UnityWebGLSpeech

The `WebGL Speech` package combines speech detection and speech synthesis.

The `WebGL Speech` package is available in the Unity Asset Store.
Online documentation is available.

See Also

- The `WebGL for Speech Detection` package is available in the Unity Asset Store. Online documentation is available.

- The `WebGL for Speech Synthesis` package is available in the Unity Asset Store. Online documentation is available.

- Try the Unity WebGL Speech Demos

Supported Platforms

- WebGL

- Mac Standalone (using Speech Proxy)

- Mac Unity Editor (using Speech Proxy)

- Windows Standalone (using Speech Proxy)

- Windows Unity Editor (using Speech Proxy)

> Note: WebGL builds use the built-in browser to use the Speech API on PC/Mac/Android/iOS. In order to use the Speech API in standalone builds and in the Unity Editor, you will need to configure and run the free Speech Proxy. ![image_5](images/image_5.png) The demo scenes have game objects to support the WebGL Plugins and the `Speech Proxy`. ![image_3](images/image_3.png) With the `Speech Proxy` running, open a browser tab that relays `Speech API` calls to and from the browser. ![image_4](images/image_4.png) Only the `WebGL Speech` package in the [Unity Asset Store](https://assetstore.unity.com/packages/tools/audio/webgl-speech-105831) has example scenes that show using `Speech Detection` and `Speech Synthesis` together.

Target

The `Unity WebGL Speech Package` is created for Unity version `5.3` or better. This includes support for Unity 2017.X, 2018.X, 2019.X, and 2021.X.
This package combines the `Unity WebGL Speech Detection` and `Unity WebGL Speech Synthesis` packages.
This package was originally created for the `WebGL` platform and supports other platforms using a `Speech Proxy`.
This package requires a browser with the built-in Web Speech API, like Chrome.
Speech detection and synthesis requires an Internet connection.
The browser compatibility indicates which browsers have the `Speech API` implemented.
The languages page shows what languages are supported by the `Speech API`.

Changelog

1.0 - Initial creation of package

1.1 - Added support for `Speech Proxy`

1.2 - Minor fixes

1.3 - Added support for speech detection/synthesis in edit mode

1.4 - Added support for `MacOS` for `play-mode` and `edit-mode`

1.5 - Added example without GUI

1.6 - Added buffering for language data

1.7 - Cleaned up sample code

1.8 - Updated sample scenes to use default `5000` port

1.9 - Added support for `2018.1` and `2019.1` .

