

Auditory Training App!

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PROBLEM

Auditory training is necessary for adults with hearing loss who have received a cochlear implant. Existing auditory training resources include non-interactive audio books and tapes, as well as a handful of apps that fail to provide engaging exercises with adequate difficulty scaling for cochlear implant patients.

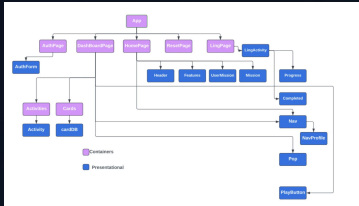
REQUIREMENTS

This auditory training app was designed to be a cross-platform application with iOS, Android, and web compatibility. The app's different user-facing features would include a community forum, and singleplayer/multiplayer games and activities. These games would increase in difficulty, giving the ability for players to track their auditory comprehension progress as they play longer.

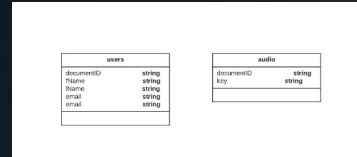
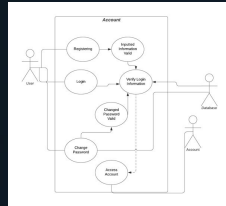
CURRENT SYSTEM

Auditory training app is a brand new application, with development having started on the current Spring 2022 semester. The general idea is to provide a one-stop service that can provide both cochlear auditory training through fun and interactive games, as well as providing inter-patient support via a community forum where users can connect, chat, and compete with each other.

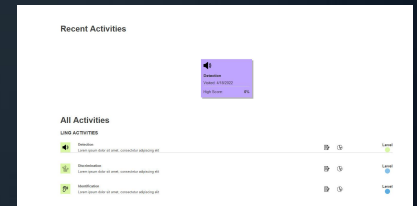
SYSTEM DESIGN



OBJECT DESIGN



SCREENSHOT



VERIFICATION

During the development of this application testing was done in parallel to the programming. After implementing different features, the features would be tested to ensure verification of their tasks. On front-end and back-end verification was performed, as well as on the database.

IMPLEMENTATION



SUMMARY

This auditory training app seeks to help fix the gaps in helping people with hearing loss and user experience. It does this in the form of interactive games and activities to be performed by the user. As well as giving the user feedback on their progress. Using technologies like React and JavaScript we can achieve this goal and make this serves more accessible.