



Final Stage(October -November)

The purpose of this stage :

1. Packaging AR product appearance
2. Write distance sensing code as well as light bar effects
3. Discuss recent results with your mentor
4. Essay outline
5. Installation Appearance building
6. Clip videos

1.Packaging AR product appearance

I want my AR scan labels to be on top of transparent products filled with different mushrooms, because my theme is related to food, so I also remodel the refrigerator and finally put the mushrooms and mushroom products with AR labels into this refrigerator



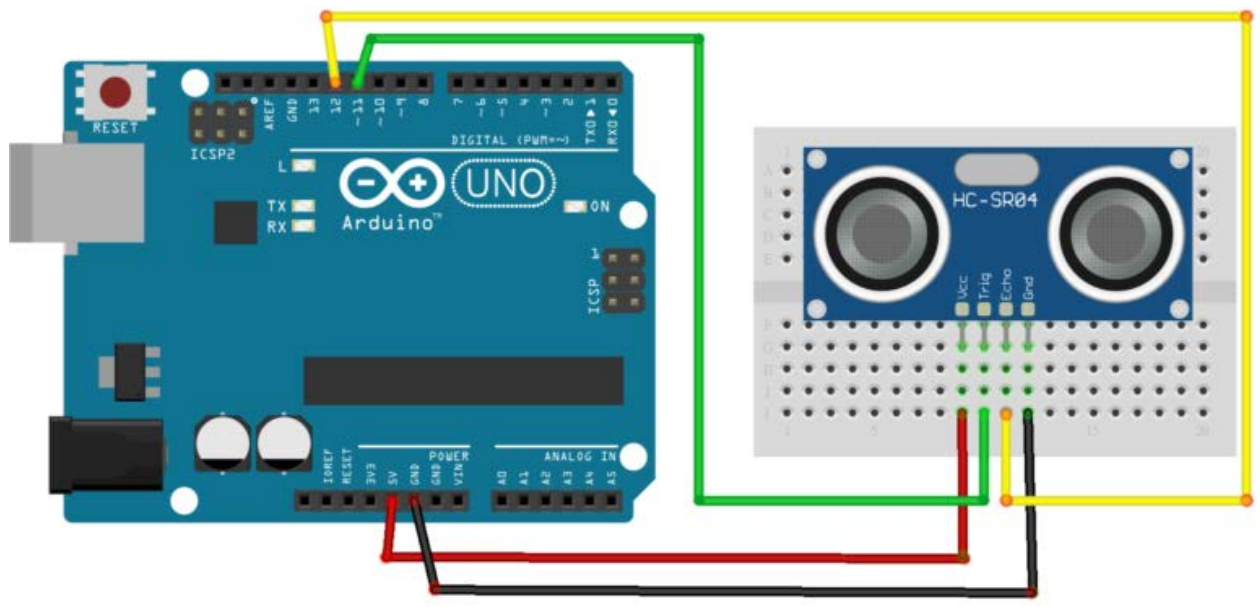




2. Write distance sensing code as well as light bar effects

Distance sensor combined with two videos:

Actually, i use arduino and processing to detect the user distance.



fritzing

juli | Arduino 1.8.19

```

juli
#define PIN_TRIG 12
#define PIN_ECHO 11

Float cm;
Float temp;

void setup() {
  Serial.begin(9600);
  pinMode(PIN_TRIG, OUTPUT);
  pinMode(PIN_ECHO, INPUT);
}

void loop() {
  digitalWrite(PIN_TRIG, LOW);
  delayMicroseconds(2);
  digitalWrite(PIN_TRIG, HIGH);
  delayMicroseconds(10);
  digitalWrite(PIN_TRIG, LOW);

  temp = float(pulseIn(PIN_ECHO, HIGH));
  cm = (temp * 17) / 1000;

  // Serial.print("Echo = ");
  // Serial.print(temp);
  // Serial.print(", Distance = ");
  // Serial.print(cm);
  // Serial.println("cm");
  if(cm <= 200){
    Serial.write(1);
  } else{
    Serial.write(0);
  }
  delay(300);
}

```

video_arduino | Processing 4.0b6

```

Loop
1 import processing.video.*;
2 import processing.serial.*;
3
4 Serial myPort; // Create object from Serial class
5 int val; // Data received from the serial port
6
7 Movie movie1;
8 Movie movie2;
9
10 void setup() {
11   fullscreen();
12   //size(1920, 1080, P3D);
13
14   String portName = Serial.list()[2];
15   myPort = new Serial(this, portName, 9600);
16
17   frameRate(30);
18   movie1 = new Movie(this, "video1.MOV");
19   movie2 = new Movie(this, "video2.MOV");
20   movie1.loop();
21   movie2.loop();
22 }
23
24 void movieEvent(Movie m) {
25   if (m == movie1) {
26     movie1.read();
27   } else if (m == movie2) {
28     movie2.read();
29   }
30 }
31
32 void draw() {
33   if (myPort.available() > 0) { // If data is available,
34

