Interactive Music Assignment: Sound Synthesis

Patch Description:

Demo: https://youtu.be/s79RLl51Tsw

Description:
    The patch makes use of Ableton's Analog instrument and effects like Flanger and Reverb.

Controls:

- **Intensity**: Controls the gain levels for the two amplifiers in Analog instrument. It also controls the noise input level and it's filter cutoff ie noise color. Increasing the slider increases the all the gains and the noise filter cutoff.

- **Tension**: Controls the detune parameter of the second oscillator. Increasing the slider increases the amount of detune which leads to an unsettling sound which creates tension.

- **Chaos**: Controls LFO1 of Analog Instrument. LFO1 is mapped to the cutoff frequency of Filter1 which has a high resonance. Modulating this frequency creates an effect that sounds like different notes being played in a rhythm. The LFO generates a stepped noise signal which leads to sharp note like sound from the resonant filter. Increasing the slider increases the LFO rate which causes faster changes in cutoff. This leads to faster note like sounds.

- **Depth**: This slider is mapped to the reverb decay time. This adds depth or hollowness to the sound.

- **Wobble**: Controls the LFO rate of the flanger. This makes the sound wobble between left and right channels. Increasing the slider increases the rate at which the sound wobbles.