Web Synthesizer and Drum Sequencer

MUMT 301 Final Project

Project Idea

The goal of this project is to create a basic, web-based synthesizer with a panel to change synthesizer attributes, a drum sequencer that one can play the synthesizer over, as well as a recording and playback mode so the user can create basic tracks.

Technologies

- HTML and CSS
- JavaScript
- Web Audio API
 - Pizzicato.js
 - Tones.js?

The synthesizer will be web based, using HTML and CSS for the design. JavaScript will be used to implement the synthesizer, utilizing Pizzicato.js and potentially Tones.js for the drum sequencer.

Challenges

- Implementing Recording: Since we are building and deploying through GitHub pages, we cannot have a backend to store or process.
 - Potential solutions: local recording of note information and playback using separately initialized oscillator.
- Creating Sounds: When it comes to creating the drum sequencer, I would like to create the sounds myself.
 - This will involve figuring out the limitations of either the Pizzicatio.js or Tones.js libraries, and trying to design the drum sounds using what is available.
 - Worst case scenario, I will import drum samples and load them into the program.

Beta Demo