First Homework of Computer Music Languages and Systems A.A.2022/23
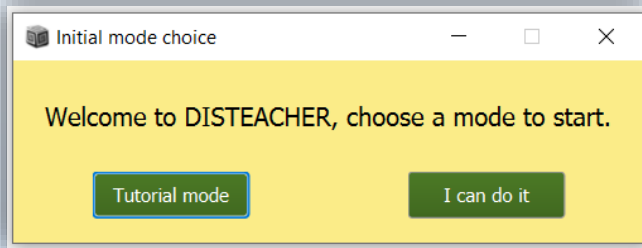
The Disteacher

Group 2 - Circuitone - X. Luan, G. Costa, S. Stagno, A. Paoletti
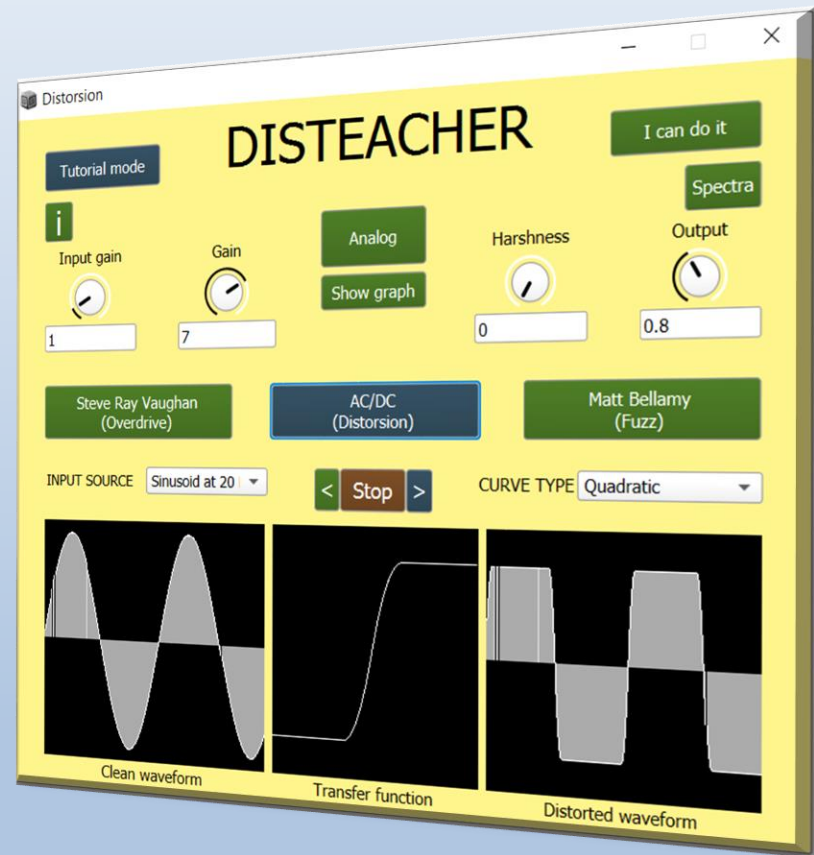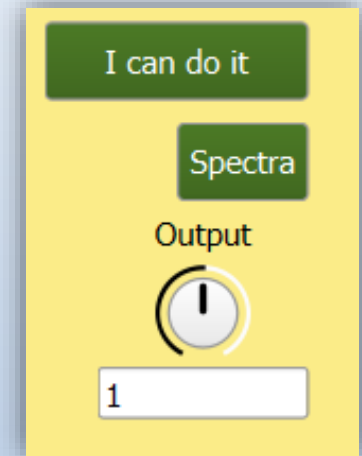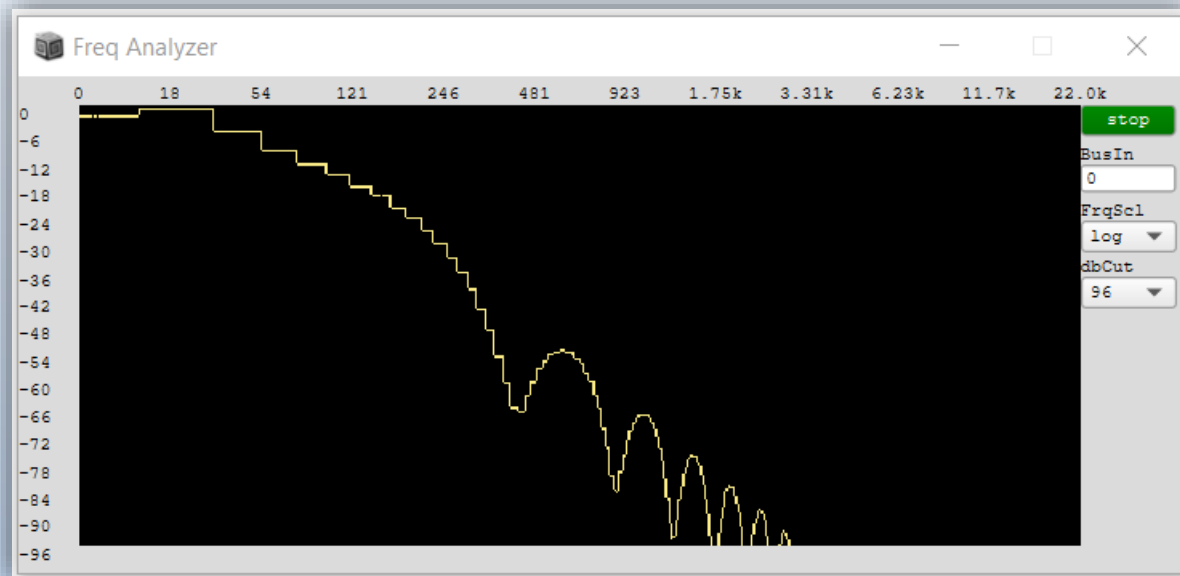
Teaching Distortion

