

# Portfolio



# 2020

Ingredients: Interaction, Service, Sustainability, Music, Installation, Processing

Yixun Li



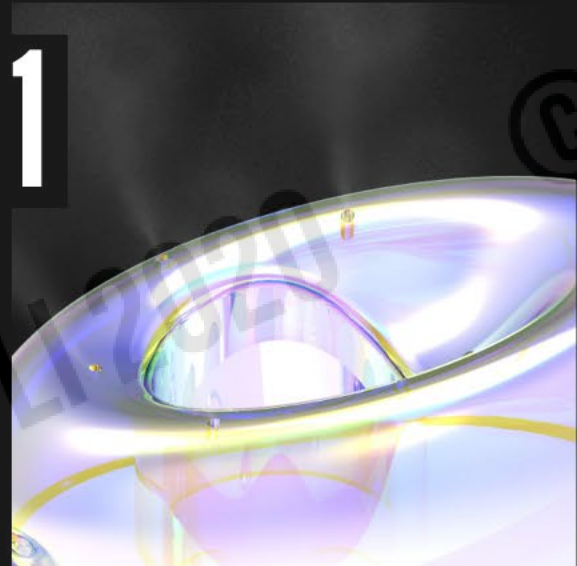
made with passion





# CONTENT

01



## MOIOR

Future Design (APP + PRODUCT)

A futuristic humidifier designed for us living on the earth where will be extensively degraded in 2050. The product allows us to wear anywhere on their bodies, the app can monitor the conditions of their Moior. Moior can protect us in the future to confront the bad air quality by providing us a moistured environment around us.

02



## THROUGH THE FLOOD

Using glass cullet to recreate beauty. Glass is a fragile material that we can easily find. It is fragile and extremely hard to be composted. Seeing through the broken cullet makes me feel that I could wander in it. I started to question, are the cullet just a filter? Or it is a key to another world.

03



## FLOOPY

Service Design (APP + PRODUCT)

A mobile app and product for farmers to help them better dispose of deformed fruits. Fruit waste is still a big issue all over the world. Floopy allows farmers to use products to reprocess deformed fruits and sell them on the platform by pricing advice.

04



## MY MUSIC MUSEUM

Sounds appear in our minds when we are hearing them. They are full of vitality even though they flash very quickly like writing in water. How could we memorize sound?

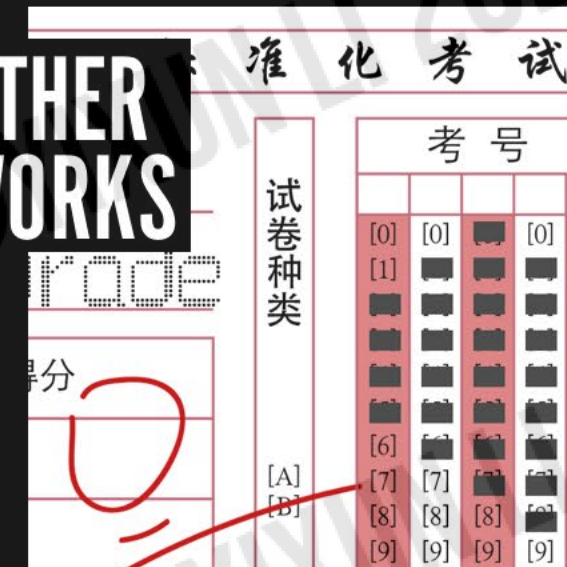
OTHER WORKS



## INCLUSIVE MUSIC FESTIVAL

A music festival inspired by hot pot, a Chinese traditional food that mainly to express the feeling of inclusiveness. This festival will be held for three days with a different type of music, that are Folk, Punk, and Jazz.

OTHER WORKS



## BAD GRADE

Brand Identity + Web Design

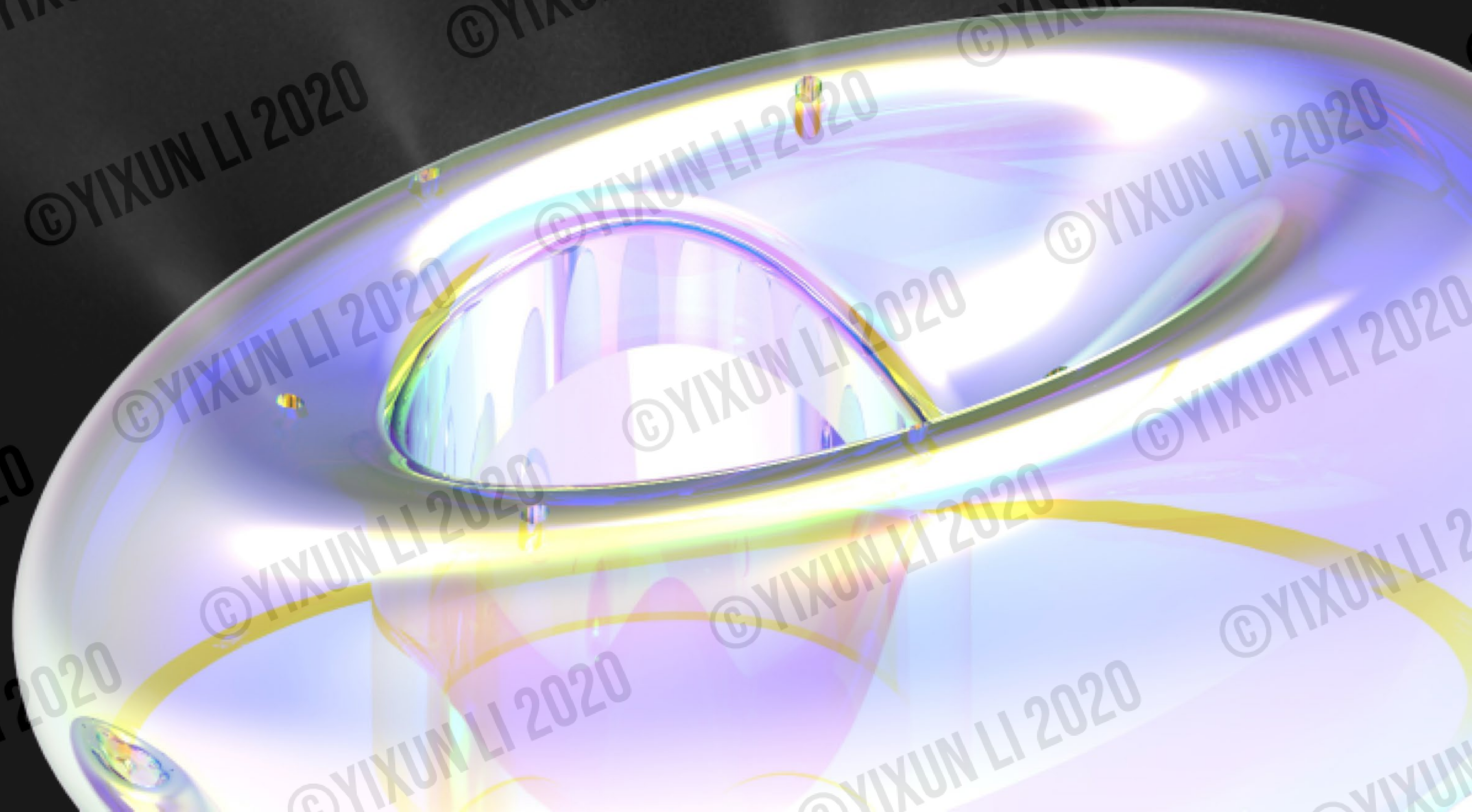
BAD GRADE is an online shopping branding inspired by scantron, which is an old-school test answer sheet. BAD GRADE uses the languages from the subjects in middle and high school to distinguish each category.



