« A wind chime system program » By Wan Hua Li ID: 40200887 For Pippin Barr

Project 1
CART-263
Fine Arts (Computational Arts Department)
Concordia University
April 2022

This project is the study and attempt to implement a physical wind chime system in an html document.

As I was initially interested into a conceptual approach of the wind chime - a program that would behave like a wind chime. I realized I didn't have a basic understanding of the physics of the wind chime itself so I believe it was the step prior to eventually conceptualize a program that reacts in its fashion. The project would been more conceptually complex than technical, which seemed to me as a bit dishonouring as a final project on this course.

The program and interactivity

The program aims to replicate a physical wind chime in an html document. The user's mouse input becomes a wind force on the wind chime, which moves it. It can change the physical aspect of the wind chime with html buttons (mute, pattern, look, sound, force mode), and it can accentuate the sensitivity of the chimes with a slider.

This project turned out to be an exercise of translation from desktop to mobile. At its last stage of the programming, I focused my attention on responsively by using « responsible » variables, relative to the innerWidth, etc. It opened up my perspective on this criteria for my following learning of js/html. The final result turns out to be made for mobile and hardly for desktop.

I followed few of the Daniel Schiffman's « Nature in code » videos to implement the nature physics algorithm. It accesses the p5 vector librairy, and vulgarizes the basic Mass = Force/Acceleration formulas. I had a help from the computation lab for this incrementation (micInput functions), and most of the physics part is from Daniel's videos. I feel like I did more physics and maths than programming, and it was really interesting as a realization that everything has to pass by the rules of the tangible world.

When this part was settled, I implemented variations and options which put in application notions from the class (from arrays to class to html-js translation). My favourite part of this course was the javascript merged with html, so I focused mainly on it since I feel like I didn't used it much.

Who

This is basically like an instrument, a passive tool. It aims to be for every one that... speaks English.

Art direction

The desired experience is one of contemplation. Nothing more useful in mind. It drew from the feeling I get from a wind chime, its delicacy. I somehow relate to its personality. It falls in my aesthetic and personality conceptually. I think that's where one can recognize my ideas from this project. At the end of the day, my wind chime program is as useful as how useful a wind chime can be. Always in the fantasy of creating useful art, looping back to my first Theremin-like project.

I believe it can seem more or less creative on a first level... but in terms of art direction, it shares interest with my tai chi apprenticeship where we study the implementation of tao elements in our surroundings and daily life. This project was, for me, a study of the concept of « air »: the impact of air on an object, completely artificial, and the returning to initial state after the impact; the sublimation of air into sound, so the crystallization of the ancestral presence to us threw wind. Just like Chinese ancient painting was aiming to depict the Tao through symbols in landscape painting, I want to explore how it could transcend in digital media. From this point of view, the fluidity of the program (movement, flow, sound) is balanced with the hard coding. Abstract versus concrete informations.

I believe all these previous concepts could be more elaborated, although this is an opening to evolve the project further as this final render was more technical.