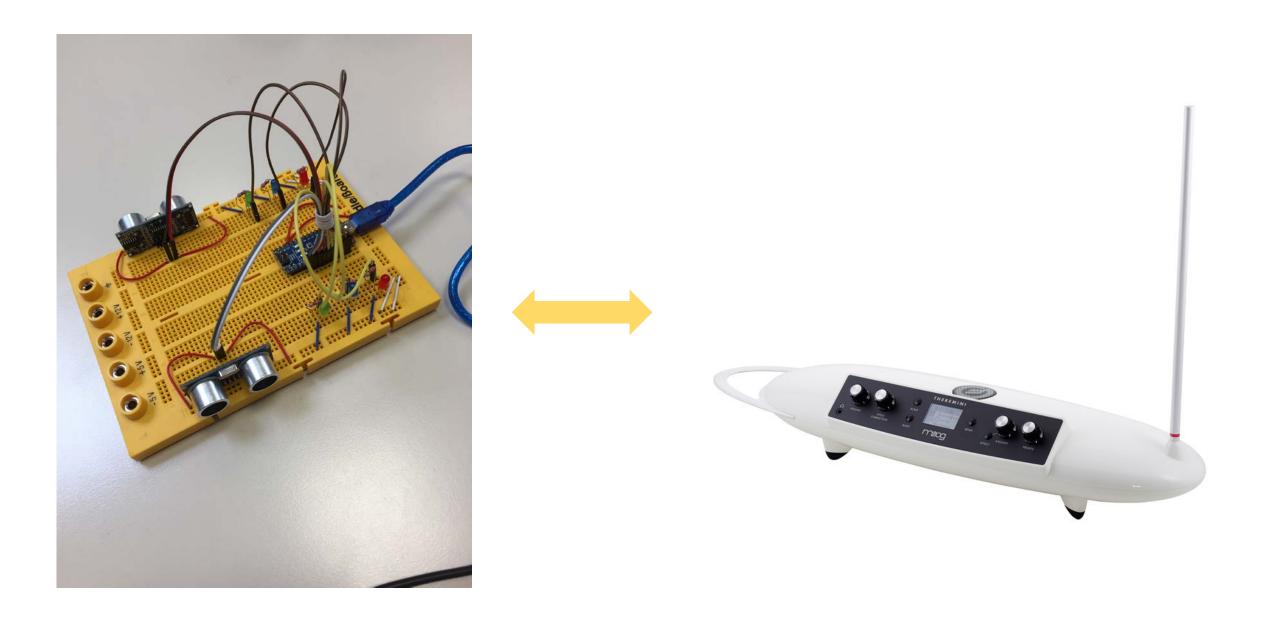
# Athens 2017 Project: Theremin

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#### • Summary:

This document describes The Arduino-Processing project for a Theremin. It includes more sounds in Processing and offers the possibility to make music.