# 01 MOIOR

## Future Design (APP+SMART PRODUCT)

A futuristic humidifier designed for humans living on the earth where will be extensively degraded in 2050. Moior allows people to wear anywhere and protect them from the bad and extremely dried air. Moior includes the product and a mobile application. The product can be worn anywhere on the body. The mobile application monitors the condition of the humidifier by its water level, bacteria level, light colors, and diffuser. Moior also provides a water recharging station, where people can refill their equipment. Moior can protect us in the future to confront the bad air quality by providing us a moistured environment around us.





In the Future... Year 2050

70% of land are degraded

1109/1692 Cities are dryland

# DESERTIFICATION ANALYSIS



Hyper-arid ■ + >20%    Arid ■ + 15%–20%    Semi-arid ■ + 10%–15%    Dry Sub-humid ■ + 5%–10%    Humid □ + <5%



Over-farming



Over-irrigation



Overgrazing



Deforestation



Forest Fire



Urbanization



Droughts



Over-population

Year 2020

It is predictable that the earth will be exhausted in the future. Due to the forest fires, which is the major cause of desertification, the green area will be very limited. We should be aware of anything bad is going to happen.



Parched Future

64100 wild fires annually



The weather will be extremely dry  
and very low precipitation in a year...



## “Sand City”

Even in the urban area, the streets will be covered by large amount of sand. The moisture in the air will be extremely low.



## Outdoor...

The outdoor activities will be difficult to organize in the future because there is almost nothing outside, and people will be hard to travel to another place.

## Low Visibility

The sand storm will also be obstructing out sight. The extremely low visibility will be around us all the time.

## CONCEPT IDEATION

There are a lot of factors that can possibly cause desertification to happen in the future. For instance, deforestation and overgrazing are influencing and will be continued. The air quality and humidity will be the top one need in our daily lives.





# CURRENT HUMIDIFIER ANALYSIS



## Water Monitoring

Lack of water level monitoring, the user cannot check the water level promptly. There is also no low water level warning function.

## Light Controlling

The light control function is limited and inconvenient. Users want more color options.

## Essential Oil

The essential oil has to directly drip into the water tank can cause the water tank breeding bacteria and hard to clean.



