NordicSMC 2021 Workshop: Introduction to JUCE Audio Plugins

11-11-2021

Software-setup instructions

This workshop will give an introduction to JUCE, a C++ framework specifically designed for creating audio applications and plugins. Over 3 hours, we will go through the code structure of the JUCE Audio Plugin template, and create an audio effect. At the end of the workshop you will (hopefully) have a VST / Audio Unit which you can use in your favourite DAW, as well as the basic knowledge to continue to build your own audio plugins.

Please follow the following instructions to install all the necessary software to be able to follow the workshop. Also, be sure to bring headphones, as you might be using your microphone as an input.

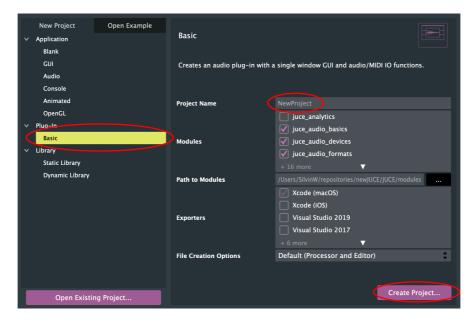
- 1. Make sure you have an Integrated Development Environment (IDE) that can compile C++
 - If you are using Windows, make sure you have *Visual Studio Community 2019* or download from here: https://www.visualstudio.com/downloads/. In the installer select *Desktop development with C++* and tick the latest version of the Windows 10 SDK (currently 10.0.19041.0) and the latest MSVC (currently v142).
 - If you are using Mac, make sure you have *Xcode* (can be found in the App Store).

2. Get JUCE

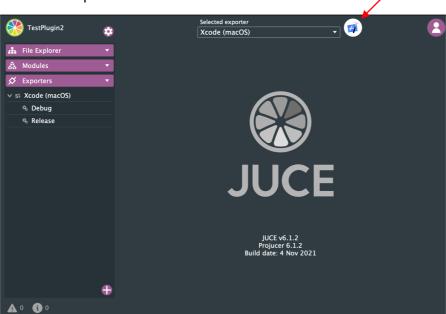
- Download the latest version of JUCE through https://juce.com/get-juce/ (currently v6.1.2), select Education and follow the further instructions.
- Unzip the downloaded folder and place it somewhere you can find it easily.

3. Set up the Projucer

- Find the Projucer in the root folder, open it and go to "Global Paths..." (Mac: under **Projucer**, Windows under **File**)
- Select correct paths for "Path to JUCE" and "JUCE modules" click on Browse (...) and find your JUCE and JUCE/modules folder.
- 4. Build your first JUCE plug-in
 - Under "Plug-in" select "Basic" in the JUCE splash screen.
 - Find a name for your project
 - Click on Create Project... and choose a location to save the project.



- Click on Save and Open in IDE.



5. Run / Build the project. If you get a pop-up window saying "Hello World!" everything works and you are ready for the workshop! If not, and you're on Mac, Select "Standalone Plugin" as the scheme from "Product → Scheme", and build again.

If you get errors, or if you experience any other issues, please contact Silvin Willemsen <sil@create.aau.dk> before the workshop.