

AUDI 211: AUDIO PROGRAMMING AND PERFORMANCE MIDTERM PROJECT

Guidelines

Select one of the following topics as the framework for your project:

- ▶ Pattern-based synthesis
- ▶ Sample based or granular synthesis
- ▶ Live coding
- ▶ Live microphone input + effects
- ▶ Audio/Visual

Design a small-scale interactive sonic instrument ; interactivity should not necessarily be physical. The main interaction should create variability in sound to keep it engaging for the performers.

Your instrument should utilize at least one (or more) of audio processes or synthesis concepts we have covered in the class so far with an optional addition of one or more concepts we cover in the second half of the semester. (take a look at the course schedule to get an idea)

Start with designing the overall structure of your project. Draw the architecture in form of a flowchart including the general components of the project and their connections (complete the diagram we we have started in the class). When you have the overview start to organize your synths, callbacks, inputs, outputs, and GUI components.

Submission Instructions Submit your assignment as one single archive submission. Name your archive using your initials and midterm, for example I use VG_midterm.zip. Your archive should include all your source code and a pdf file of your documentation. Your documentation should include a flowchart of your project's architecture with a short description of all the components (~500 words.) Use the same naming convention for all your files: VG_midterm.sc, VG_midterm.pdf and upload your zip archive on Canvas.

Presentation: All students are going to present their projects in the class on 03/23/23. The presentation of the project should take no more than 15 minutes, you should spend a small portion of that time in production of sound by small sonic components of the project alone or with a group of students (as a proof of concept or prototype), and the remainder dedicated to explanation/illustration of it.

Midterm project should be related to the final project, i.e. an intermediary step towards it, or may be a demo of a work-in-progress.

Grading Criteria: Your works will be assessed based on:

- ▶ creativity and originality of the concept
- ▶ clarity of the diagram and description
- ▶ feasibility of the concept (within the constraints of Supercollider language and the time left to finish implementation)
- ▶ functionality of your code for **one use case** (proof of concept). You should be able to demonstrate that in the class.
- ▶ structure of the code (readability and optimization)
- ▶ commenting the code
- ▶ quality of presentation (structure, sound examples)

Grading Rubric:

Creativity and originality of the concept	5%
Structure and logic of the code	5%
Clarity of diagrams and documentations (including comments in SC)	5%
Presentation and proof of concept (sonically and interactively)	5%
Total	20%