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Team Deliverable 1 Part 2

JythonMusic

"An open source environment for music making and creative programming activities." Written in Python, JythonMusic is an environment intended for programmers and musicians that allows for the use of MIDI files to be played with simple GUIs and fairly simplistic code to allow for the manipulation of these music files. The website has really good documentation such as the API, and a full tutorial on how to use the environment.

Installation

Installing JythonMusic was just a simple download of the program from the website and unzipping the folder. Some example files and JEM Jython Environment for Music, were included with this, which is a user interface for running the files.

Build

Building and running JythonMusic wasn't too difficult as the website gives a fairly good explanation of how to run individual files. Running the files from the JEM worked just fine with no hang-ups, however running the files from the Terminal following the directions of the website gave some errors on occasion.

Source Code

There were several files in the library folder that had test cases written at the bottom of the source code. Below is a brief explanation of the test cases written.

Gui.py – The tests created several displays that tested creating buttons, sounds associated to the buttons, and simulating mouse clicks on the buttons. There are also simple animations that are created for the testing as well.

Guicontrols.py – The unit test for this file was testing a vertical and horizontal slider and toggle switches.

Midi.py – This unit test creates a connection between an input and output MIDI device to test the I/O functionality.

Osc.py – This unit test is used for an OSC input object, according to Wikipedia an OSC is "is a protocol for networking sound synthesizers, computers, and other multimedia devices for purposes such as musical performance or show control." The test connects to a localhost on the host machine to send messages such as "helloWorld".

Timer.py – This unit test creates a timer object and counts the seconds passed.

The other files included in the library did not have a specific section for unit testing and if there were further tests, they were in the middle of the code.

Summary

JythonMusic is much easier than our original choice of project, SugarLabs, but it has its own challenges. There have been some issues with compiling and building, but for the most part we have been able to get it up and running. We are excited to dig deeper into the code in the coming months.