```

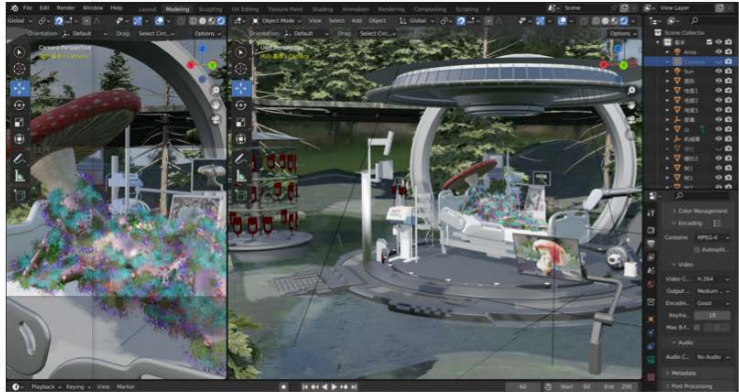
3. 11.16 meeting with tutor

design outcome

画板备份 5

video 1

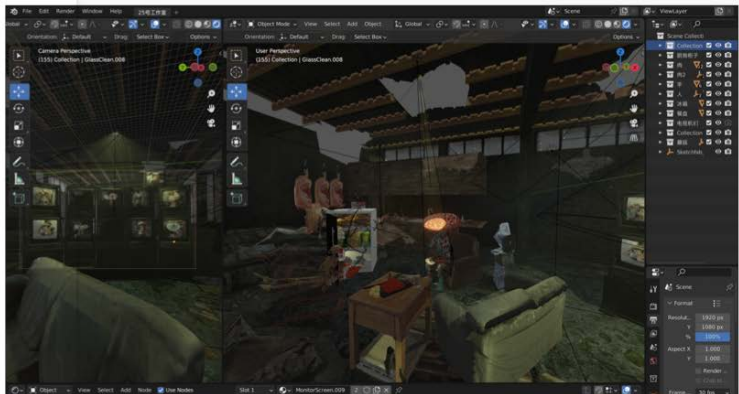
The natural environment, at this time the character is overgrown with mushrooms, becoming a complete mushroom woman—
indicating the seriousness of the disease, hanging salt water bottle around it, and being around healing instruments



画板备份 6

video 2

In the kitchen environment, the woman begins to cry because of eating disorder convulsions, meat that cannot be swallowed is placed on her legs, the food around is scattered, the woman's body begins to grow with mushrooms, indicating that the condition is gradually deteriorating, and the camera will also turn to the video trained by machine learning, and the mushrooms are mixed with the woman's body



AR scan

mixed with the woman's body

AR scan

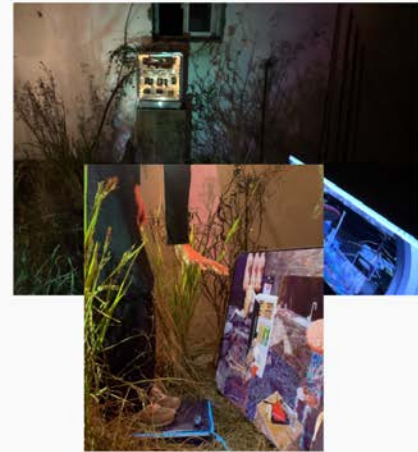
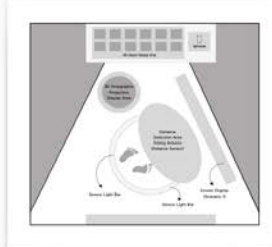
画板备份 4

I created a series of mushroom products through AR scan images and packaged them in the refrigerator, which connected with the food, in line with my theme, the mushrooms were packaged into products, and when the user scanned the product label, they could see the video of the mushroom woman trained by machine learning in the hidden video of the medical detection instrument, and these models were also presented in two videos



the environment

exhibition 备份



画板备份 3

When the visitor steps into the Distance Detection Area (Using Arduino Distance Sensor), the lights around it are lit, and the sensor detects the distance, indicating that the visitor enters the world of eating disorders experienced by the mushroom woman through a third-person perspective, and the presentation of this event is controlled by the participants, through this series of behaviors from the metaphor of gaze and discipline