#### • Contents:

- 1) Material & Circuit
- 2) Description
- 3) Code
- 4) Pictures

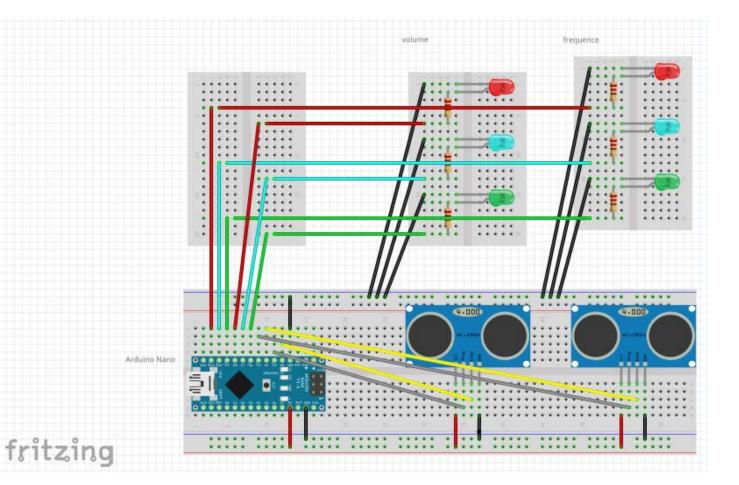
#### 1) Material

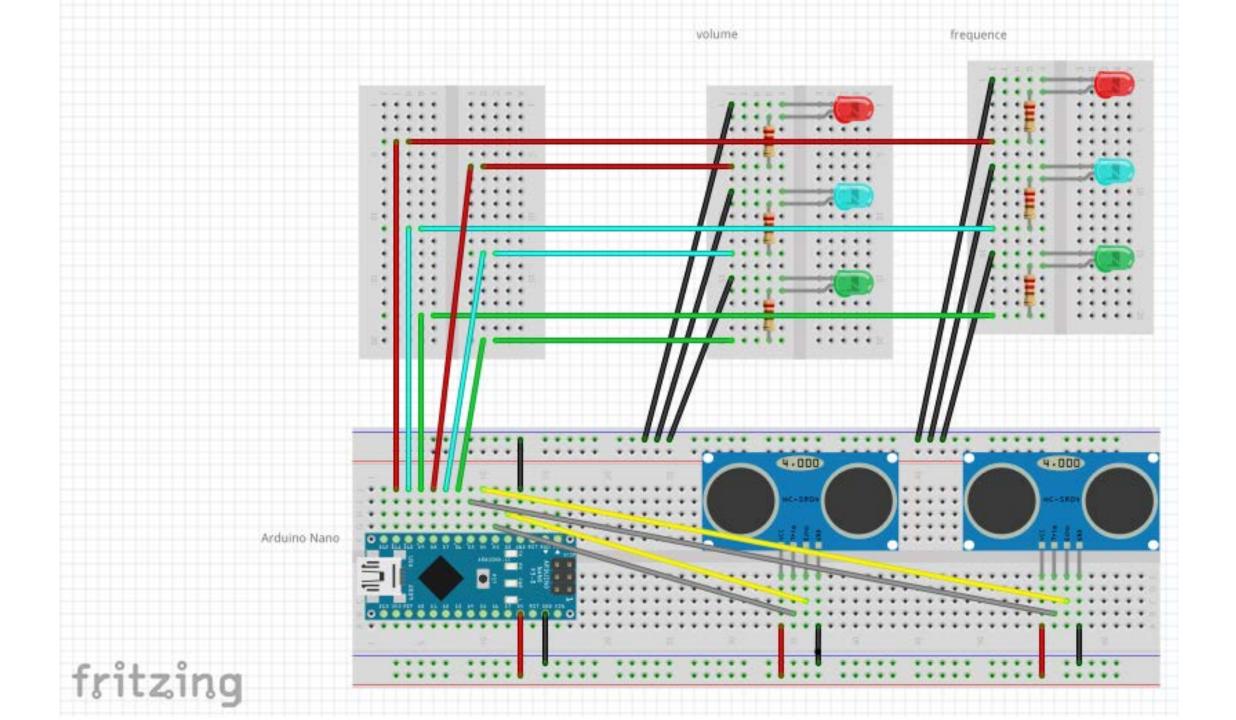
## & Circuit:

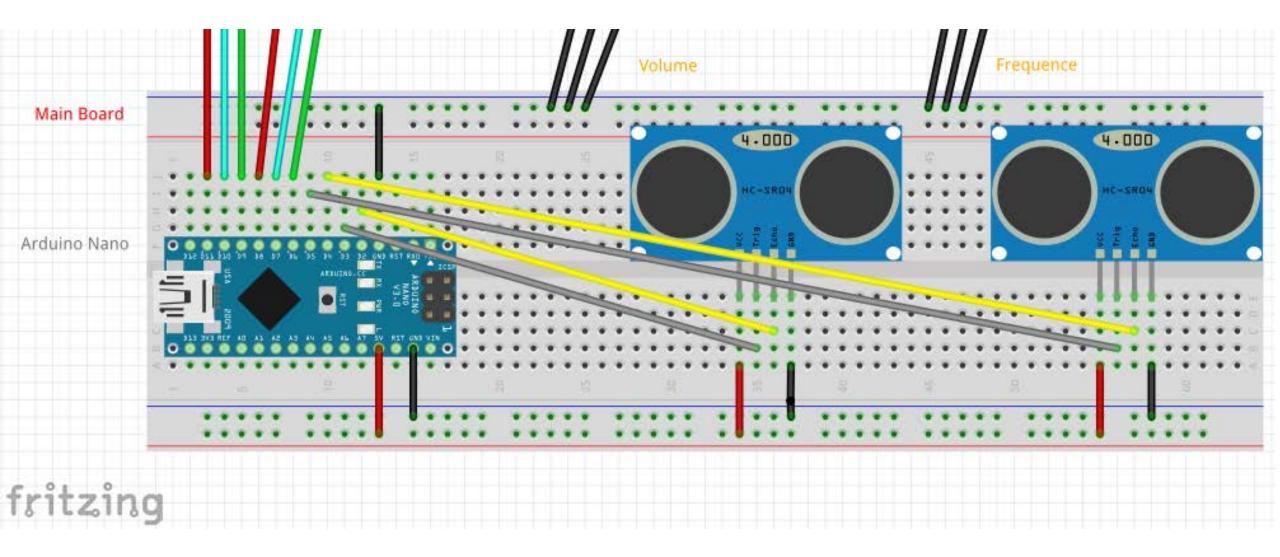
-Arduino Nano
-Ultrasonic Sensor x2
-Breadboard
-Jumpers
-PC with Processing