1.10 - Added support for `2020.x`

1.11 - Added support for `2021.X`

1.12 - Added support for `iOS 16.3.1`
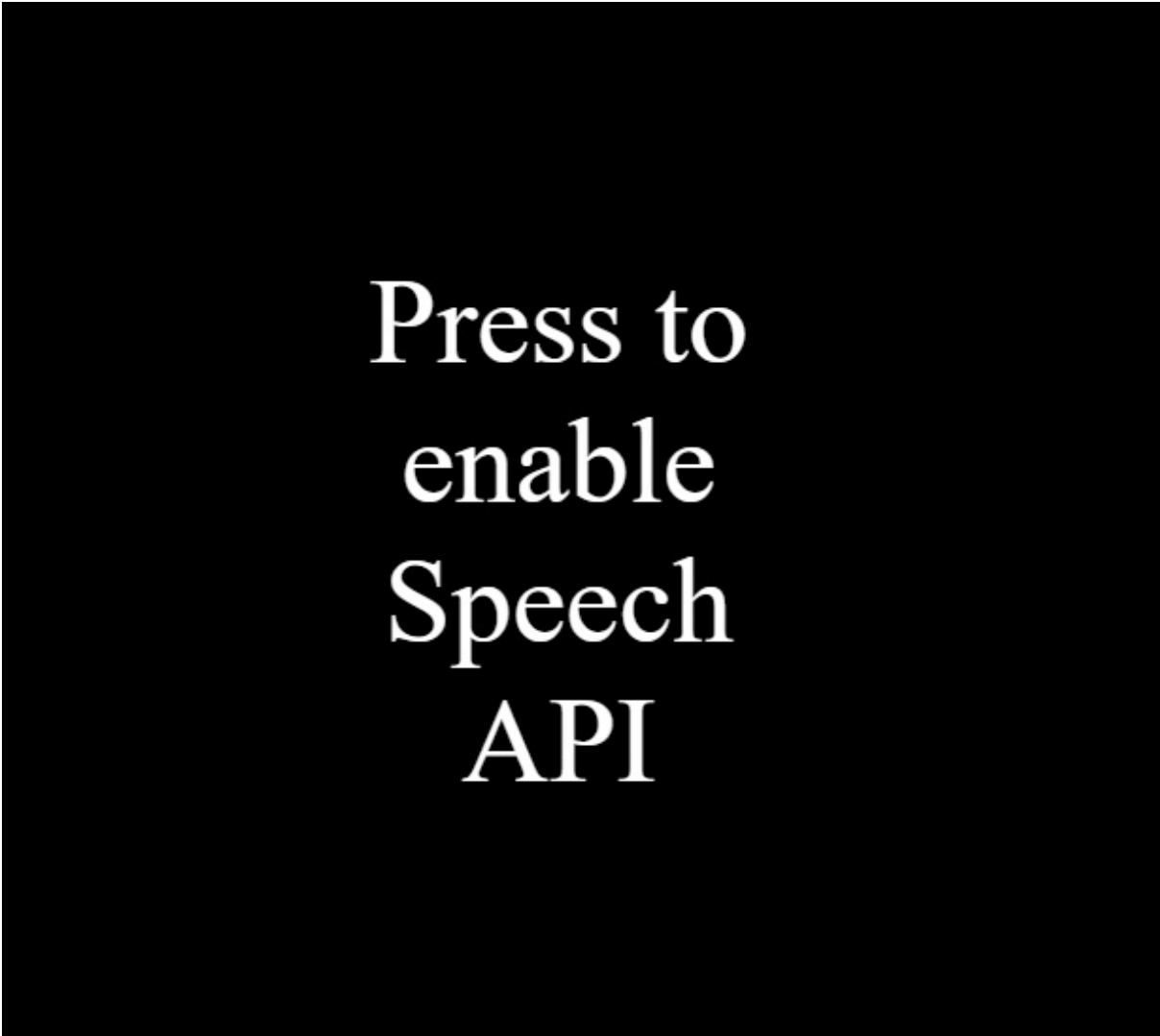
FAQ

- To avoid constant Microphone security prompts, host WebGL builds on secure HTTPS sites. Take a look at the online demos to see how that works.

- Speech can work on mobile as a WebGL build. Launch the Chrome browser app on mobile and load your WebGL page in the Chrome app.

- WebGL can take a long while to build. For faster development, try the Speech Proxy. This enables speech in the editor and standalone Windows/Mac builds without the long wait times.

- Sometimes the browser speech mechanism can crash. It can happen. If speech stops working, just close all of the browser windows and relaunch which should fix the issue.

> Note: In December of 2018, Chrome added a speech restriction that the speak() method can't be invoked until a web page has some user interaction.

- The WebGLSpeechSynthesis plugin now adds a full page `div` named `divActivateSpeechAPI` that initializes the Speech API when clicked to work around the new browser security. An alternative div element named `divActivateSpeechAPI` can be added to the HTML5 page if you want to customize the visual look of this user interaction.

- WebGL builds require iOS 15.5 or greater. Earlier versions will report a memory access violation.

- Unity 2021.X or later introduced a build issue when plugins use Unicode. Use the latest Unity 2021.X package from the Unity Asset Store rather than upgrading from an earlier package.

Scenes

WebGLSpeech Detection

Example01 - Dictation

The scene is located at `Assets/WebGLSpeechDetection/Scenes/Example01_Dictation.unity` .

The example source is located at `Assets/WebGLSpeechDetection/Scripts/Example01Dictation.cs` .

The WebGLSpeechDetection/Example01_Dictation demo is available online.

With the Microphone enabled, Unity displays recently detected words.

| English | ⌄ | | United States | ⌄ |

"this is" Confidence=0.9
" a sample" Confidence=0.01
"this is" Confidence=0.9
" a sample of" Confidence=0.01
"this is a" Confidence=0.9
" sample of" Confidence=0.01
"this is a sample" Confidence=0.9
" of" Confidence=0.01
"this is a sample of" Confidence=0.9
"this is a sample of" Confidence=0.9
" dictate" Confidence=0.01
"this is a sample of" Confidence=0.9
" dictation" Confidence=0.01
"this is a sample of dictation" Confidence=0.9
[FINAL] "this is a sample of dictation" Confidence=0.987629

