

Three nuts for Cinderella

1) Piano

Piano was realized by additive synthesis. Amplitude's characteristics were identified from samples from VST plugin Keyzone Classic. They were identified for five notes (A3-A7). For each interval of frequencies, which represents individual octaves, one of these five notes was used. Reverb was added by function from our classes. The audio sample (koupelna.wav) was from <http://sami.fel.cvut.cz/syn/>.

2) Strings

Strings was made similarly to piano. Only difference were in used samples. These samples are from VST plugin Sakura. The same reverb was added.

3) Strings pizzicato

Pizzicato strings were made by physical modeling. It was realized by simple Karplus-Strong algorithm. The same reverb was added.

4) Flute

Flute was realized by simplified additive synthesis. The waveform was made by sum of few sinusoids with odd harmonics. One squarewave was added for diversify the sound. Triangulare envelope was used for this instrument.

5) Bassoon

Bassoon was realized by formant synthesis. Coefficients of formant's was determined from fomant's frequencies. These frequencies are from our lectures (with a little modification).

Own creation

1) Kick, snare, clap, hat

All of the drums were made similalry. Using linear interpolation, frequency of the sinewave goes from higher to lower. For all of these drums ADSR envelope was used and reverb was aplied.

2) Bass

Bass was realized by FM synthesis.

3) Lead

Lead was created from piano which was used in Popelka. It was modified. Instead of sinewaves, sawtooth was used.