Goal: develop an application to teach how **_distortion_** works.

Two usage modalities, one to learn and one to experiment.

Four knobs to change distortion parameters. Three distortion pre-sets to get an idea of how parameters influence the distorted output.
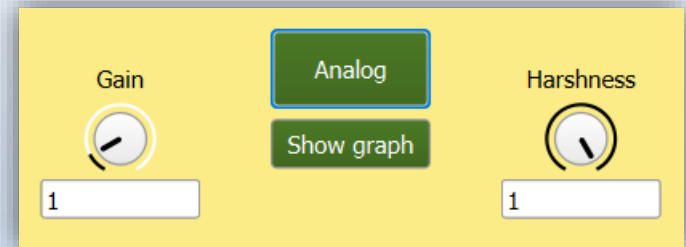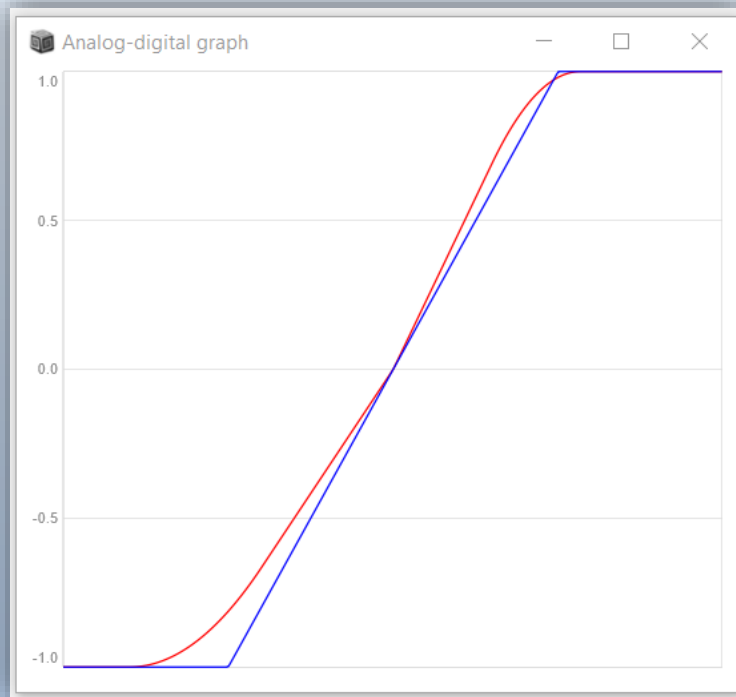
Show Frequency Spectrum