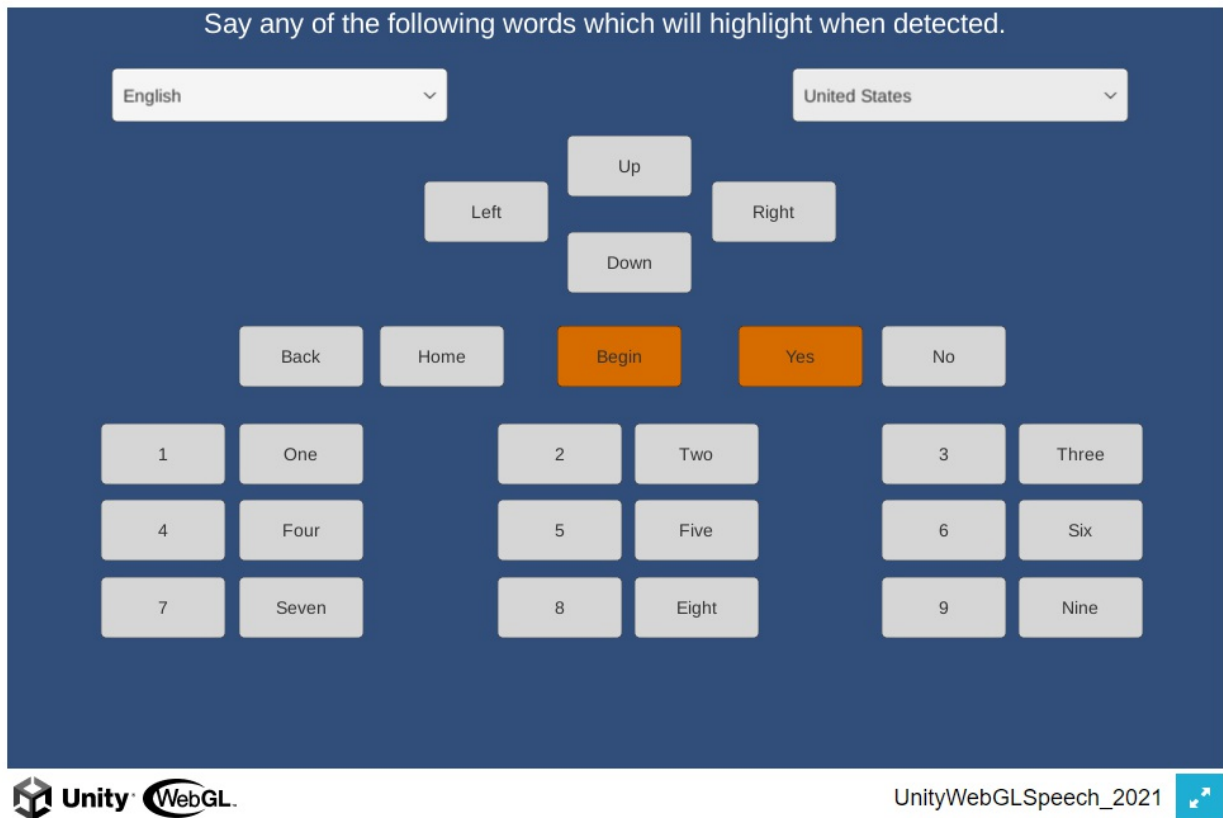🎮 Unity · WebGL.   UnityWebGLSpeech_2021 ⤢

Example 02 - Dictation

The scene is located at `Assets/WebGLSpeechDetection/Scenes/Example02_SpeechCommands.unity` .

The example source is located at `Assets/WebGLSpeechDetection/Scripts/Example02SpeechCommands.cs` .

The WebGLSpeechDetection/Example02_SpeechCommands demo is available online.

Say any of the following words which will highlight when detected.

WebGLSpeech Synthesis

Example01 - Synthesis

The scene is located at `Assets/WebGLSpeechSynthesis/Scenes/Example01Synthesis.unity` .

The example source is located at `Assets/WebGLSpeechSynthesis/Scripts/Example01Synthesis.cs` .

The WebGLSpeechSynthesis/Example01_Synthesis demo is available online.

Example 04 - Sbaitso Clone

The scene is located at `Assets/WebGLSpeechSynthesis/Scenes/Example04SbaitsoClone.unity` .

The example source is located at `Assets/WebGLSpeechSynthesis/Scripts/Example04SbaitsoClone.cs` .

The WebGLSpeechSynthesis/Example04_SbaitsoClone demo is available online.

Dr. Sbaitso, by Creative Labs.

Please enter your name...

