Use Cases

orator.io by Team Gucci

Sung Kim (sunghyun) Yina Zhu (yinazhu)
William Bhot (willbhot) Hao Hu (hhu94)
Logan Girvin (lsgirvin) Joey Li (joeyli96)

Introduction

The first two use cases: “Record/Save Speech” and “Access/Listen to/Delete Past Recordings” are essential to ensuring the functionality of *orator.io*. Within these two use cases, the most important features and scenarios of *orator.io* are covered—such as recording a speech, getting feedback from our system, logging in to access past recordings, and managing user data. The last use case, “Turn Mirror On/Off”, demonstrates an important feature to make *orator.io* a more robust speech-training application. As well, this last use case also serves as a precursor to our stretch goals of video-based gesture analysis.

In all three of our use cases, the actor is the user (speaker), and the trigger is listed in the first step of the user case—usually the user clicking on a button. Failure end conditions are handled in the Alternate Flows. Each failure condition, i.e. handle invalid input, is noted once, even if it pertains to more than one use case, as handling the failures follows a similar procedure in each use case.

Use Case 1: Record/Save Speech

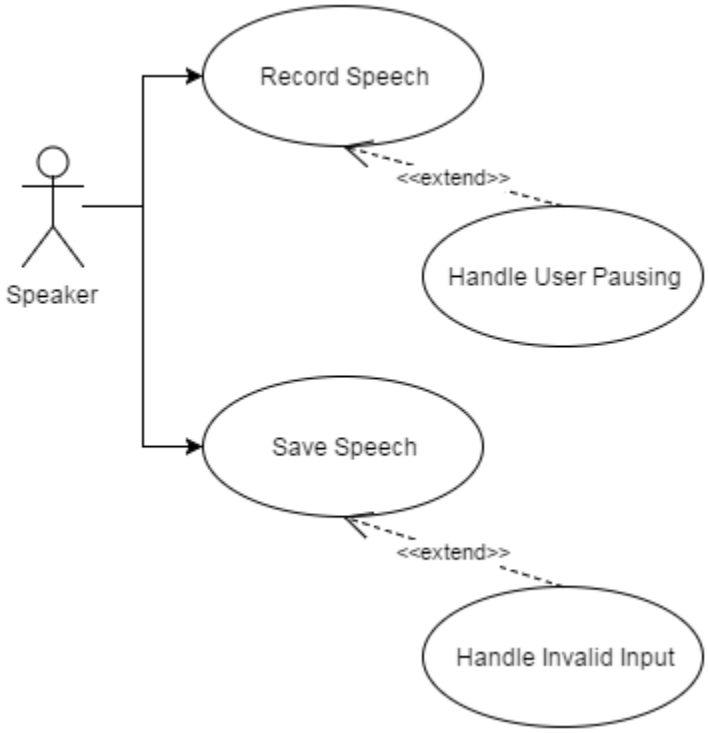

Figure 1 Use Case diagram of Record/Save Speech

Basic Flow: Record Speech

Preconditions:
User is at homepage.

1. The user clicks the "Record" button.
2. The system indicates that it is recording the user.
3. The user delivers a speech.
4. The user clicks the "Stop" button.
5. The system provides speaking feedback to the user, as discussed in the *Product Description*.

End conditions:
User is at the feedback page.

Alternate Flow: Handle User Pausing

1. If at 3. in *Record Speech*, the user clicks the "Pause" button:
2. The system waits for the user to click "Continue", "Restart", or "Stop".
3. If the user clicked "Continue", the use case restarts at 2. in *Record Speech*.
4. If the user clicked "Restart", the user case restarts at 1. in *Record Speech*.
5. If the user clicked "Stop", the use case restarts at 5. in *Record Speech*.

Basic Flow: Save Speech

Preconditions:
User is at the feedback page.
User is logged in.

1. The user clicks the "Save" button.
2. The system prompts the user to give the speech a name.
3. The user enters a name for the speech.
4. The user clicks the "OK" button.
5. The system saves the speech feedback and recording.

End conditions:
The user is at the feedback page.
The system has saved the user's speech.