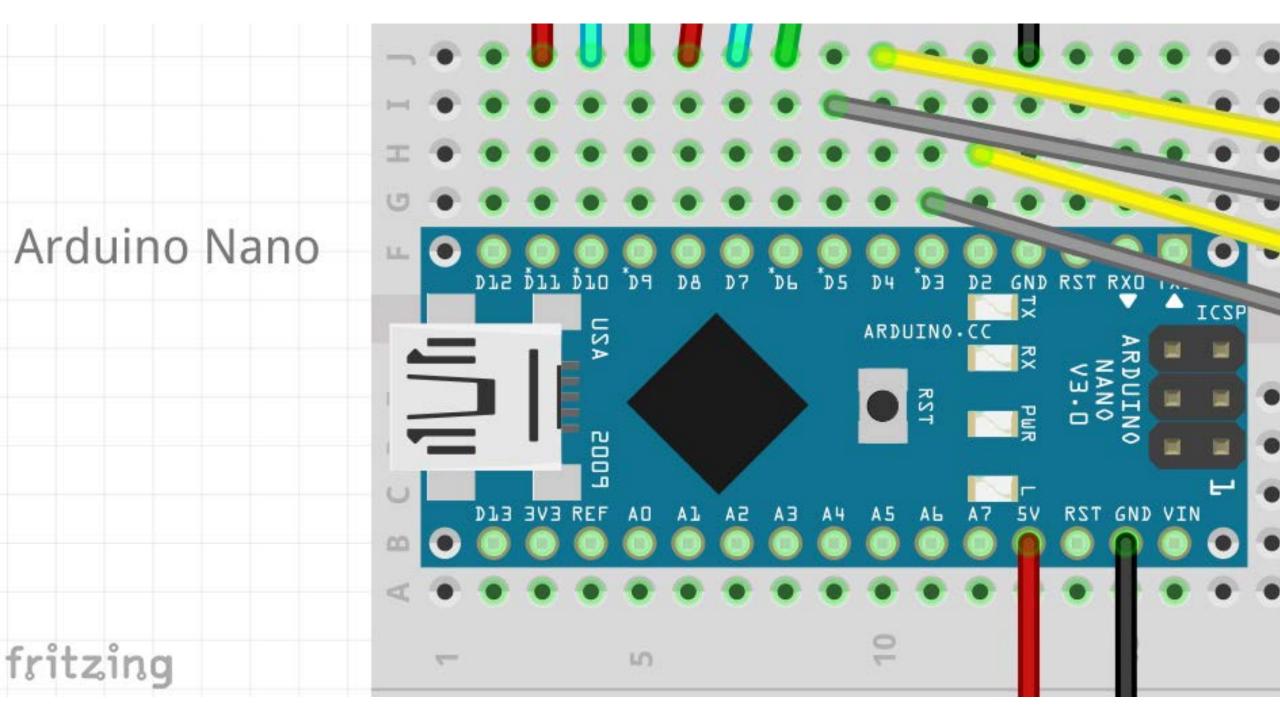
Optional:

-220 Ohm Resistor x6 -Red LED x2 -Blue LED x2 -Green LED x2





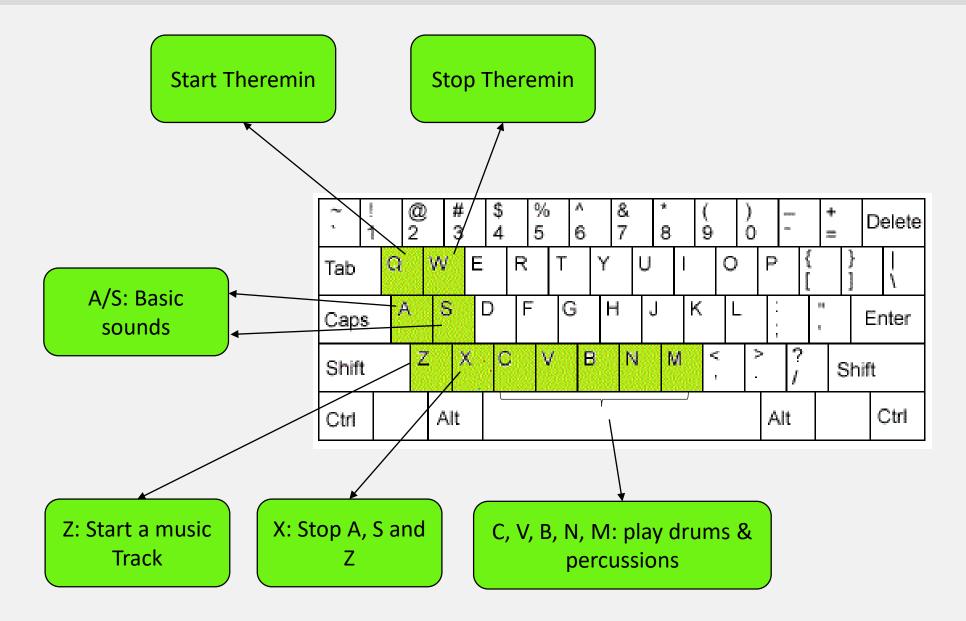




## 2) Description:

- The Project is a Theremin: the 2 ultrasonic sensors replace the antennas; they control the frequency and the volume of the sound played by the instrument.
- Also it is possible to stop and start the Theremin using the keyboard of the computer.
- The Processing interface also plays percussions(drums, etc..) by hitting some buttons from the Keyboard.
- The Theremin and the extra percussions offer a very entertaining tool to make music.

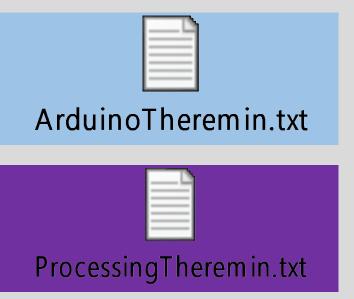
#### Use of the program in the Processing interface:



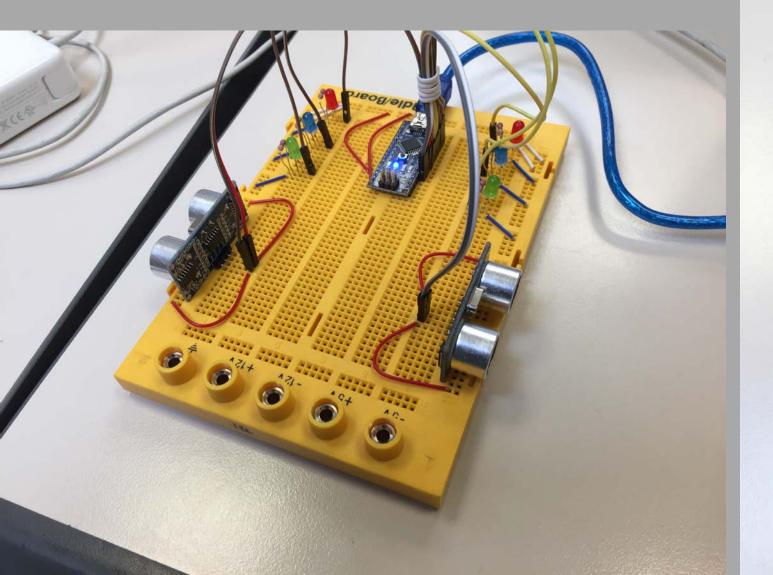
3) Code:

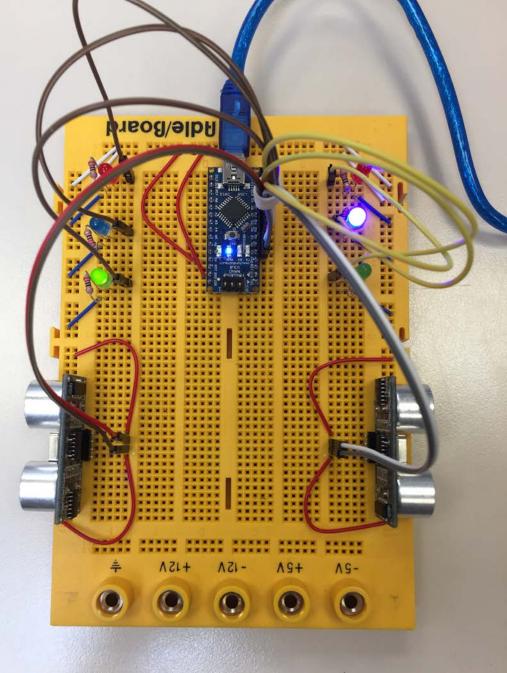
### -for Arduino

## -for Processing











### Muchas gracias!!