Tim

Hello Tim, my name is Dr. Sbaitso.

I am here to help you.

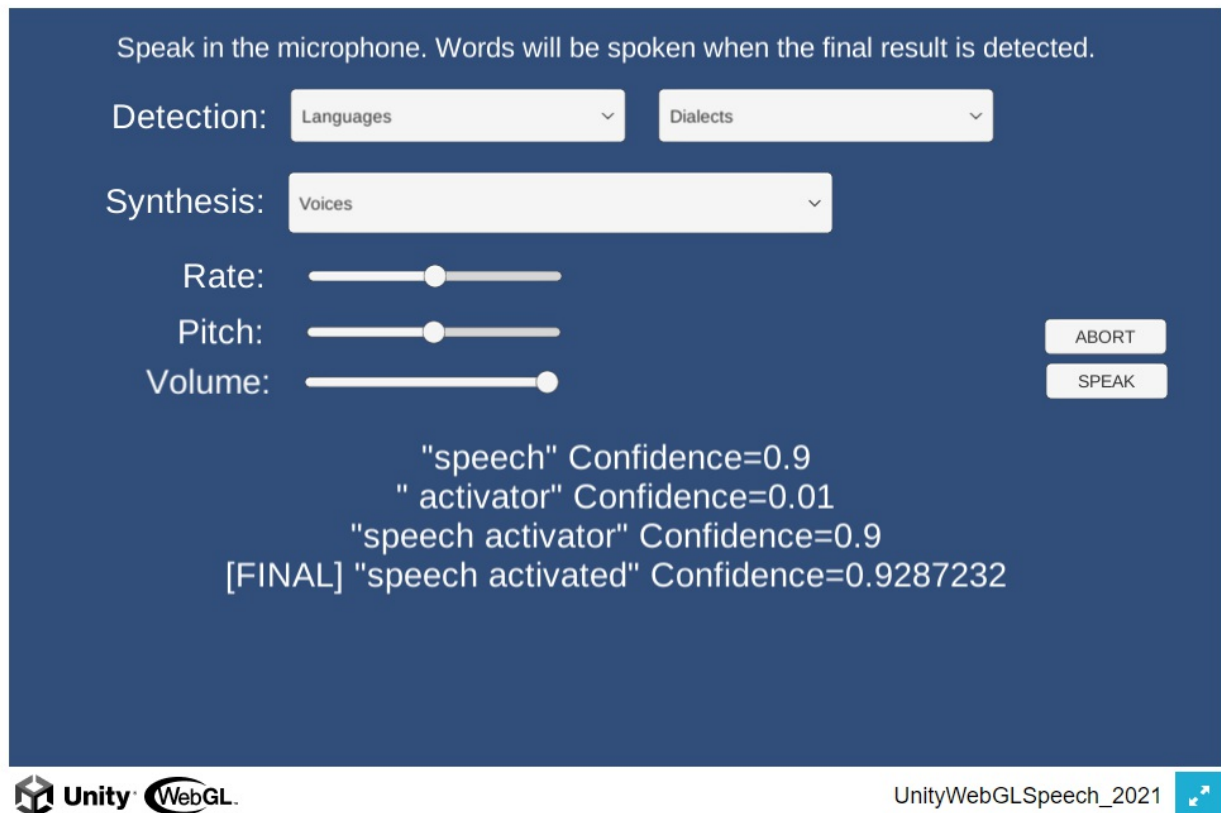Unity WebGL.   UnityWebGLSpeech_2021

WebGLSpeech

Example01 - Dictation Synthesis

The scene is located at `Assets/WebGLSpeech/Scenes/Example01_Dictation_Synthesis.unity` .

The example source is located at `Assets/WebGLSpeech/Scripts/Example01DictationSynthesis.cs` .

The WebGLSpeech/Example01_Dictation_Synthesis demo is available online.

Example 02 - Dictation Sbaitso

The scene is located at `Assets/WebGLSpeech/Scenes/Example02_Dictation_Sbaitso.unity` .

The example source is located at `Assets/WebGLSpeech/Scripts/Example02DictationSbaitso.cs` .

The WebGLSpeech/Example02_Dictation_Sbaitso demo is available online.

Dr. Sbaitso, by Creative Labs.

Please enter your name...

Tim

Hello Tim, my name is Dr. Sbaitso.

I am here to help you.

Continue

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Support

Send questions and/or feedback to the support@theylovegames.com email.

Support is also available in Discord, you can reach me at `Tim Graupmann#0611` .