



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

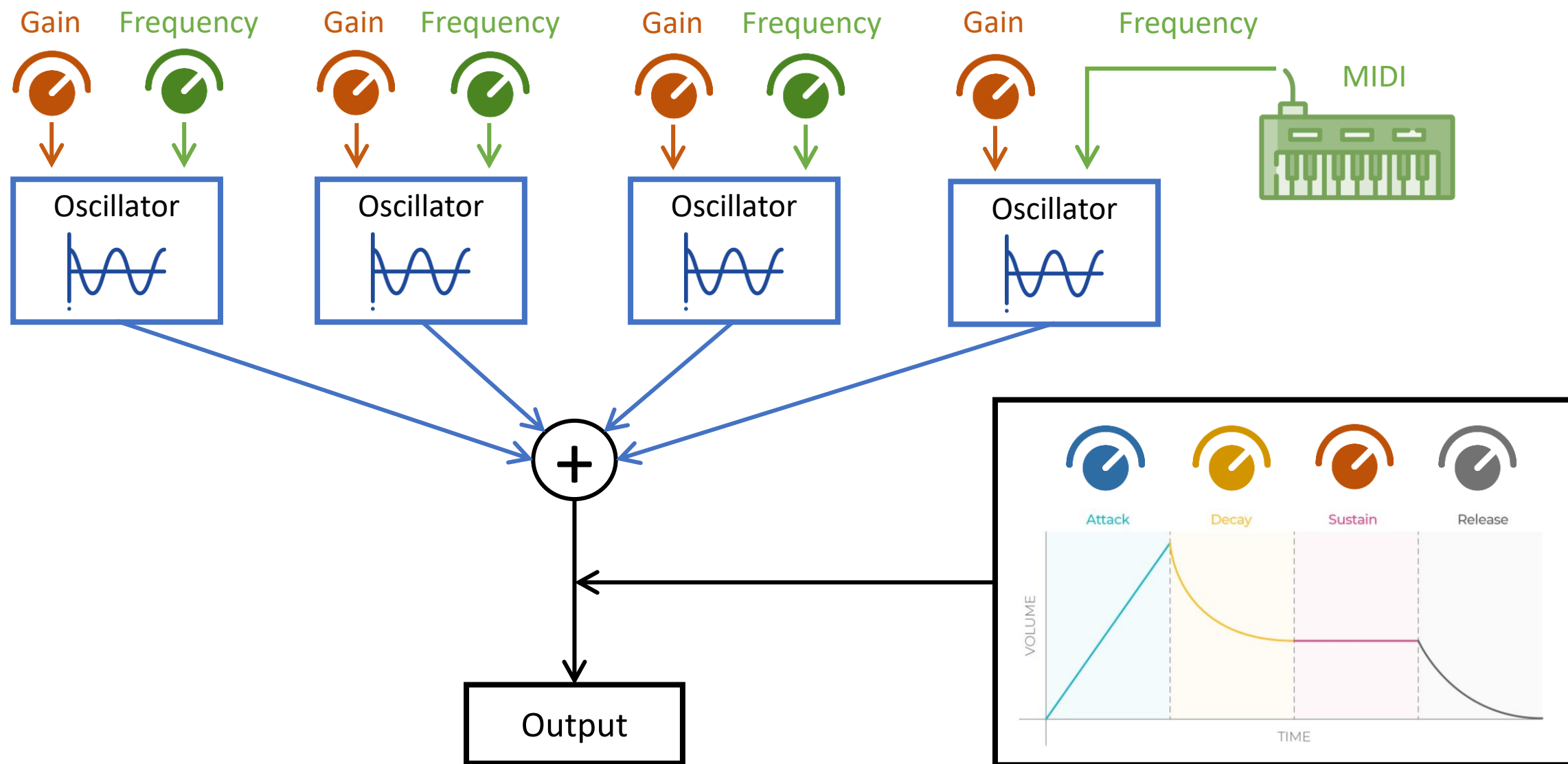
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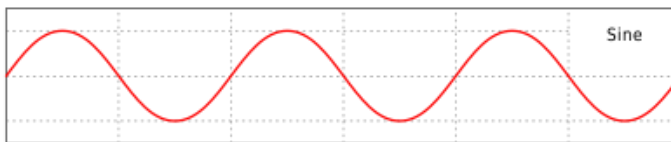
ADDITIVE SYNTHESIS