Moisturizing Needs

Air Quality Needs

Out Door Activities

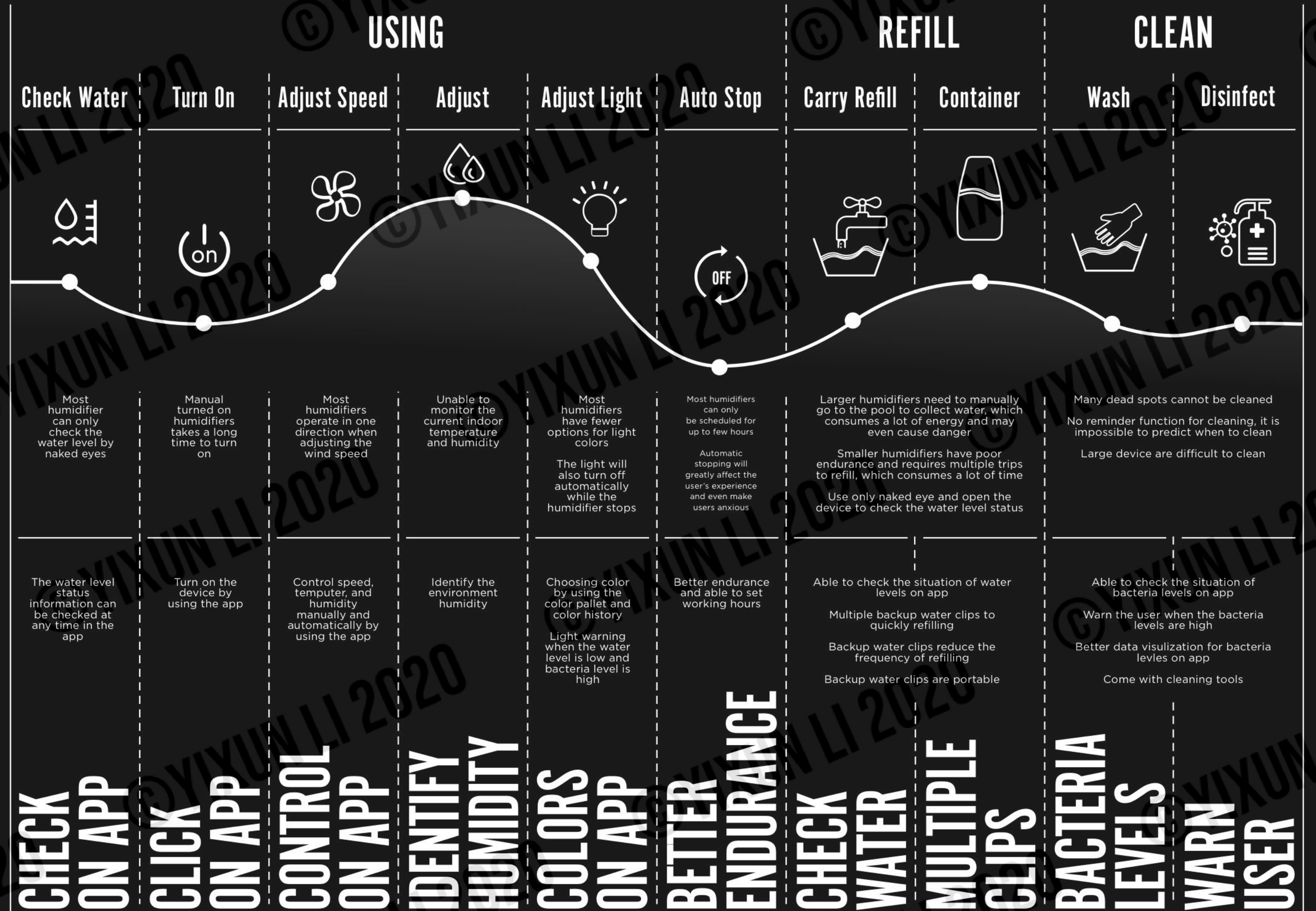
**Diya Chen**

Female 24  
Fashion Model

## PERSONA STORY

Miss Chen used to be a fashion model before the entire world was degraded,. She used to live in the southern China, where the air was moist and the environment was green and beautiful. However, due to the desertification, she could not do anything outdoor. The air quality is getting worse gradually. Her skin quality is also getting bad, which is affecting her job.

“ I used to live in a very humid city, I miss the fresh moist air I used to breathe, so bad!”





# Products

# Functions

# Strength

# Weakness

Speed Control

Temputer Control

Portable

Diffuser

Humidity Identify

Easy to Wash



3/5

4/5

2/5

5/5

Quiet, larger coverage, better appearance, app controls, desinfect and air purification

Expensive



3/5

4/5

2/5

2/5

Better endurance, quiet, stronger speed and controlling

Hard to refill, temputer sensor not work well, hard to clean



1/5

4/5

2/5

4/5

Portable, able to put diffusing oil, easy to wash, better appearance, lower price

Poor on light contols, few functions, easy to breeding bacteria, auto stop loud, not spell-proved, hard to turn on



4/5

4/5

Light color control, portable, easy to wash, able to use by 110V and 220V

Hard to endurance, not spell-proved, low coverage



3/5

3/5

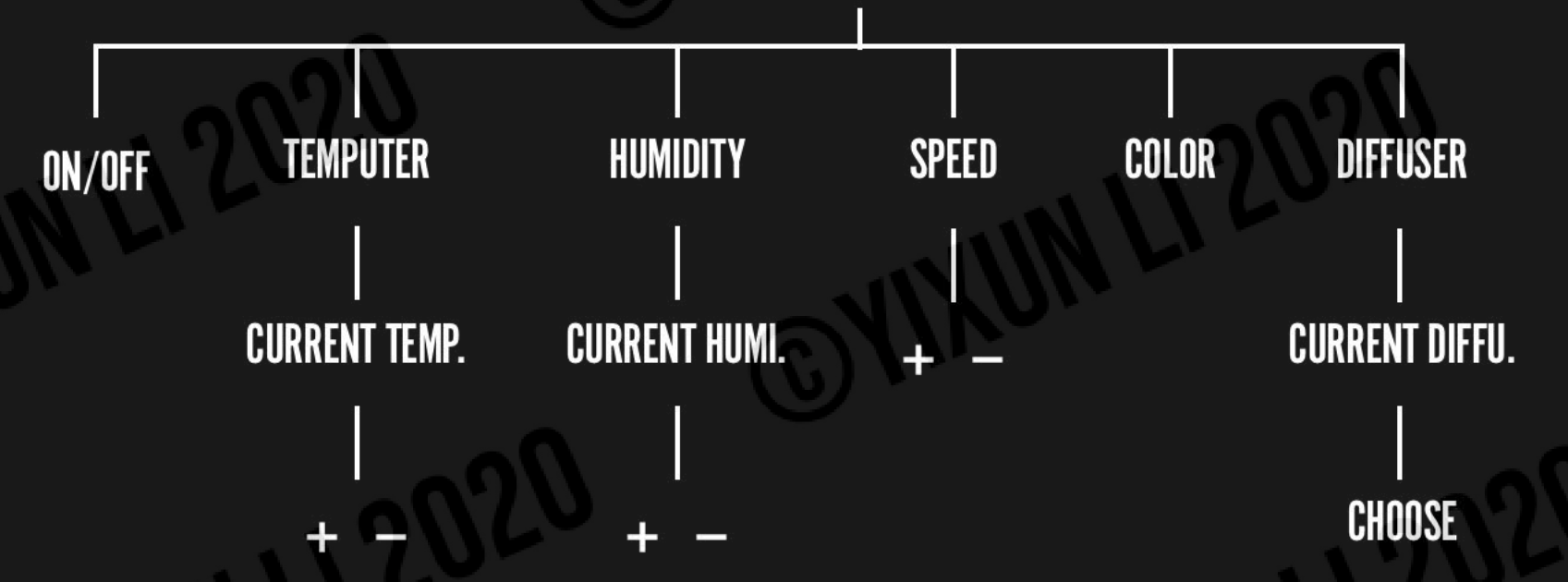
Air purification, lower price, temputer sensor, fine mist

Hard to endurance, low coverage

# CURRENT HUMIDIFIER ANALYSIS

By analyzing the current common humidifier, we can see the larger the machine, the difficult to be portable. On the other hand, the smaller the machine, the lower the endurance. So in the future, there could be a refill station when people are outdoor. The users are also looking for a more sufficient light controlling system so that they can quickly adjust the light color and brightness.

