How to Run the 'Cloud Face Detection' Demos

Prerequisites

1. This package uses Microsoft Cognitive Services for face detection and analysis. These services are free of charge, if you don't exceed a certain limit (30000 requests per month, 20 per minute, as of now).
2. In order to use the Cognitive Services for face detection and analysis, you need to subscribe for Face API. To get a subscription key, go to this page: https://www.microsoft.com/cognitive-services/en-us/face-api and press the big orange 'Get started for free'-button.
3. You will be requested to sign-in with your Microsoft account. This is the moment to sign-up for Microsoft account, if you don't have one already.
4. Request subscription keys for Face Preview (and any other free previews that may interest you).
5. If you don't see the list of your current subscriptions yet, click 'My Account'-link, located in the top right corner of the browser window.
6. In the list of subscriptions, find 'Face Preview' and unhide one of its keys. It doesn't matter, if you use the primary or secondary one.
7. Create an empty Unity project and import this package into it.

Face Detection Demos

1. Open Assets/CloudFaceDetection/DemoScenes/FaceDetectionDemo-scene.
2. Select the CloudFaceController-game object in Hierarchy. Then paste the Face-Preview subscription key from Prerequisites-p.6 above to the 'Face Subscription Key'-setting of the CloudFaceManager-component.
3. You are all set. Now run the scene.
4. The upper left part of the screen shows the output of your machine's web-camera, if there is any. Click on the camera image, to make a photo for face detection and analysis.
5. Alternatively, you can click on the lower left window, to select a jpeg-image for face detection and analysis.
6. The selected picture or camera shot will be displayed on the lower left window, along with the detected faces on it. All detected faces will be surrounded by rectangles with different colors.
7. Further information about the detected faces will be displayed in the same color on the right part of the screen. The information includes gender, age and smile-status for each detected face.
8. Open Assets/CloudFaceDetection/DemoScenes/UIFaceDetectionDemo-scene. As you can see, it uses similar components as the FaceDetectionDemo-scene above.

How to Include Face & Emotion Detection in Your Own Unity Project

1. Copy the Assets/CloudFaceDetection/OxfordScripts-folder from this package to your project's Assets-folder.
2. Create an empty game object in your scene. Name it 'CloudFaceController'.
3. Add CloudFaceManager as component to the newly created CloudFaceController-object.
4. Copy & paste the Face-Preview subscription key from Prerequisites-p.6 above to the 'Face Subscription Key'-setting of the CloudFaceManager-component.
5. You can copy CloudFaceDetection.cs and related scripts from DemoScenes/Scripts-folder to a folder in your project and then use it as component in the scene. Don't forget to set its webcam source.
6. Alternatively, you can use the public API-functions of the CloudFaceManager-component in your scripts, just like the CloudFaceDetection.cs-script in the demo does. See its source, if you need an example.

More Information, Support and Feedback

Web: http://rfilkov.com/2016/01/25/cloud-face-detection/
E-mail: innovative.smart.systems@gmail.com
Facebook: https://www.facebook.com/issbgcom
Twitter: https://twitter.com/roumenf