

# OSP Quick Start Guide - Release 2020B

## OSP Installation Steps

### 1. Check that you meet installation requirements.

Mac computer with a browser and terminal.

Audio device (either an external headset or computer mic and speakers)

At least about 800 MB of storage space

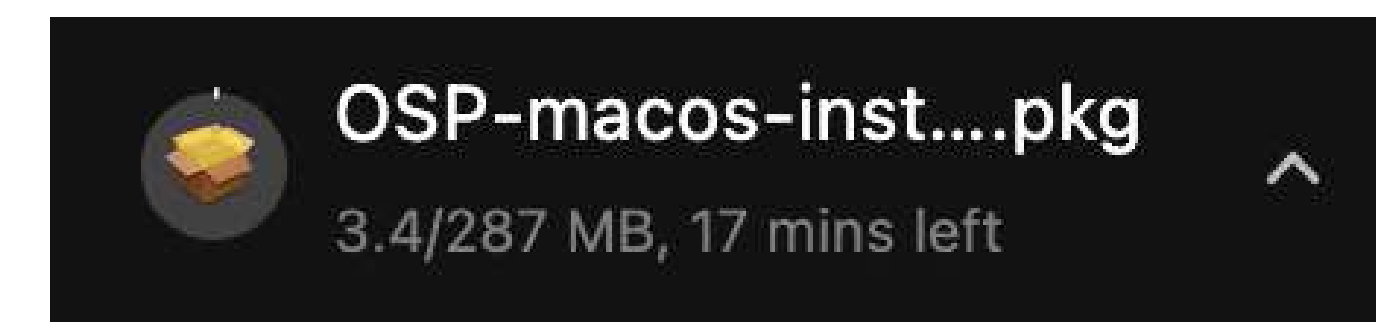
### 2. Click on the link to the Google Drive "Releases" folder to find the downloadable .pkg file.

<https://drive.google.com/drive/folders/1NjtWBNzf2SkYOxKLAYshZf0nhYLz3Y0z?usp=sharing>

Alternatively, copy and paste the above URL into your browser and press enter. The .pkg file should have a name called "OSP-macos-installer-x64-(version number).pkg".

### 3. Save the .pkg file, wait for download to finish.

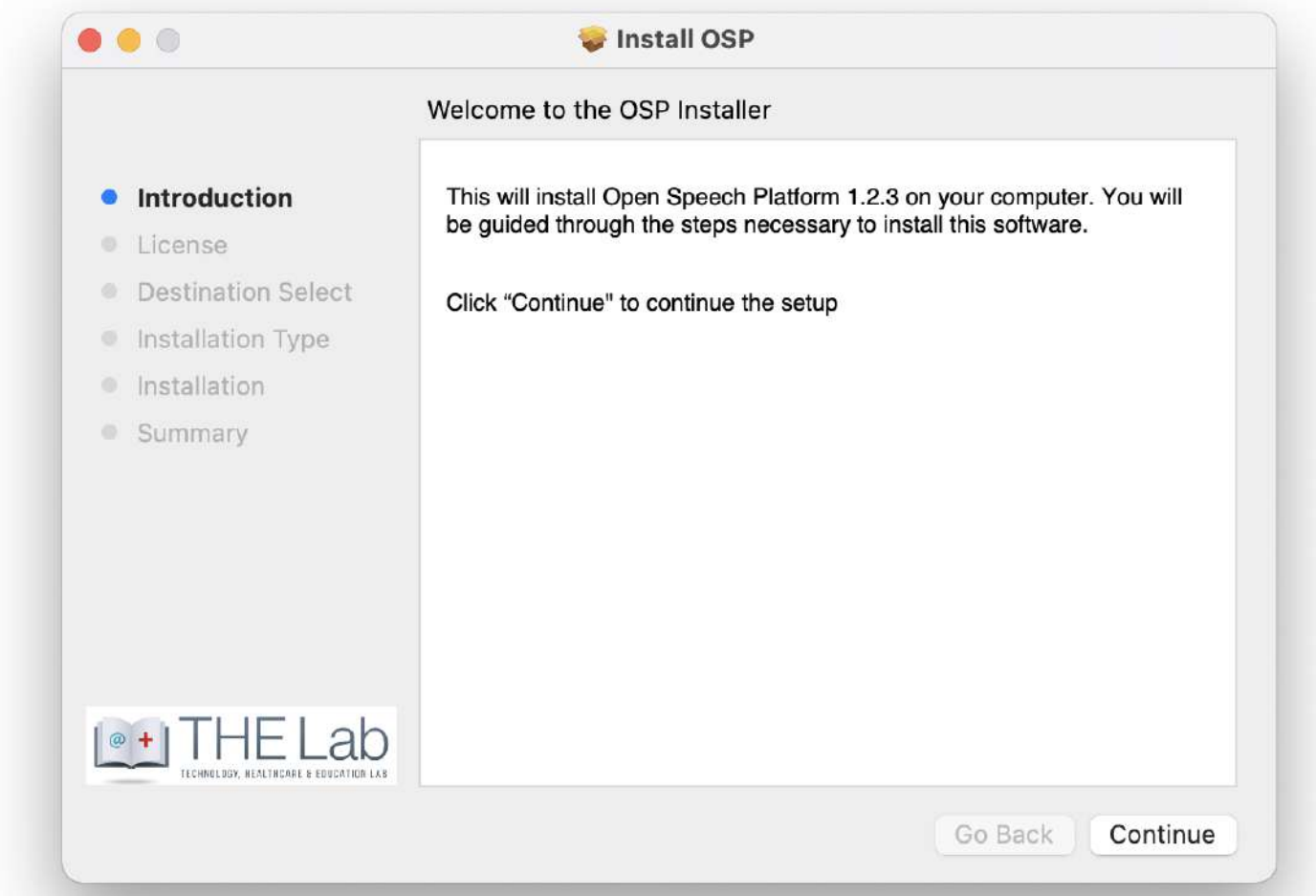
Time will vary depending on download speeds.



Once you open the file, If you receive a message "OSP-macos-installer-x64-(version number).pkg cannot be opened because it is from an unidentified developer", see "**Troubleshooting - Can't Open Installer Window**".

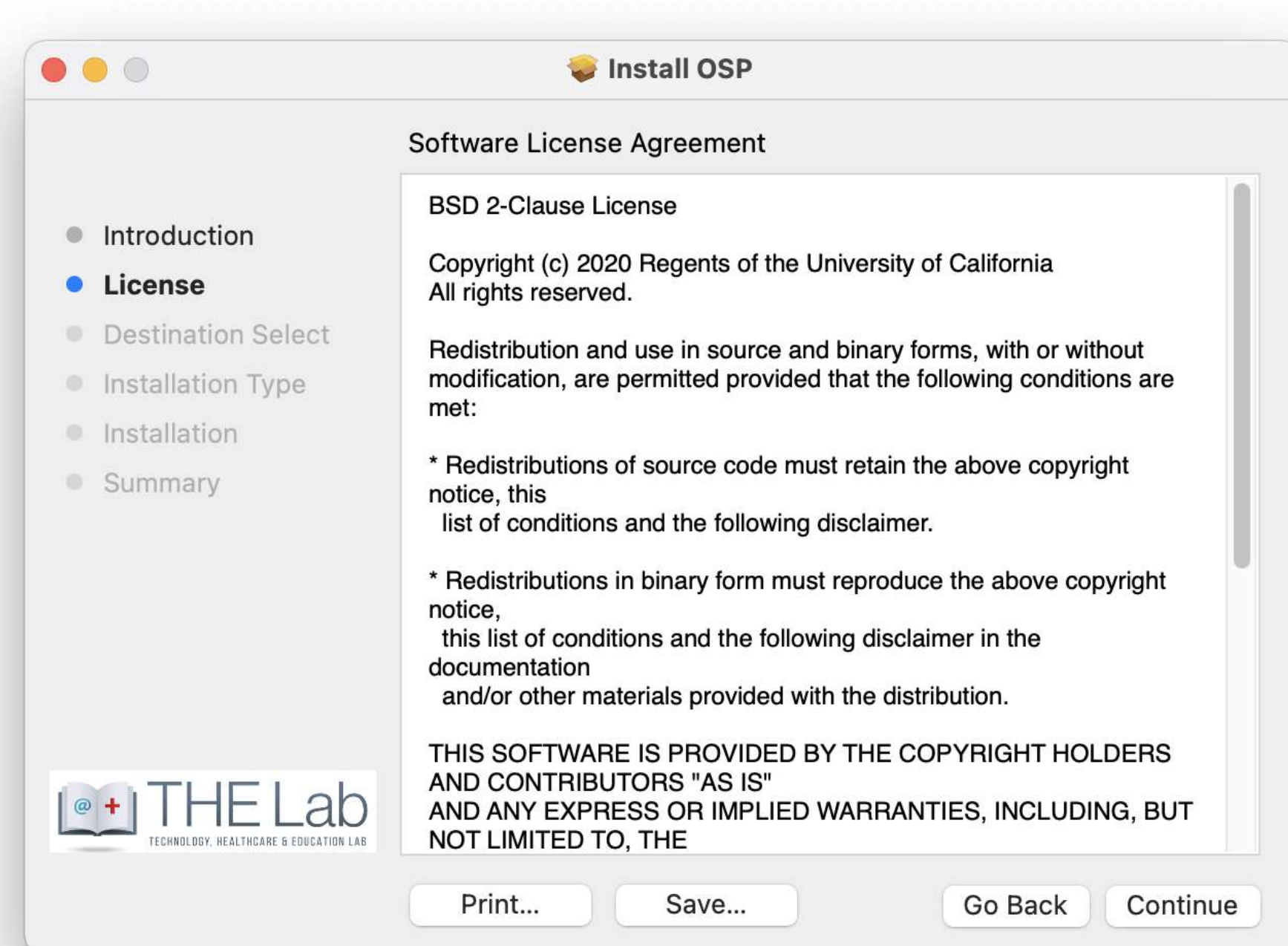
Otherwise, proceed to step 4.

### 4. You should see this installer window opened.

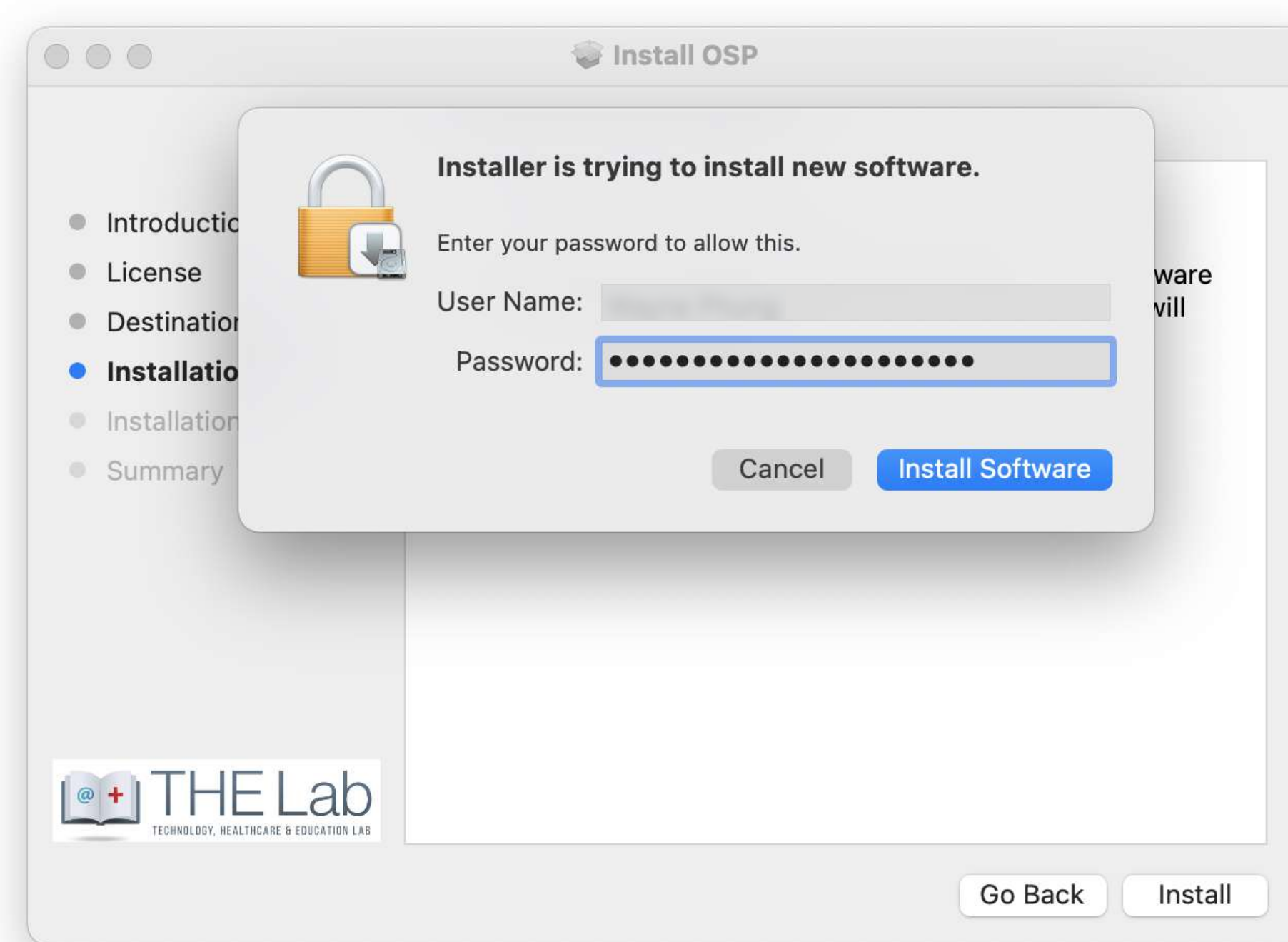


### 5. Follow the installation instructions.

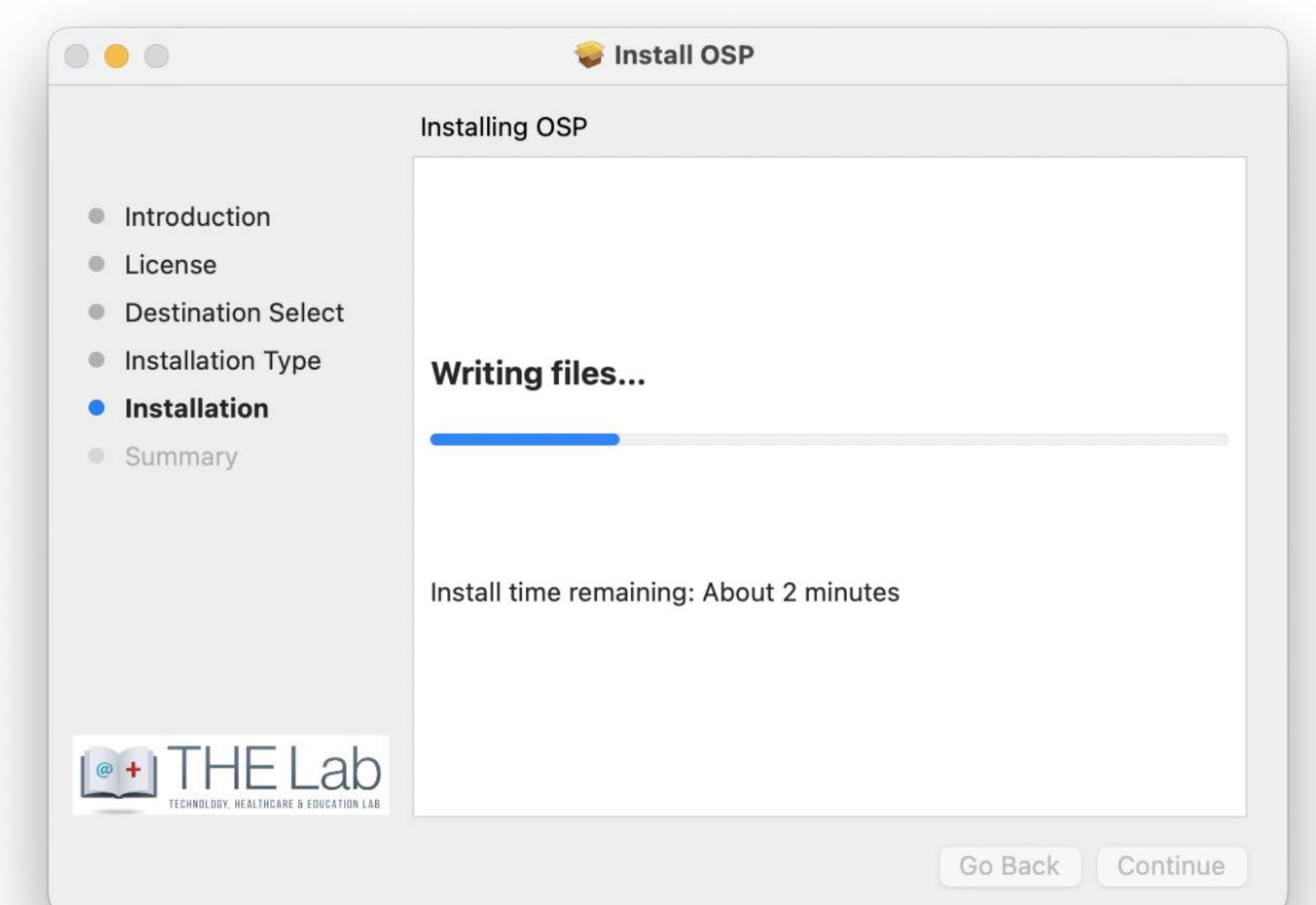
5a. Agree to the Software License Agreement.



5b. Enter your password used to sign in to your computer to continue the installation.



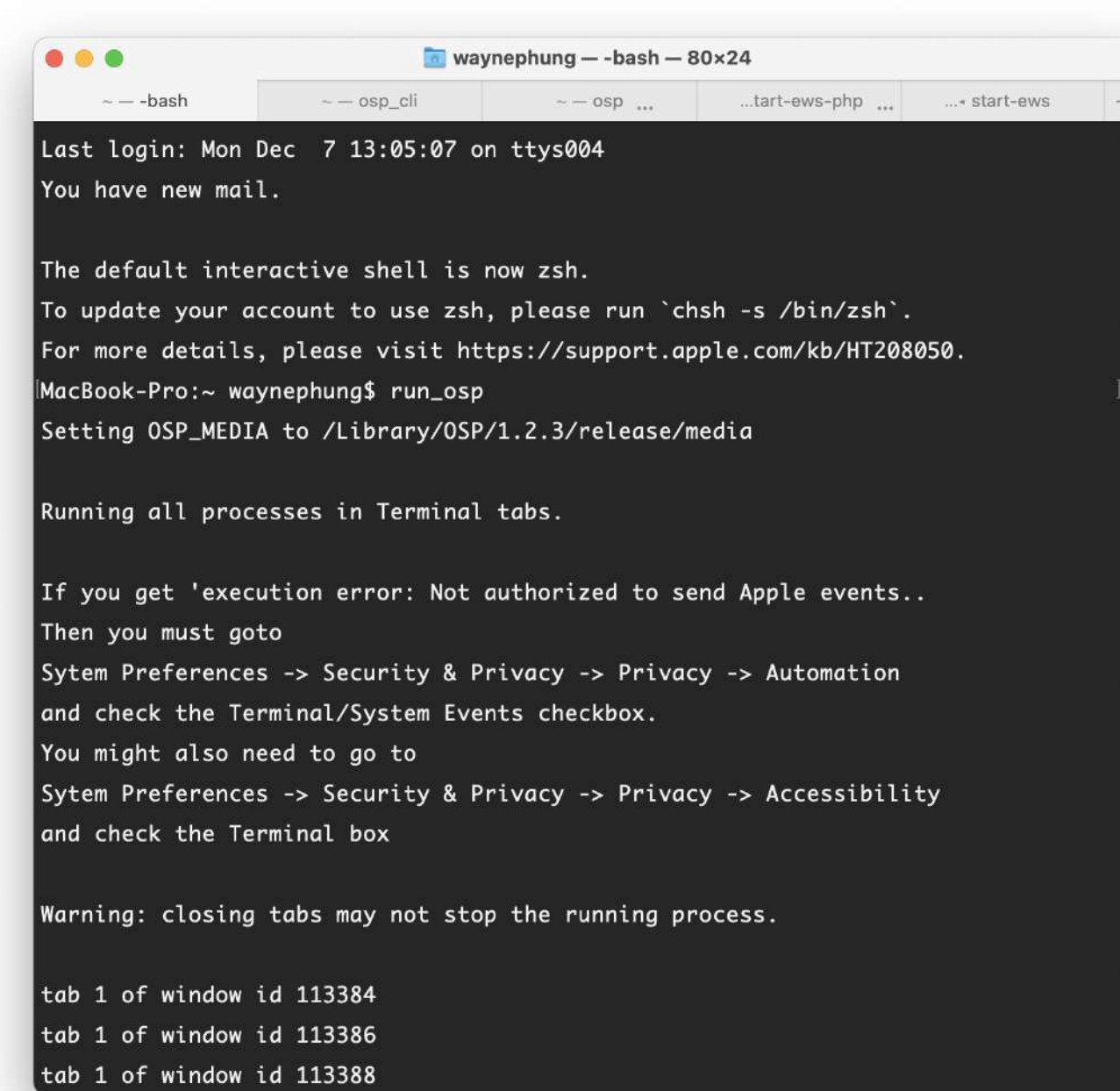
5c. Wait for the installation to complete. Time will vary.