# DASHBOARD



# WATER TANK



# APP WORKFLOW

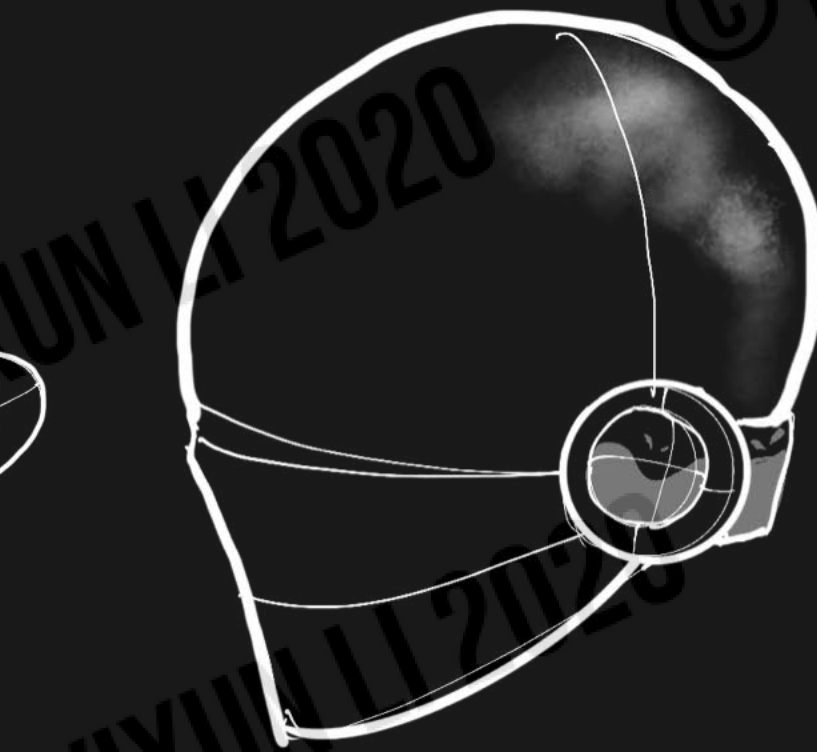
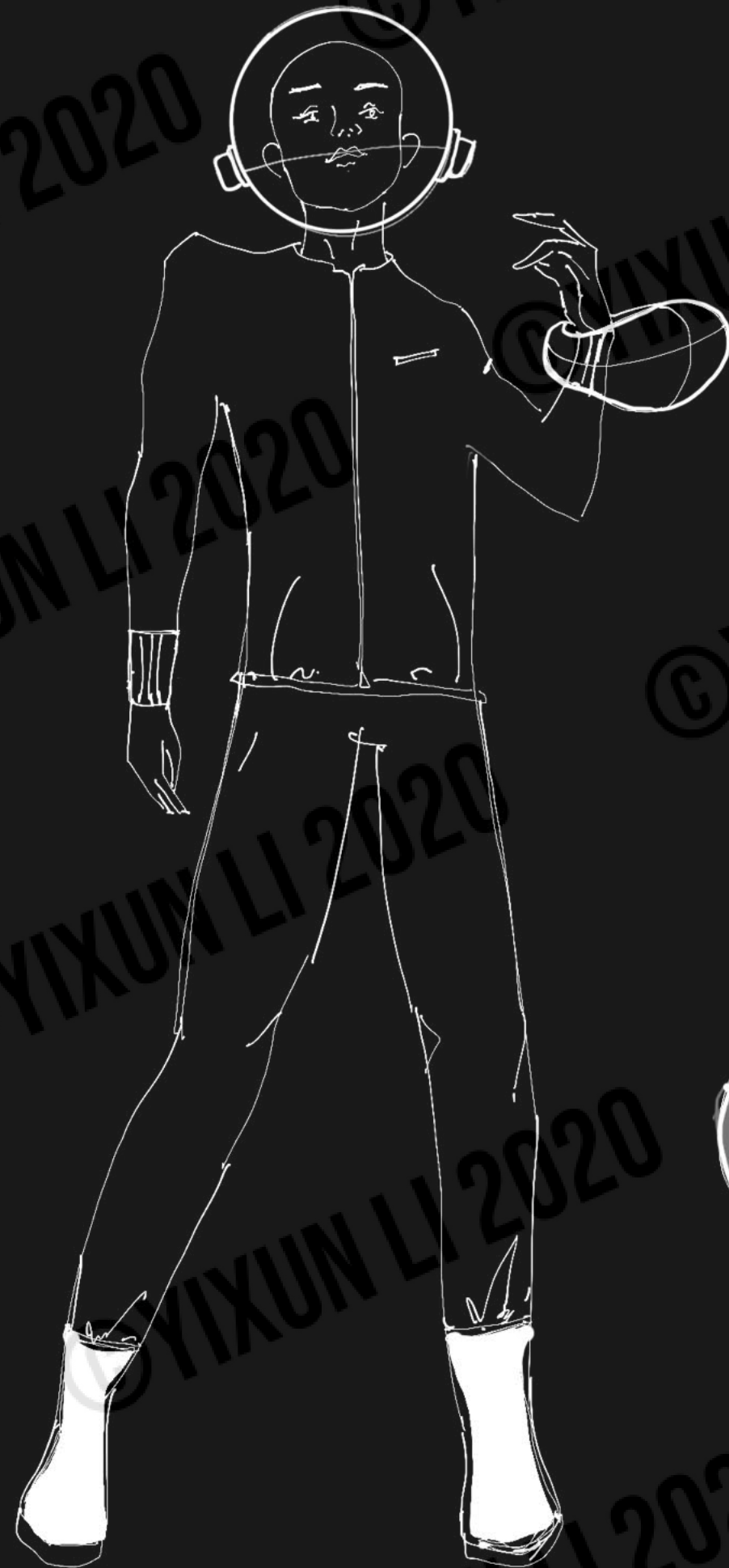
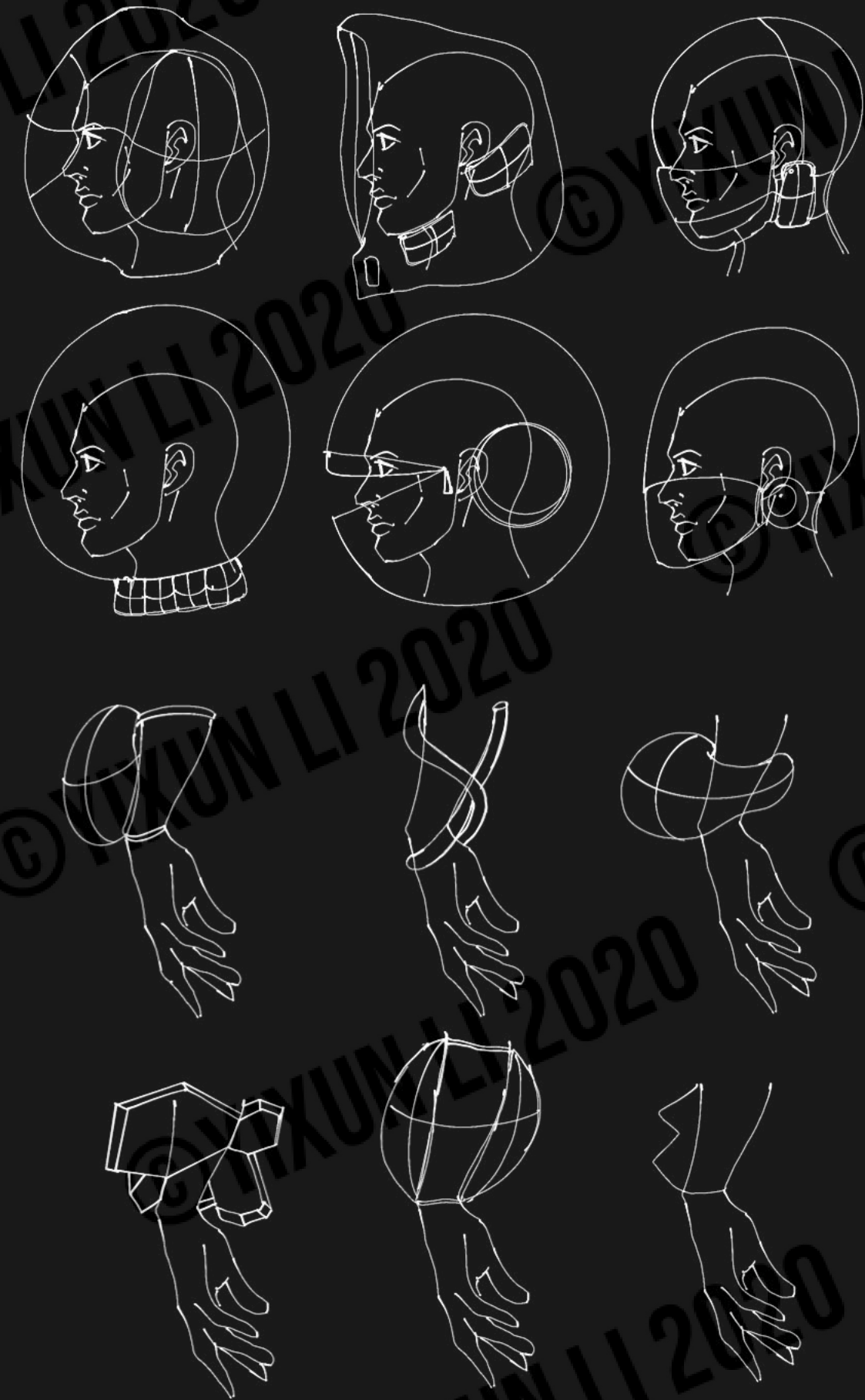
The app will be connecting the equipment through Bluetooth. The users can easily monitor the water level and bacteria level on the app. The app will also warn the user when the water level is low, and the bacteria level is high.



