NordicSMC 2021 Workshop: Introduction to JUCE Audio Plugins

11-11-2021

Documentation NordicSMC_Effect

This document provides additional instructions for the code found via: https://github.com/ SilvinWillemsen/NordicSMC Effect

This document shows various steps to

- 1. Add a parameter to the Processor.
- 2. Set up slider functionality in the Editor (done for you).
- 3. Linking the slider in the Editor to the parameter in the Processor.

Adding a parameter

- 1. Define a variable (PluginProcessor.h → Private variables)
- Apply to a signal (PluginProcessor.cpp → processBlock())

Slider functionality setup

- 1. Make your Editor inherit from Slider::Listener (PluginEditor.h)
- 2. a) Override void sliderValueChanged (Slider* slider); (PluginEditor.h)
 - b) Implement void sliderValueChanged (Slider* slider);(PluginEditor.cpp).

Adding parameter control

- 1. Add a slider instance (PluginEditor.h → Private variables)
- 2. Set up the slider (PluginEditor.cpp → Constructor)
- 3. Add the Editor as a listener to the slider (PluginEditor.cpp → Constructor)
- 4. Make the slider visible (PluginEditor.cpp → Constructor)
- 5. Give the slider "bounds" (PluginEditor.cpp → resized())
- 6. Create a "setter" function in the Processor (PluginProcessor.cpp → Public functions)
- Apply the slider value to the Processor parameter (PluginEditor.cpp → sliderValueChanged())

Things I changed in the Projucer setup

- Changed "Plugin Manufacturer" to "NordicSMC"
- Changed 'Add "using namespace juce" to JuceHeader.h' to enabled

Other changes in the code (besides the sinusoid):

- Obtained the sample rate in prepareToPlay(), as we need this for the sine-wave generation.
- Added a limiter for protection of your ears (thank me later).