



# DoEarMi - Musical Ear Training App

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## Overview

### Initial Goals

- Create an app for identifying scale degrees
- Enable musicians to improve listening and composition skills
- Construct the app to encourage ear training practice
- Address areas of improvement for similar apps

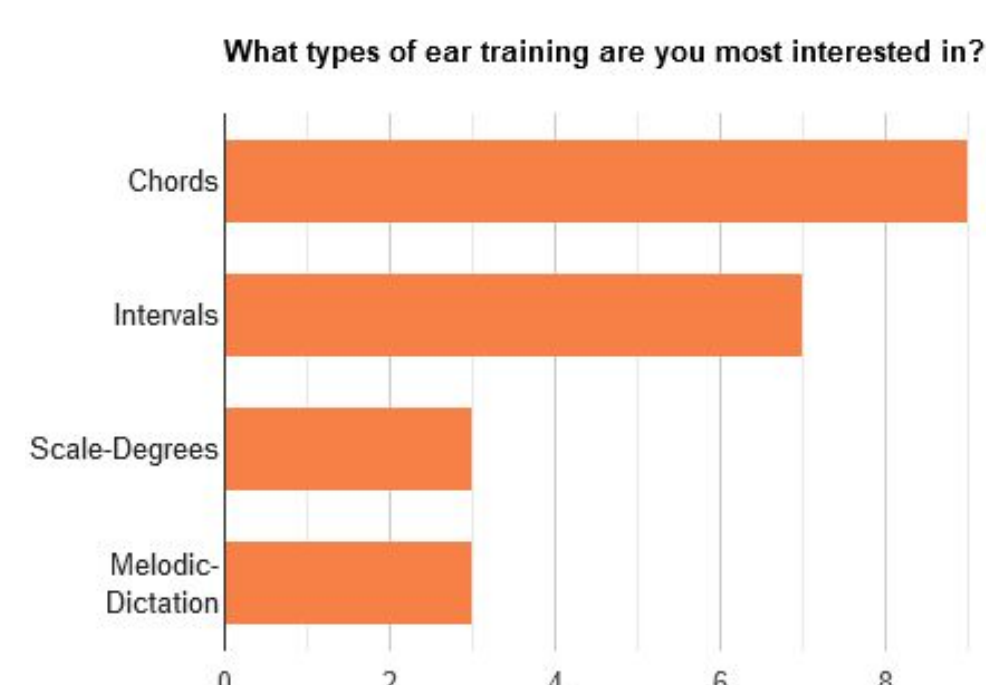
### Need Finding

#### Methods

- Survey potential users to understand their needs
- Research existing apps for design implications

#### Observations

- Users desired ear training beyond initial intended features
- Most users were beginner musicians
- Existing apps were difficult for beginners
- Existing apps had limited game aspects and audio options



### Revised Goals

- Help musicians identify chords, intervals, scale degrees, and melodic dictation by ear
- Make easy for beginners to understand and use
- Make free to use
- Include gamified aspects
- Include multiple instruments for ear training
- Add feedback for practice and user statistics

## Implementation



## Reflection

### HCI Challenges

- Keeping the app accessible
- Having features usable within one or two taps
- Keeping the barrier to practicing low
- Getting a large enough sample size for our survey

### Implementation Challenges

- Our app scale was larger than anticipated
- A more robust UI framework would enable easier changes to meet HCI challenges
- Our Heuristic Evaluation earlier could have occurred earlier to allow more time for improvements

### What Went Well

- Unity worked better than anticipated for building out a UI
- Our app is very close to being feature complete
- Our need finding and initial prototyping gave us a great base to start working off of

### Future Work

- Make the app entertaining to use, with more animations and rewards.
- Expand lessons and practice sessions
- Develop the online features
- Deploy to an app store and get more feedback from regular users
- Improve the usability of the practice section