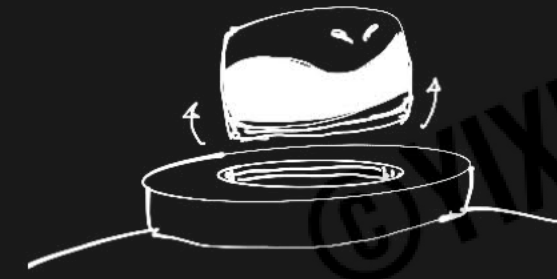




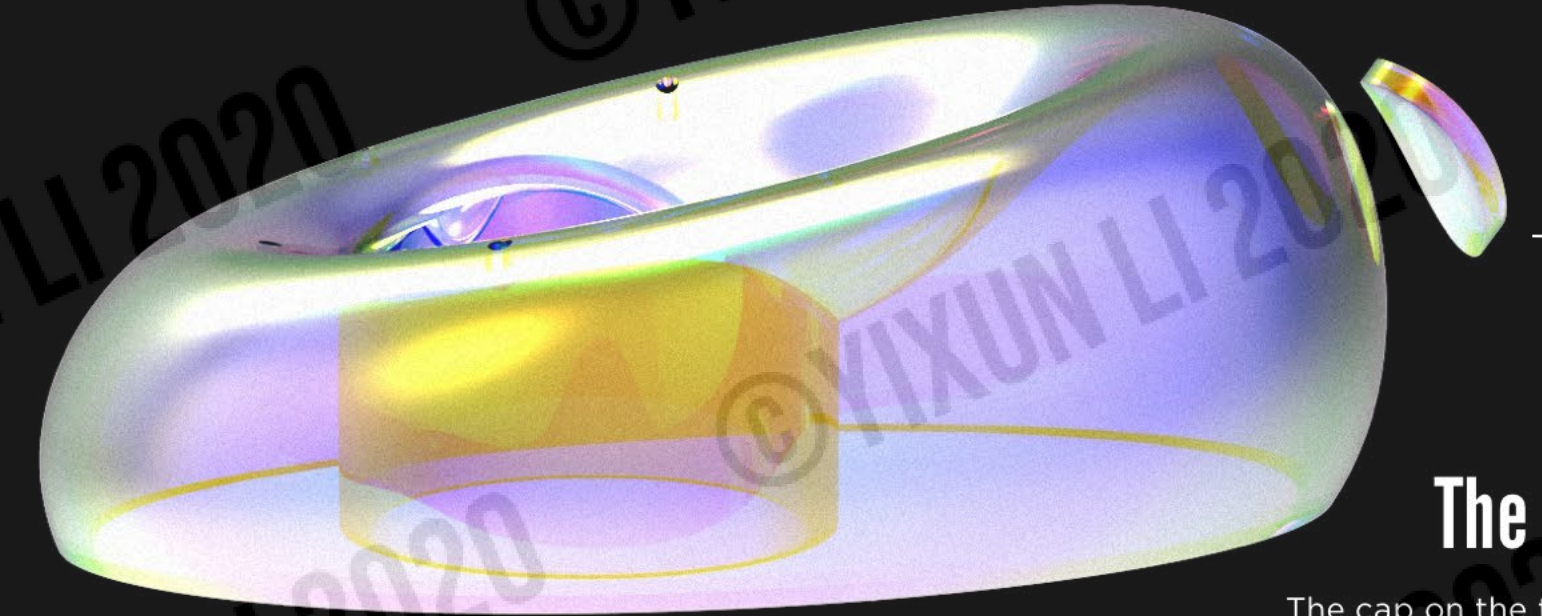
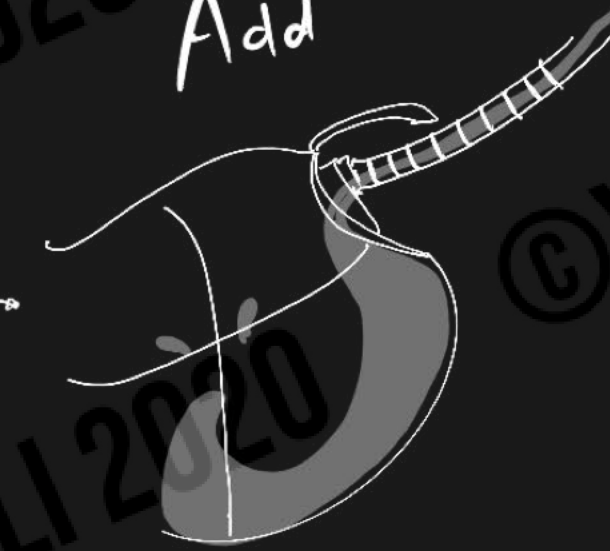
# PRODUCT SKETCHES



Change



Add



The Cap

The cap on the top of the hole. Take it off before refilling

The Air Outlet

There are six outlets on the top of the equipment, each one has different essential oil

Light Strip

Can be controlled on App. Notice the user when the water level is low by the opposite chosen color. It is also a illuminating.

The sketch includes the exploration process and arranges all the possible functions. There will be two parts of the product set, one is on the head, and the other is around the wrist.

MODELLING



moioi'

Monday  
Nov. 7 2050

13:34

Make your choice



20 oz



50 oz

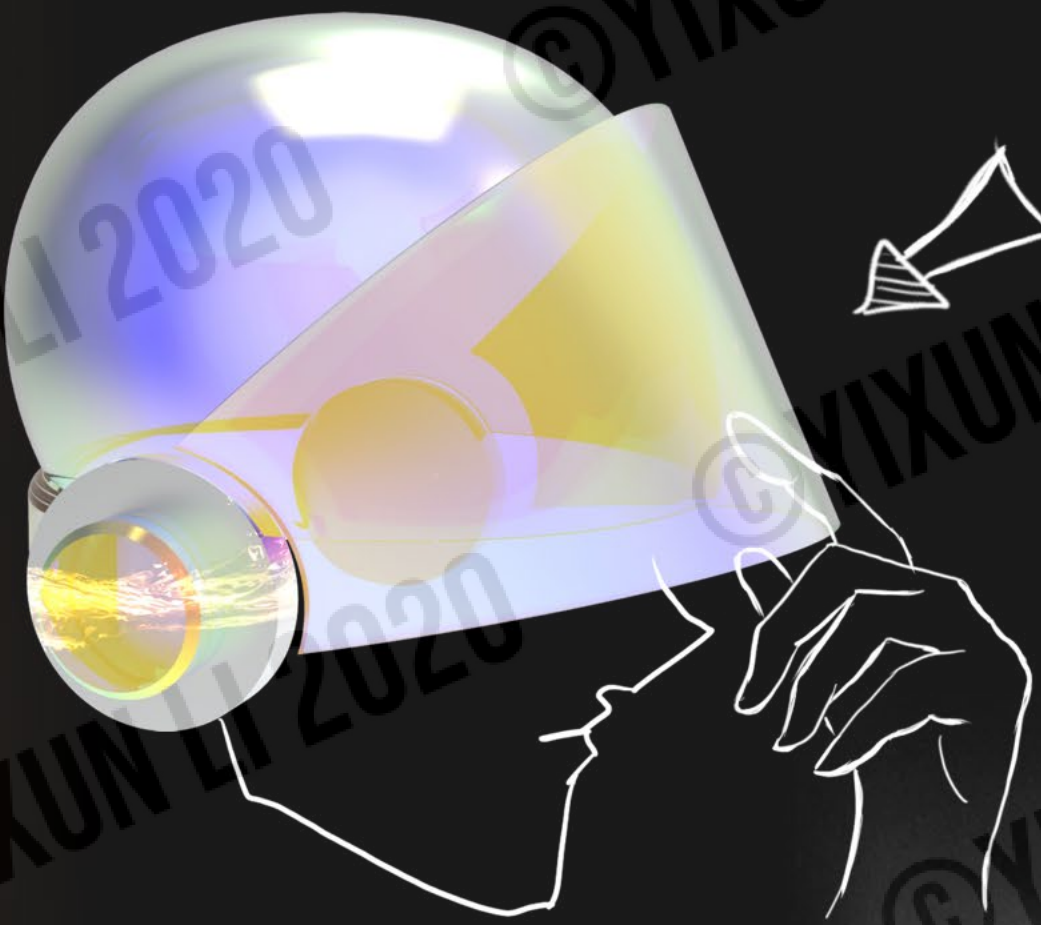
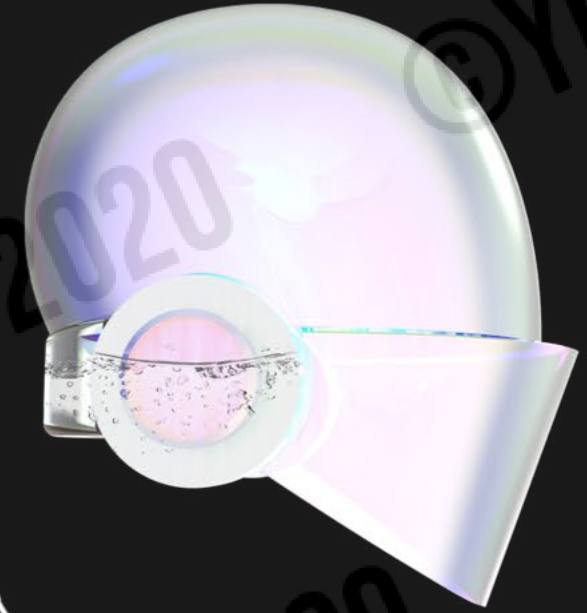


