The Game Master, a tool for composers of "musique concrète"

Jean-Jacques Girardot and Jean-François Minjard ji@girardot.name, contact@lesondeschoses.audio

Abstract

The Game Master (GM)[1] is a software tool for composers of "musique concrète". It consists of a set of JSFX[2] modules, communicating together and operating within the REAPER[3] digital audio workstation. The GM incorporates a micro Script Language (mSL), whose syntax is compatible with JSFX, which can be used to extend the functionality of the Game Master. mSL is functional, proper tail recursive, multithreaded, and includes a garbage collector. The main purpose of the GM is to play audio clips, which are short sounds (between one second and two or three minutes) created by a composer. The GM handles up to 64 output channels and accepts clips in any format, resolution or number of channels. It can also receive and respond to MIDI commands. There is a built-in internal algorithm, which selects clips and various other parameters, based on static criteria defined by text files and dynamic criteria related to previously played clips, but mSL can be used to provide other heuristics.

The Game Master can be of some help when the composer has selected a set of clips he intends to use in a composition, and is looking for a pleasing spatial and temporal arrangement of those clips.

In an exploratory phase, the system generates various combinations of clips, that the composer can listen to. The settings are saved for each clip, and at any time the composer can mark the present moment, loop on a present or past moment, isolate a sequence, replay a sequence more or less quickly, etc.

In such an analysis phase, the composer can interactively mute or solo any clip, duplicate, delete or replace it, as well as modify any one of the hundreds of parameters that define how the clips are played. Also, REAPER lets him record at any time what is played, so it is always possible to keep an interesting sequence.

The Game Master is still a "work in progress", but it has already been used in interactive installations, concerts and shows with dancers, and there will be a summer school dedicated to it (July 11-15 2022). We intend to develop its capacities for live and studio situations, but also for algorithmic generation of "musique concrète".

References

- [1] Jean-Jacques Girardot & Jean-François Minjard, "Un exercice de programmation vintage... et un outil d'aide à la composition électroacoustique", MiXiT 2022, 24-25 Mai 2022, https://mixitconf.org/2022/
- [3] The JSFX language: https://www.reaper.fm/sdk/js/js.php
- [2] REAPER site: https://www.reaper.fm/