WebX0X - Web Audio Drum Synthesizer and Sequencer

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ABSTRACT

WebX0X is a drum synthesizer and sequencer built using the Web Audio API. All sound generation is performed entirely in the browser without the use of samples.

WebX0X takes its name from the classic drum machines made by Roland in the 1980s, most notably the TR-606, TR-707, TR-808 and TR-909. Like the 606 and 808, WebX0X synthesizes all its sounds using simple oscillators, noise generators, filters and envelope generators and has an integrated step sequencer to control patterns. WebX0X has 4 synthesizers, or 'voices'. Unlike most classic analog drum machines, WebX0X uses the same algorithm for all voices. Each voice is tuned to resemble a different kind of drum by default (kick, snare, hi-hat and cowbell), but is also capable of a wide variety of other percussive sounds.

WebX0X makes use of a combination of standard Web Audio API features such as OscillatorNode, BiquadFilterNode and GainNode, and custom components including an AHDSR envelope generator and variable-rate noise generator.

WebX0X has been featured by several prominent online publications, including Create Digital Music and FactMag. The latest iteration, available at https://webx0x.com, allows users to save and optionally make their patterns (beats) publicly visible and shareable.

WEB LINKS

WebX0X: https://webx0x.com

Irritant Creative Inc.: https://irritantcreative.ca