### 6. After installation is complete, open a new terminal and enter the command "run\_osp".

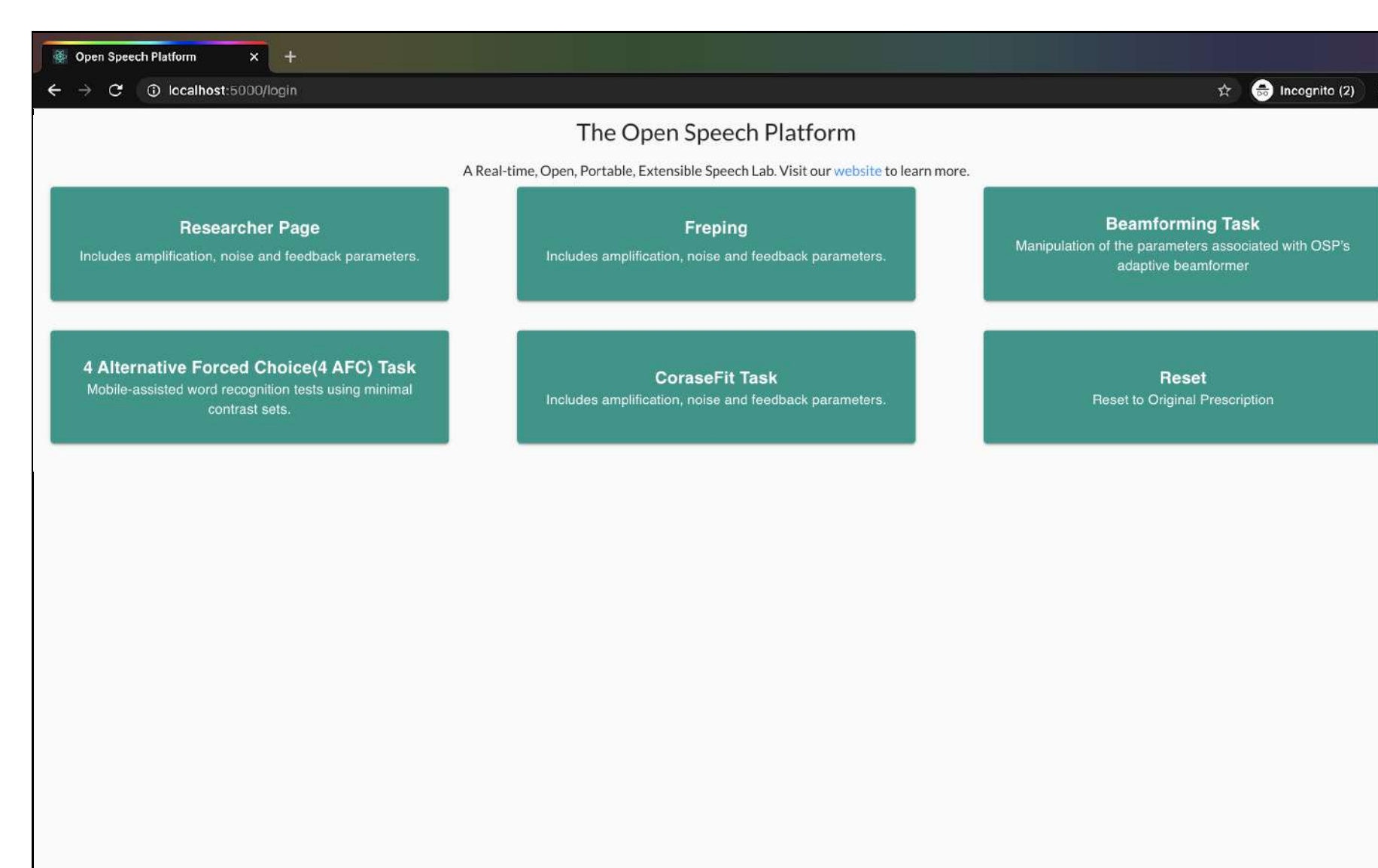
You should see five terminal tabs automatically opened, running processes, and generating messages.

If you don't see these tabs and/or get an error message "execution error": Not authorized to send Apple events...", see "**Troubleshooting - Terminal Tabs Won't Open**".

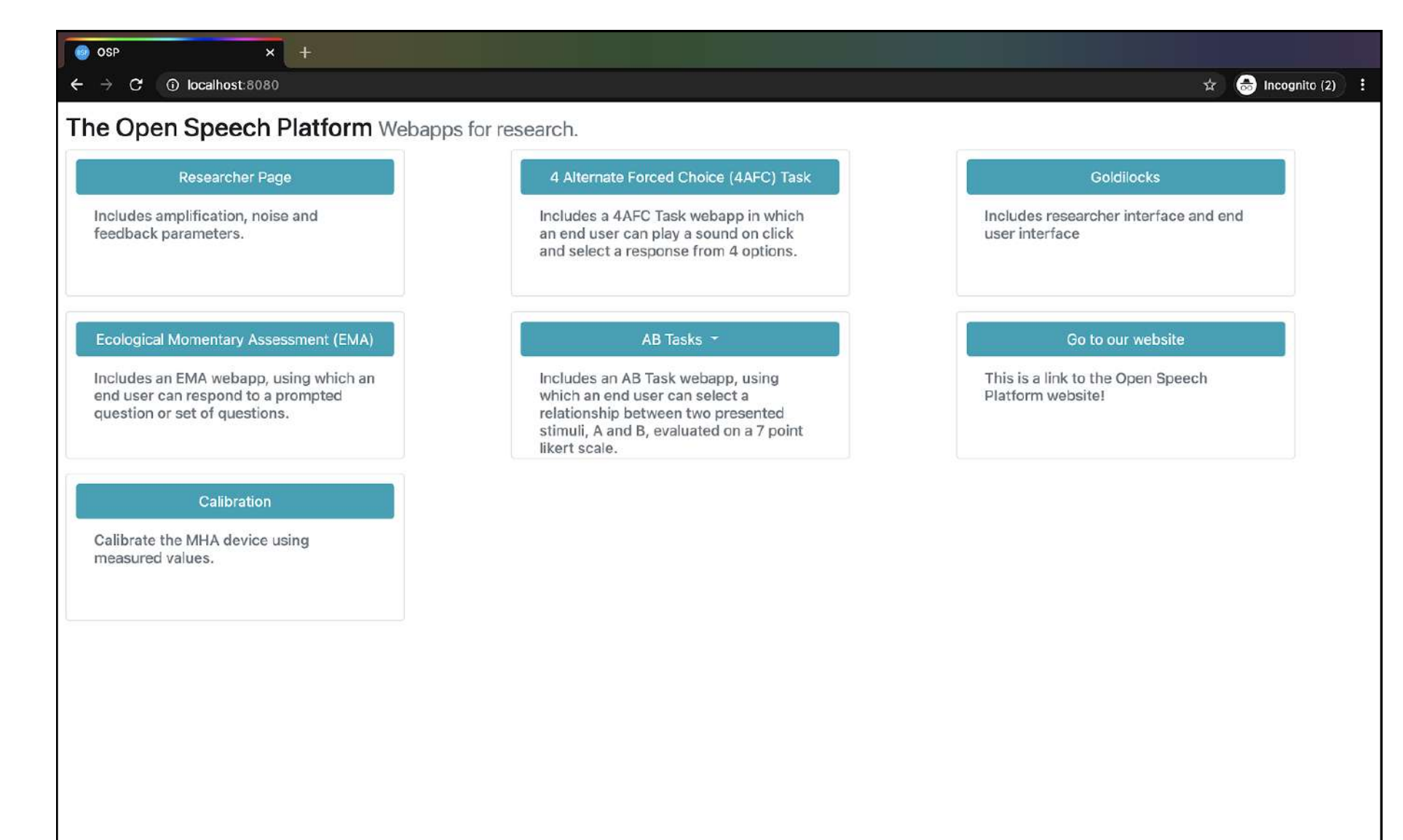


### 7. At this point, OSP and EWS should be running.

You would be automatically redirected to your browser. There, you will immediately see the landing page for Node.js version of EWS (URL should be "localhost:5000/login").



(Optional) To access the PHP/Laravel version of EWS, enter "localhost:8080" in your browser search bar. The landing page should look like the following.

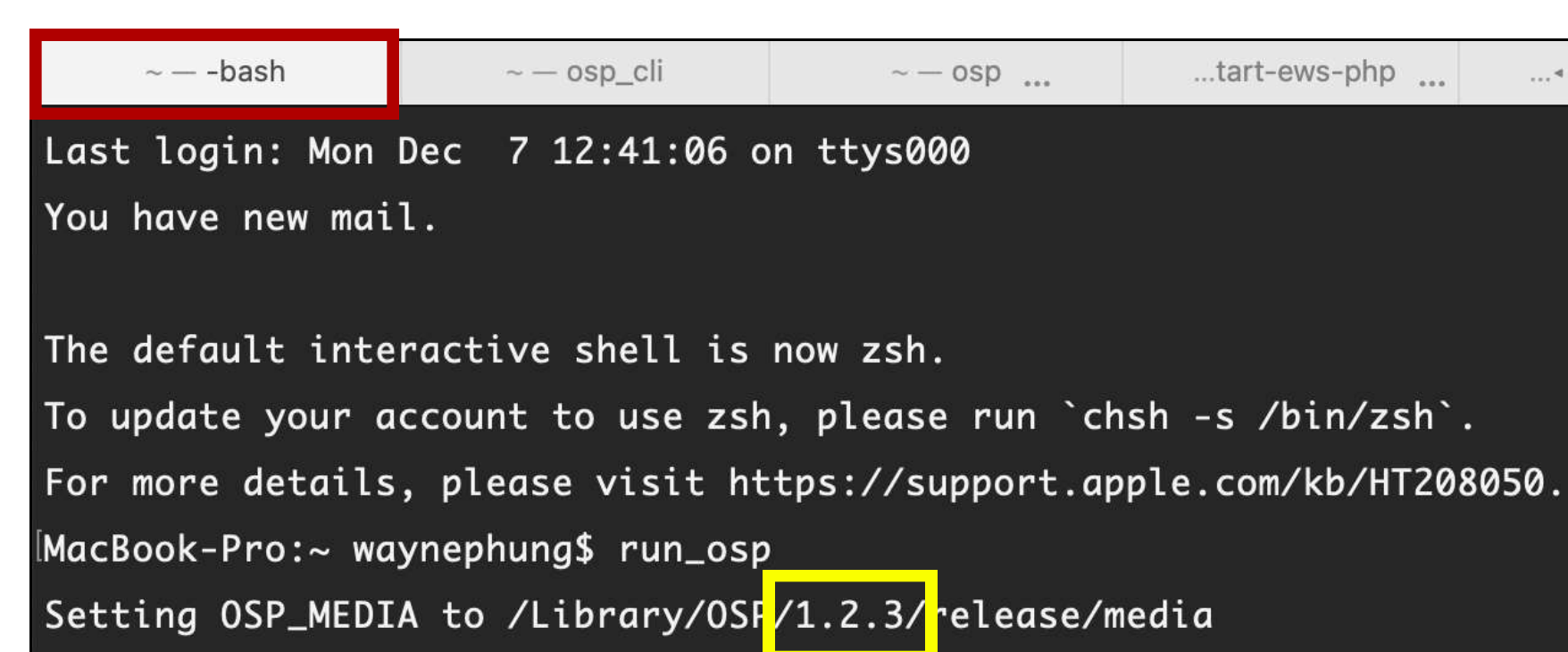


## Uninstalling OSP

### 1. Go to your terminal and enter the command "sudo bash /Library/OSP/1.2.3/uninstall.sh", enter your computer sign-in password. If you have a different version installed, simply replace "1.2.3" with the version number that you installed.

```
MacBook-Pro:~ waynephung$ sudo bash /Library/OSP/1.2.3/uninstall.sh  
Password: 
```

To find the version number, simply enter "run\_osp" to launch OSP, go to the "-bash" terminal tab, and find the "Setting OSP\_MEDIA to /Library" message.



```
Setting OSP_MEDIA to /Library/OSP/1.2.3/release/media
```

### 2. You will be asked if you want to proceed uninstallation. To do so, type "y". to proceed uninstallation. You should see the following message that the uninstall process has been finished.

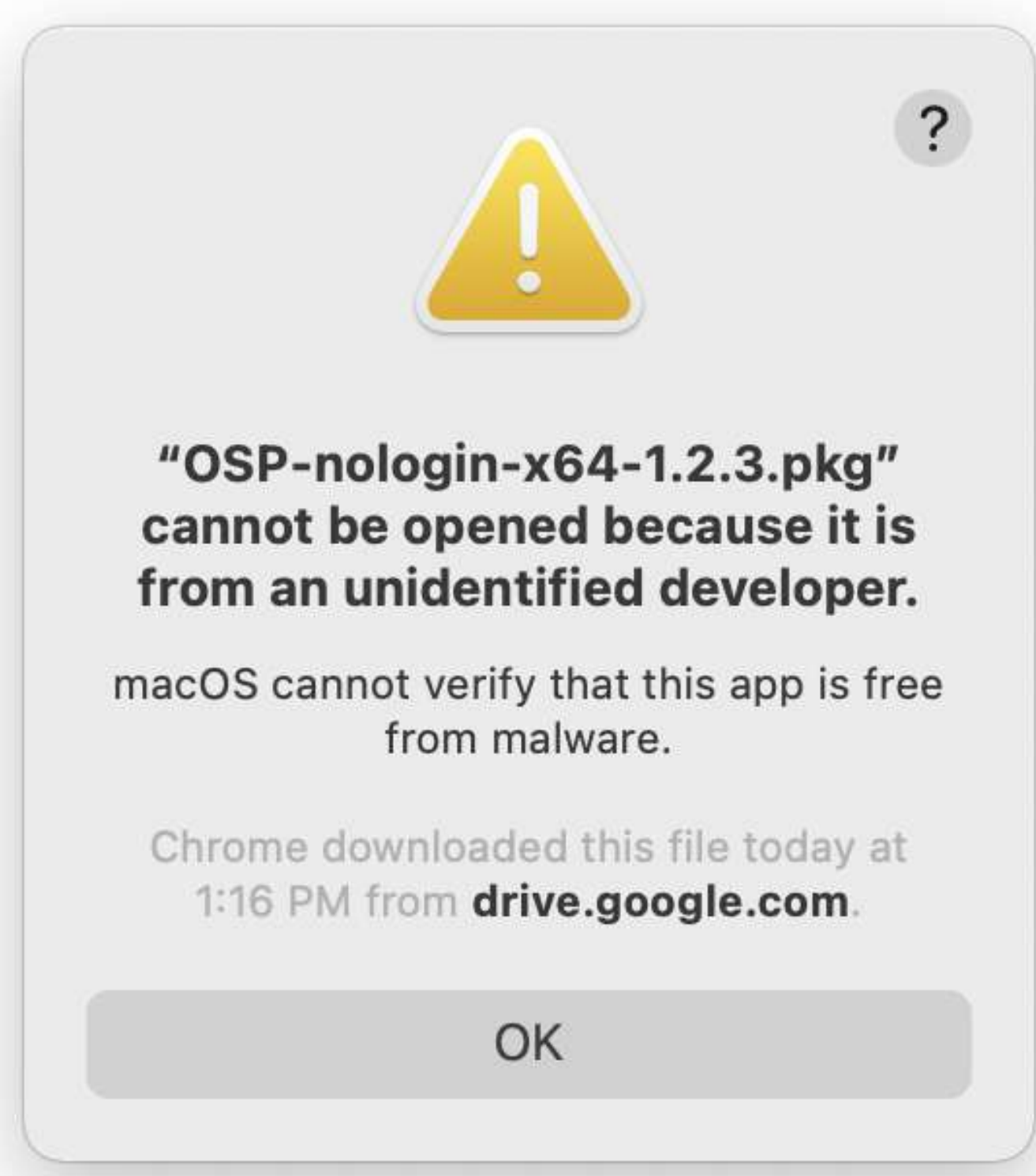
```
Welcome to Application Uninstaller  
The following packages will be REMOVED:  
OSP-1.2.3  
Do you wish to continue [Y/n]?y
```

```
Application uninstalling process started  
[1/3] [DONE] Successfully deleted shortcut links  
[2/3] [DONE] Successfully deleted application informations  
[3/3] [DONE] Successfully deleted application  
Application uninstall process finished
```

# Troubleshooting - Can't Open Installer Window

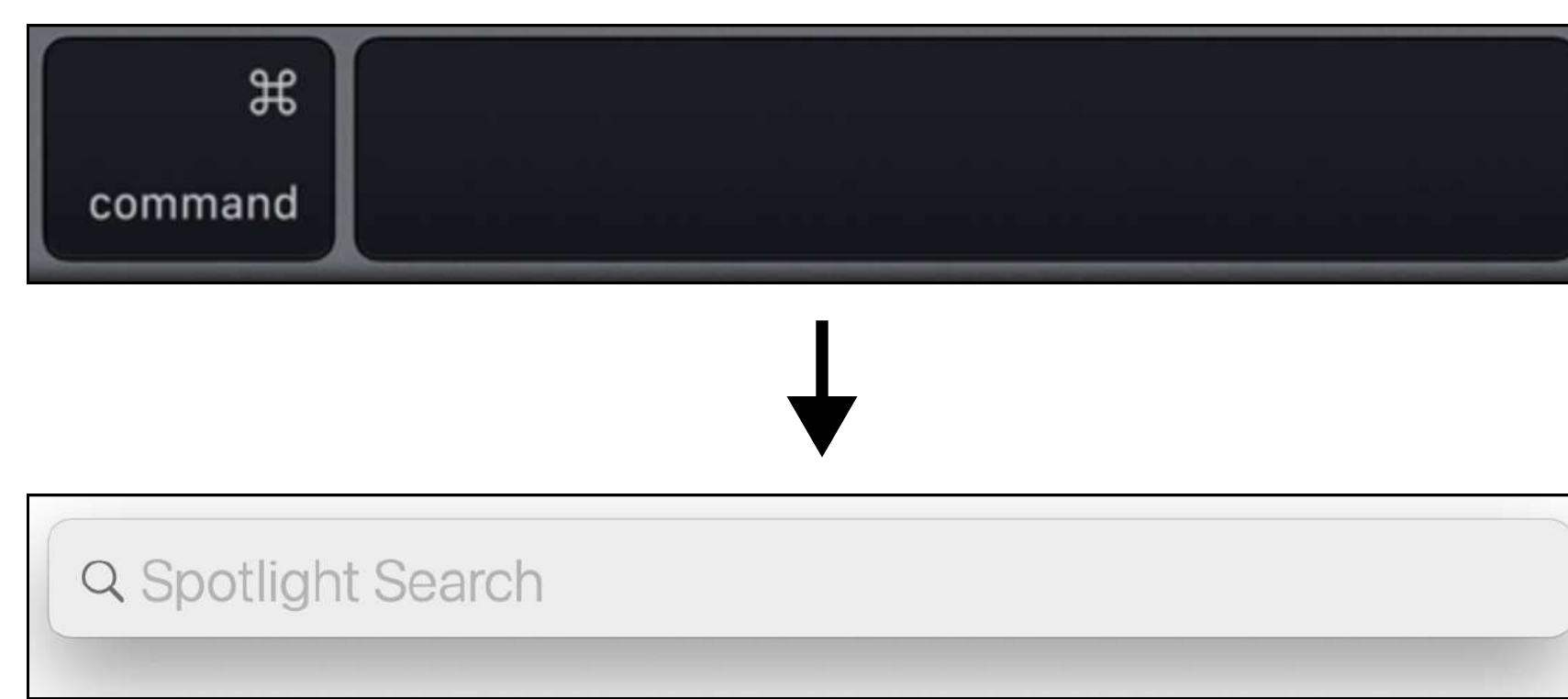
Refer to this section if you don't see the OSP installer window open, and instead see an "Unidentified Developer" message in step 4 of the "OSP Installation Steps" section.

If you received the message, that means you need to change permissions on your computer to allow the installer to run.