画板备份 2

I chose a weedy scene to place my work, and because I considered the naturalness of my subject matter and the style of the work, I chose to create a wasteland style

画板备份

essay outcome

画板

The disciplined mushroom

A visual interactive installation shows a woman's eating disorder problem under patriarchal scrutiny

Abstract: (150 words)

This paper uses Arduino, machine learning, unity AR and other technologies to make a visual interactive installation — "The Disciplined Mushroom", which uses the image of the mushroom woman under the patriarchal gaze to present the entanglement of food and body of women due to eating disorders, conveys the appeal of "body naturalness" from the standpoint of ecofeminism, and summarizes the feedback results of the experiences based on the interactive design experience of the visual device, and finally made suggestions for its future development (self-experience, realted project)

Introduction: (500 words)

Once paranoid ideas are formed, life can begin to spiral out of control. Eating Disorder (ED) caused by weight loss and weight loss has ruined the normal life of many girls, and eating well has become a luxury. According to the "Survey on the Prevalence of Patients with Chinese mainland Eating Disorders" published in 2021, eating disorders are currently the mental illness with the highest mortality rate in the world. There may be between 90 million and 120 million people with eating disorders in China

My experience:

In high school, there was a period of low self-esteem, fasting and dieting, and there was a period of special attention to the calorie index value of food, resulting in a tendency to anorexia now.

Purpose of the project:

The author insists on taking an ecofeminist position, discussing the health imbalance of eating disorders among women, criticizing the female body under the patriarchal gaze, and women's evasion to food in the process, and ultimately natural food waste and consumption, the author hopes to convey the natural value that society should liberate the female body and respect naturalness (the naturalness of the female body itself and the protection of natural resources).

2.Theoretical framework: (1100 words)

- (1) talk about relationship between woman body and food
- (2) The mushroom sign and my personal experience

3.Artwork&Technology: A Visual Interactive Installation(1000 words)

The entire visualization device is divided into two parts, consisting of visual images and scannable AR images. The two images switch by detecting the distance between the visitors, who can scan the labels on the objects with their mobile phones to present the 3D object. In line with the theoretical tone of natural feminism and the whole work, the author places the entire installation in a natural plant environment, from which visitors can experience the emotional tone of the whole process of women experiencing eating disorders and the value that society should liberate the female body and respect naturalness.

- (1) Moving video and lighting changed detected by user distance
- (2) Machine learning video scanned by AR technology

4.Discussion(600-700 words)

- (1) The conception of installation and related artwork



A themed exhibition on women's body anxiety visited in Shanghai, the entire exhibition is the first art exhibition in China to focus on the theme of "body anxiety" (know more)



- (2) Methodology: Arguing under patriarchal gaze through my installation
ask around 15-20 people to experience it

after:
what do you think the project is about?
what do you think the mushroom woman represents/does she represent anything?
what didn't work well about the interactive installation?
what emotions or feelings did you experience engaging with the interactive installation?
what did you like about the installation? what worked well?

5.Conclusion(500 - 600 words)

- 1.what the essay talk about
2. the future of the work

A pix2pix model of a virtual dataset created by blender and three rapid style transfer models trained using medical images in Katie Tindle's work [They Were Expected to see what stuff she was made of]

Me:

What i did

- i have done my two videos
- i did AR scan product and package it
- i have created the environments
- i have done the essay

What the next step :

- let 15 -20 people to experience my installation
- ask their feelings
- finished the final essay
- editing video

Caroline Sinderson:

- think about what question to ask when the visitor finished experienced the installation
- to finished the whole environment
- when write down the essay , you need small your focus , talk more about aspiration and your experience, and finally conduct the conclusion
- finished your video, and video need talk about your project more clear

4. Essay outline

Abstract : (150 words)

1.Introduction : (500 words)

2.Theoretical framework : (1100 words)

(1) talk about relationship between woman body and food

(2) The mushroom sign and my personal experience

3.Artwork&Technology: A Visual Interactive Installation(1000 words)

4.Discussion(600-700 words)

(1) The conception of installation and related artwork

(2) Methodology : Arguing under patriarchal gaze through my installation

5.Conclusion(500 - 600 words)

5. Installation Appearance building

I wanted the whole scene to feel like a wasteland style, with a lot of natural elements added to it, both for healing and for eating disorders as a whole serious topic, to draw the audience's attention to my subject

All appearance:



AR scan area:



Distance and light detect area :



6. Editing video