Alternate Flow: Handle Invalid Input

1. If at 3. in *Save Speech*, the user enters an invalid file name (i.e. more than 250 characters, contains invalid symbols such as ';', '|', etc.):
2. The system prevents the user from clicking the "OK" button by disabling the "OK" button.
3. The system prompts the user to enter a valid file name.
4. The use case restarts at 3. in *Save Speech*.

Use Case 2: Access/Listen to/Delete Past Recordings

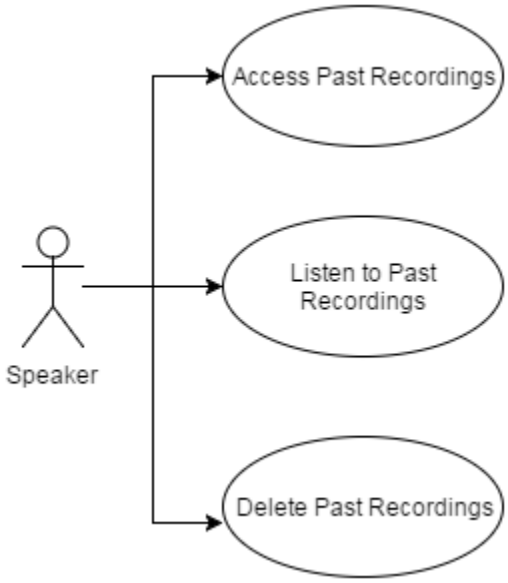

Figure 2 Use Case diagram of Access/Listen to/Delete Past Recordings

Basic Flow: Access Past Recordings

Preconditions:
The user is not currently recording a speech.

1. The user logs into the system.
2. The user clicks “Past Recordings”.
3. The system displays a list of past recordings.
4. The user clicks on a past recording.
5. The system indicates it is ready to play the past recording.

End conditions:
The user is at the “Play Past Recording” page.

Basic Flow: Listen to Past Recordings

Preconditions:
The user is at the “Play Past Recording” page.
The user has selected a recording to play.

1. The user clicks the “Play” button.
2. The system plays the past recording.

End conditions:
The system has played the recording for the user.
The user is at the “Play Past Recording” page.

Basic Flow: Delete Past Recordings

Preconditions:
The user is at the “Play Past Recording” page.

1. The user selects a recording.
2. The system provides options for the selected recording.
3. The user clicks the “Delete” button.
4. The system deletes the recording.

End conditions:
The user is at the “Play Past Recording” page.

Use Case 3: Turn Mirror On/Off

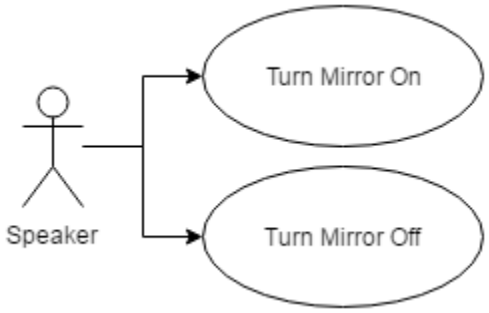

Figure 3 Use Case diagram of Turn Mirror On/Off

Basic Flow: Turn Mirror On

Preconditions:
The user is currently recording or at the homepage.
The mirror is currently off.

1. The user clicks the “Mirror” button.
2. The system displays a real-time mirror of the user.

End conditions:
The mirror persists throughout the recording or homepage, unless the user turns it off.

Basic Flow: Turn Mirror Off

Preconditions:
The user is currently recording or at the homepage.
The mirror is currently on.

1. The user clicks the “Mirror” button.
2. The system no longer displays the real-time mirror of the user.

End conditions:
The mirror is turned off.
The user is at the same page as before they turned the mirror off.

Conclusion

Most of our failure-handling remedies involve providing the user clear options or instructions to proceed. For example, if the user pauses, we provide them with clear buttons to Continue, Restart, or Stop; if the user inputs an invalid file name, we provide a warning and prompt them to re-input a file name. For more severe failures, such as our system not being able to record a speech for some reason, that failure does not yet have a resolution, but efforts to mitigate such failures from occurring are considerations as we design the system. For example, in the event that the Speech-to-Text APIs we use cannot provide accurate transcripts, we will provide feedback to the user in the form of an audio playback rather than a text-based transcript.