

Student name: terence tang

Course: CART 263

Assignment: proposal for my project

Link: <https://terencethw.github.io/cart263/130225demo/>

### **How will I create my artwork:**

My project will be an interactive art piece. The main idea is to question the traditional view of artwork: that the artist is the sole creator. In my project, the audience will also participate in the creation process. In other words, they will become creators of the artwork as well. I also see this project as an opportunity to explore how interactive art can be created with JavaScript. I have previously created other interactive artworks using different software, but this will be my first time using JavaScript for such a creation. I am looking forward to experimenting with JavaScript and exploring its potential.

### **How am I going to create**

I am creating a piece of work that will encourage recipients to take on a creative role. My project can be divided into two parts: visuals and controls. First, I will create a visual effect using JavaScript. Then, I will use a Raspberry Pi as a device to collect user data and use it to interact with the visuals I've created with JavaScript. Multiple sensors will be used to encourage recipients to participate in groups. The data collected from each sensor will control specific effects (such as how the object moves or fades). By combining data collected from various recipients and using it to interact with the visuals I've created, a

unique experience will be generated for each group of participants. Since the data collected from one group will be different from the data collected from another, each group will have their own unique experience and create their own piece of work.

**Technical issues I may face:**

There are two main challenges I may face in creating my artwork. The first will be related to the sensors. This is my first time using a Raspberry Pi, and the key challenge will be figuring out how to program it and send the data I've collected to the JavaScript environment. I will also need to ensure the stability of these sensors. In short, I will need to conduct research and figure out how to write a program that sends the collected data to my JavaScript environment. My previous experiences are with Arduino, so this project will be a new challenge for me to learn how Raspberry Pi works.

The second challenge will be creating the visual effects. I am a beginner with JavaScript and am still in the exploration phase. While I can create many things with Processing or P5.js, it will become increasingly difficult to achieve the same results using JavaScript. Additionally, it will be a challenge for me to figure out how to use the data I have collected. The idea is to use this data to create effects that are realistic. For example, the harder the user presses on the Raspberry Pi, the more bubbles will be generated on the screen. I have not yet figured out how the visuals will look. The visual stage should be completed after the study week. Then, I will start working on the Raspberry Pi. In this project, the visuals are not the priority; my goal is to figure out how the Raspberry Pi works and how to make these data interact with the visuals created in JavaScript.

