



POLITECNICO
MILANO 1863

POLO TERRITORIALE DI **CREMONA**



Master of Science Music and Acoustic Engineering
Computer Music – Languages and Systems

Homework 2: Additive Synthesis

GROUP 16

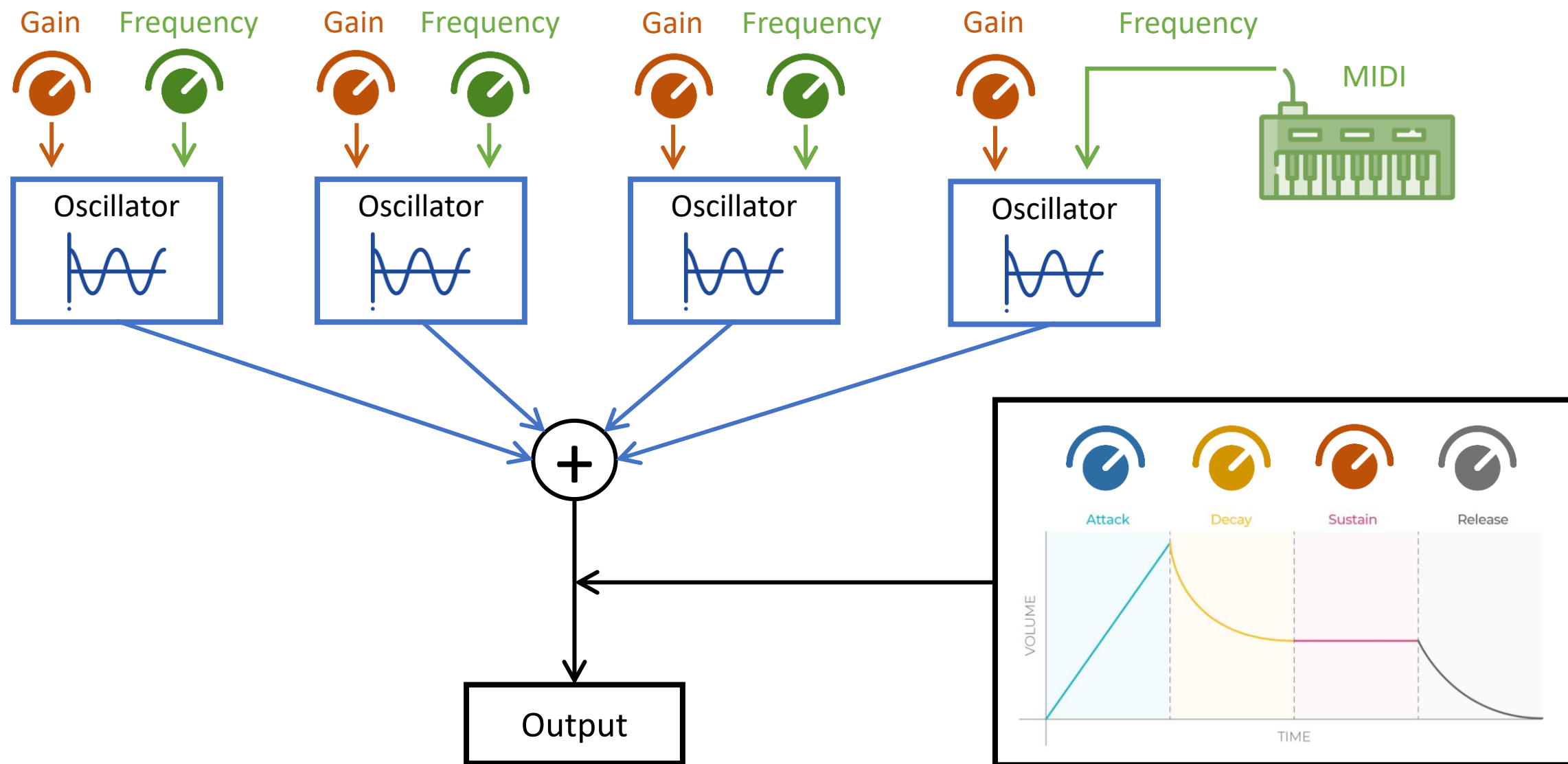
Zaccaria Carrettoni

Lorenzo Lellini

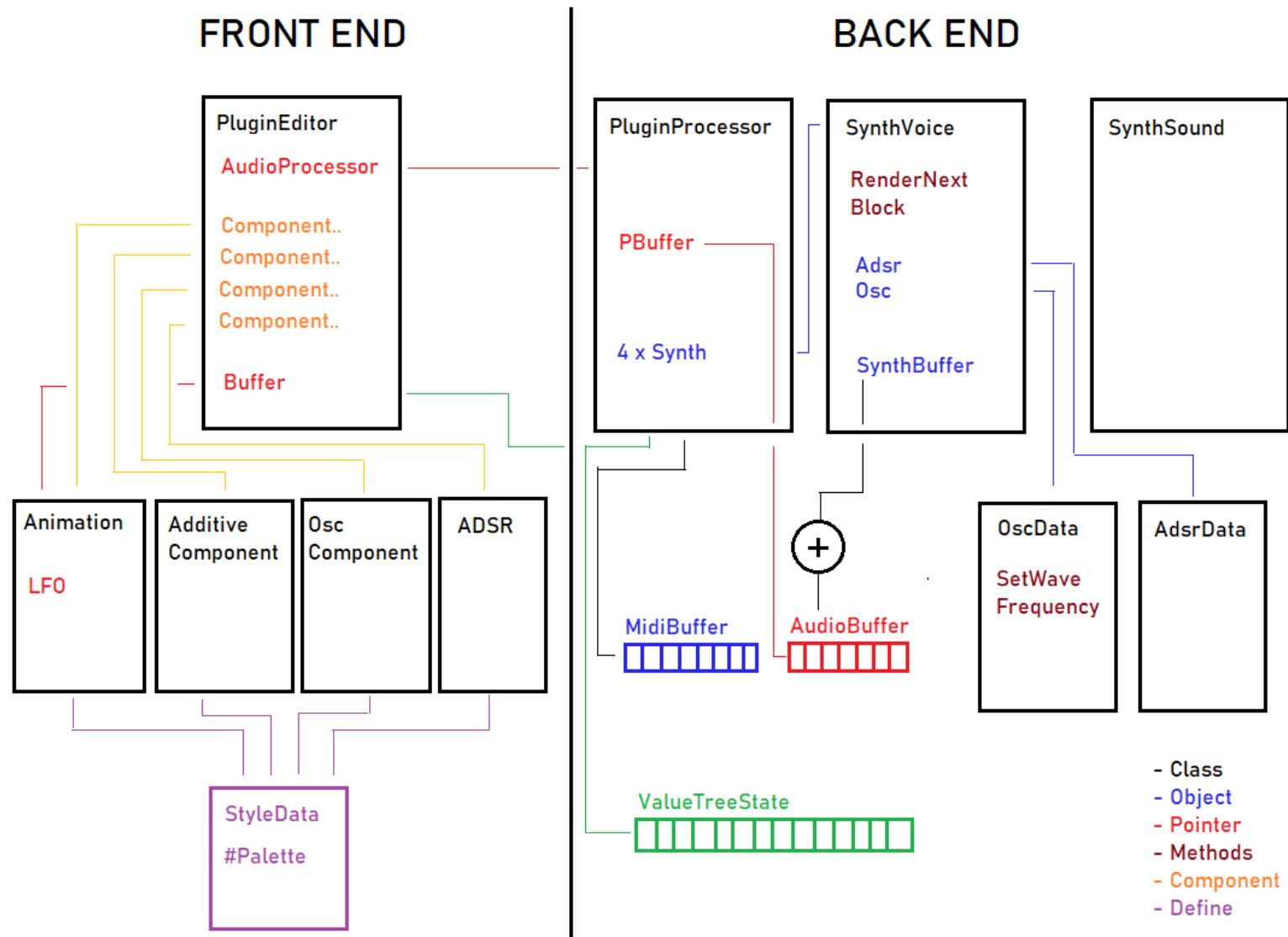