moioi'



### 1 Wear Equipment

The equipment on the head will be like a helmet that can protect the users and give them a better vision. The shield can be open when the users needed



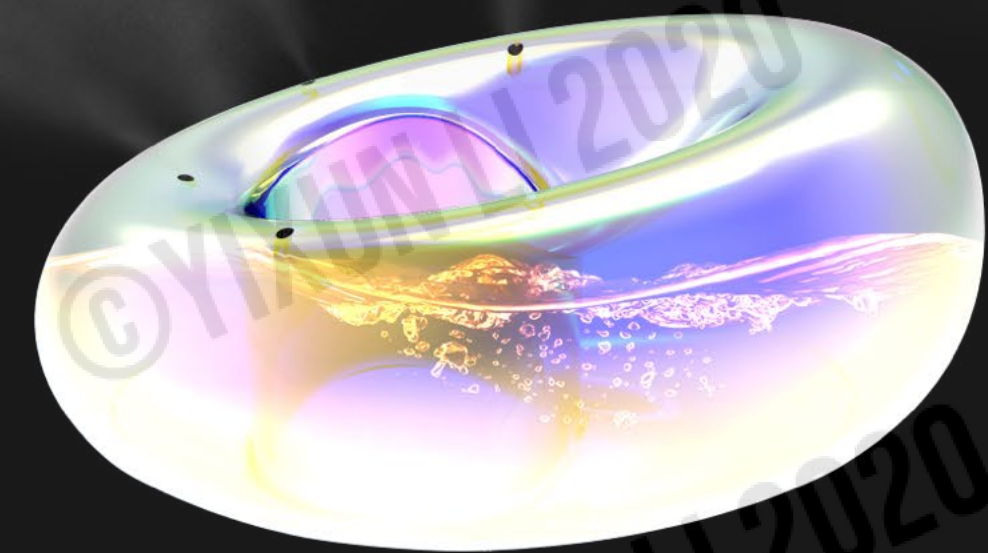
### 2 APP CONNECT

The app connects the equipment by bluetooth, users can monitoring the water level, bacteria level, adjusting color, and find the nearest refill station to them.



### 3 Refilling

There will be refilling stations outdoor just like the gas stations. The machine will be like a vending machine that users can choose to either buy a refill bottle or use a nozzle to infuse water in.