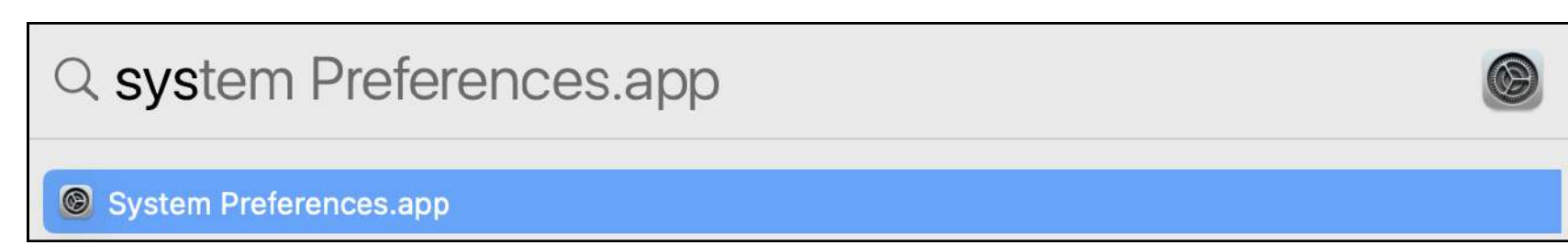


## 1. Open System Preferences

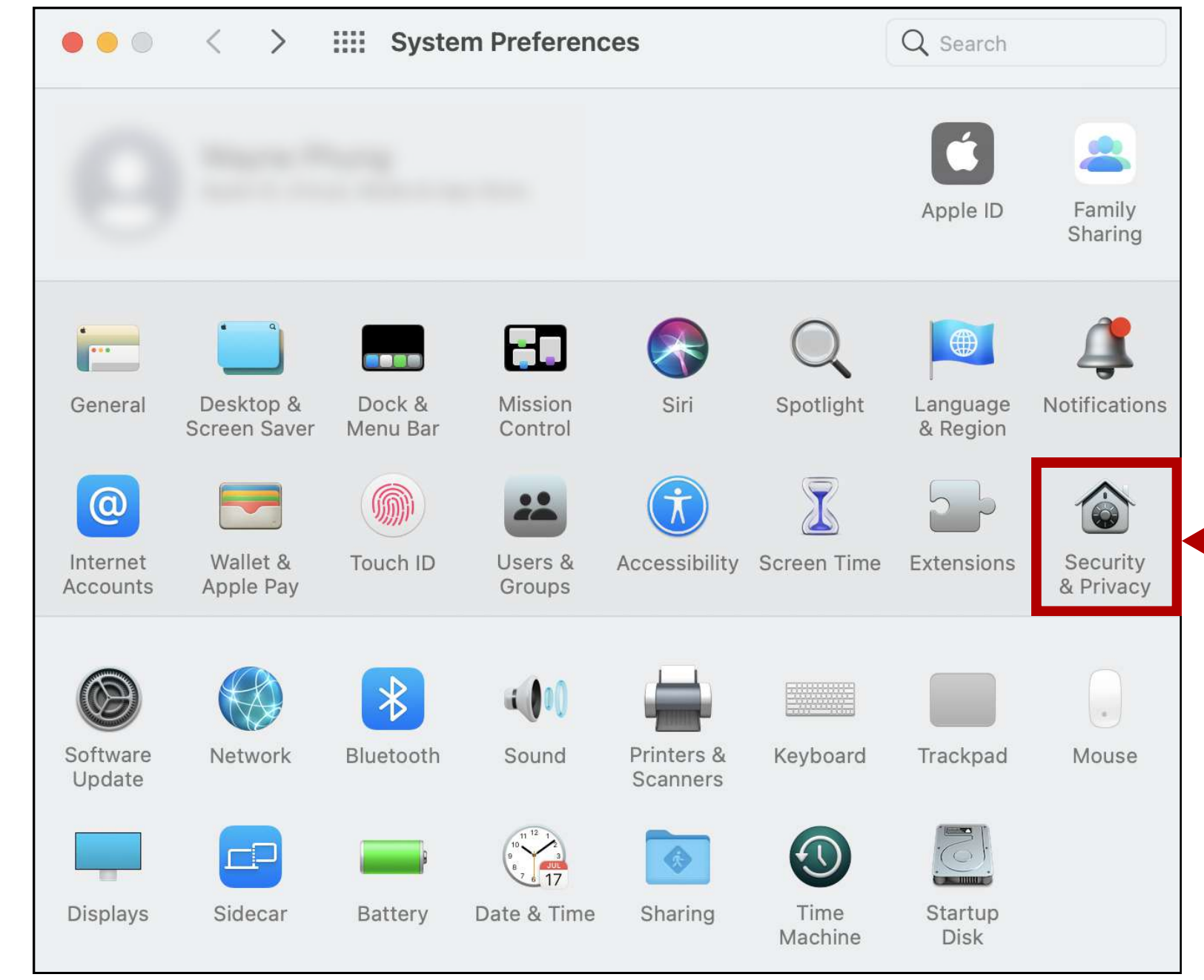
Press command + space to open Spotlight Search and start typing "system preferences".



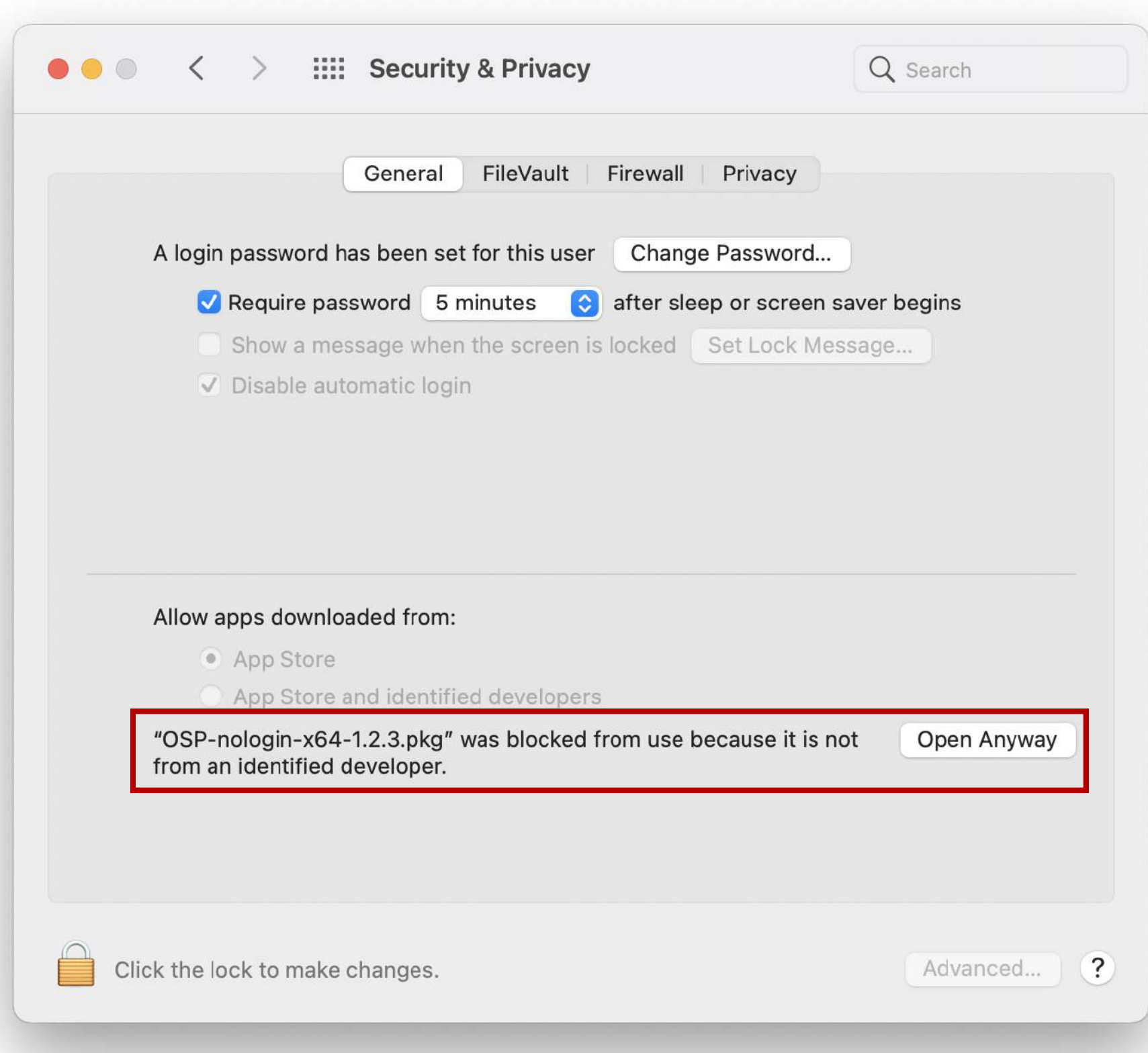
The app name will be highlighted. Press enter.



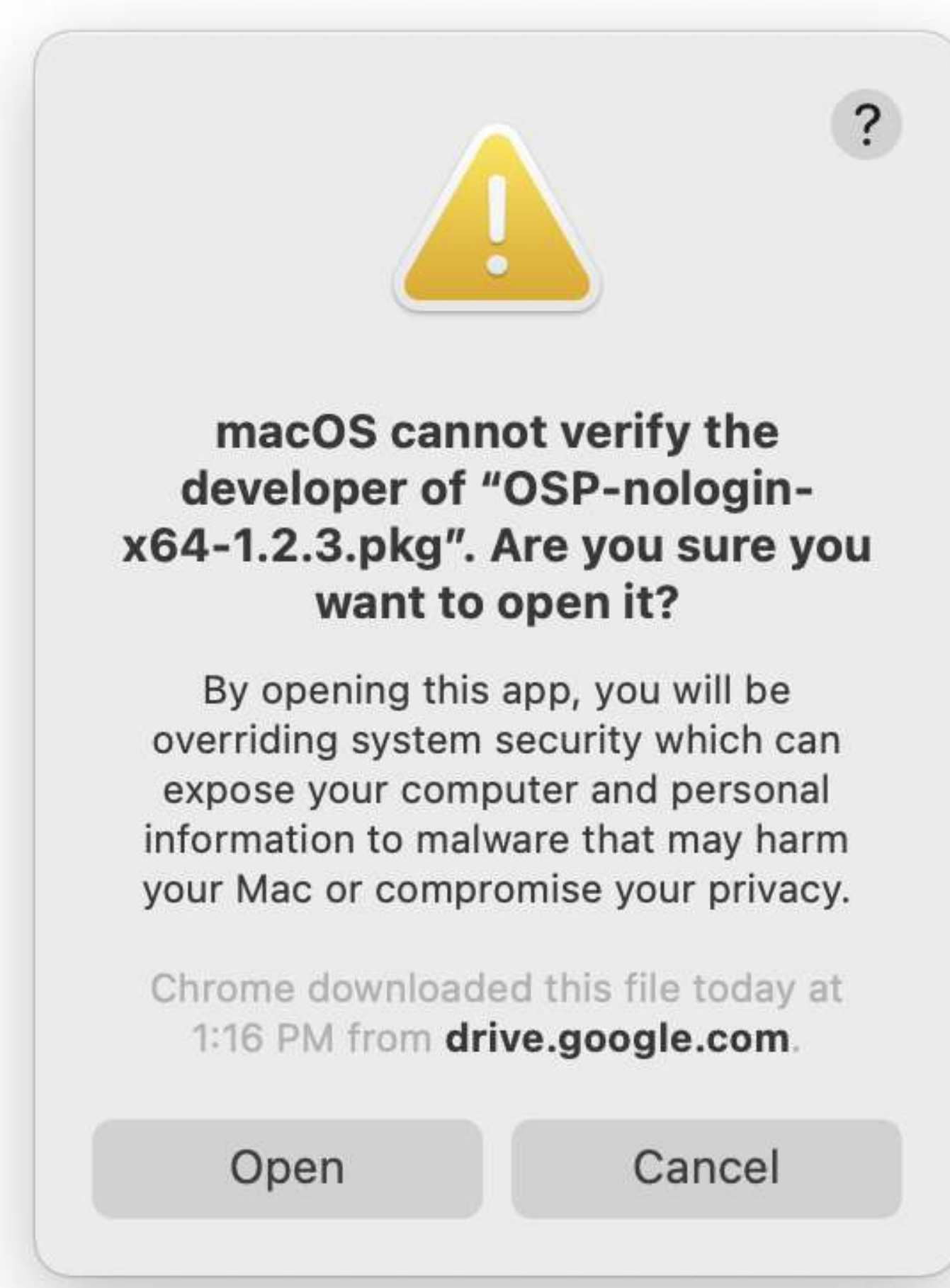
## 2. Go to "Security and Privacy"



3. In the "General" tab, you should see the "unidentified developer" message here as well. Click the "Open Anyway" button.

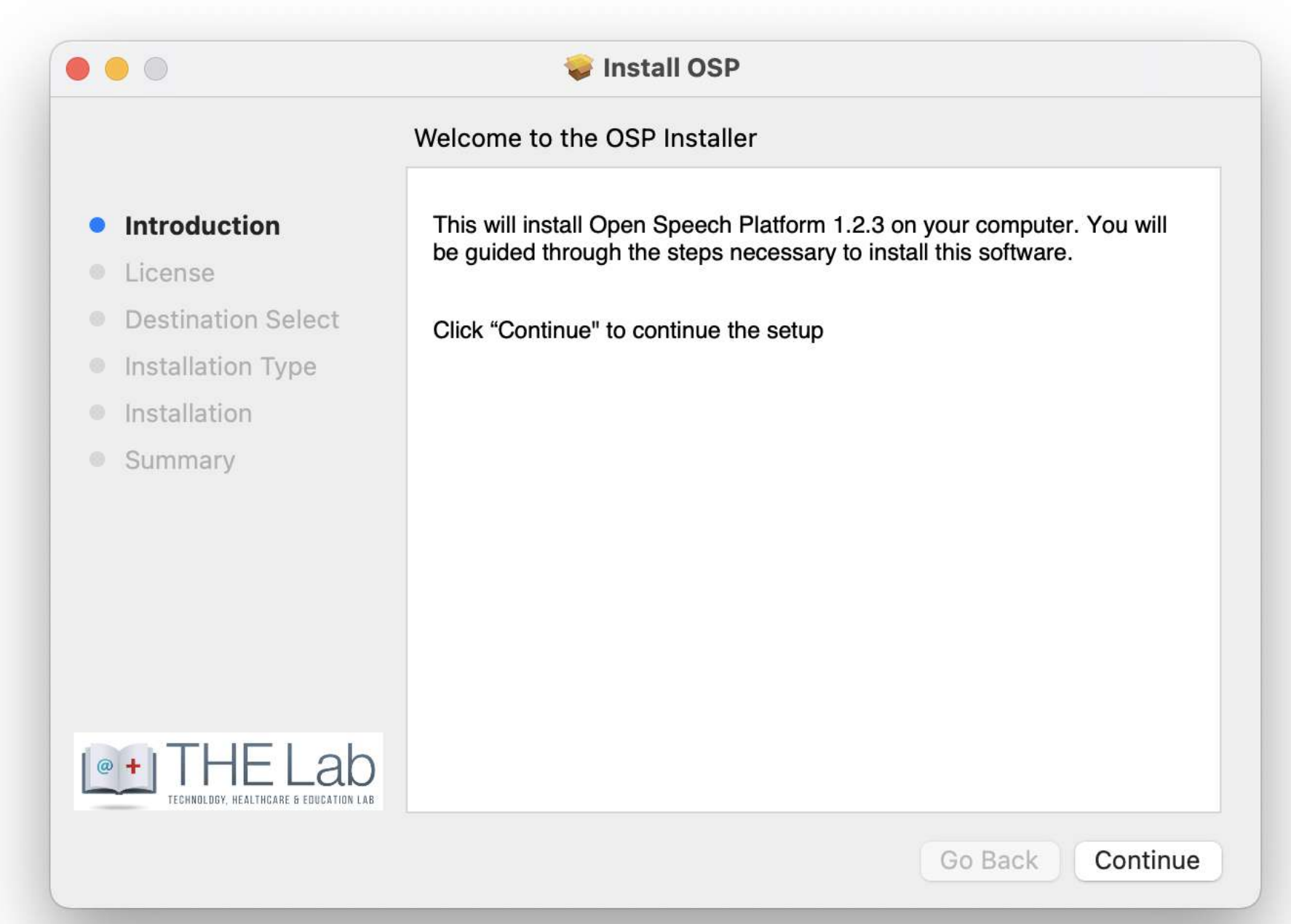


4. If you receive this popup, confirm by pressing the "Open" button.



5. You should see this installer window opened.

Proceed to step 5 in the "OSP Installation Steps" section.

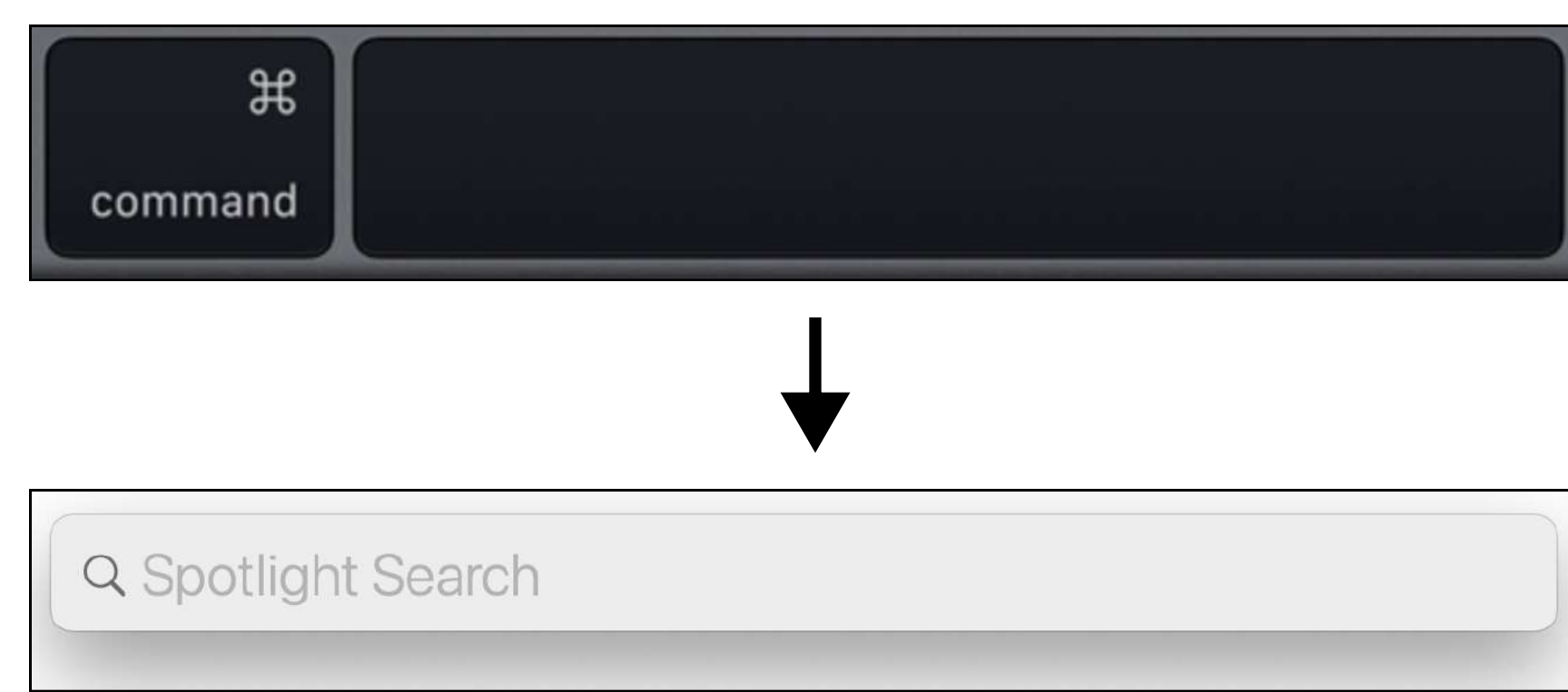


# Troubleshooting - Terminal Tabs Won't Open

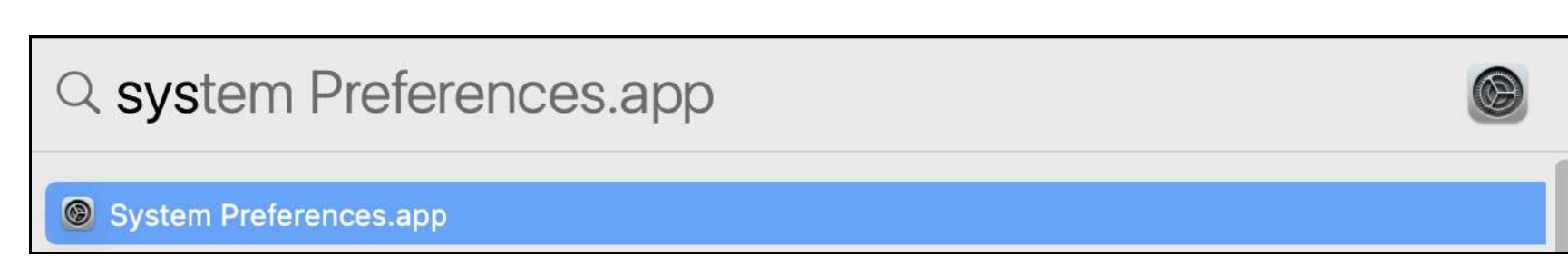
Refer to this section if the five terminal tabs don't open when you enter the "run\_osp" command during step 6 of "OSP Installation Steps".

## 1. Open System Preferences

Press command + space to open Spotlight Search and start typing "system preferences".



