

[Speech](#) / Speech Recognition in Objective-C

API Collection

Speech Recognition in Objective-C

Use these classes to perform speech recognition in Objective-C code.

Topics

Essentials

Asking Permission to Use Speech Recognition

Ask the user's permission to perform speech recognition using Apple's servers.

`class SFSpeechRecognizer`

An object you use to check for the availability of the speech recognition service, and to initiate the speech recognition process.

`protocol SFSpeechRecognizerDelegate`

A protocol that you adopt in your objects to track the availability of a speech recognizer.

`enum SFSpeechRecognitionTaskHint`

The type of task for which you are using speech recognition.

`enum SFSpeechRecognizerAuthorizationStatus`

The app's authorization to perform speech recognition.

Audio sources

Recognizing speech in live audio

Perform speech recognition on audio coming from the microphone of an iOS device.

`class SFSpeechURLRecognitionRequest`

A request to recognize speech in a recorded audio file.

```
class SFSpeechAudioBufferRecognitionRequest
```

A request to recognize speech from captured audio content, such as audio from the device's microphone.

```
class SFSpeechRecognitionRequest
```

An abstract class that represents a request to recognize speech from an audio source.

In-progress requests

```
class SFSpeechRecognitionTask
```

A task object for monitoring the speech recognition progress.

```
protocol SFSpeechRecognitionTaskDelegate
```

A protocol with methods for managing multi-utterance speech recognition requests.

```
enum SFSpeechRecognitionTaskState
```

The state of the task associated with the recognition request.

Transcription results

```
class SFSpeechRecognitionResult
```

An object that contains the partial or final results of a speech recognition request.

```
class SFSpeechRecognitionMetadata
```

The metadata of speech in the audio of a speech recognition request.

```
class SFTranscription
```

A textual representation of the specified speech in its entirety, as recognized by the speech recognizer.

```
class SFTranscriptionSegment
```

A discrete part of an entire transcription, as identified by the speech recognizer.

Voice analytics

```
class SFVoiceAnalytics
```

A collection of vocal analysis metrics.

```
class SFAcousticFeature
```

The value of a voice analysis metric.

Errors

```
let SFSpeechErrorDomain: String
```

```
struct SFSpeechError
```

```
enum Code
```

Error codes that can be thrown under the Speech framework's error domain.