Luca Sorini

Alessandro Zullo

ADDITIVE SYNTHESIS



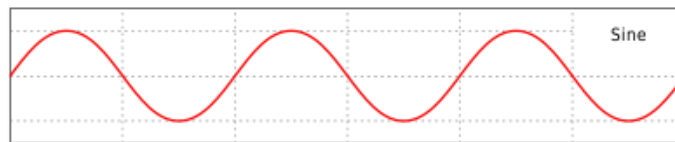
STRUCTURE OF THE SYNTHESIZER



3 GOALS FOR THE BACK-END

- Optimization of resources and readability
- Polyphony
- Different waveforms

Sine



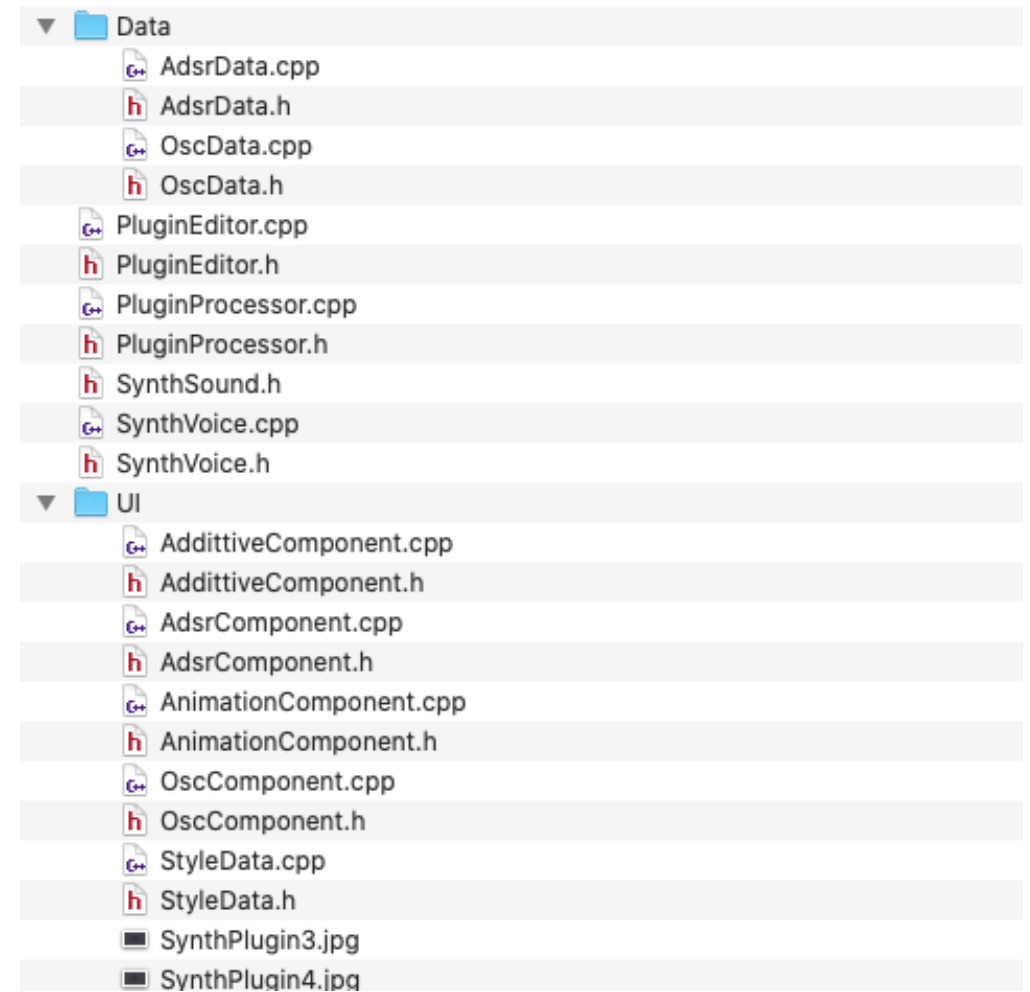
Square