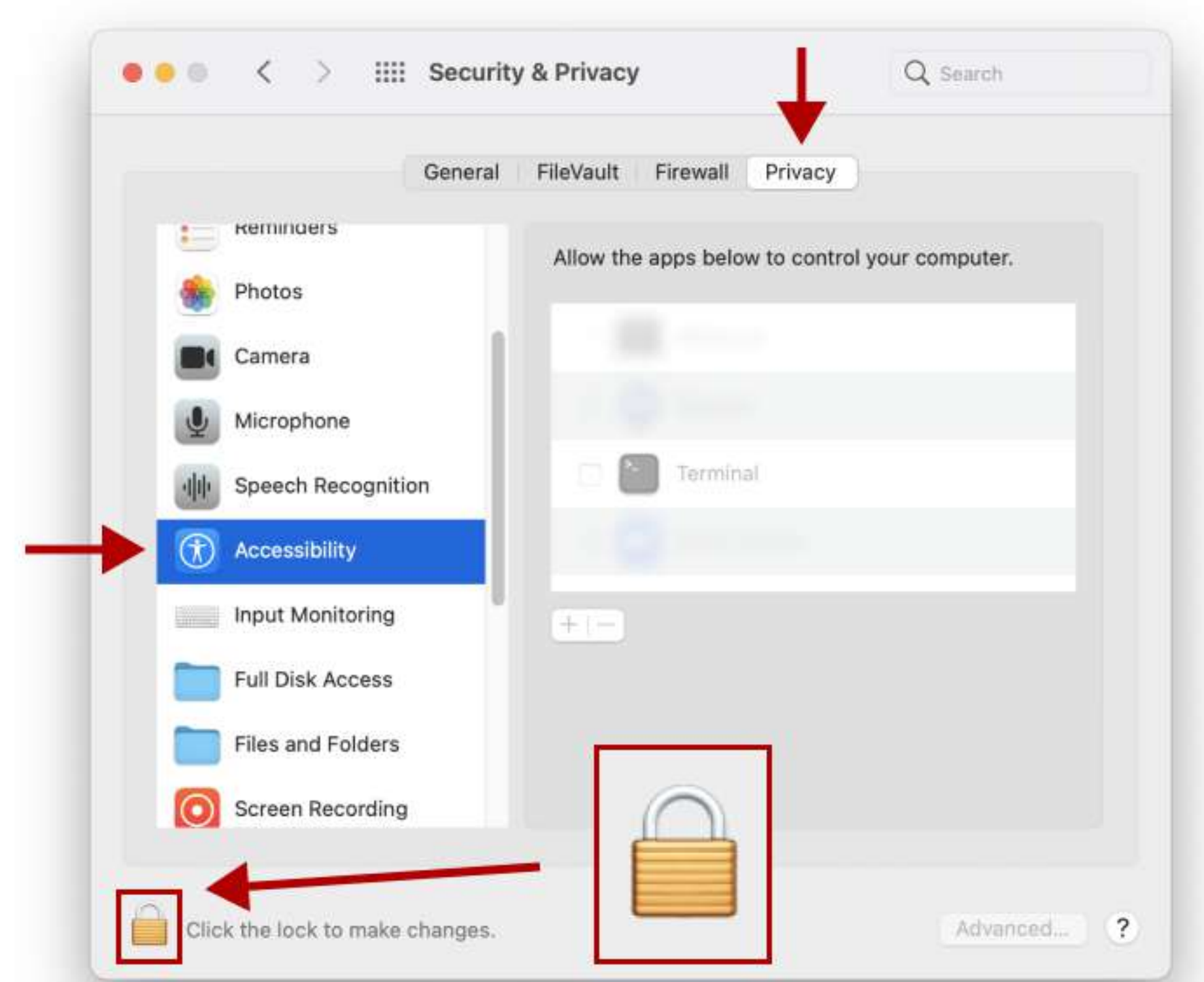
The app name will be highlighted. Press enter.



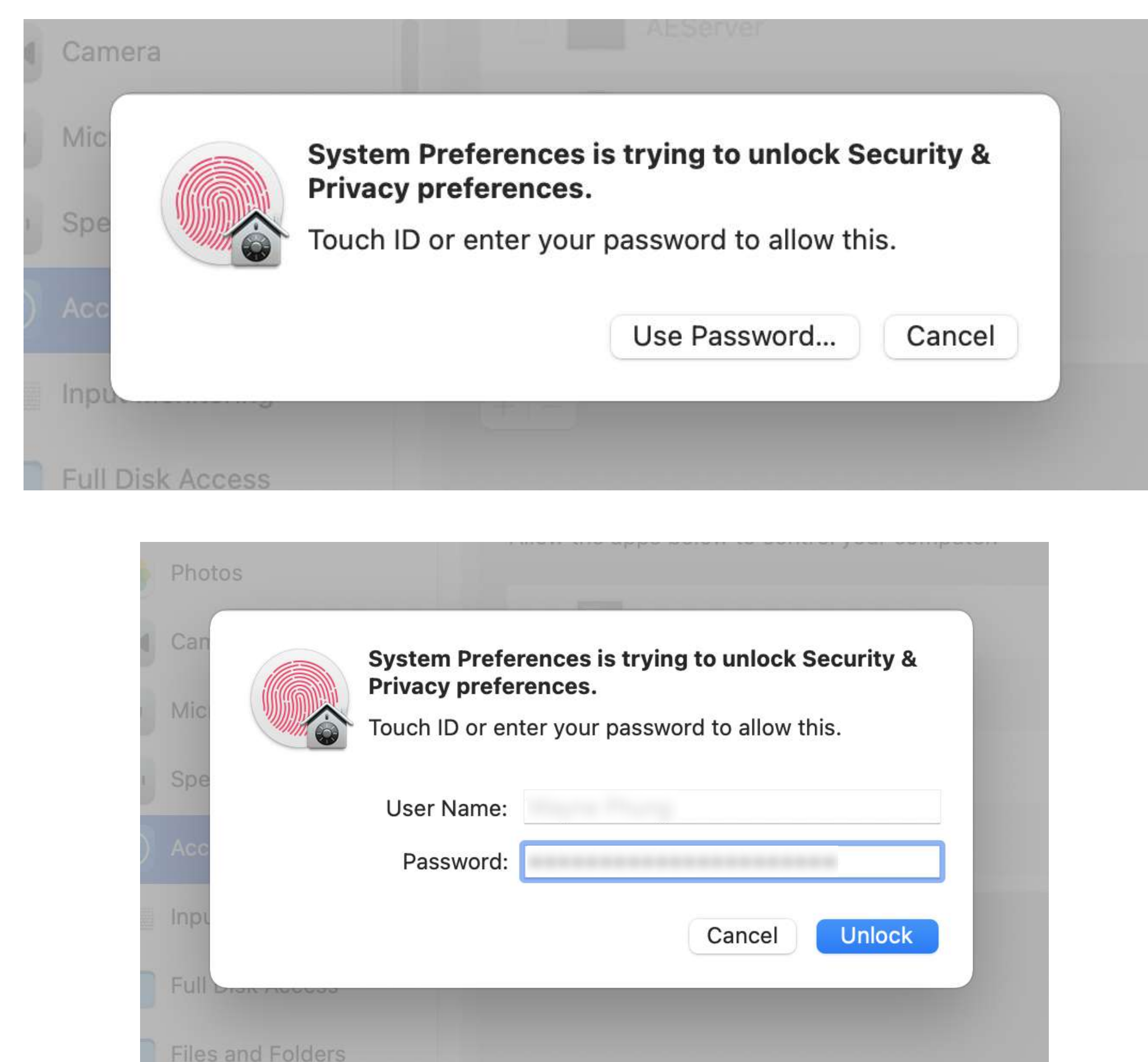
## 2. Go to "Security and Privacy"



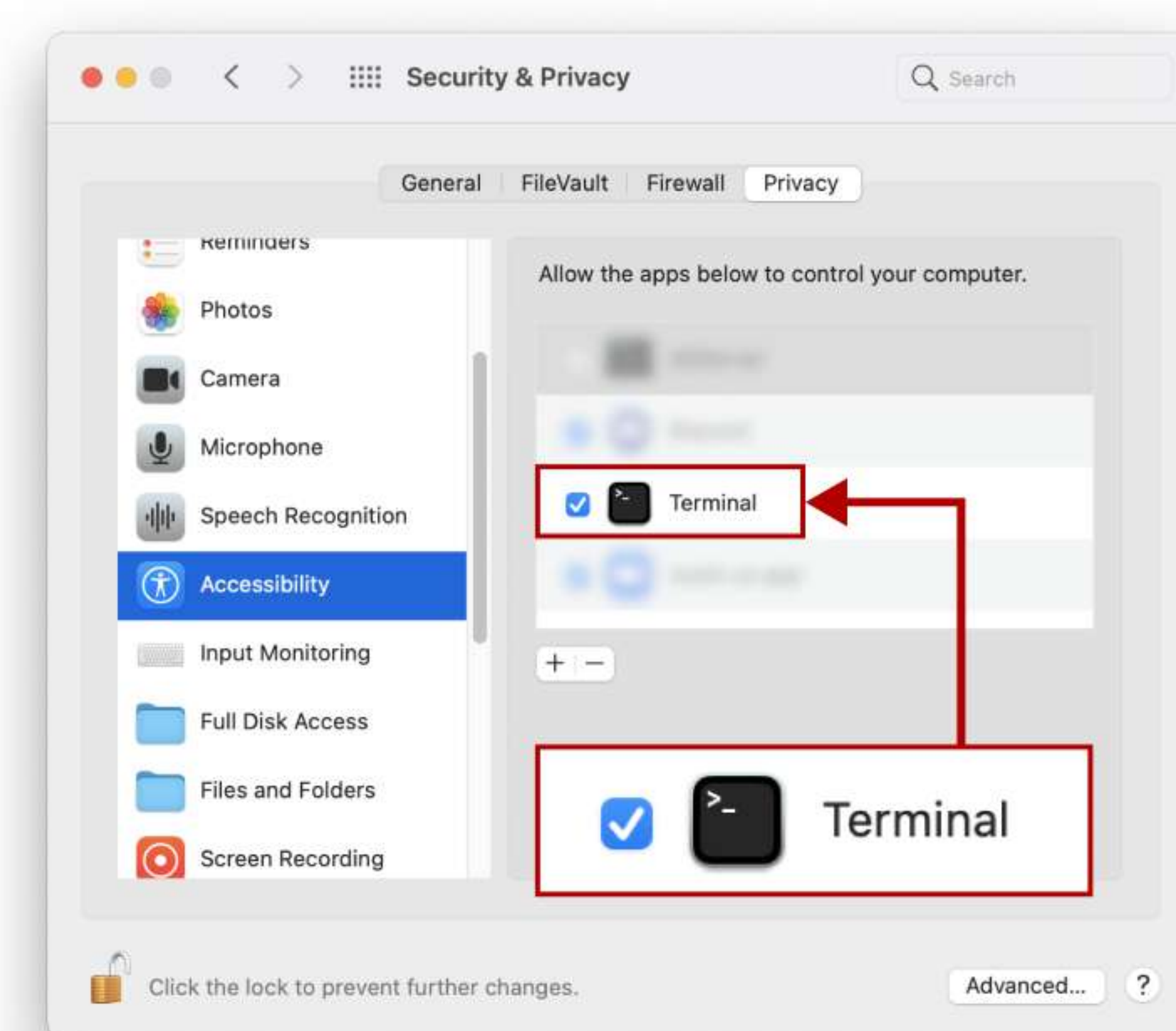
3. Go to the "Privacy" Tab. On the left sidebar, scroll down to "Accessibility", then click on the lock icon at the bottom.



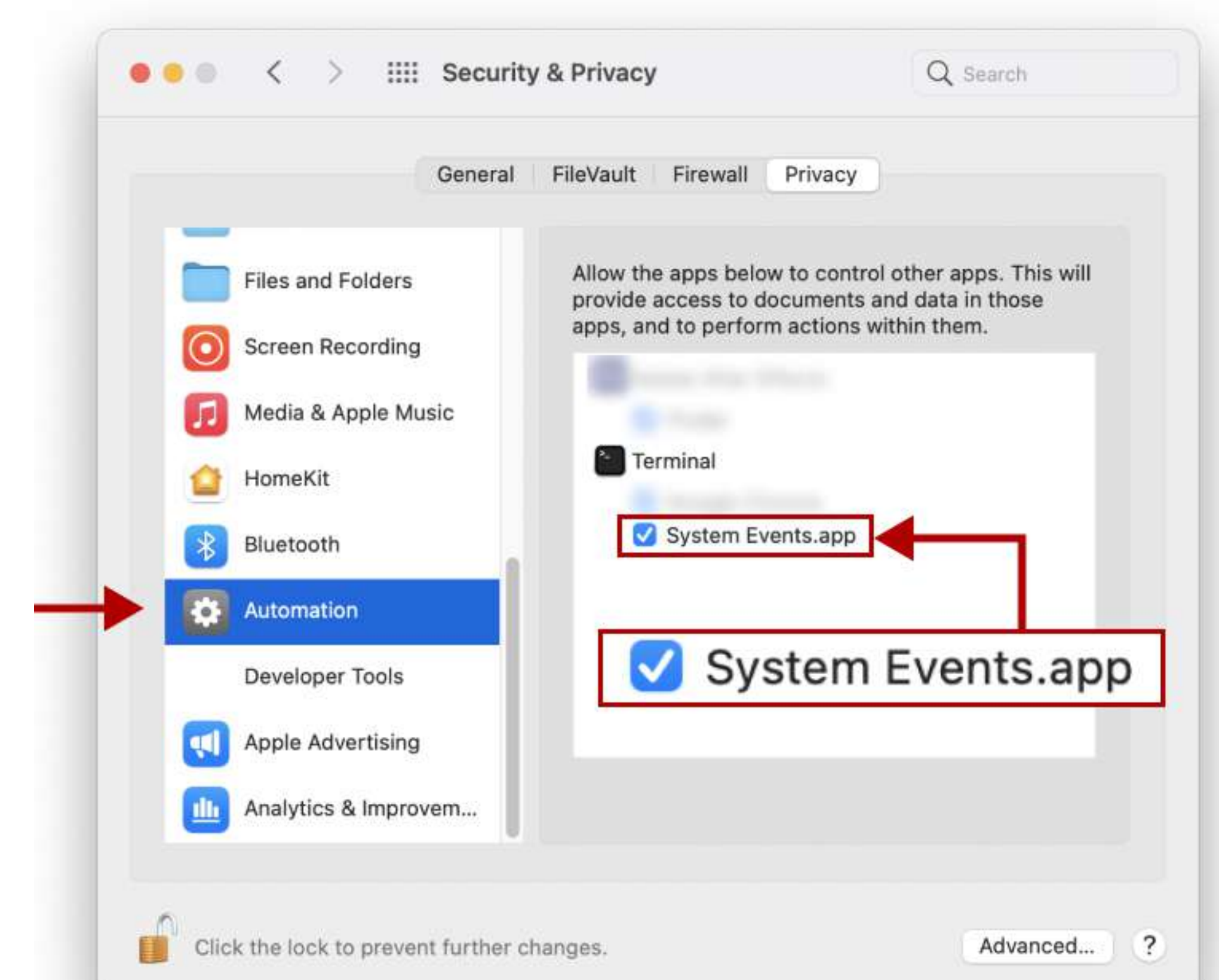
4. Use Touch ID or enter your password to unlock these settings.



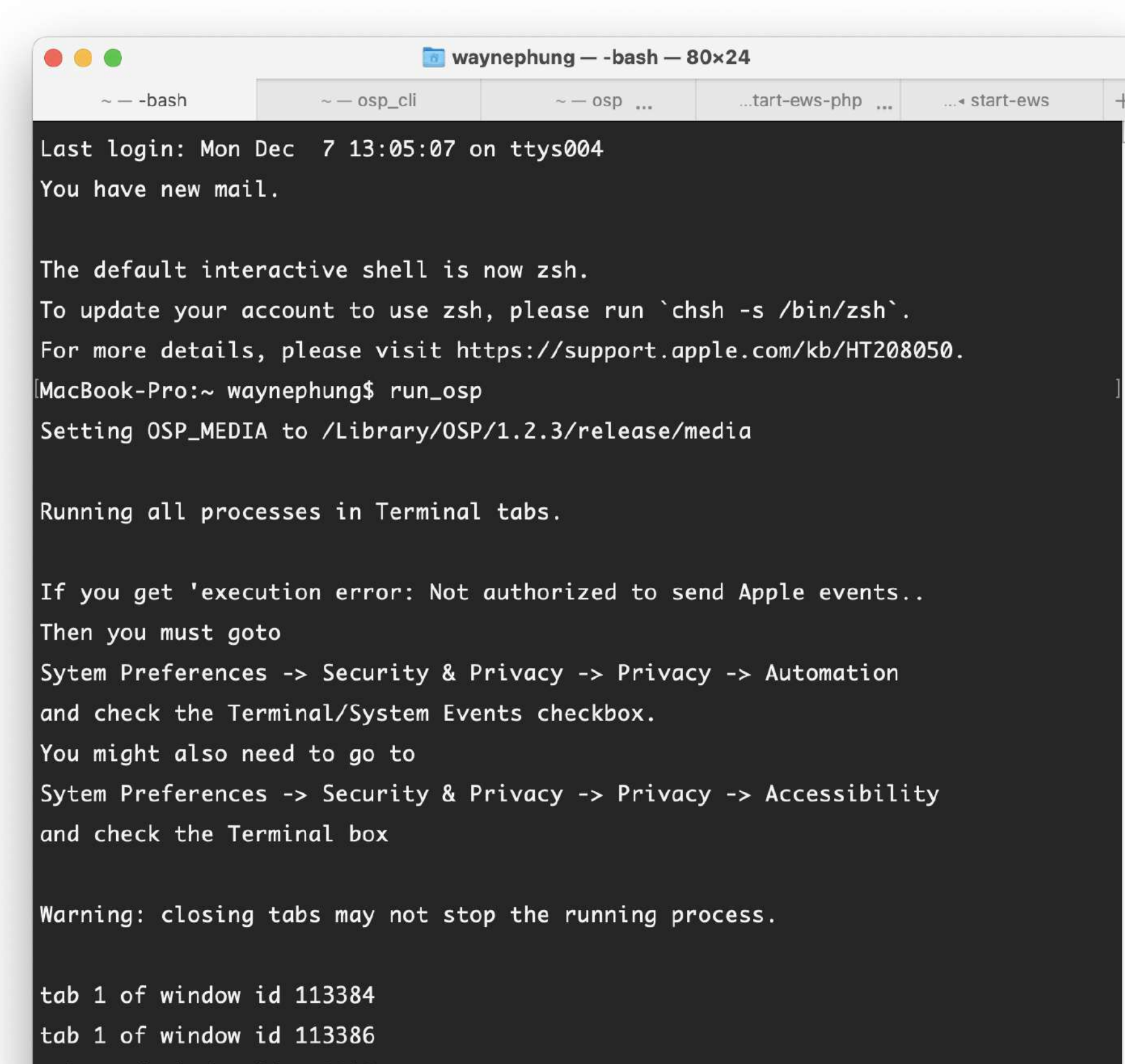
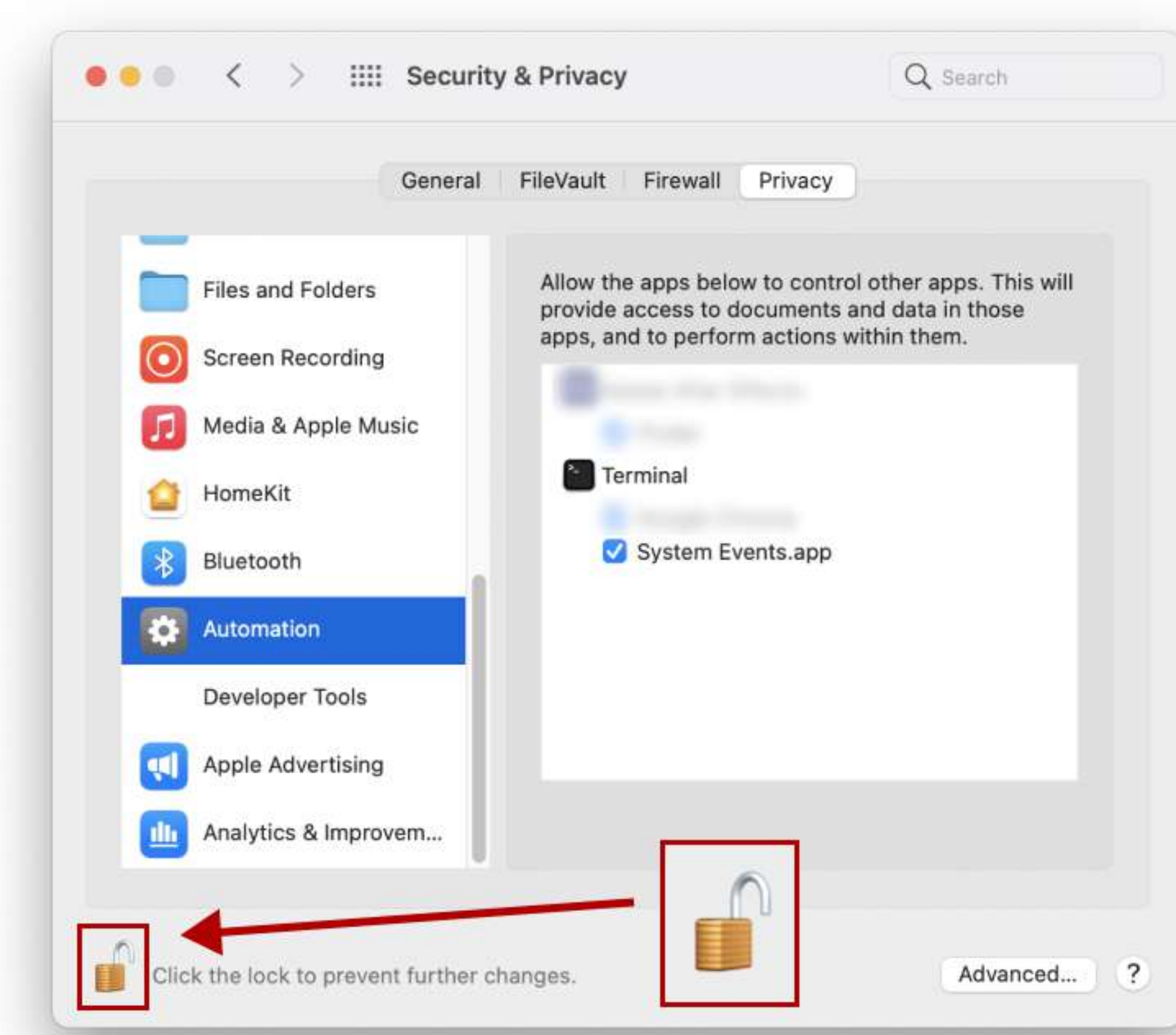
5. Click on the checkbox next to Terminal to enable Terminal access. You should see a checkmark.



