Interactive Music Assignment: Sensor Input

Max Patch Description:

Demo: https://youtu.be/p_w8DirZr6A

The idea is to create a sequencer like interface with the sensor mappings to change to modify the sounds. The patch makes use of TouchOSC for getting accelerometer and touch input.

Sequence Selector:

This is a 3 part semi sequencer. It allows the user to select the loops to be played. Three types of loops are played simultaneously: Main loop, High loop and low loop. The number of the loops of each type that are played can be configured. This allows for possibilities of poly rhythms.

Sensor Input:

The user can use the touch input and turn multiple loops on or off. The accelerometer input provides 3 more streams: X, Y and Z axis.
X axis controls the center frequency of the bandpass filter applied to the output of main sample sequence selector.
Y axis controls the Q of the bandpass filter applied to the output of main sample sequence selector.
Z axis (flipping the phone upside down) changes the direction of the playback.

TouchOSC Interface:

The TouchOSC interface presents the user with three rows of toggle buttons each mapped to 9 loops of each type. The button at the bottom stops playback. To start playing initially the phone must be flipped so that the ‘play’ is triggered.