Pure Data ATIAM Ninon Devis Philippe Esling

Pure Data Make some music

2022-09-23 ninon.devis@ircam.fr philippe.esling@ircam.fr

The goal of this assignment is to compose an entire track *only* using Pure Data. It must last less than 15 minutes and has no restriction regarding the genre.

You must provide a .wav or .mp3 of your creation alongside with all the patches and samples you used to make it. You can attach a README.txt if necessary.

No post-processing, mixing or mastering are allowed unless you attach a README.txt explaining your method and why you felt the need to do that. A raw track must be provided as well.

No Max MSP allowed but any creative experiment will be valued.

1. Overall presentation

Global instruction
Generalities
Deadline
Organization one project per student
DepositGithub, wetransfer or drive
Project folders
track/wav or .mp3
patches/ containing all the patches you used for your creation
samples/ with all the samples contained in your track
README.txt/ if you want me to read something
Track
Length
Recordinginternal recorder Pure Data
Patches
Comments At least a general comment explaining the concept of each patch and its utility
Canvas highlighting the compulsory items described below
All genres accepted
Evaluation grid
Patches - Respect of specifications
Patches - Comprehensibility & comments
Track composition
Creative experiments

Pure Data 1

2. Required items

Your patches must have some compulsory items described below, all of them have to be highlighted using colored canvas. It is possible to mix several of the required items in a patch. You will need to look by yourself for some of the necessary Pd objects to make them.

Don't forget to normalize your signal if needed, think about unipolar and bipolar signal if you use ring modulation or amplitude modulation.

- One triangle oscillator.
- One voltage control filter.
- One patch should play notes using the keyboard, so that the played note lasts only the time that the key is pressed (it is permitted to use a MIDI keyboard).
- One must have an echo of 1 second compared to your original signal.
- One plays melodies from random pitch and duration.
- Use sample(s) in your track, one of them must be passed through an effect of your choice.
- One patch should be able to process an external recording (the microphone of your computer is more than sufficient) that you will after use in your track.
- One should use chained AM.
- The main clock of one of your patch must be chosen by BPM.
- One patch should provide a step sequencer.

Pure Data 2