



Norwegian University of
Science and Technology



MCT4046: Sonification and Sound Design

Week 2: Self-built Auditory Displays

Anna Xambó

Department of Music, NTNU

2 April 2019

Planning for the week (talks)



- **Day 5: April 2, 2019, 10.00-12.00:** Guest lecture (remote talk): Edo Fouilloux (MUX) - Facilitator: Ashane Randika Silva
- **Day 7: April 4, 2019, 15.00-16.00:** Guest lecture: Pamela Z - Facilitator: Tone Åse / Guy Sion (blog post writing)
- **Day 9: April 8, 2019, 11.15-13.00:** Guest lecture by Ole Maria Nieling - Facilitator: Samuel Rodan
- **Day 9: April 8, 2019, 15.00-16.00:** WoNoMute lecture by Pamela Z - Facilitator: Tone Åse
- **Day 10: April 9, 2019, 10.00-12.00:** Guest lecture (remote talk): Pedro Pestana - Facilitator: Jonas Bjordal

Planning for the week (Tutorials: Fundamentals sonic interactive design I)



- **Day 5: April 2, 2019, 13.00-14.00:** Reading JSON files (external online data)
- **Day 6: April 3, 2019, 10.00-12.00:** Machine listening
- **Day 7: April 4, 2019, 10.00-12.00:** Interactive tools (Data-to-music API)

Planning for the week (Project auditory display)



— Day 5: April 2, 2019

- 12.30-13.00: Creating teams for the week
- 14.00-15.30: Development (1/4)
- 15.30-16.00: Group discussion (1/3)

— Day 6: April 3, 2019

- 12.30-15.30: Development (2/4)
- 15.30-16.00: Group discussion (2/3)

— Day 7: April 4, 2019

- 12.30-14.00: Development (3/4)
- 14.00-14.30: Group discussion (3/3)

— Day 8: April 5, 2019

- 9.15-14.45: Development (4/4)
- 14.45-16.00: Presentations (group)

Learning outcomes



- Be able to design technically and aesthetically consistent auditory displays.
- Get a sense of creating mappings in sonification design.
- Get familiar on how to implement auditory displays using data (e.g. static, dynamic, multidimensional)
- Be able to work in a group project relating sonification concepts and building up from previous knowledge.
- Be aware of best practices in project development in group projects.
- Be able to complete a group project using sonification principles and present it.

Criteria of Evaluation



The criteria of evaluation for assessing the auditory display over the course of the week include:

- Concept: originality / creativity
- Design / Implementation: technical choices, engineering, reproducibility
- Artistic / Aesthetics: style, consistency
- Mappings / intelligibility: the elements (or a subset) of the original data are reflected systematically in the resulting sound?
- Delivery: oral communication for the presentation, written communication for the blog post / article

Content for Presentation (Assignment 3, total grade 15%)

- Description: What is the title of the project and main concept. Overview of the technologies used.
- Timeline: Provide an overview of the 4 days that you have been working in the mini-project. What have you been working on?
- Division of labour: Explain who has been working in what, how you have documented it, working strategies and technologies used.
- Live demo: Try to allocate some time for a live demo.
- Achievements: Give a summary of the achievements of this week through the project. Any progress?
- Challenges: Give a summary of the challenges that you have been encountering over the week and how you did face them?
- What is next? e.g. blog post, code repository, website publishing... more development?

Content for Written Work: Written essay (Assignment 4, total grade 15%) and blog post (Assignment 5, total grade 10%)



- It should include all of the previous explained in written format and combined with visual material.
- It should also include the code repository and a reflection section from the feedback received during the presentation.
- The blog post (500 words) should be an 'online' shorter version of the article adapted to the online medium (e.g. code snippets, videos, links).
- The written essay (1500 words) should include some references and also visual material (photos, code snippets, links).

Project Auditory Display Development



You are expected to create an auditory display project in teams that should be doable within a week. The overall aim is to explore a little bit further sonification and sound design mappings. Here are different approaches that you can take:

- Develop an idea based on what we are seeing in class (lectures, tutorials). Feel free to build up everyday, or change if not convinced (from scratch approach).
- Adapt an existing code to your needs and document what are the changes (remake approach).
- Combine projects from other courses (hybrid approach).
- Other?