

Project 2: Beat Maker

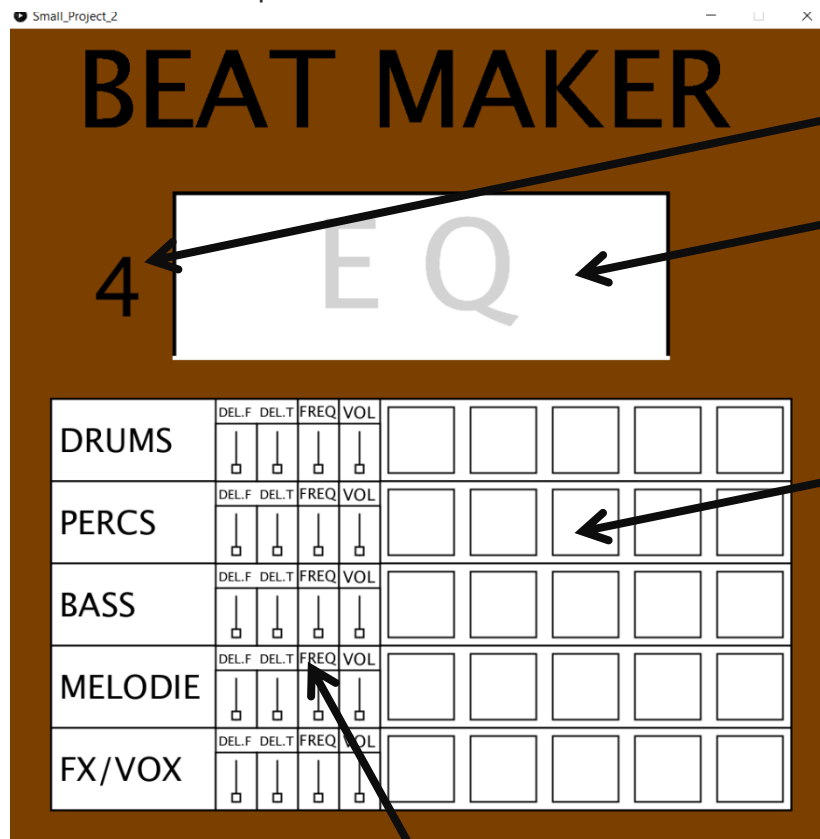
Requirements

Written in Processing 3.5.4

Uses the Processing Sound library.

Operation

Run Small_Project_2.pde in Processing.
You will see the operational screen.



The count down. This number indicates when the samples are going to start playing.

EQ. This is a simple EQ that shows the high, high – mid, mid, low – mid and low sound frequencies. It isn't very accurate, used more for visual effect.

The control pads.

Controlled by mouse clicks.

The pads are used to trigger the samples, on and off. Each pad has a unique sample, but samples containing similar sounds like drums, for example, are joined together in the first row.

If a pad is pressed it change the colour to black, this means that the sample that is controlled by the current pad is active. Similarly, when the pad is white the sample is offline.

The effects.

There are 4 things you can control for each row:

- Delay time and feedback
- Frequency of the samples
- Volume of the samples

You can use the mouse and the key W and S (both lower and upper case) to control the sliders.

Design notes

Synchronisation. In order for the samples to be played at the same time I used the frame count to launch all the active samples at once. The frame count isn't constant and varies according to the number of samples active (according to my observations) therefore after the samples finished playing there might be a gap between starting to play new ones, or similarly samples might overlap.

Effects are used to control the whole row of similar samples rather than each individual one.

Vertical sliders work both with mouse and w and s keys (both lower and upper case). Keyboard keys allow the user to control the sliders more accurately.

The scale used for samples is D Maj. This allows for different samples to be played together without sounding out of tone.

You can use your own samples by replacing the samples in the projects directory while keeping the same name.

Samples used from: Cymatics, Easy Angel (Drum Kit), KSHMR.

Video: BeatMaker_DEMO.mp4