COS/MUS 314

Final Project: Interactive Performance or Installation

Proposal: due Friday, April 20, 11:59 pm
Submission of written work: due Tuesday May 15, 5:00 pm (Dean's Date)
House of PLOrk showcase: Friday May 18, Woolworth (various rooms),
3:00 pm setup, 4:30-7:30 pm demos and performances

Assignment:
Create an interactive, computer-based musical system. This could be an instrument, a composition, or an installation that can be performed or otherwise used by yourself and/or others.

Showcase this interactive system to your classmates, instructors, and friends during House of PLOrk by providing a live interactive demo and/or performing a piece.

Requirements:
- Work alone or with a group of up to 4 people.
- If you choose to perform a piece on the House of PLOrk concert, your performance should be no more than 10 minutes long.
- Use your project to deepen your expertise in one or more of the significant topics covered in class (e.g., ChucK programming, audio synthesis, network communication, signal processing, machine learning).
- Your piece/project should run on one to four PLOrk stations (hemi + sub), and it should ideally play on all 6 channels of the hemi(s). (If you specify individual output channels in your code, make sure you have a version of your code that uses channels 0-5 and not just 0 and 1; if you just chuck everything to the dac without specifying channels, your code should run fine on the hemi without modification.)
- You are welcome to use input devices from the PLOrk stash (e.g., joystick, DDR pad, tether, game controller). If you do, please check them out for the remainder of the semester and return them on 5/18 following House of PLOrk.
- You are free to incorporate code from your assignments and class, but we expect you to have a **very** substantial new component in this work. If you do incorporate any existing code, please explain to us in your written work how it was used and which aspects of your project are new.
- Make your project musical and fun! Create something that you are happy to share.

You'll be graded on originality, creativity, code quality, presentation/performance quality, and written work. We will take group size into account when grading; larger groups should do proportionately more substantial projects.

Proposal (one submission per group):
A written document that should include
1. A list of names of people in your group
2. One paragraph describing your proposed project
3. Answers to the following questions, to help us plan the House of PLOrk schedule:
       - Do you anticipate doing a demo, performance, or both?
       - For your demo and/or performance, what will your setup be? (how many PLOrk stations, how large a space will you need, any other special hardware, etc.)
Due April 20; submit on Blackboard

Final written work (one submission per group):
Create a wiki or webpage for your project (could be a wiki hosted by Princeton CS, for example). Populate it with a few written paragraphs discussing your piece/instrument: Describe your project. How is it performed or used? What were your goals in making it, and do you feel you met them successfully? Reflect on the success with which you feel you were able to create a compelling musical experience for the performer and audience. Discuss thoughtfully how you might improve the instrument or piece if you had more time, knowledge, or resources. Include some photos or video of your instrument/project. (We'll be taking video footage at House of PLOrk, so you'll be able to add a link to video later if you want.)
       Include on this page a link to a .zip of your code, along with any associated files needed to make it work.
Due Dean's Date. Email us a link to your page by the Dean's Date deadline. We'll save a "snapshot" of your page at that point in time, so you will be graded on the state of the page at the deadline.

Other Information
Late submission of code and write-up (past Dean's Date) is obviously not an option. **Notify us by April 13** if you have any conflicts with the May 18 House of PLOrk. Four letter grades will be lost for people skipping House of PLOrk without pre-approved excuse or doctor's note.

We are happy to spend time in office hours and extra meetings helping you work out any aspect of your projects. The earlier you can notify us of any difficulties or questions, the easier it will be to assist you!