21 M.385 Final Project Guidelines

Choose a Topic

Your choice for the Final Project is quite open-ended. The only requirements are that your project
- Produce music.
- Have graphical elements (user interface, artistic, or both).
- Is interactive – the user controls what happens in real-time.

One strategy for choosing a topic is to pick a particular area that we covered in class and **explore it more deeply**. As a reminder, we have covered:
- Audio synthesis
- Audio file playback and manipulation
- Graphics
- Sequencing / scheduling / MIDI playback
- Kinect or other input devices
- Music games

Your topic can focus on one of these **modes of interaction**:
- **Games**: directed goals. Winning / losing. Earn points.
- **Education**: teach how some aspect of music works – harmony, counterpoint, melodic shaping, music styles – rock, classical, non-Western (Gamelan, Indian, African).
- **Performance** – A piece that you compose/perform that has a beginning, middle, end, and real-time improvisational elements.
- **Sandbox** – DJ tools, music creation tools, looping, modifying, building musical components from building blocks
- **Art Pieces / "Synesthesia"** – Highlighting connections between Music and Graphics (Color, Shape, Texture, Animation).

The **musical output** of your system can be:
- Your own audio synthesis
- Fluidsynth instruments
- Existing songs
- Recordings you create (pre-recorded or live recorded)
- Any combination of the above

The **control device** for your system can be:
- A game controller
- Kinect
- Other motion sensing devices (Playstation Move or Wii-mote, Myo, Leap Motion)

- Other control surfaces (MIDI controllers like Launchpad, Keyboards, etc...)
- Custom hardware you build

Choose a team

I highly encourage you to work on this project with one or two other people. A two-person or three-person team is the ideal.

As you work with another student, you will bounce ideas off each other, help each other get unstuck, and gain experience working together and resolving differences. Your project can be bigger in scope or be more refined and polished. You can divide the work based on your relative strengths and will gain experience breaking down your project into modular pieces that can be worked on by more than one person at a time.

The Project Proposal

Each team is required to submit a written project proposal (see Project Proposal Template) and also present their proposal in class.

Schedule and Deliverables

You are required to demonstrate weekly progress on your final project. Progress is evaluated based on the Project Proposal, two interim presentations, and the final presentation. The final presentation will be video taped in class for archival purposes. Working code must be submitted as part of the final project deliverable.

Date	Deliverable
Wed, Nov 9	Project Proposals: Document and in-class presentation
Mon, Nov 21	Milestone 1: First working prototype / "MVP" in-class presentation
Wed, Nov 30	Milestone 2: Alpha in-class presentation
M/W, Dec 12 & 14	Milestone 3: Project Complete in-class presentation