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What is a Music Synthesizer?



Problems For Musicians

- Unable to pinpoint sound characteristics
- Unfamiliar with components that make a sound
- Lack proper knowledge to communicate ideas



Solution: Ear Training

Recognize fundamental characteristics of sounds

Enhance your skill set, communication, and creativity

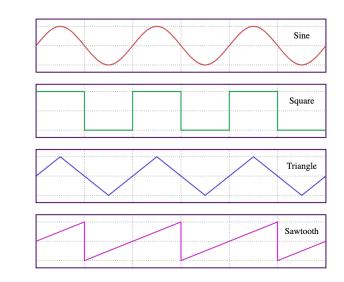


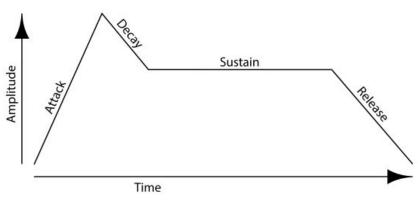
How Synth Trainer Works

- The app randomly generates a sound using the parameters available to the user
- 2. The user attempts to recreate the sound using the synth interface
- The user submits their sound
- 4. The app reveals the parameters of the randomly generated sound

Anticipated Results

- Waveform Recognition
 - Sine
 - Square
 - Sawtooth
 - Triangle
- ADSR Envelope Recognition
 - Attack
 - Decay
 - Sustain
 - o Release





Technologies

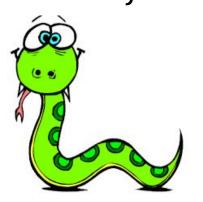
Python



Audio Engine: Pyo



GUI: wxPython



Thank You!