By clicking on the *Spectra* button in the upper right part of the screen you can see the frequency spectrum of the output soundwave.
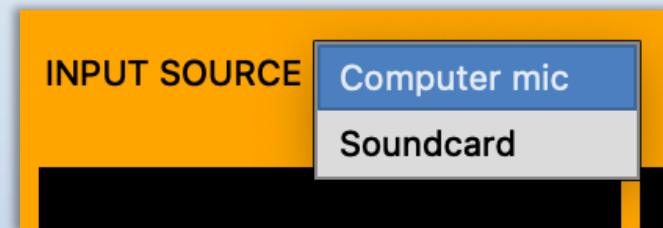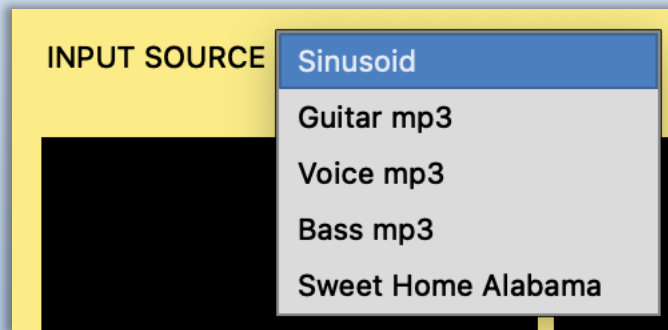
Analog Emulation

By clicking on the central **Analog** button you can add an analog feel to the distortion function.

If you want to see the difference between the normal and the analog function, just click on the **Show graph** button.
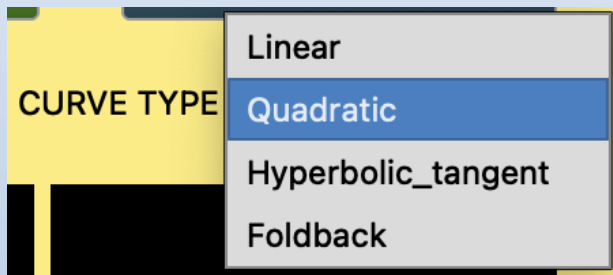
Input choice

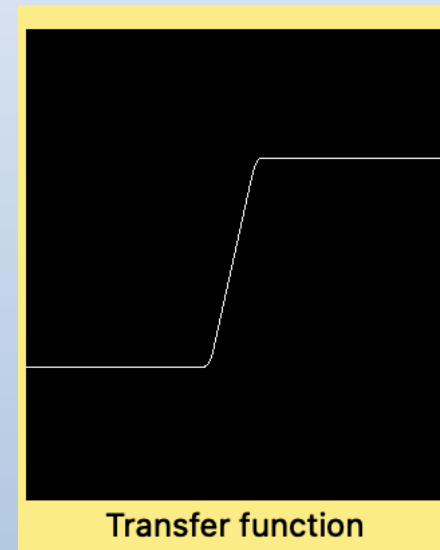In the *Tutorial* mode user can choose the input from a list of recorded audio files.

In the *I can do it* mode the distorsion will be directly applied to the sound coming in real-time from the hardware inputs.

Transfer function choice

CURVE TYPE

- Linear
- **Quadratic**
- Hyperbolic_tangent
- Foldback

In both modalities user can choose the **transfer function** type. The graph is always shown in the bottom center of the GUI.

Transfer function

Thanks for the attention!