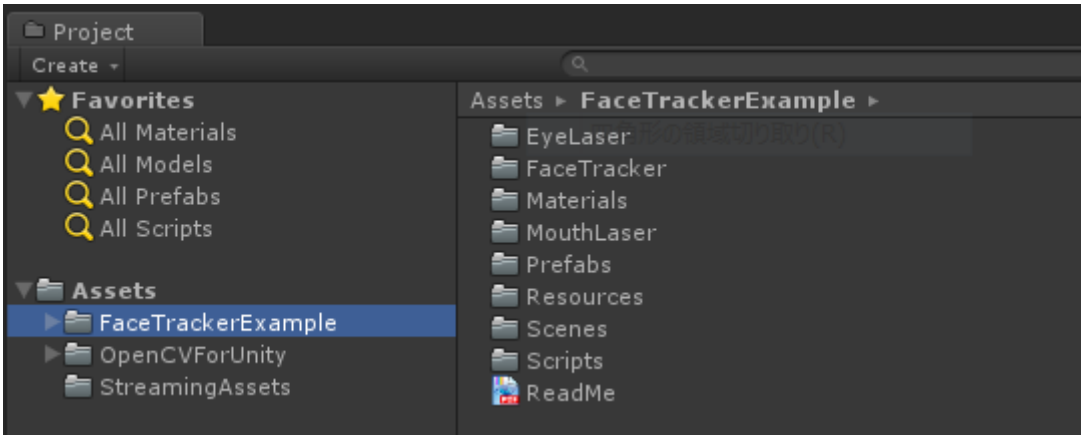
3. Add all of the "***.unity" in the "FaceTrackerExample/Scenes" folder to [Build Settings] –[Scene In Build].



4. Run FaceTrackerExample Scene.



Screenshot after the setup



Q&A

Q1.

How can I to create a “tracker_model” file?

A1.

Please refer to “Mastering OpenCV with Practical Computer Vision Projects Chapter6”(http://www.packtpub.com/cool-projects-with-opencv/book). I convert “tracker_model” file format into json from yaml and use it in “FaceTracker Sample”.

Q2.

Does this sample support WebGL platform?

A2.

Currently, this sample does not support the WebGL platform. It seems that the calculations in face tracking process(Imgproc.matchTemplate(I, P, res, Imgproc.TM_CCOEFF_NORMED) in PatchModel.cs) are not working well. It is probably caused by the following reasons.

In the WebGL platform, the calculation result of Float type may be significantly different from other platforms. When using the OpenCV's method that use the Mat class (CvType is CV_32F) as an argument, you need to pay attention to the calculation precision.