Google Cloud Vision

- Intro:

  Google Cloud Vision enables developers to understand the content of an image. It quickly classifies images into thousands of categories (e.g., "sailboat", "lion", "Eiffel Tower"), detects individual objects and faces within images, and finds and reads printed words contained within images. You can build metadata on your image catalog, moderate offensive content, or enable new marketing scenarios through image sentiment analysis. Analyze images uploaded in the request or integrate with your image storage on Google Cloud Storage.

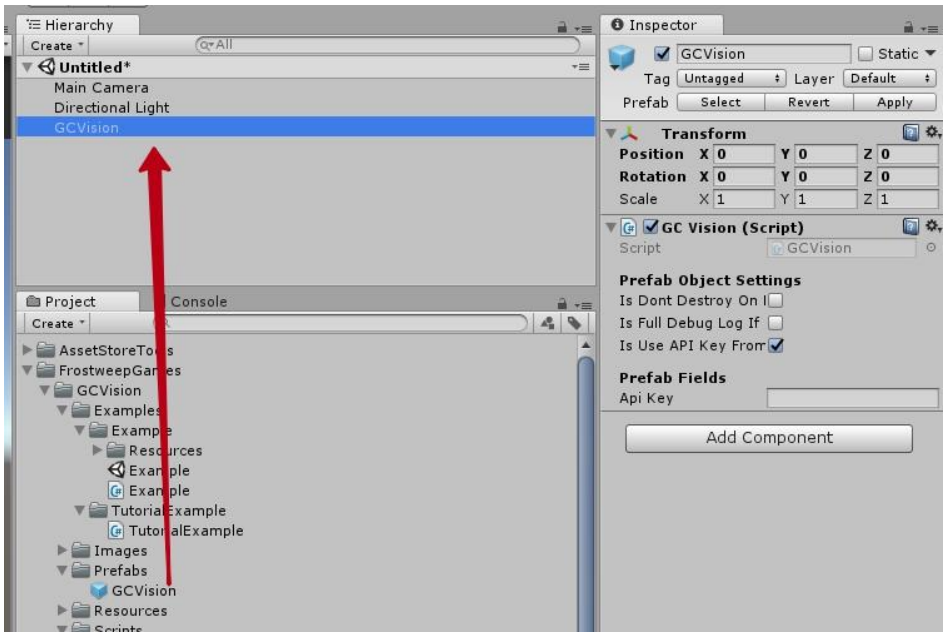
- How to use:

  Create you first an app example:

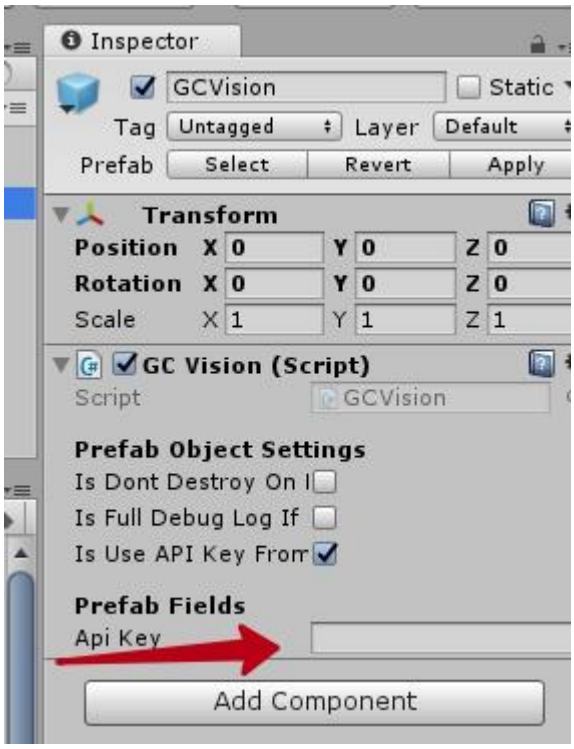
  Create the script with and name it 'TutorialExample':

```
TutorialExample.cs  Example.cs
Assembly-CSharp                          TutorialExample
1   using System.Collections;
2   using System.Collections.Generic;
3   using UnityEngine;
4
    0 references
5   public class TutorialExample : MonoBehaviour {
6
7       // Use this for initialization
        0 references
8       void Start () {
9
10      }
11
12      // Update is called once per frame
        0 references
13      void Update () {
14
15      }
16  }
17
```

