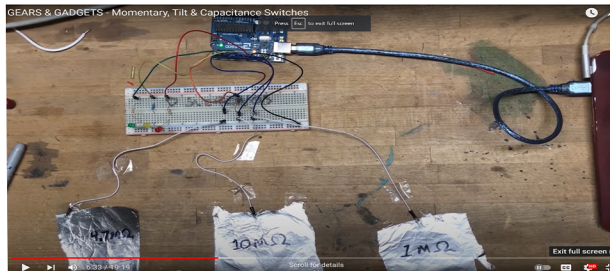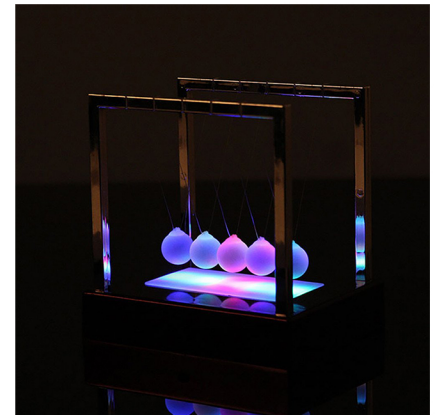# Musical Sculpture
By Kelsey Cao

Inspiration

I drew inspiration from existing interactive sculptures, musical instruments and capacitance sensors made using Arduino.
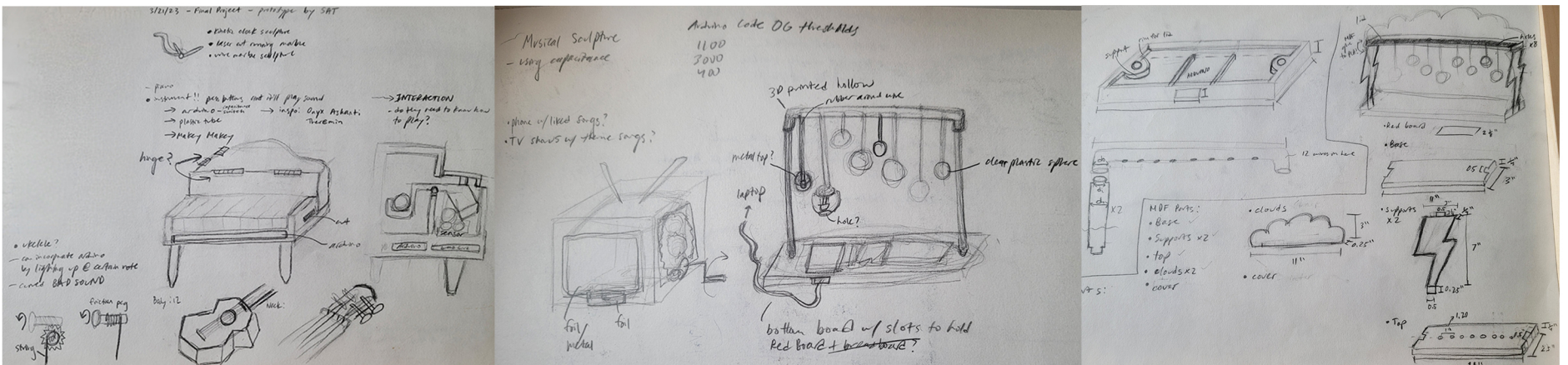