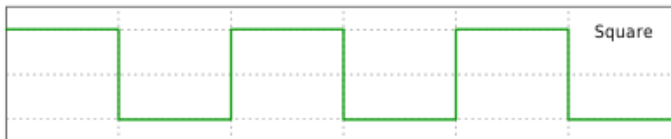
2 GOALS FOR THE BACK-END

- Optimization of resources and readability
- Polyphony
- Different waveforms

Sine



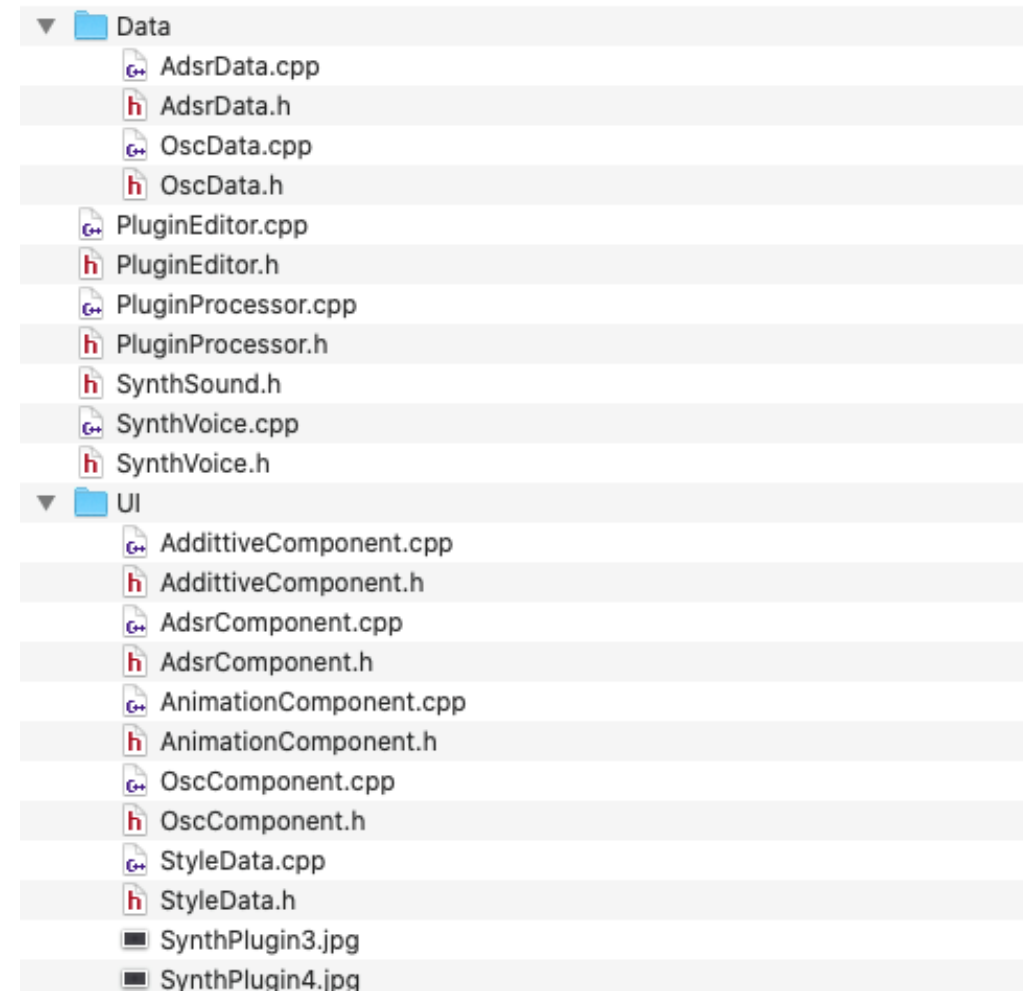
Square



Triangle



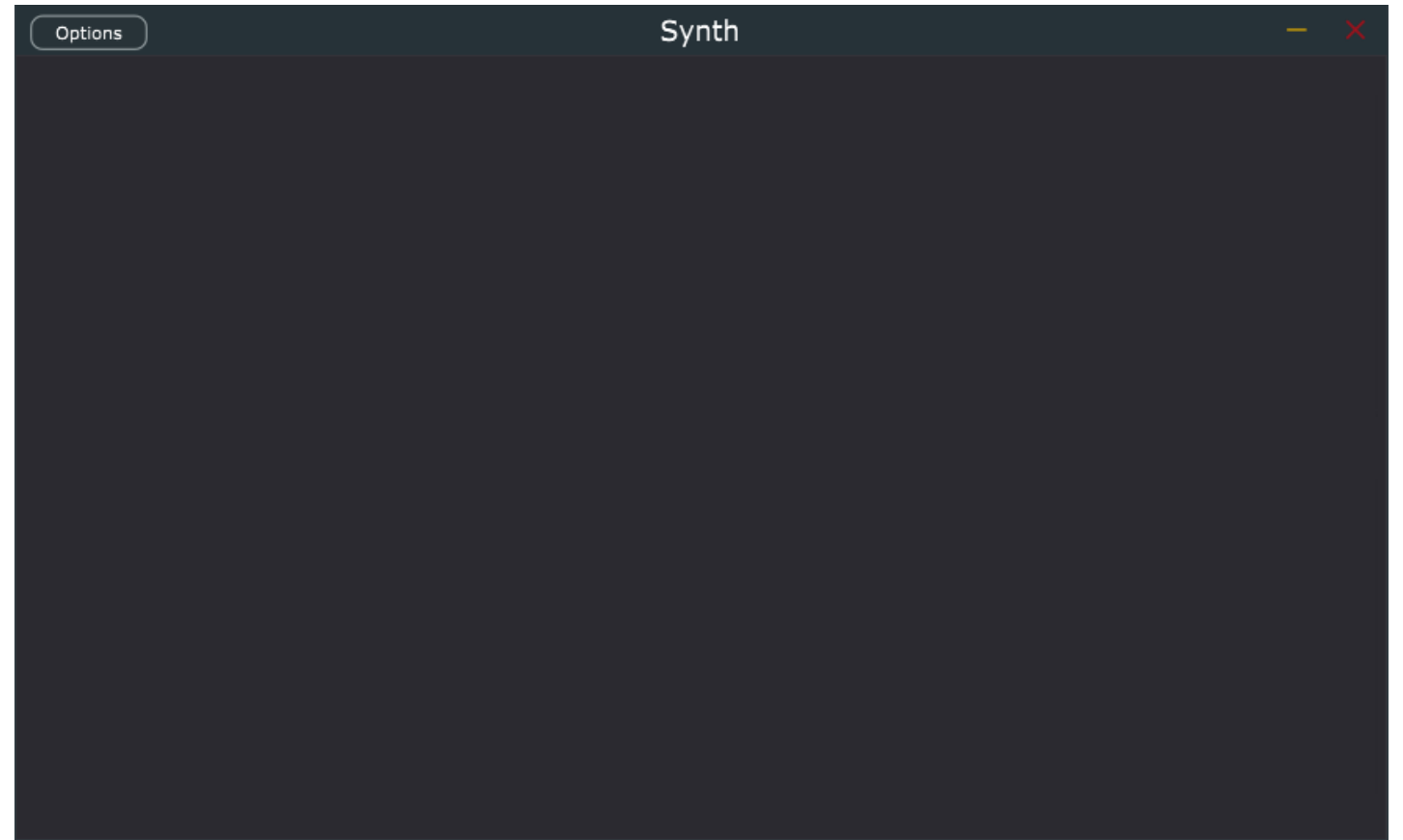
- Knobs for parameters control
- Real-time modifications



