

Оглавление

Introduction:	2
Getting Google Speech API Key:.....	2
Adding and configuring plugin:	2
Example Scene – description:	2
Description of scripts and their classes:.....	2
Script “MicRecorder”:	2
Script “SendToGoogle”:.....	2
Script “SavePCMIntoMemory”:.....	2
How to work with the API:	3
Conclusion:	4
Contacts:	4

Introduction:

Unity Speech Recognition using Google API is a plugin for Unity 5.x, also supported the above version of Unity 4.0 which you can use to record audio from your application microphone, convert the audio into a format that Google understands Speech, to get a response from Google with the answer, converting it into clear view.

Getting Google Speech API Key:

In order to use Google Speech API requires the API key that is easy to get. Instructions for obtaining the key here: <https://www.chromium.org/developers/how-tos/api-keys>

Adding and configuring plugin:

To start using the plugin, you need to load it into your project. After the plugin is loaded, on the top left in the menu bar will appear in the tab “Speech Recognition” with which you can control the plugin. Clicking on Speech Plugin Window, which is located on the menu tab “Speech Recognition” window will appear plugin, easy to add a system scripts plugin, open the example scene open the documentation, leave a review and get a Google Speech API Key, if you have already configured Google Mail account.

Example Scene – description:

Standard scene plugin is one of the many ways how you can use the plugin. In this scene shows how a plugin works, what functions it performs, and how it can be configured. For this scene has been separately written the script responsible for the execution of commands in other scripts of the plugin, thereby obtaining a convenient interface to work with the plugin.

Description of scripts and their classes:

Script “MicRecorder”:

In this script collected function to record audio from your microphone.

Script “SendToGoogle”:

In this script, assembled the functionality of sending audio to the Google Speech, language recorded audio, a simple parsing of the response returned from Google Speech into an array of words.

Script “SavePCMIntoMemory”:

In this script collected function to convert audio format PCM 16 bit int.

How to work with the API:

To start using SpeechAPI, you need to add to the scene prefab “ GlobalScripts ” folder Prefabs, to insert the APIKey into the field, script SendToGoogle by Google Speech API Key (If you have not yet read the instructions for obtaining the key, here <https://www.chromium.org/developers/how-tos/api-keys>).

- Then you will need to write a script to access the API, for example:

```
using UnityEngine;
using System.Collections.Generic;
using SpeechRecognition; //plugin namespace

public class Example : MonoBehaviour {

}
```

- Then you will need to get the links to the scripts asset:

```
public MicRecorder micRecorder;
public SendToGoogle sendToGoogle;
```

- Then create a method that will start a voice recording:

```
public void TryStartRecord()
{
    micRecorder.StartRecord(Microphone.devices[0]);
}
```

- You also need to add a method that completes the audio

```
public void TryStopRecord()
{
    micRecorder.StopRecord(Microphone.devices[0]);
}
```

- To get the result that Google recognize Speech, we need only:

```
string[] results = sendToGoogle.GetWords();
```

In the end we get the script:

```
using UnityEngine;
using System.Collections.Generic;
using SpeechRecognition; //plugin namespace

public class Example1 : MonoBehaviour
{
    public MicRecorder micRecorder;
    public SendToGoogle sendToGoogle;
    public string[] results;

    public void TryStartRecord()
    {
        micRecorder.StartRecord(Microphone.devices[0]);
    }

    public void TryStopRecord()
    {
        micRecorder.StopRecord(Microphone.devices[0]);
        TryGetResults();
    }

    public void TryGetResults()
    {
        results = sendToGoogle.GetWords();
    }
}
```

Conclusion:

This plugin may be used for commercial purposes IF IT WAS PURCHASED IN the UNITY ASSET STORE OR the CREATOR DIRECTLY! For use in non-commercial purposes required to communicate directly with its Creator and to discuss the details of the license for the plugin, if it was not purchased. It is also PROHIBITED any modification of the plugin code, if it was NOT PURCHASED from the UNITY ASSET STORE OR the CREATOR DIRECTLY!

Contacts:

E-mail: frostweep@gmail.com | support@frostweep.ru

www.frostweep.ru – contact form.

Frostweep Games, LLC 2013-2015©

All right reserved