Arduino Spinet - by Gadgetronicx

Gear & Gadgets - Dennis Svoronos
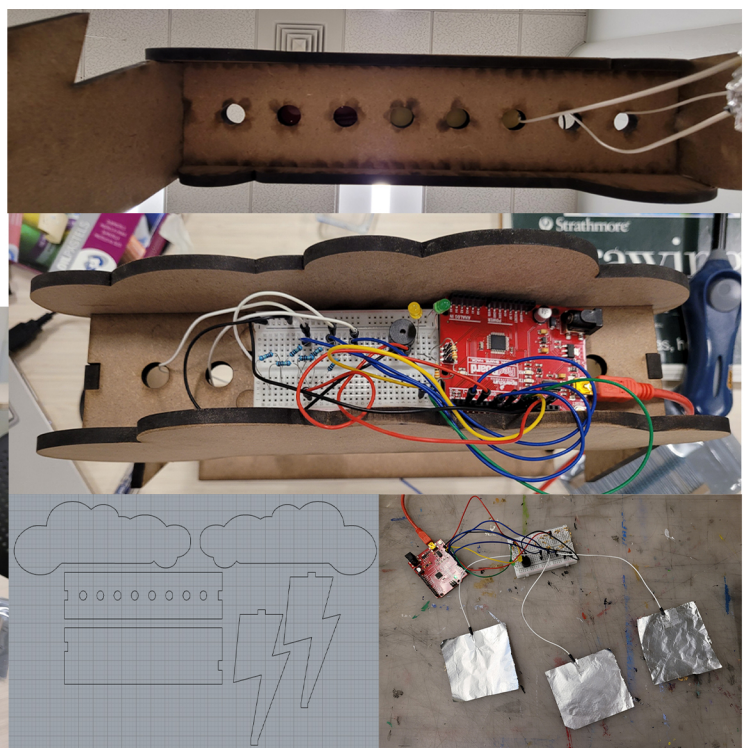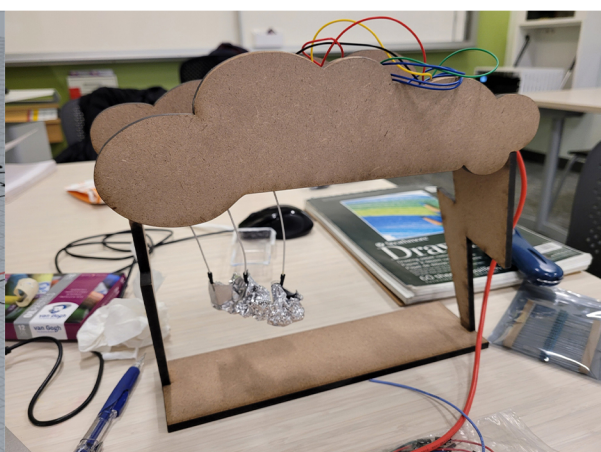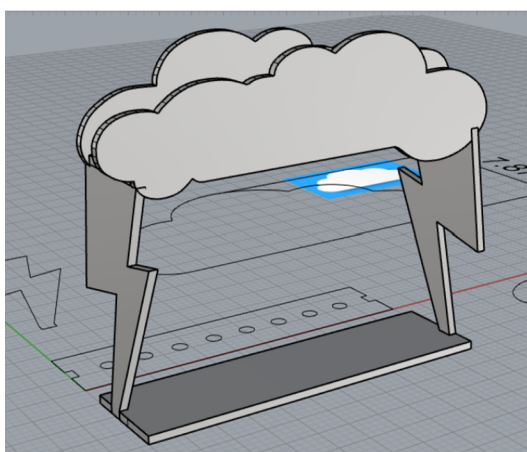
Light up Newton's Cradle Toy

Sketchbook

Going through various ideas of musical instruments (i.e. piano, ukelele), I decided on a sculpture with 8 interactive hanging capacitance sensors that would play muscial notes when touched.

Prototypes

The functionality of the capacitance sensors and LEDs were first tested first on the breadboard. Longer wires were made to connect the LEDs to the breadboard by crimping 22 gauge silicone wires. The physical components were drafted on Rhino, laser cut on 1/4" MDF and colored with acrylic paint. The wires were taped to coins covered in blue-painted tin foil.

Final Piece!

The sculpture is a thunderstorm with clouds, lightening, raindrops and a rainbow. When touched, the raindrops play a C# natural minor scale and [yellow, red, green, blue] LEDs light up simultaneously underneath the cloud.

Video: https://drive.google.com/file/d/1mzou5ylmwuJWCodTNVASUOLv6Tnel9af/view?usp=share_link