6. Go to the left sidebar again and scroll down to "Automation". Click on the checkbox next to "System Events.app".



7. Then, click on the lock icon to save these changes. Return to step 6 of "OSP Installation Steps" to try entering "run\_osp" again.



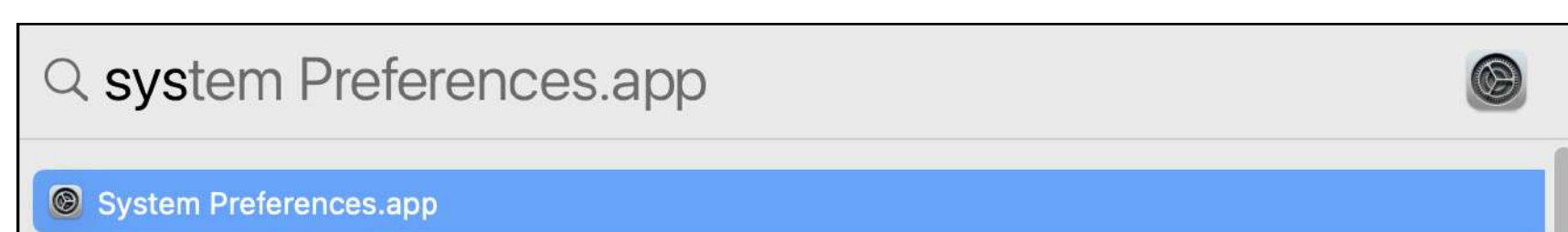
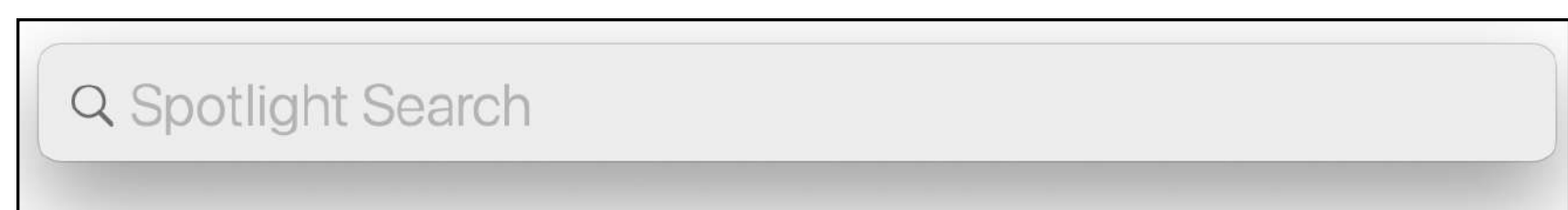
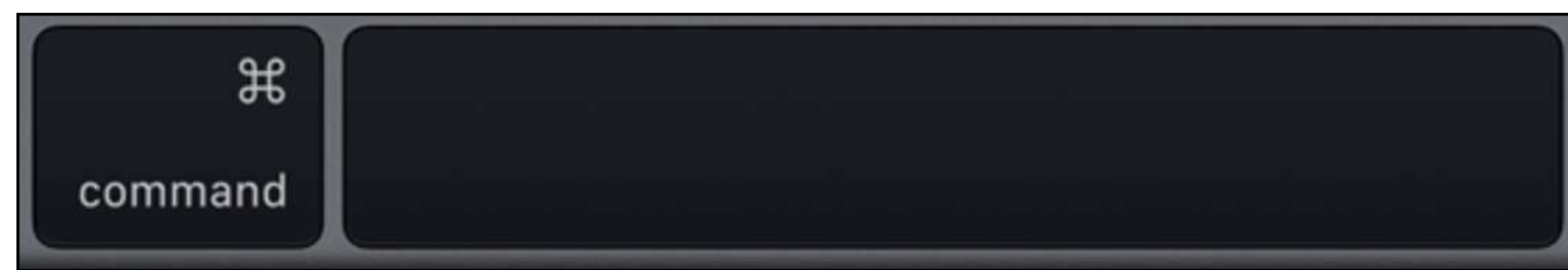
# OSP Sanity Check - Making Sure Audio Input and Output Works

## 1. Choose one method to check and connect your audio input and output sources.

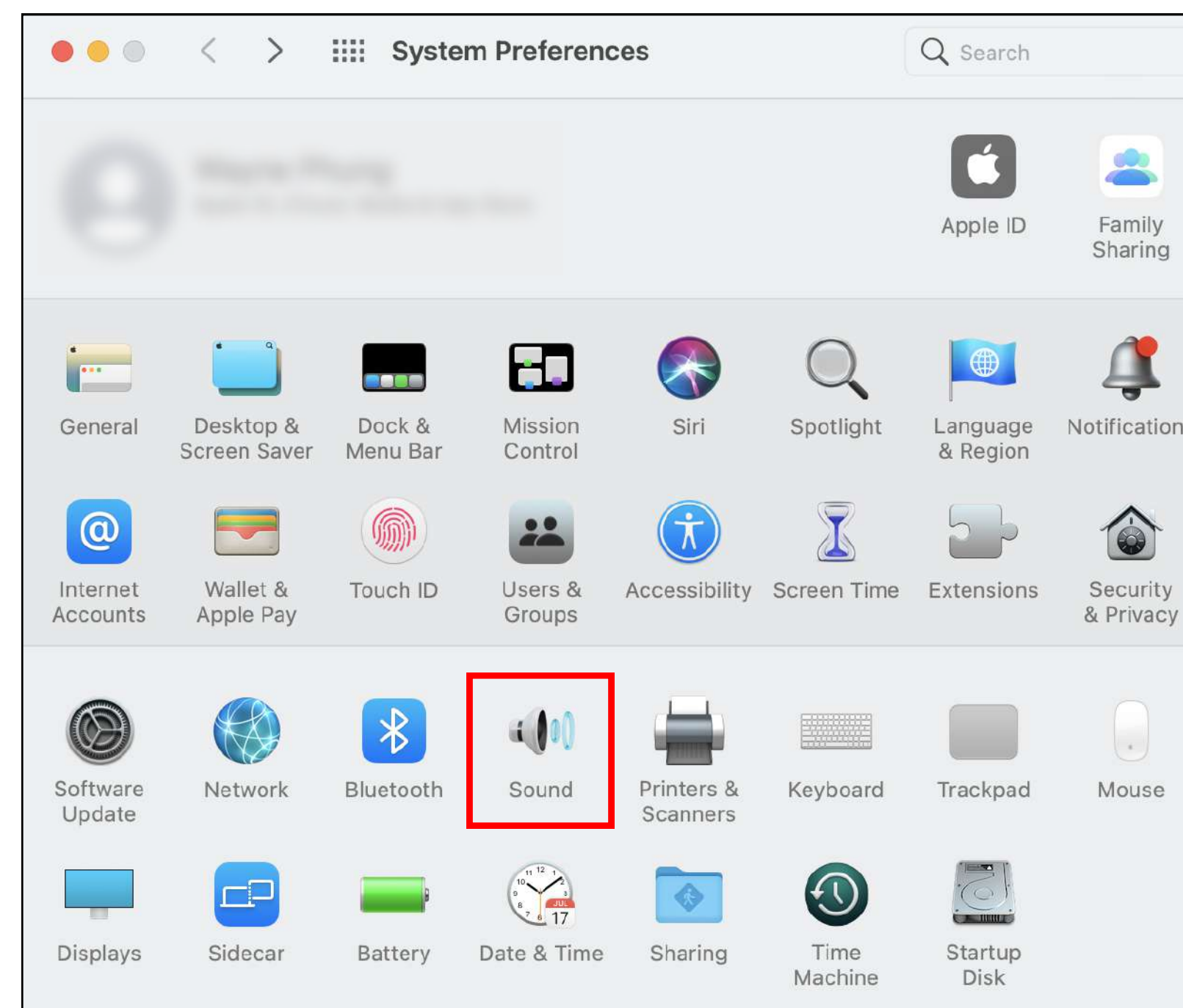
### Method A - System Preferences (Mac)

A1. Press command + space to open Spotlight Search and start typing "system preferences".

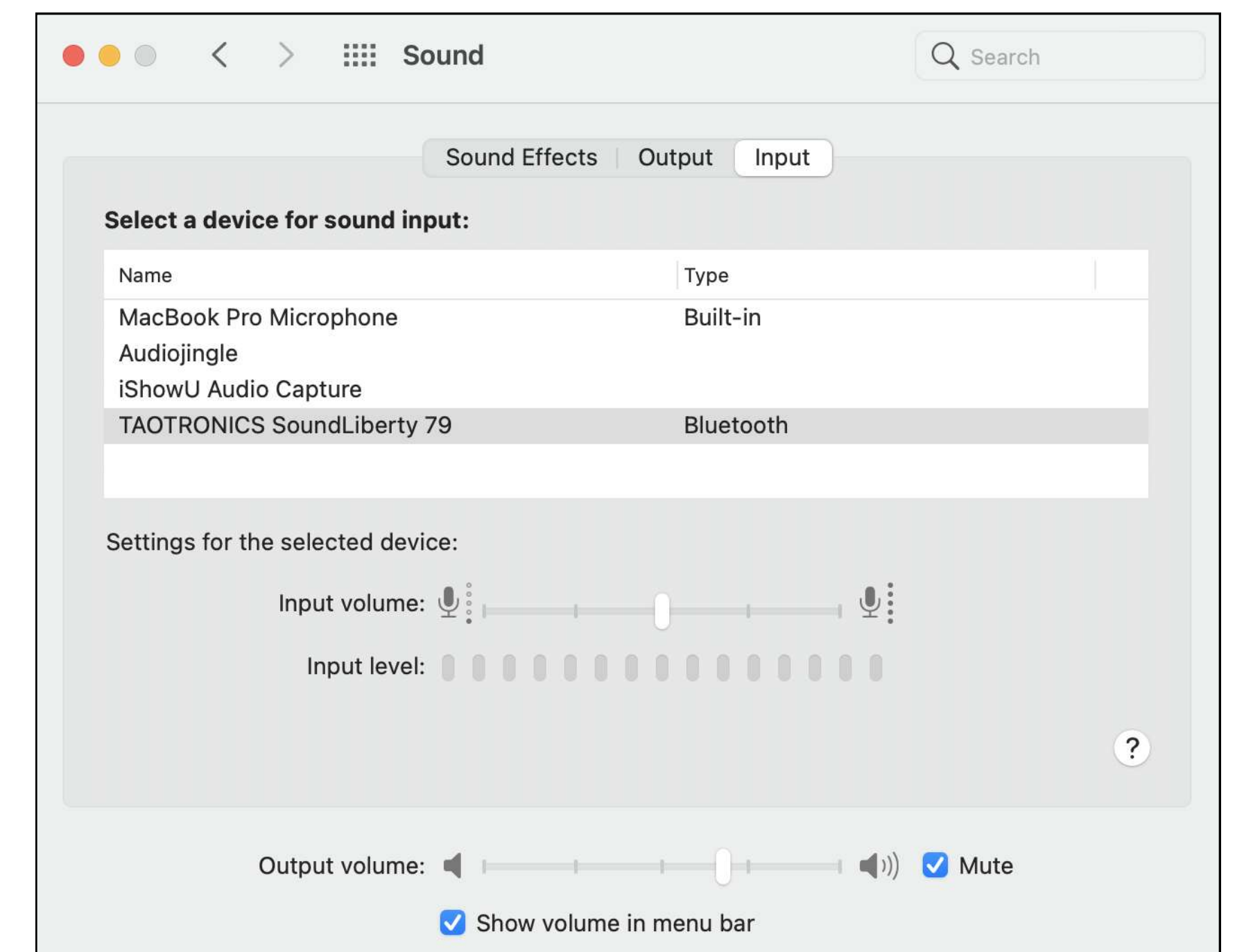
The app name will be highlighted. Press enter.



A2. You should see this interface of the System Preferences. Then, click on "Sound".



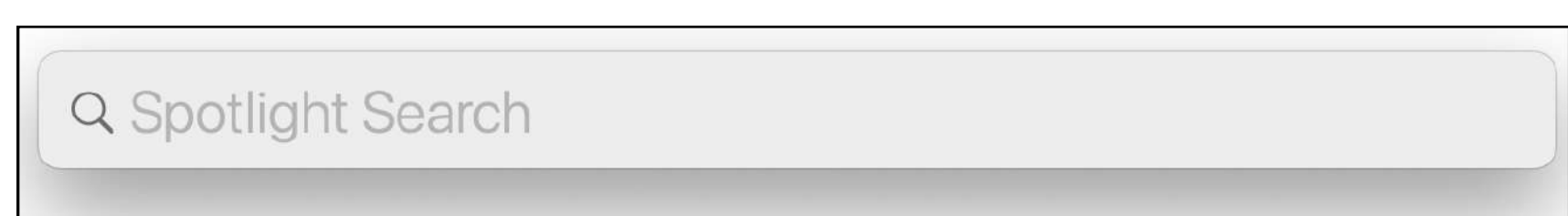
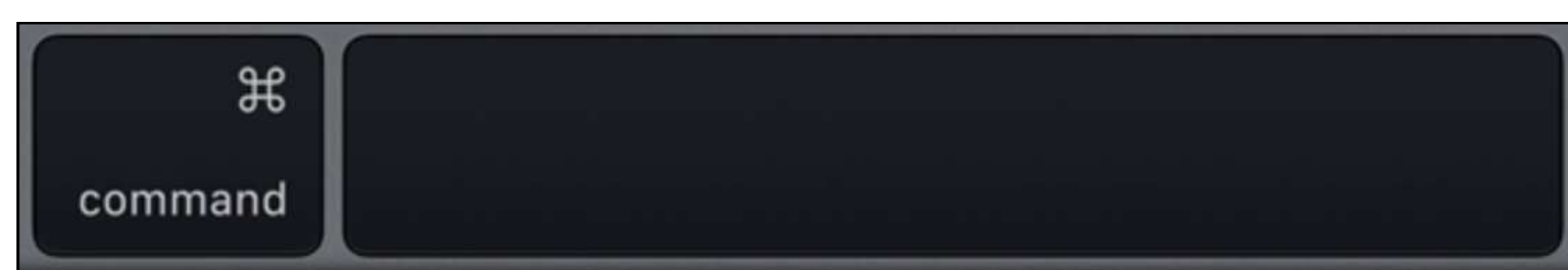
A3. There are tabs labeled "Output" and "Input", where you can connect available audio microphone input and volume output sources.



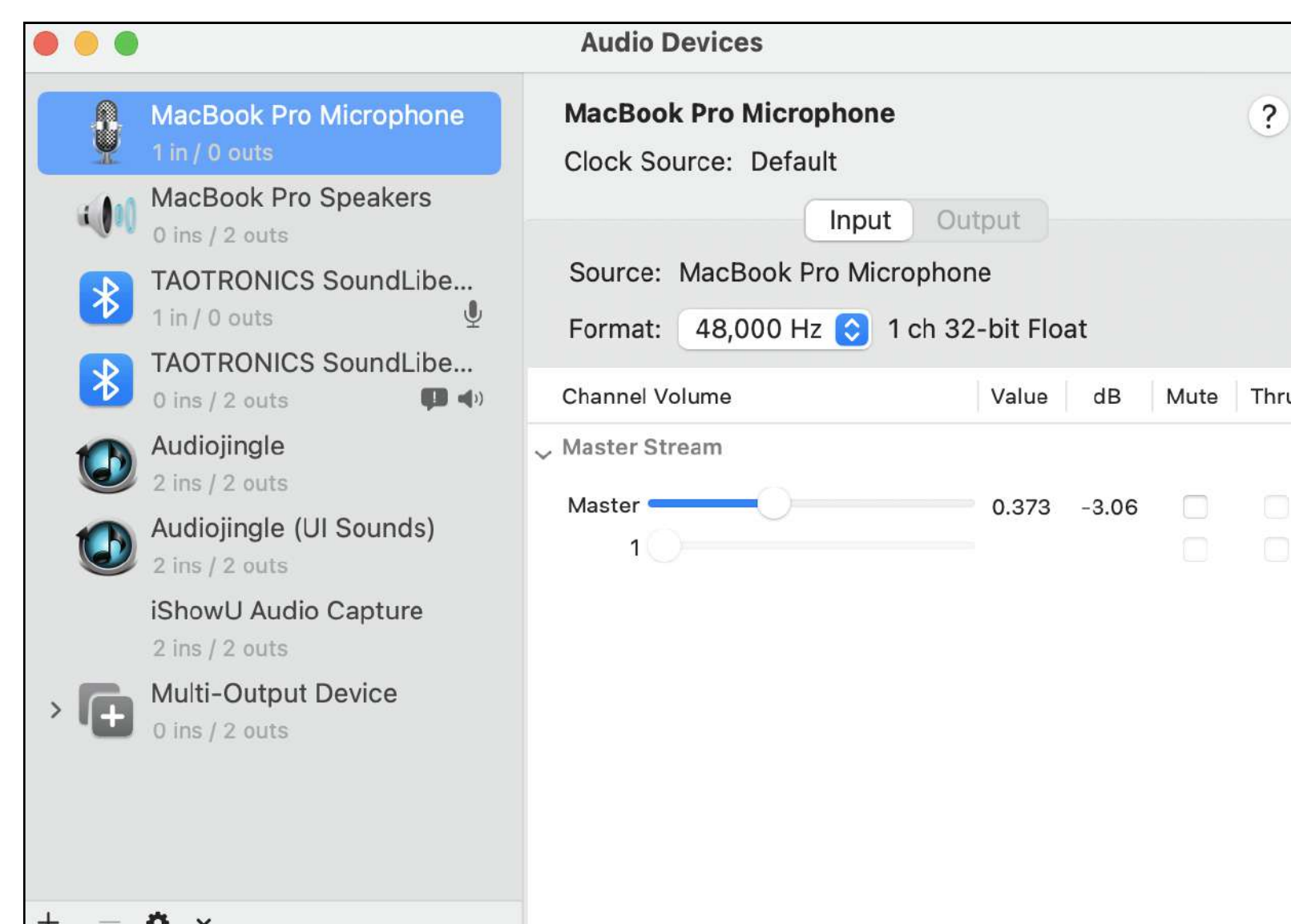
### Method B - Audio MIDI Setup (Mac)

B1. Press command + space to open Spotlight Search and start typing "audio midi setup".

The app name will be highlighted. Press enter.

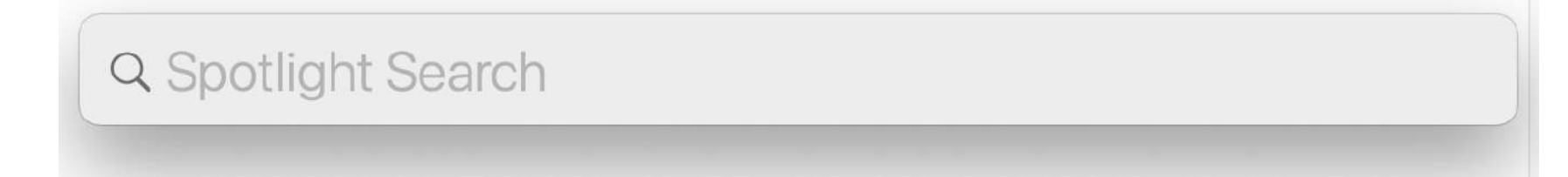
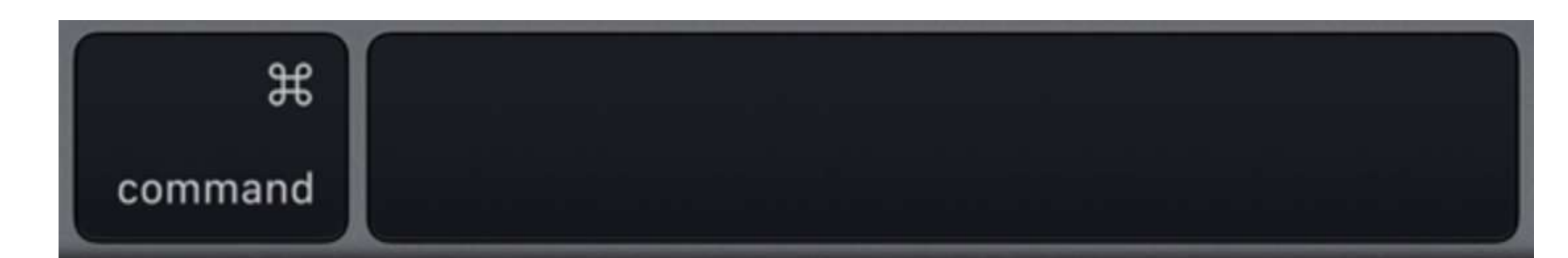


B2. The image below is the Audio MIDI Setup interface, where you can connect your audio sources for microphone input and volume output and make other changes to sound settings.