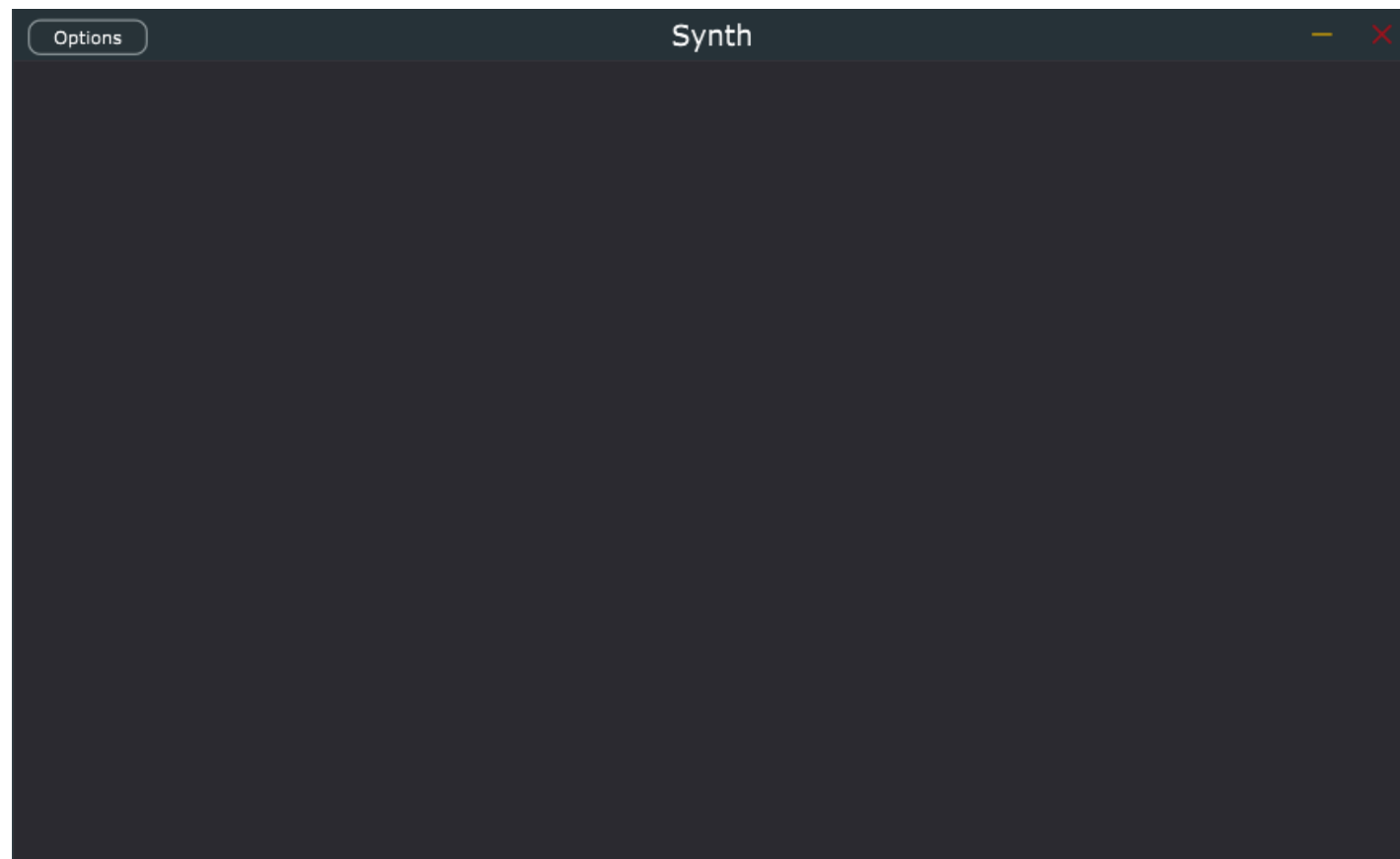
Triangle



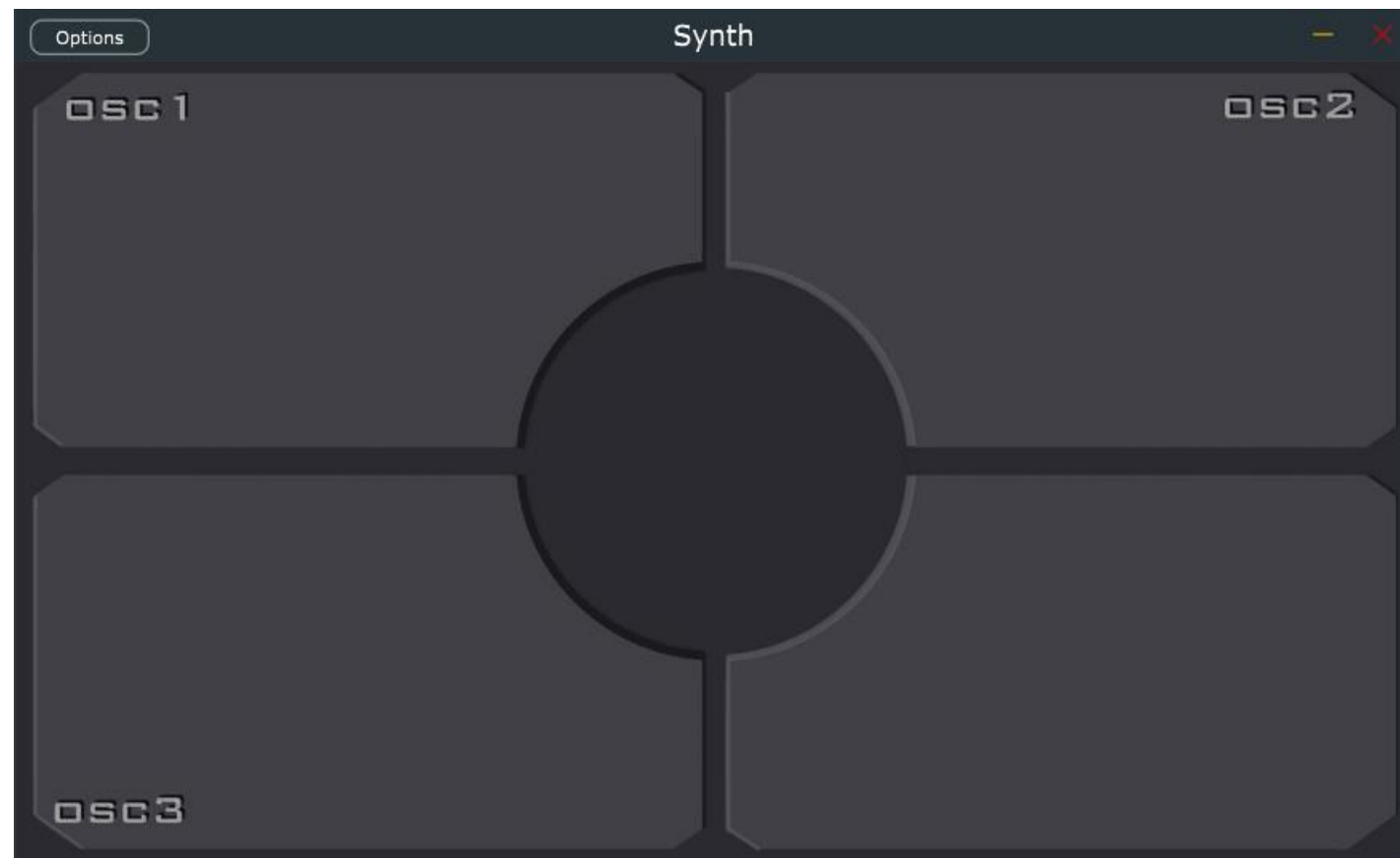
- Knobs for parameters control
- Real-time modifications



- Layer graphical structure of the GUI
 - plugin editor



- Layer graphical structure of the GUI
 - plugin editor
 - animation component



- Layer graphical structure of the GUI
 - plugin editor
 - animation component
 - additive component



- Layer graphical structure of the GUI
 - plugin editor
 - animation component
 - additive component
 - oscillator box



- Layer graphical structure of the GUI
 - plugin editor
 - animation component
 - additive component
 - oscillator box
 - ADSR component



- Layer graphical structure of the GUI
 - plugin editor
 - animation component
 - additive component
 - oscillator box
 - ADSR component
- Cool animation around the central knob
- Graphical parameters control





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Thanks for your attention!