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M.S. Music Technology Final Project
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Music Technology Thesis Proposal

Project Title: Chordly

Project Description: A web-based harmonic dictation game where the goal is to guess the correct chords in a set amount of attempts.

Project Goals: My goal for the project is to create an interactive studying tool for students to practice their ear training. The aural theory will be based on Temple University's music theory book: *A Concise Introduction to Tonal Harmony* by L. Poundie Bernstein and Joseph N. Straus. Additionally, I aim to deepen my understanding of programming languages such as Javascript, Max MSP, and HTML. The Chordly website will have standard (Theory I) and advanced (Theory II) options and additional modes for practice, such as focusing on secondary dominants or specific predominant chords. Additionally, I want this project ready for future research purposes, such as to see if Chordly affects music theory students' understanding of harmonic dictations.

Research Initiatives:

A key aspect of this project's research is analyzing existing music theory education tools and websites and understanding their strengths and weaknesses. Another aspect is understanding how musicians develop their aural skills and identifying effective teaching methods. A third aspect is examining the efficacy of gamification in learning.

Deliverables:

- Functional program or website
- Research paper
- Presentation and slide deck

Resources Needed:

- A Max MSP, and potentially an RNBO, license or subscription
- A high-quality piano VST for playback

Rough Schedule:

- End of February - Rough prototype of harmonic dictation algorithm and have a list of sources for the research paper.

- End of March - Finish the harmonic dictation algorithm, have a rough draft of the website/app, finish researching, and begin organizing the paper and presentation.
- End of April - Finish the Chordly website, and have the final draft of the paper and presentation.