

# Auditory Ace Plus

## Cochlear Implant hearing exercises

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People who get Cochlear implants for the first time require training their brains to understand the input information as sound from the implants. Tim Anderson is advising an undergraduate capstone project to develop an application that allows users with Cochlear implants to train their ears. The original app is written in Godot and the project can be found at <https://github.com/thorkel2/Auditory-Ace>.

I have forked that project into my own repository found at <https://github.com/LydiaDoza/Auditory-Ace-Plus>. My changes will be made here and my commits will be shown as my own.

I will be building exercises to determine whether a sequence of three tones being played are: 1) all the same pitch, 2) rising in pitch, and 3) falling in pitch. I will also add some exercises to determine what instrument is being played from a small selection of instruments. I will be getting audio files for the instruments from <https://freesound.org/>.

If I have enough time and the complexity is manageable, I will also be adding exercises to determine if a sequence of tones being played are 1) rising then falling or 2) falling then rising.

Some of the concerns I have are that I have never used Godot before and so I will have to learn a new language for this project. Since I will be extending a pre-existing open-source project, I will have additional lead-in time as I familiarize myself with the code base before I can produce novel code. I have some concern that the open-source project team may upload a commit that breaks my code, but I hopefully can mitigate that since I have forked their project to work on my own repo.