README

Sketch Description

The music player instrument is designed to provide a visually appealing and interactive experience for users. It resembles a record player, featuring a rotating disc and album covers on the side. Users can control volume, frequency, and timbre to customise the music. The goal is to create a nostalgic atmosphere by blending traditional record player elements with modern digital music, using visuals like album covers and a stylus to connect with physical media while enjoying the convenience of digital music.

Design Decisions

Throughout the development process, several adjustments and enhancements were made to improve the record players functionality and user experience.

1. **Record Rotation Speed**: The rotation speed of the record is adjusted based on the frequency value set by the user. This change allows for a more synchronised visual representation of the music's tempo.
2. **AI-Generated Album Covers**: I used the artificial intelligence model "DALL·E 2" to generate album covers that match the royalty-free music selection. This ensures that each album cover is unique, fitting and visually appealing.
3. **Vintage Scratch Effect**: I incorporated a scratch effect that mimics the experience of playing a vintage record. By adjusting the intensity of this effect using the timbre slider, a lowpass filter is applied to produce a more authentic and nostalgic sound.

Instructions

To operate the record player, follow these steps:

1. **Necessary Libraries**: *controlP5* and *processing.sound*
2. **Interact with Sliders**: Use the sliders labeled "Volume," "Frequency," and "Timbre" to control different aspects of the music.
   - **Volume**: Adjust the volume of the currently playing song
   - **Frequency**: Change the playback frequency of the song, altering its speed and pitch
   - **Timbre**: Control the intensity of the lowpass filter and the scratch effect
3. **Choose a Song**: Press keys 1, 2 or 3 to select and play one of the available songs. Pressing the spacebar will pause or resume the currently playing song.

The songs used are royalty-free and sourced from Bensound.com. Users can enhance and personalise their experience by adding their own preferred songs.