Development Progress Report 1

I have not made quite as much progress as I intended, but I have established a solid foundation for the project, and I understand what needs to be done yet. I have so far implemented tempo, time signature, and ADSR control, which makes the chord play for one bar with the selected attack, decay, and release times. If these times aren't compatible with the duration of one bar, there is a failsafe that only needs a user message output to be added. I have also added a master gain, play button, transposition, and delay, including control over delay time and feedback. I may add a lowpass filter to the delay and possibly tweak the other controls, but they are currently implemented in a way that will be compatible with the addition of the rest of the features.

I am currently trying to implement scheduling with consistent timing. As of now, a placeholder chord plays once for a one bar duration. There is no chord selection, chords repeating each bar, or any sort of generation happening right now. I intend to have the generation process happen in phases, including a phase that creates the oscillators to play the selected chord, a phase that chooses the next chord, and a chord that chooses the voicing of the next chord. The second and third phase will work with the use of arrays. In my research, I have learned that the setTimeout() function is not very precise, so it may require some extra code for everything to work in time.

Given my current pace with this project and the setbacks I have faced, I don't think I'll be able to implement rhythmic variation or a drumbeat. The finished product will likely have a metronome with volume control, and a new chord will play each bar.