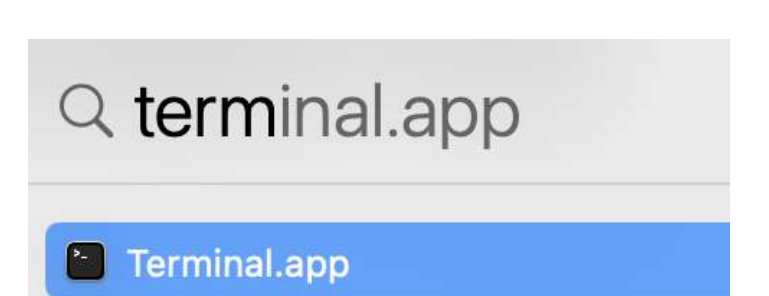


## 2. Open the terminal app once you have connected your audio sources.

Open Spotlight Search again.

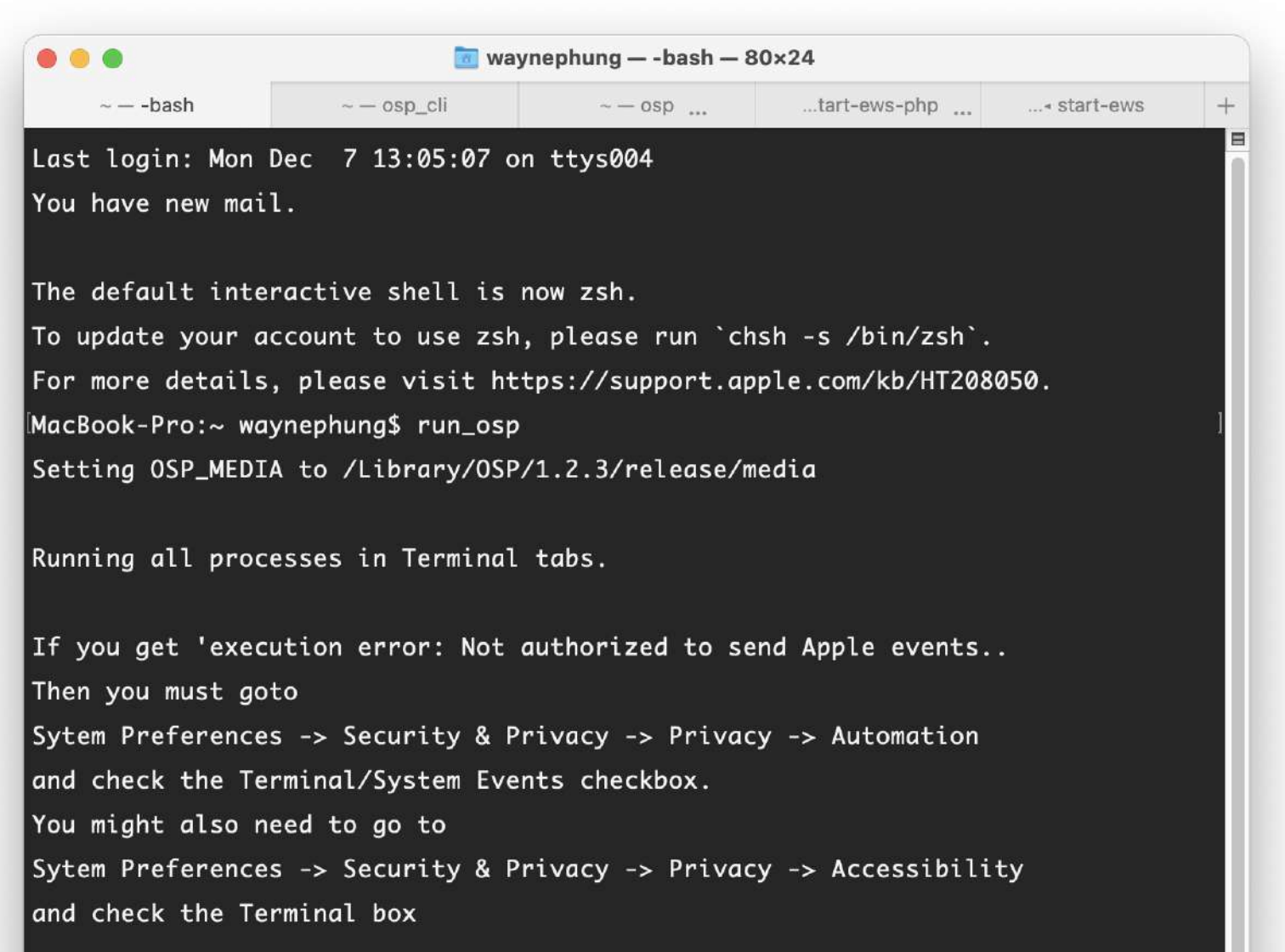


Type in "terminal", and the application should show up automatically.



## 3. In the terminal, enter the command "run\_osp".

You should see 5 terminal tabs automatically opened, running processes, and generating messages.



## 4. Click on the tab named "osp\_cli", enter the command "play", and press return/enter.

You should hear an audio file played. The file is named "tomsdiner.wav".

You should see parameters shown and the word "success" being shown.



## 5. To immediately stop the audio file playing, type in the command "stop" and press return/enter.

You should see parameters shown and the word "success" being shown.



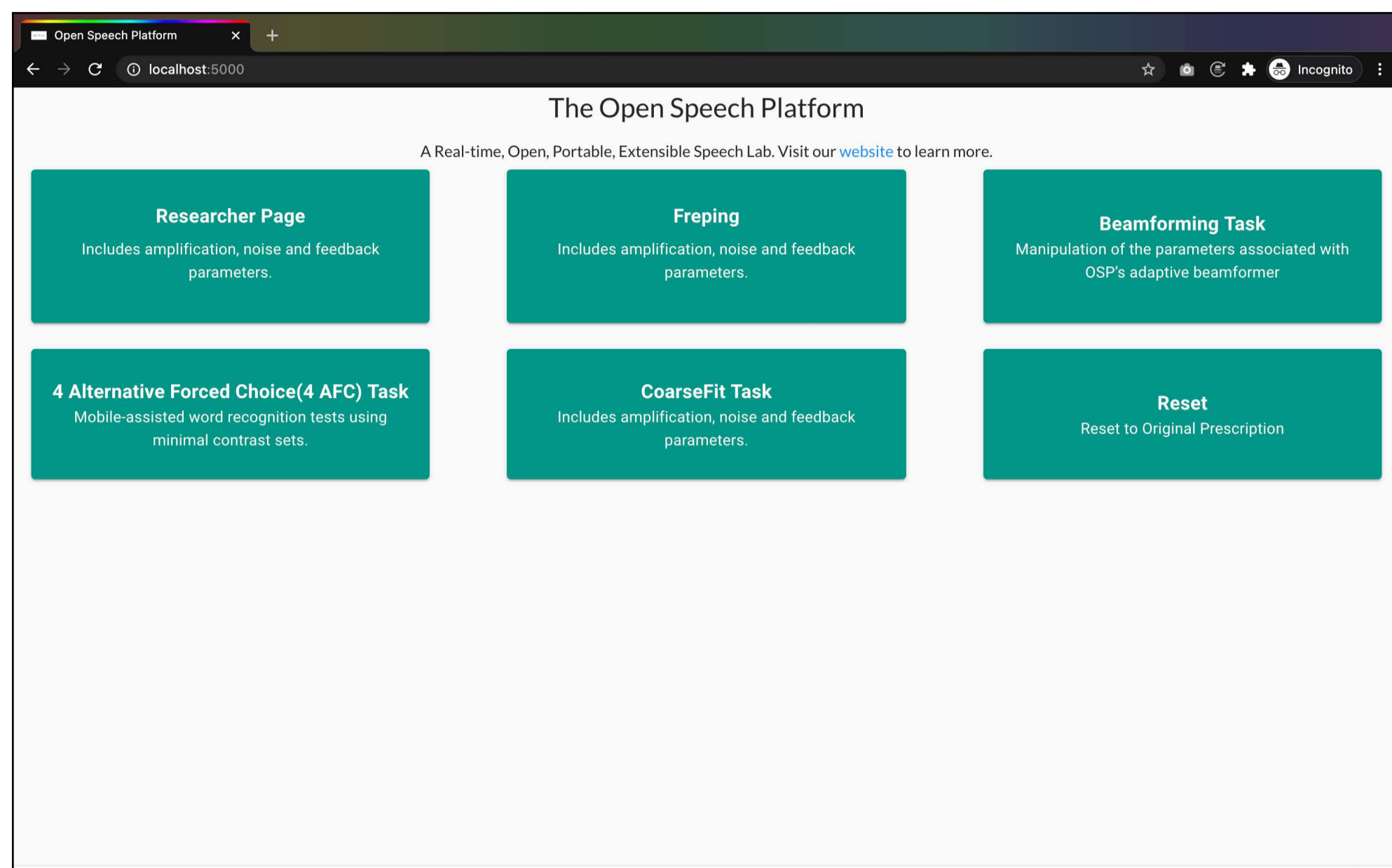
If you can't hear anything, refer to the "Audio Input and Output - Troubleshooting" section in the Getting Started Guide.

# OSP Sanity Check - Node.js version of EWS

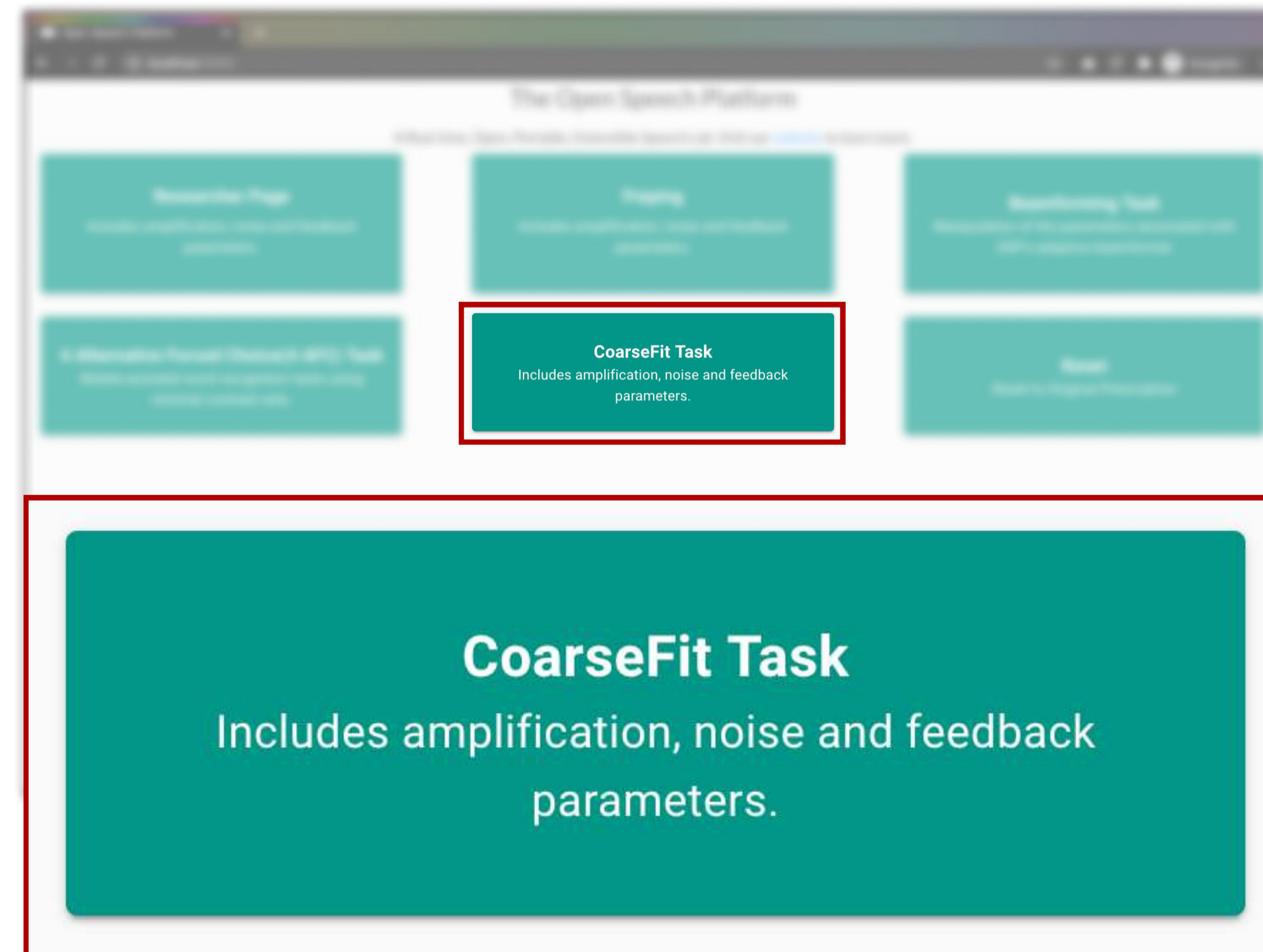
These steps verify that RT-MHA, Node.js version of EWS, and audio input/output work. For PHP/Laravel version of EWS, see “OSP Sanity Check - PHP/Laravel version of EWS”

## 1. Check your browser that you're in the right landing page.

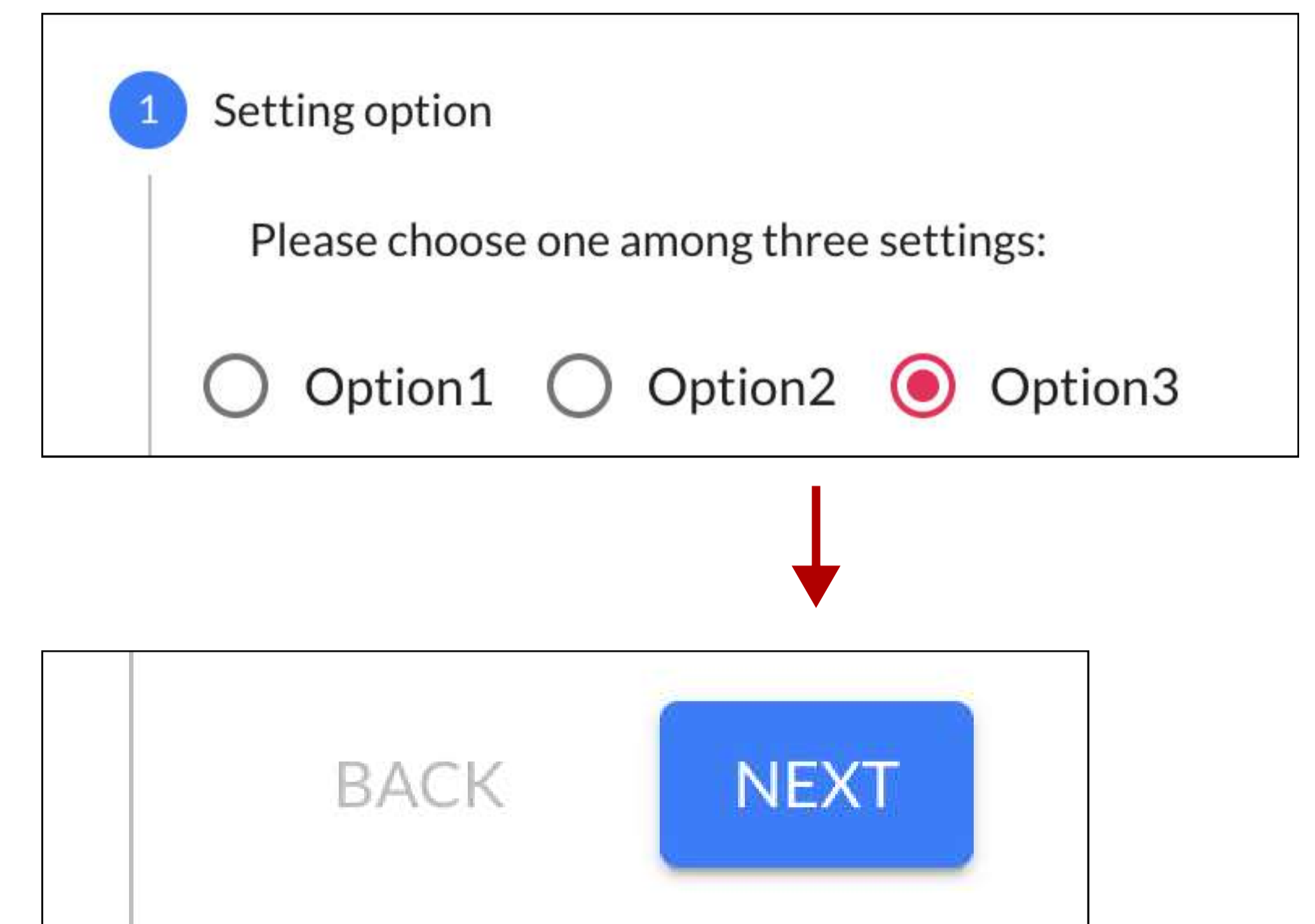
If not, type in “192.168.8.1:5000” in the browser search bar.



## 2. In the center below “Freping”, click on the button labeled “CoarseFit Task”.

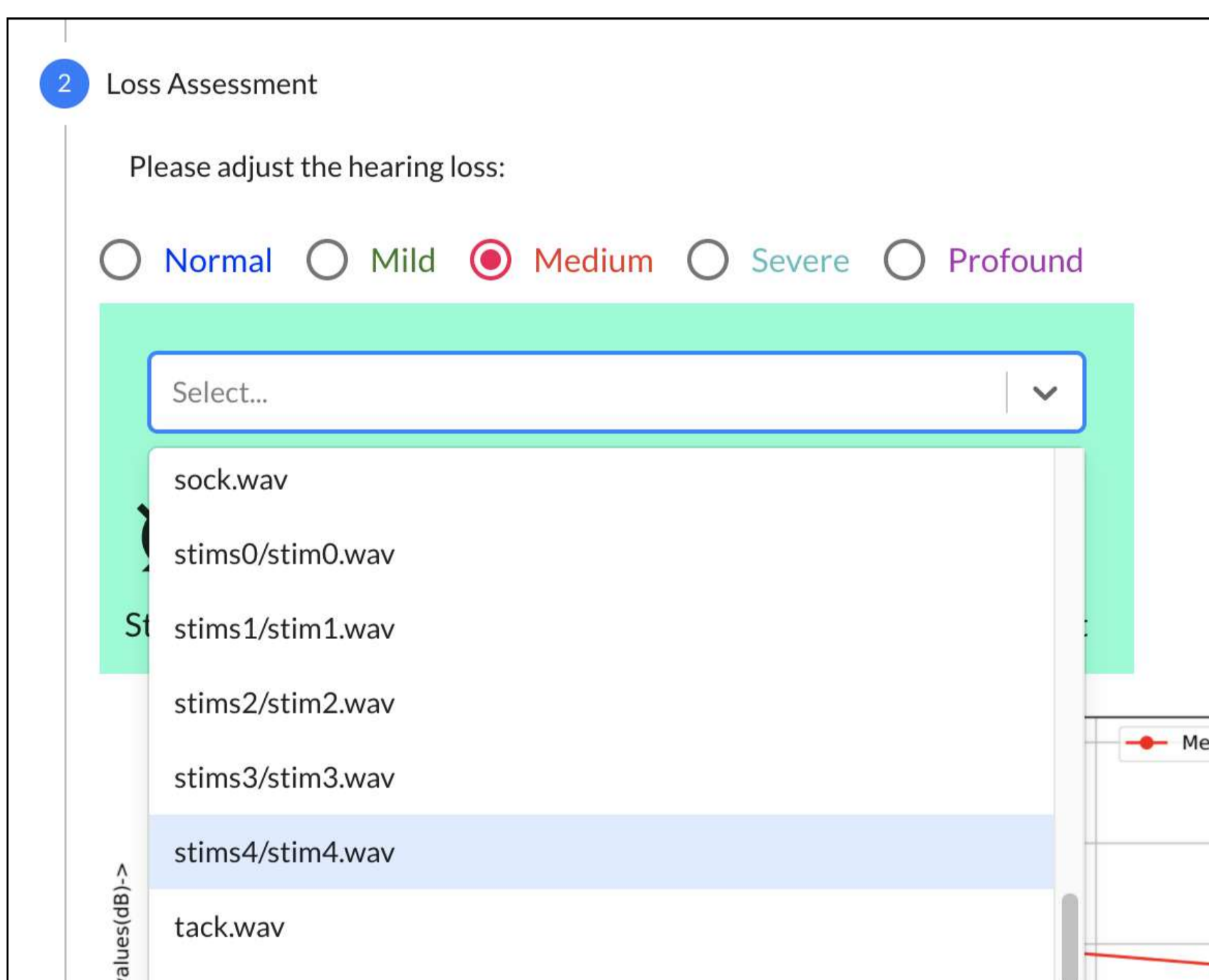


## 3. Choose any one of the three options in the CoarseFit Demo, scroll down. Notice the changes in the images and text. Then, click the “Next” button.

