



Norwegian University of
Science and Technology

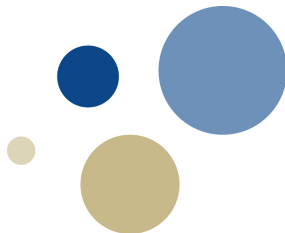
Physical Computing Workshop: Day 4

Mini-Hackathon and the Real World

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Warm-up Activity: Projects using Bela



Pick one example of a project using Bela and explain it to the class in terms of input, behaviour and output.

You can find a number of examples on the Bela's blog: <https://blog.bela.io/>

Learning Outcomes



By the end of the session, you will be able to ...

- Be able to express a concept from ideation to prototyping.
- Get a sense on how to combine and build on previous code.
- Explore how to design a custom-made musical instrument based on performance, engineering and originality/creativity.
- Learn how to present a custom-made musical instrument.
- Demonstrate a custom-made musical instrument in a performance setting.
- Reflect on the custom-made musical instrument and performance using a blogging style.

Overview of the Day

- 9.15-9.45 Warm-up activity
- 9.45-10.00 Mini-hackathon explained
- 10.00-10.30 Ideation phase: definition of the concept to develop
- 10.30-11.00 Presentations of the concepts & planning for the performance
- 11.00-14.30 Development of the prototype
- 14.30-15.00 Setting up
- 14.30-15.00 Final performance
 - 15.00-15.10 Team A: Gaute, Rayam, Thibault and Ulrik
 - 15.15-15.25 Team B: Jackson, Magda, Simon and Jarle
 - 15.30-15.40 Team C: Aleksander, Paul, Tom Ignatius and Thomas
 - 15.40-15.50 Popular vote of the best music hack
 - 15.50-16.00 Award to the best team and closing

Mini-Hackathon



Theme

Recycle



Ideation



- Meet for 30 minutes with your team and define the idea of your prototype. Some idea generation techniques include brainstorming, mindmapping, storyboarding, and so on. Here you can find some idea generation techniques:
<https://www.cleverism.com/18-best-idea-generation-techniques/>
- For the presentation of the concept, you are only allowed to use 3 slides and you should bring a title of your prototype. Each group will have 10 minutes including Q&A.

Keep it Simple!



Performance

- We should arrange the room during the morning: table on stage, seats for the audience: volunteers?
- You will have 10 minutes to present the prototype and to perform. Try to pitch your idea and leave enough time to perform.
- Time will be strictly indicated (5 minutes, 2 minutes, 1 minute left).
- There are 5 minutes to setup, we will have a table on stage for each city.
 - 15.00-15.10 Team A: Gaute, Rayam, Thibault and Ulrik => Team C closeup camera Oslo/Trondheim
 - 15.15-15.25 Team B: Jackson, Magda, Simon, and Jarle => Team A closeup camera Oslo/Trondheim
 - 15.30-15.40 Team C: Aleksander, Paul, Tom Ignatius and Thomas => Team B closeup camera Oslo/Trondheim
 - 15.40-15.50 Popular vote of the best music hack
 - 15.50-16.00 Award to the best team and closing
- After the show, you will have to return your Bela kits in good condition.
- After the show, we need volunteers on each city to reorganize the portal for Monday.

Pitch your Idea



Some tips & tricks on how to pitch a technology idea: “18 Pitching Essentials: How to Pitch an Idea to Investors (and Early Customers)”:

<https://www.ryrob.com/how-to-pitch/>

Mini-hackathon & Rehearsal



Each group has 3.5 hours to develop their idea and rehearse with the prototype and how they are going to pitch it. Try to be precise with the timing.

Post-activities



- Write a final blog post about the music hack (deadline: October 22, 2019 9.00). In the blog post, make sure to combine text with media to communicate the concept of your music hack, from ideation to the prototype. You will find guidelines on Canvas.
- Fill in the post-questionnaire of the course.

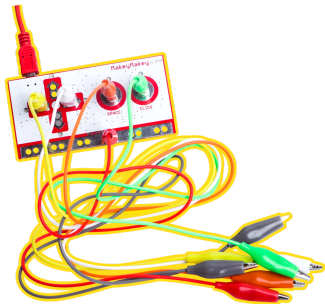
Criteria of Evaluation (Audience)



The criteria of evaluation that will be promoted are the following:

- Originality / Creativity
- Design / Engineering
- Performance / Musicality

Prize



The best music hack will be awarded with...

- A **Makey Makey** kit for each team member!: <https://makeymakey.com/> and an **audio exciter**.
- Sponsored by Soundscape Studios (Robin Støckert).

Happy Hacking!



Image source: <https://www.indiatoday.in>