Hacking Electronic Music

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General info

length: +/- 3 hours (longer or shorter possible)

participants: Max. 20 people (preferably < 15)

ages: 16+

skills: no programming or musical experience required!

computer: Bring your own laptop and headphones

language: English (spoken & written, optionally in Dutch)

system requirements:

- Mac 10.11+ / Windows 10 / Linux:
  - Intel Core i5 processor (or faster recommended)
  - 4 GB RAM (8 GB or more recommended)
  - Google Chrome (or other Chromium based web browser)

website:

- mercury.timohoogland.com

Workshop description

Join this crash-course into the exciting world of live coding music. No previous knowledge of programming required, only a desire to express yourself creatively! During this workshop you will learn to create electronic music with computercode and algorithms! For this we use the programming environment “Mercury”. You will program the instructions and the computer will translate that to beats, drops, catchy melodies and more. You can adjust the code in real time while the music is playing and hear it change. Welcome to the world of Live Coding! At the end of the workshop you have been introduced to technologies used in electronic music production and you will have experienced what it means to use algorithms to compose music and sound. Everything you will need for becoming a producer of the future!

In-depth description of Mercury

Mercury is a minimal and human-readable language that focusses on quick expression in composing, performing and communicating live coded music. Mercury is a great environment to get introduced to the amazing worlds of live coding, creative coding, algorithmic composition, electronic music and of course the Algorave scene! In Mercury, all elements of the language are designed around making code more accessible and less obfuscating for the performer and the audience. This motivation stretches down to the coding style itself which uses clear descriptive names for functions and a clear syntax. Furthermore the environment runs in the browser so it is available to you at all times. Mercury provides the artist-programmer with an extensive library of algorithms to generate sequences, sounds and music.

Goals

Starter Goals

- Learn to play a sample
- Change the timing of the played sound
- Make lists as rhythms and use probabilities
- Generate lists with functions

Intermediate Goals

- Learn to play a synth
- Make lists as melodies and rhythms for the synth
- Generate lists of melodies and rhythms with functions

Advanced Goals

- Combine functions to generate more complex melodic and rhythmical structures
- Add effects for sound designing
- Sequence parameters of effects and other functions
- Include visuals coded with Hydra
- Control synths with external devices via OSC
- Sequence other applications via MIDI output

Schedule (by approximation)

15 minutes :

- Introduction to livecoding and showcase some works

30 minutes :

- Syntax Explanation
- Work on starter goals

30 minutes :

- Play and explore possibilities with rhythms

15 minutes :

- Break

30 minutes :

- Work on Intermediate goals

45 minutes :

- Play and explore!
- Individual help/questions
- Optional move to Advanced goals

15 minutes :

- Wrap up
- Participants show their creations

Technical Requirements

for more details see the Workshop Technical Rider

Sound:

- Speakers and Mixer (PA) with mini-jack

Visual:

- Projector or screen with HDMI connection
- Flipover board or whiteboard and black (or colored) markers

Participants:

- Tables
- Chairs
- Power sockets on table

Consumptions:

- Coffee / Tea / Water / (Soda)
- Snack or lunch (depending on length and time of workshop)

Thanks to

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