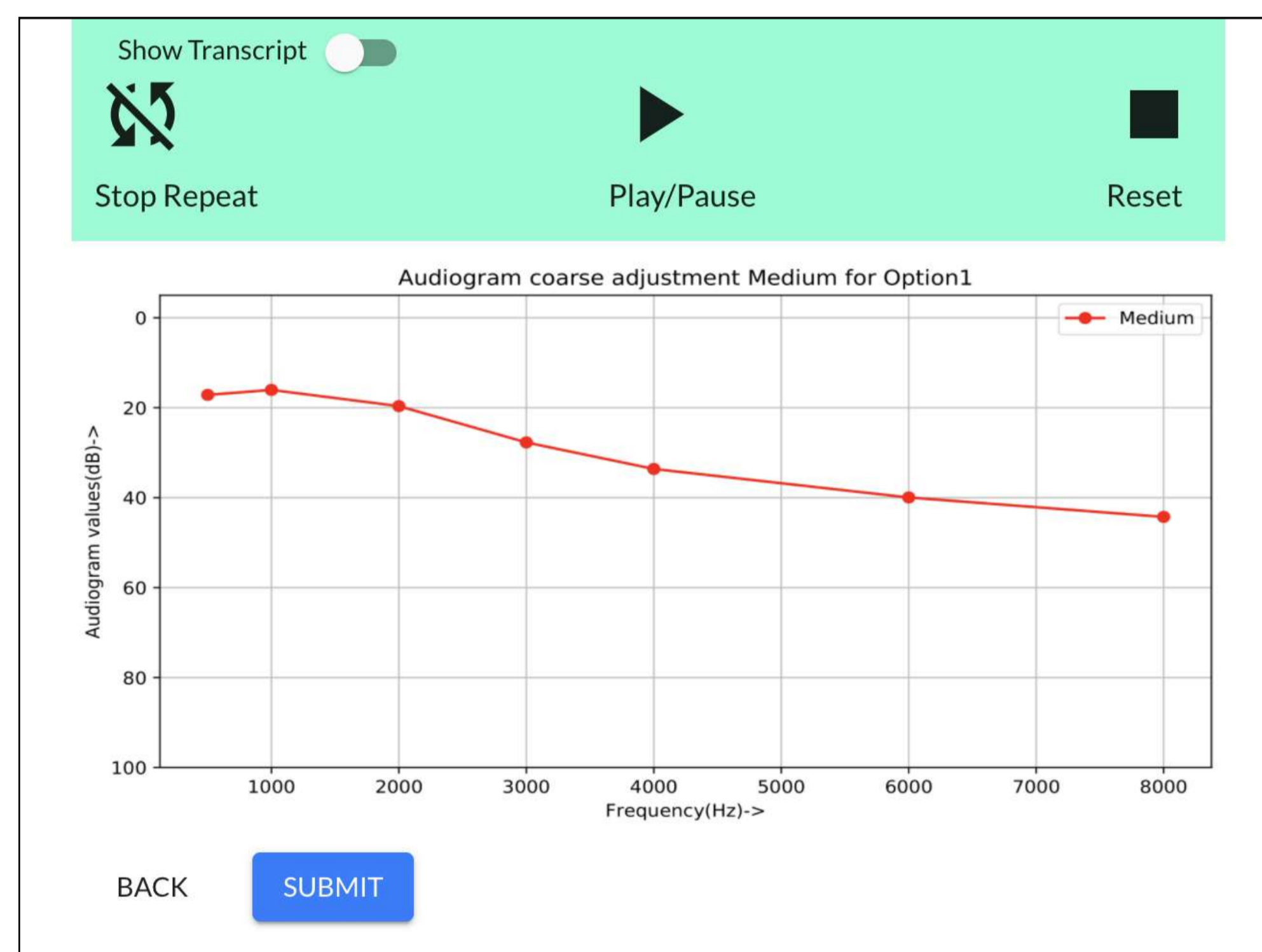


## 4. Choose one of the five different hearing loss levels and an audio file. You should witness changes to the volume heard and the information shown as you pick different hearing loss levels.

4a. Choose one of the five hearing loss levels, which help change the volume heard. Then, click on the horizontal bar and select an audio file.

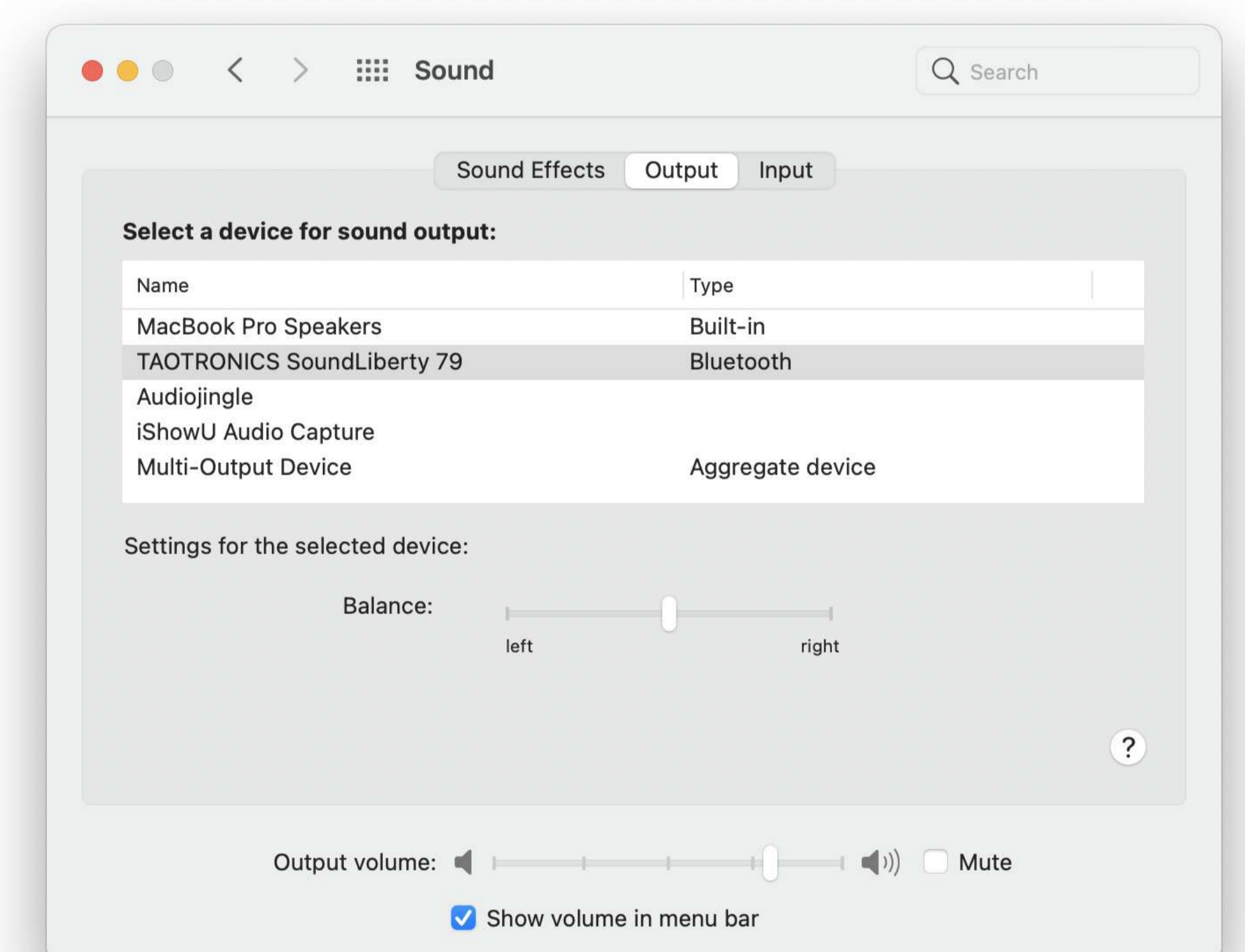


4b. Below the audio file section and buttons, you should see changes to the graph based on the hearing loss levels chosen.

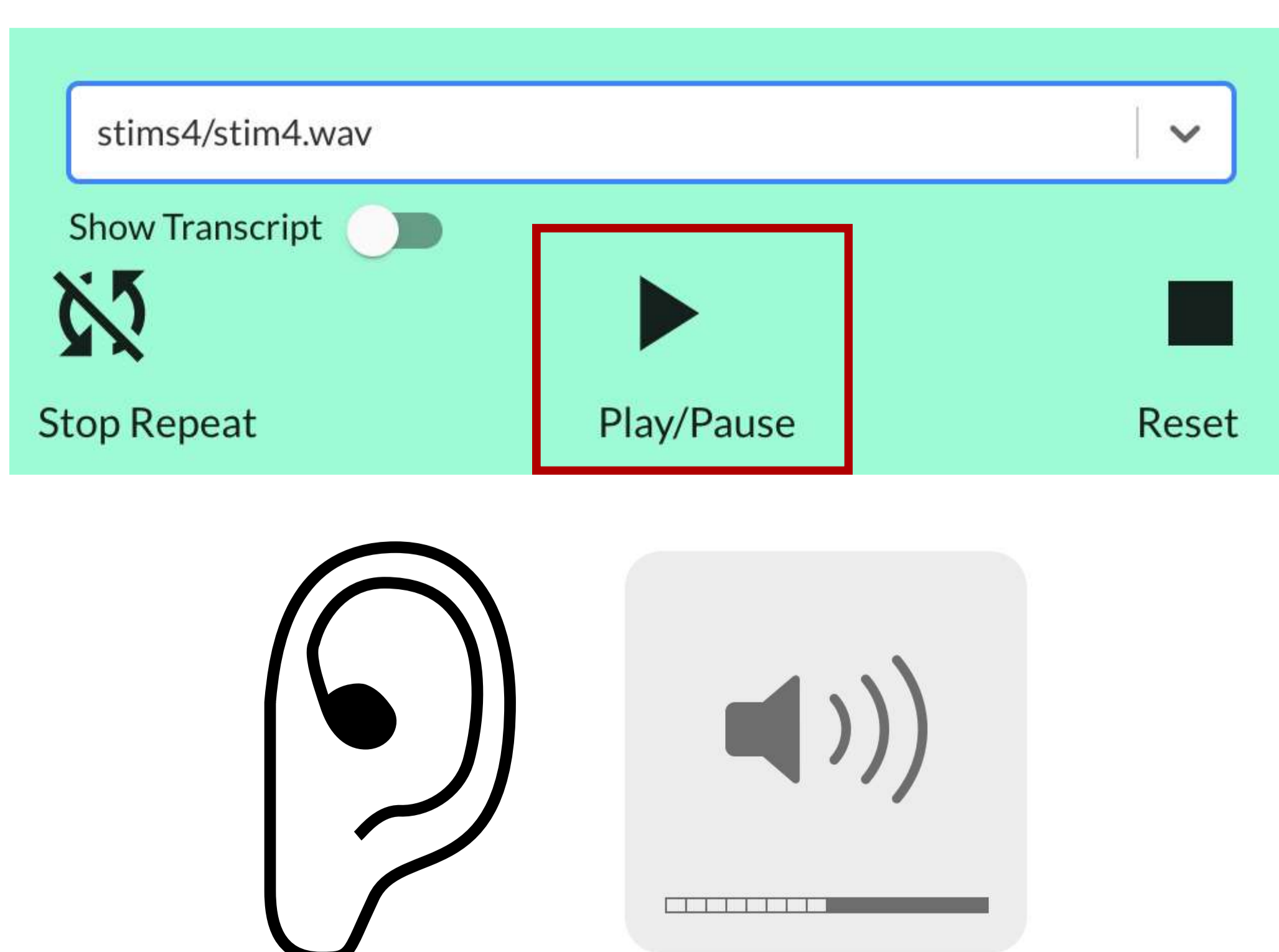


## 5. At this point, you should have an audio input and output source connected to your computer and ready for listening. Check that your volume is NOT muted.

If you have an external headset, please connect it via Bluetooth or through your computer's audio jack.



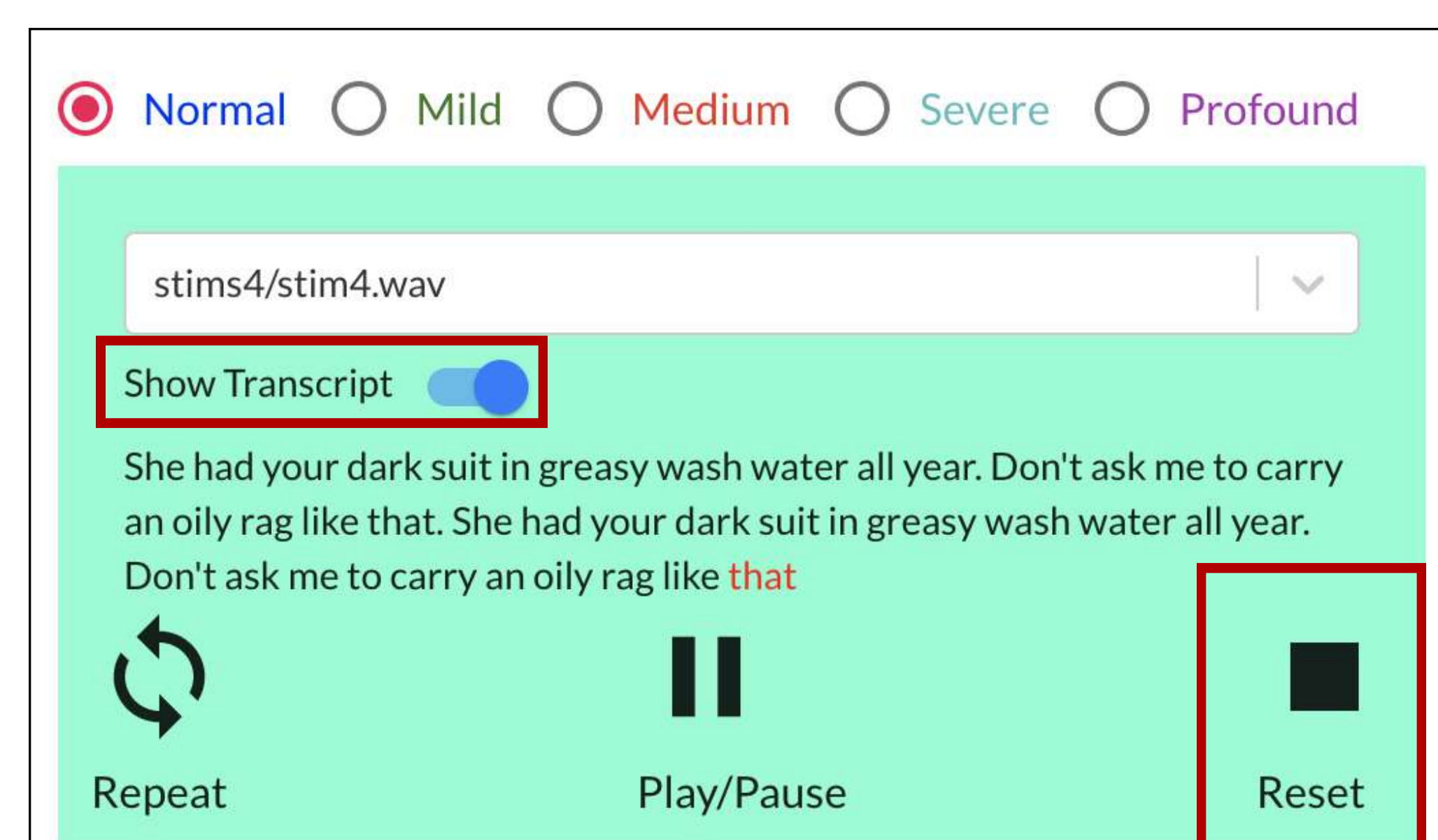
## 6. Press the “Play/Pause” button and listen for audio feedback. Adjust the volume on your computer accordingly until you can comfortably listen to the audio file.



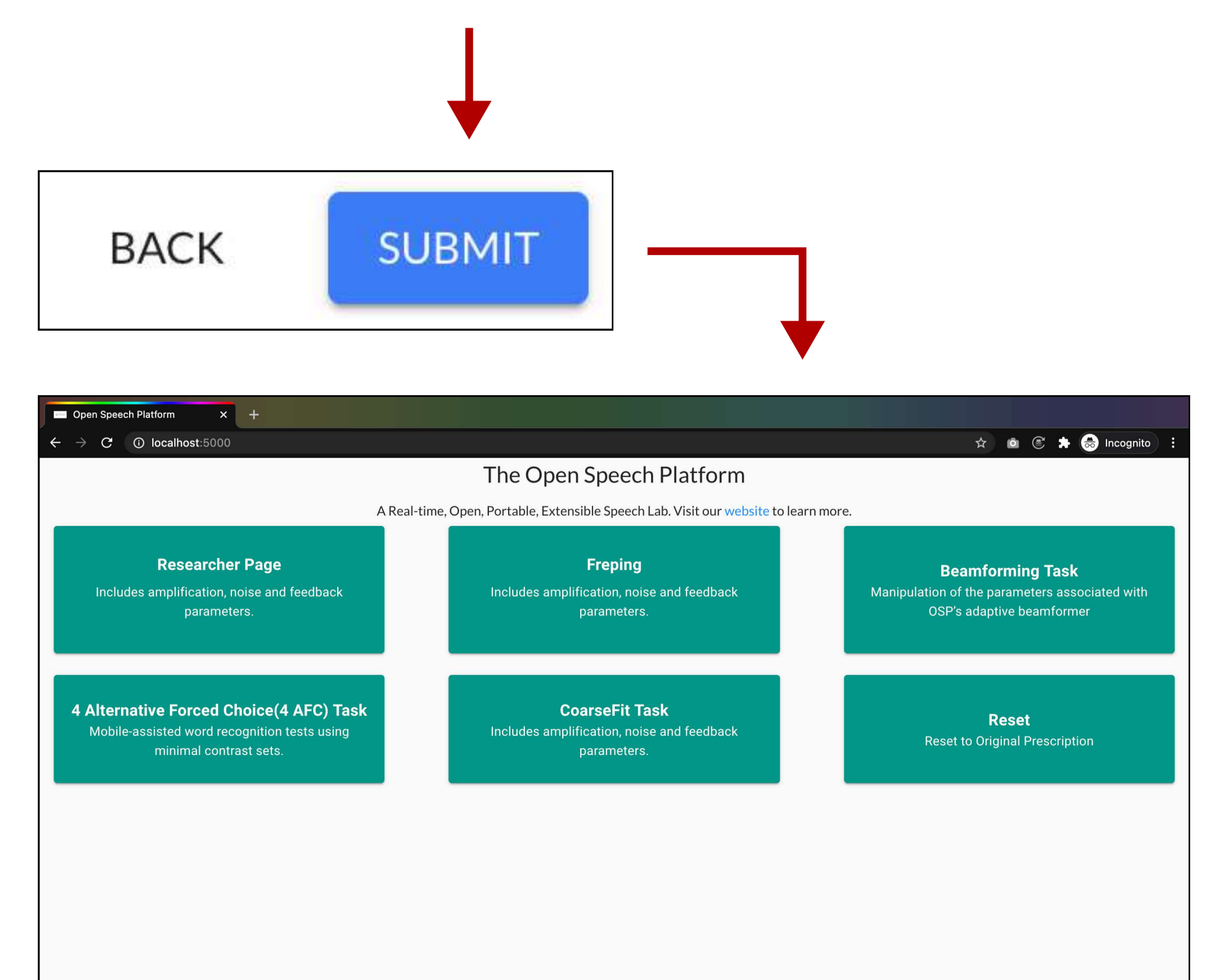
## 7. Play the audio file again, listen, and test the various buttons.

Only the “stim#/stim#.wav” files have transcripts available. To view the transcript, click on the “Show Transcript” toggle.

Click on the “Reset” button and play the audio file again. You should also be able to notice that the selected word heard and shown has a different shade of color (usually shown red) during audio playback.