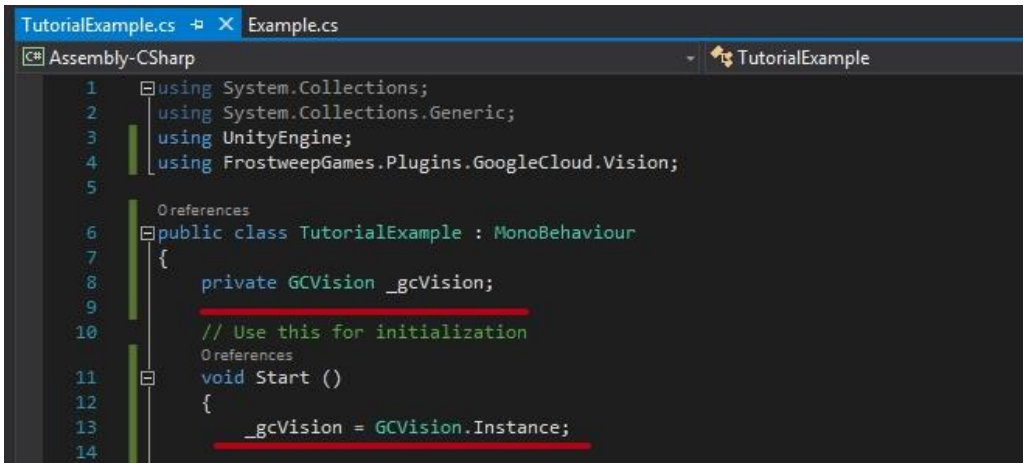
  Drag n Drop the Prefab of GCVision into the scene:



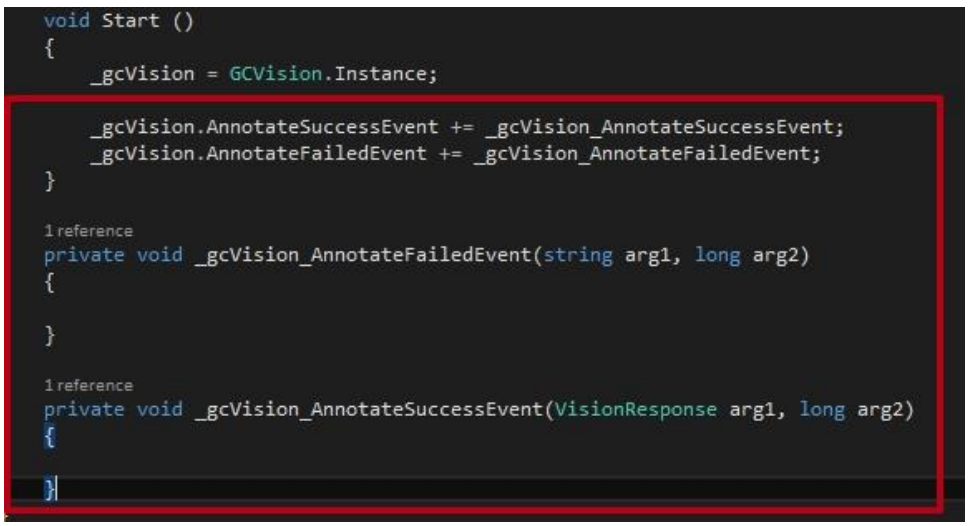
Insert your own Google Cloud API Key into this field:



Create the variable for the GCVision and get an instance of an object:



Then you should subscribe on the events:



Create the Annotation request:

```
public void AnnotateImage(string url)
{
    var features = new List<Feature>();
    features.Add(new Feature() { maxResults = 50, type = Enumerators.FeatureType.TEXT_DETECTION });

    _gcVision.Annotate(new List<AnnotateRequest>()
        {
            new AnnotateRequest()
            {
                image = new Image()
                {
                    source = new ImageSource()
                    {
                        imageUri = url,
                        gcsImageUri = string.Empty
                    },
                    content = string.Empty
                },
                context = new ImageContext()
                {
                    languageHints = new string[]
                    {
                        "english",
                    },
                },
                features = features
            }
        });
}
```

With one Feature – TEXT_DETECTION and maximum results = 50, where ImageSource->imageUri is the our link to the image.

Then you can call the method with link to the image:

```
void Start ()
{
    _gcVision = GCVision.Instance;

    _gcVision.AnnotateSuccessEvent += _gcVision_AnnotateSuccessEvent;
    _gcVision.AnnotateFailedEvent += _gcVision_AnnotateFailedEvent;

    AnnotateImage("http://fabricjs.com/article_assets/2_7.png");
}
```

When the Annotation request will be successful, will be fire the *AnnotateSuccessEvent.*

Handle the Text Detection:

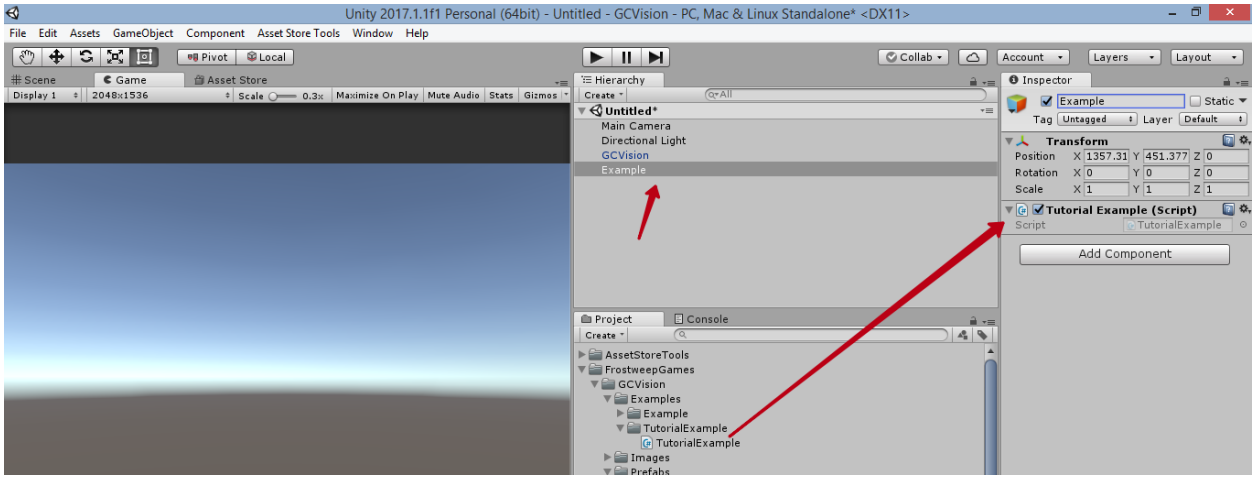
```
private void _gcVision_AnnotateSuccessEvent(VisionResponse arg1, long arg2)
{
    foreach (var response in arg1.responses)
    {
        Debug.Log(response.fullTextAnnotation.text);
    }
}
```

When the Annotation request will be failed, will be fire the *AnnotateFailedEvent.*

Handle the event:

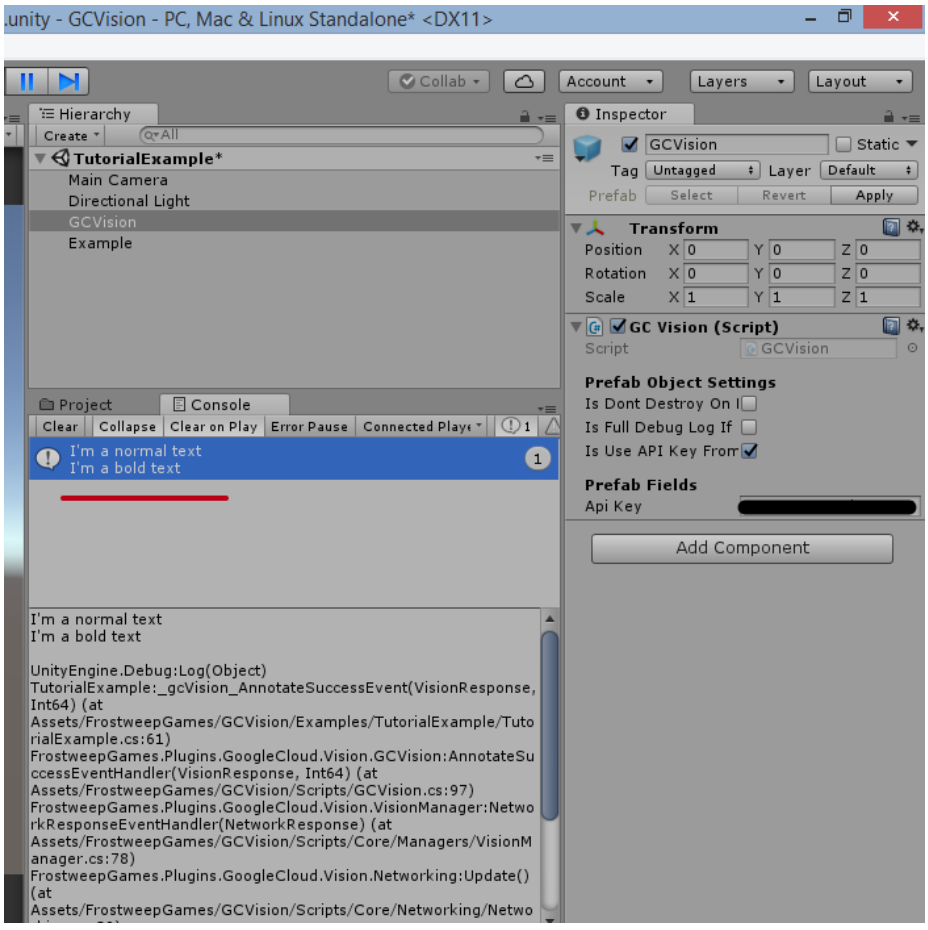
```
1 reference
private void _gcVision_AnnotateFailedEvent(string arg1, long arg2)
{
    Debug.Log("Error: " + arg1 + " - " + arg2);
}
```

Create an object in the scene and attach the TutorialExample script into this object:



Then click on the Play button.

Waiting for the result and get:



That’s all! So you can make your own image recognition using our plugin!

- Note:
  1) The plugin does not cover the cost of the Google Cloud Service
  2) Be sure to read the terms of service of Google Cloud Vision API
- Versions changes:

  1.0 – Implemented Google Cloud Vision API