## 052483 Computer Music: Languages and Systems

Homework 3 Assignment 1

## **Assignment 1: drum kit**

## **Description:**

Create a set of drum sounds (min 3) and an interface to control them.

For the synthesis part (e.g., subtractive synthesis), use SuperCollider. Feel free to check the examples on <a href="https://sccode.org">https://sccode.org</a> and other resources online. You can implement even non-traditional drum sounds if you want (e.g., not just percussive ones).

As far as the interaction part is concerned (e.g., synthesis parameters setting, play the drum, etc.), you can exploit either MIDI or OSC communication protocols. For example, you can use touchOSC app (<a href="https://hexler.net/products/touchosc">https://hexler.net/products/touchosc</a>). Alternatively, you can combine Processing, JUCE to turn other devices (e.g., Arduino, Kinect, etc.) into input peripherals.

Be creative, feel free to combine different components for visualization, user interaction and control.

## **Output:**

- A brief presentation and demonstration of your work (max 5 minutes) that will be given to the class.
- A more detailed report in which you illustrate your system and its implementation (max 5 pages).
- A link to a repository containing the code (e.g. on GitHub) with minimal comments.