## 8. You should be finished with testing the demo. Clicking the “Submit” button takes you back to the landing page.

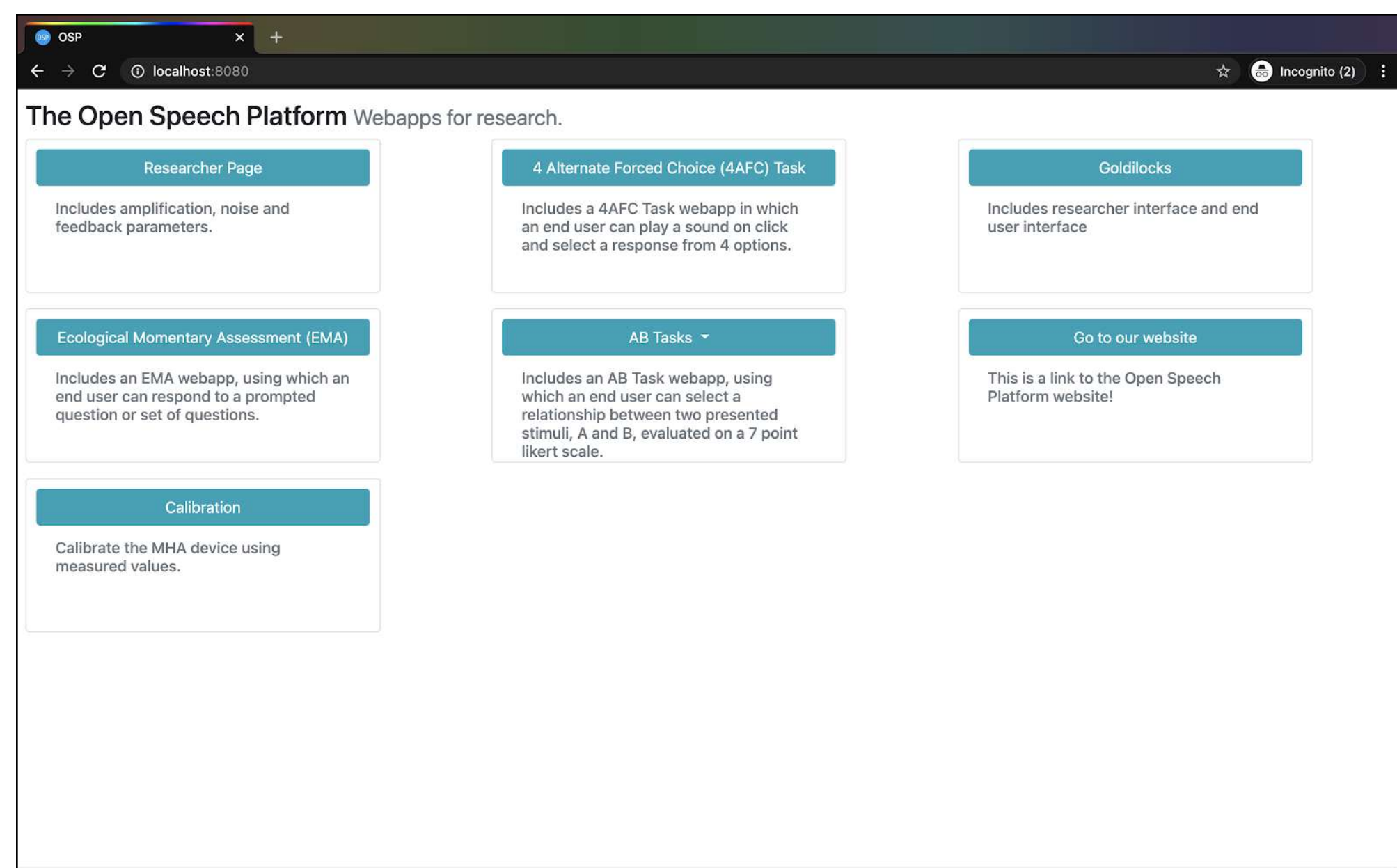


# OSP Sanity Check - PHP/Laravel version of EWS

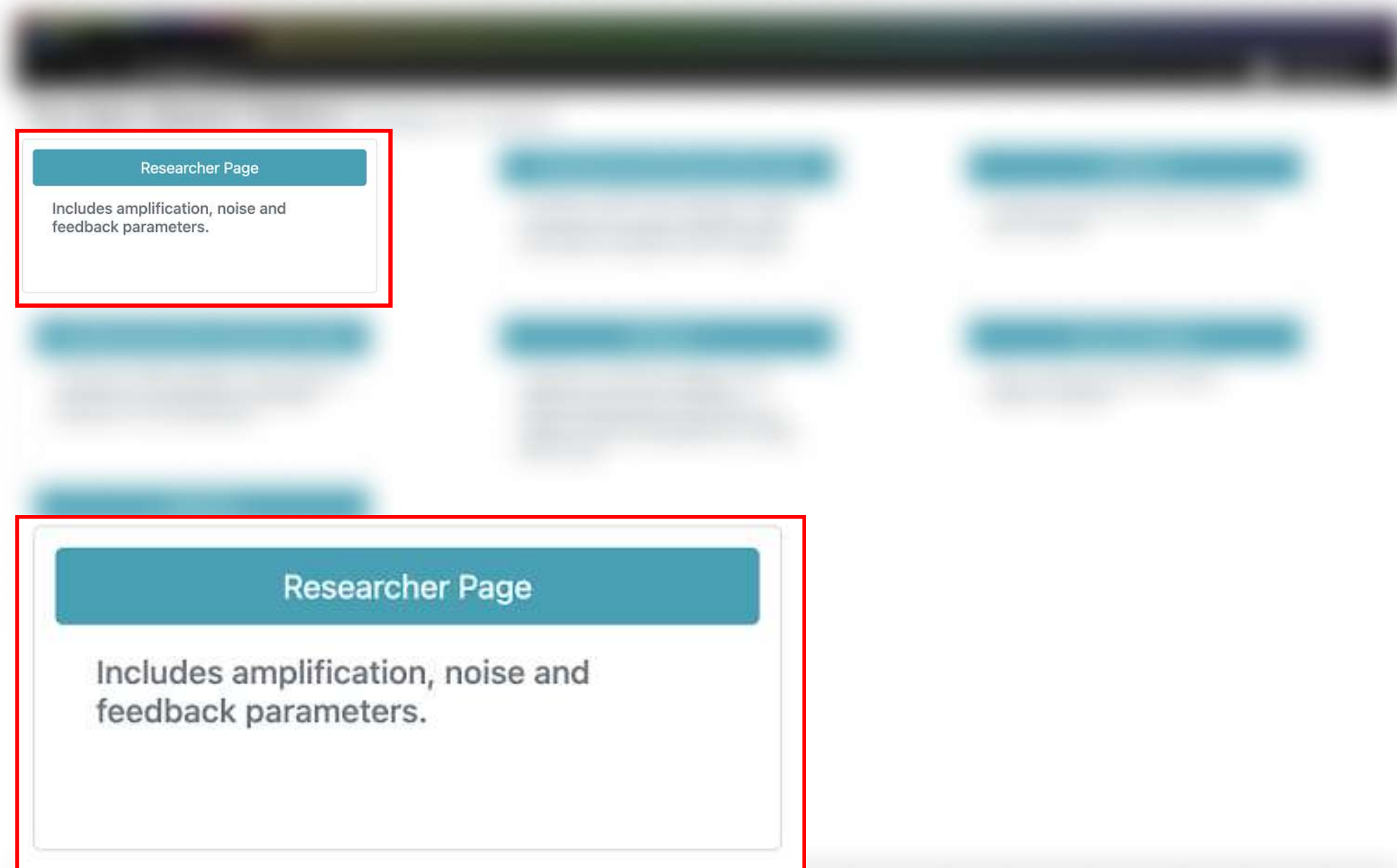
These steps verify that RT-MHA, PHP/Laravel version of EWS, and audio input/output work. For Node.js version of EWS, see “OSP Sanity Check - Node.js version of EWS”

## 1. In your browser, check that you're in the right landing page.

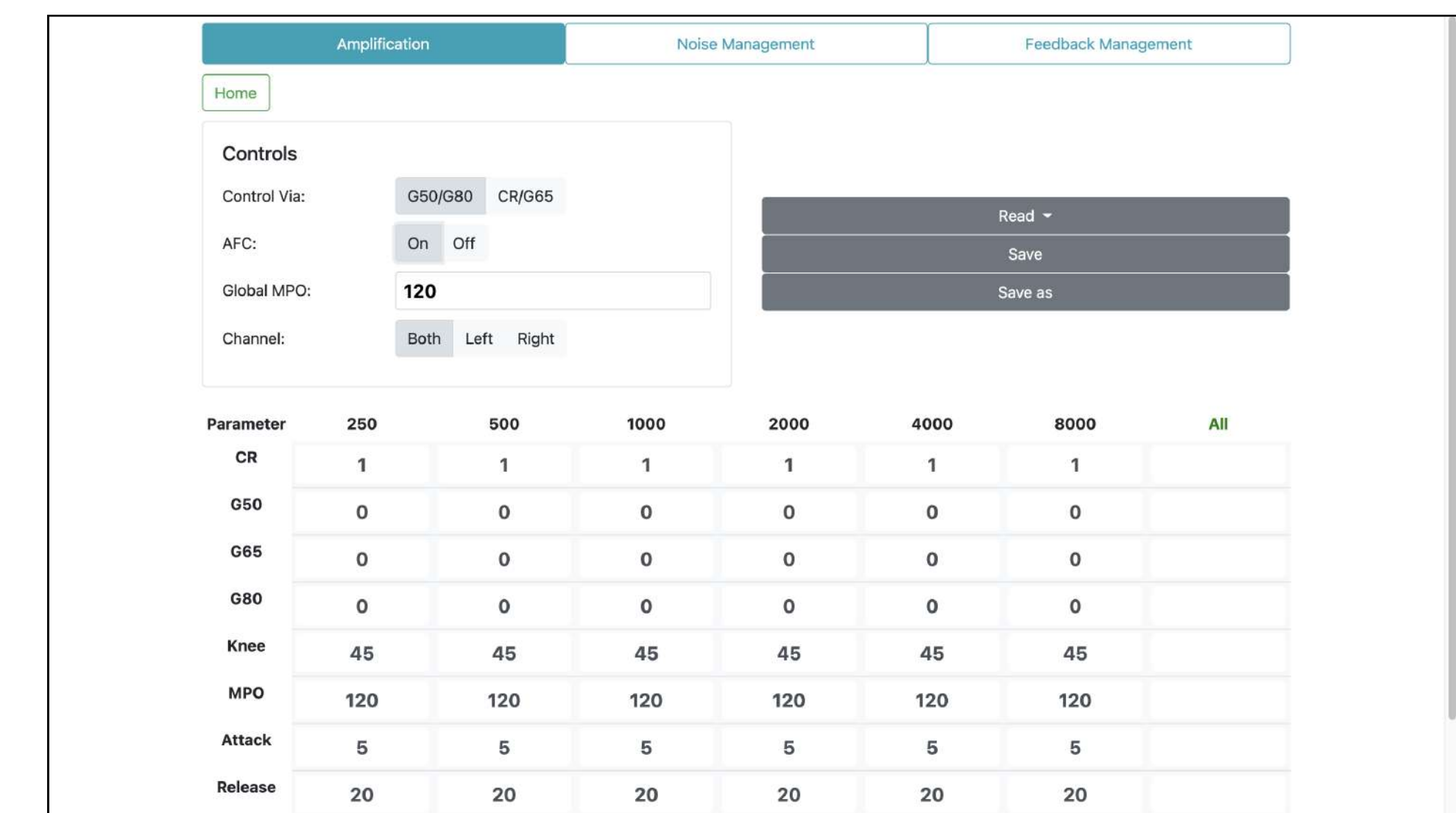
If not, type in “localhost:8080” in the browser search bar.



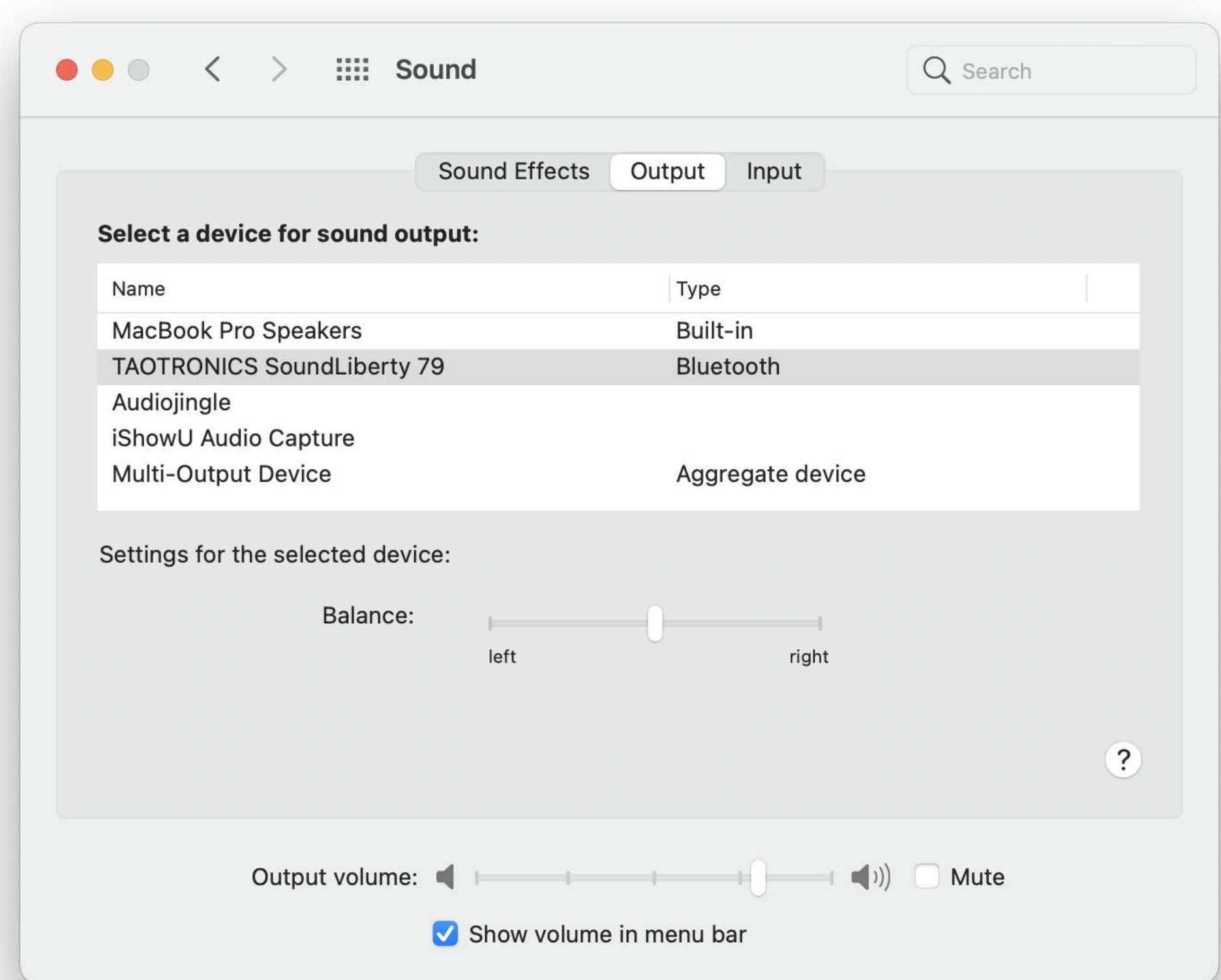
## 2. In the upper-right hand corner, click on the button labeled “Researcher Page”.



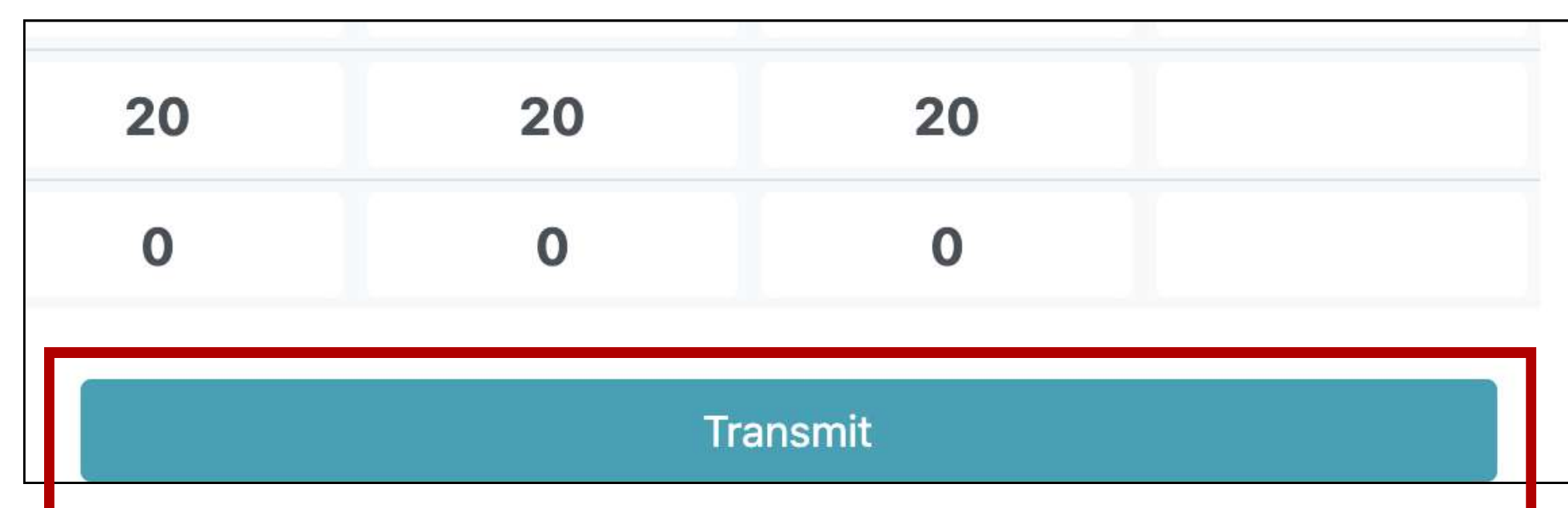
## 3. You should see this screen for the Researcher Page in the “Amplification” section.



## 4. At this point, you should have an audio input and output source connected to your computer and ready for listening and voice input. Check that volume is NOT muted.

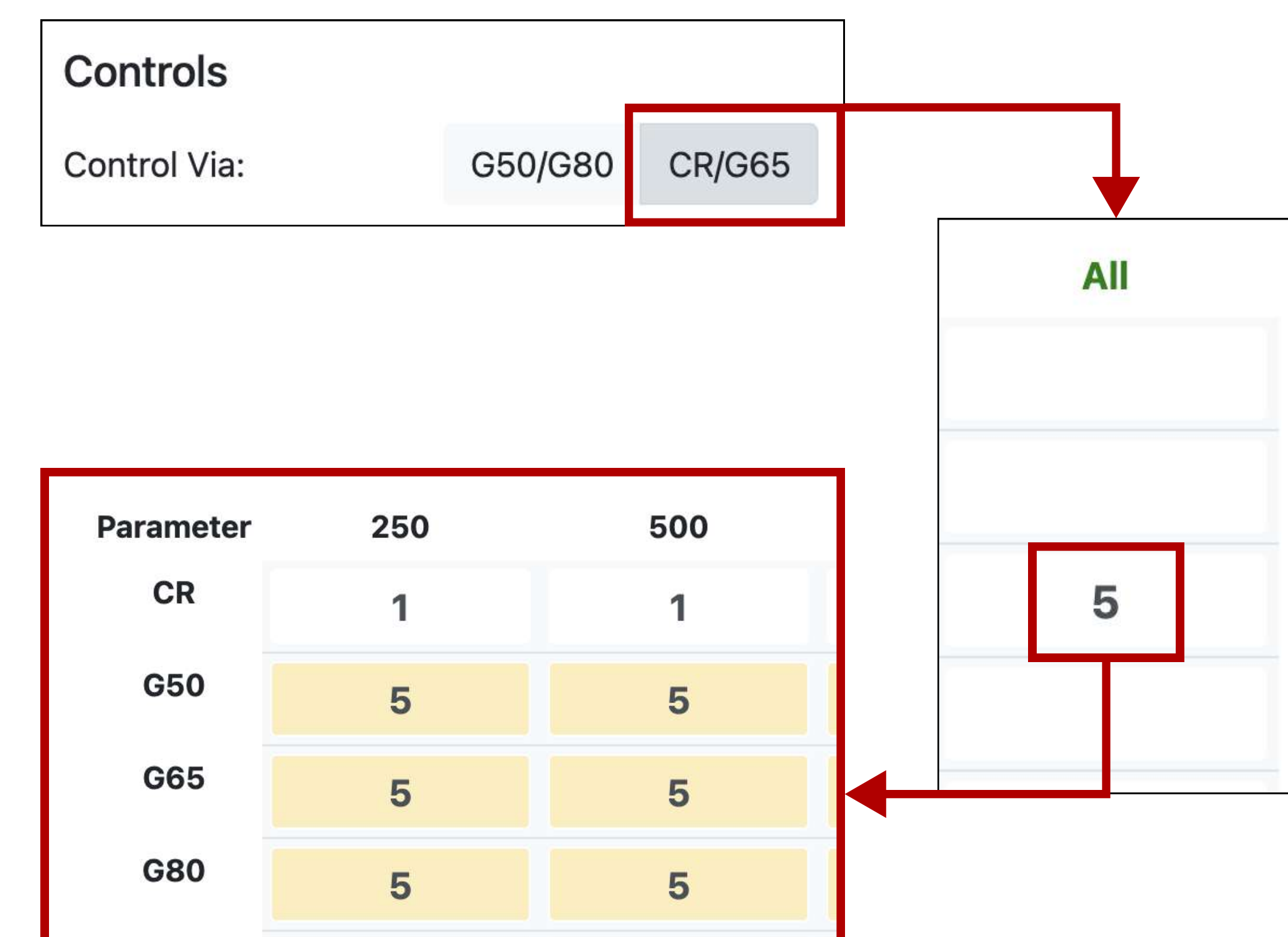


## 5. Scroll to the bottom of the page and click on the “Transmit” button. Then, speak into your computer or headset’s microphone and listen for immediate audio feedback.



## 6. Scroll back up and view the “Controls” settings. Next to “Control Via:”, click on CR/G65. Then, in the boxed cell within the “All” column and “G65” row, type in “5”. Notice the change in values.

Changing the value in the boxed cell to “5” should change the gain for “g65” to be 5 decibels (dB SPL) across all frequency bands (250 to 8000 Hertz).



## 7. Scroll to the bottom of the page and click on the “Transmit” button again. Speak into your computer or headset’s microphone and listen for immediate audio feedback. Notice the differences in volume.