3 GOALS FOR THE FRONT-END

➤ Layer graphical structure of the GUI

➤ plugin editor



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



3 GOALS FOR THE FRONT-END

- 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



3 GOALS FOR THE FRONT-END

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

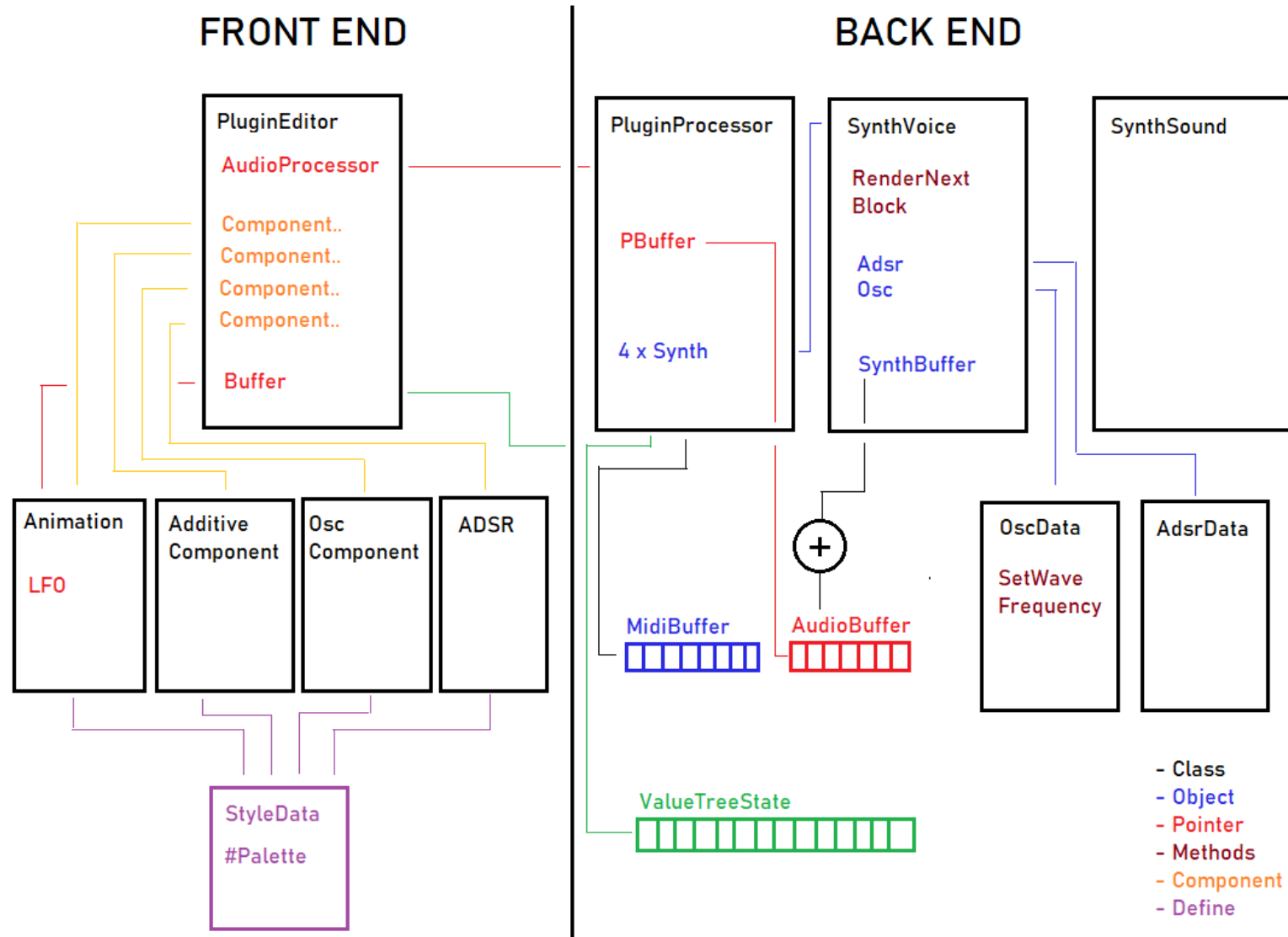


3 GOALS FOR THE FRONT-END

- 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



STRUCTURE OF THE SYNTHESIZER





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Thanks for your attention!