USER  
SCENERIO





## 02 Through the Flood

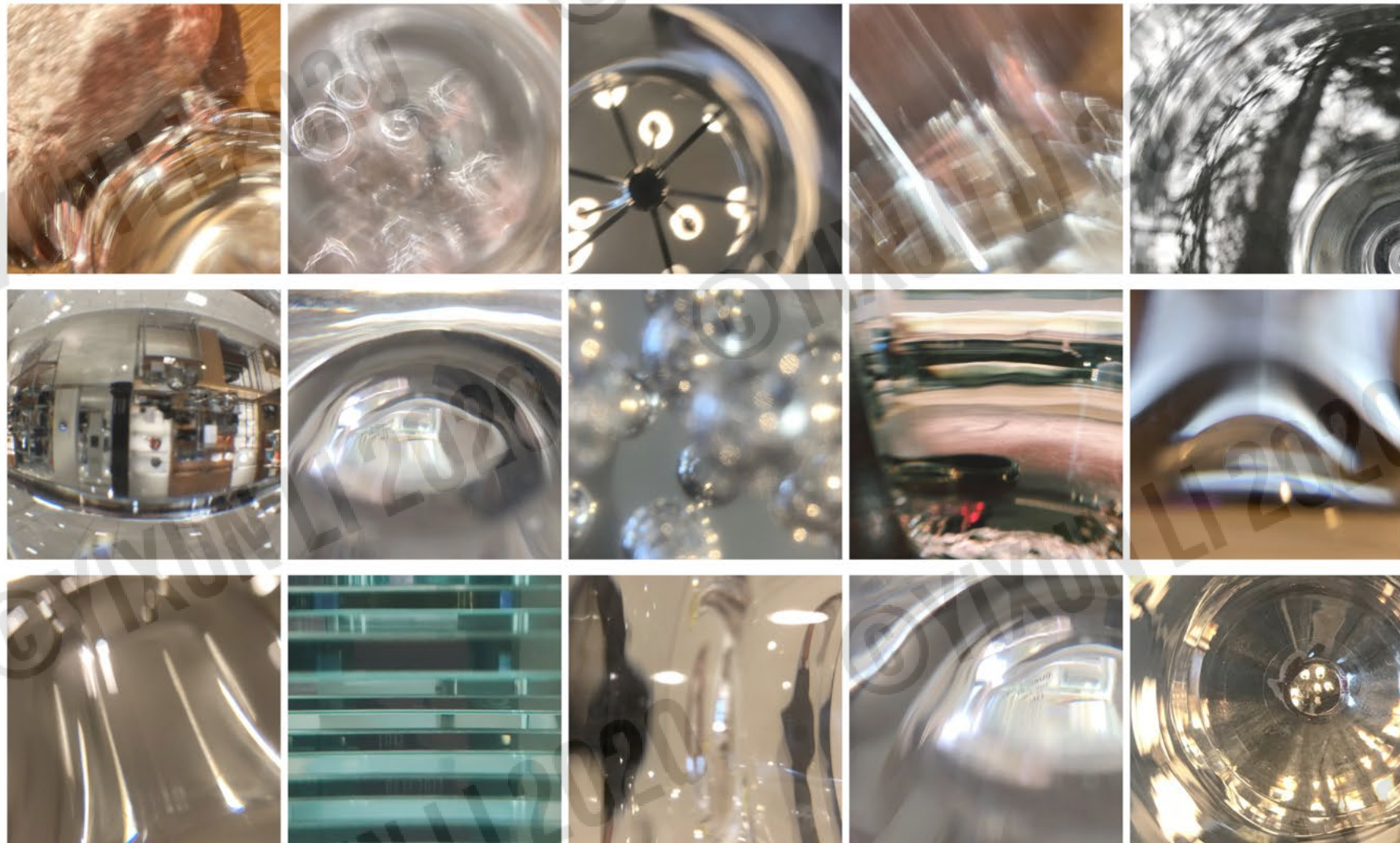
Glass is everywhere in our daily lives. They can be a container, a screen that can protect, artworks, etc. However, they are fragile, once they become cullet, they are hard to use again. But when we see through them to an object, the object is twisted and with psychedelic feelings. They broken cullet make me feel that I could wander in it. I start to question, are the cullet just a filter? Or it is a key to another world.

Click to view: <https://youtu.be/K1fcUu4BBOE>



# INSPIRATION

Started from one of my former Graphic Design projects See Through from the Glass, the concept was developing a visual language using glasses. The glass is a method that makes natural filters for objects. Through the glass, we see the world differently which is twisted and blurry. Also, the waste of glass is a big problem globally, it is extremely easy to find wasted cullet on the street or in our daily lives. So I choose to make something by using these cullet.



**Fragile**  
**Refractory**  
**Difficult to Recycle**



**33%** glass is recycled in USA

**2800 °F** melting and shaping

**50 billion tons** of sand every year used to make glass

**16.6 MJ** per kilogram of container glass produced

**1 million year** decompose in the environment

# RESEARCH

In our daily lives, there are a lot of glass materials have been wasted. For instance, a glass bottle has been shattered, it is no longer usable even though we glue up the cullet fragments. Based on the data summary collected by the United States Environmental Protection Agency, the numbers show the comparison of glass in MSW by weight (in thousands of U.S. tons) in the United States, and the recycling data collected by goingzerowaste.com. The facts are astounding that the recycling rate of glass in the United States in only 33%, requires 2800°F to melting and shaping, and it will take 1 million years to decompose if landfilling.

**11380** Thousands of U.S. tons in 2017

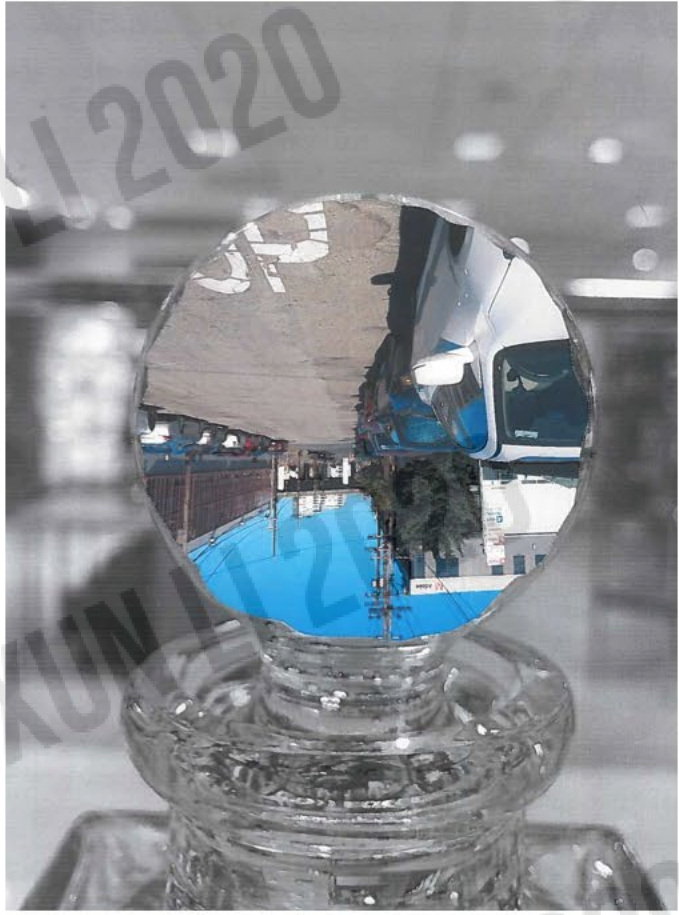
**ONE MILLION YEAR**  
to decompose if thrown away in landfills

**3030** Thousands of U.S. tons in 2017

**4.3** Percent of all MSW combustion with energy recovery in 2017



### Initial Concept 1



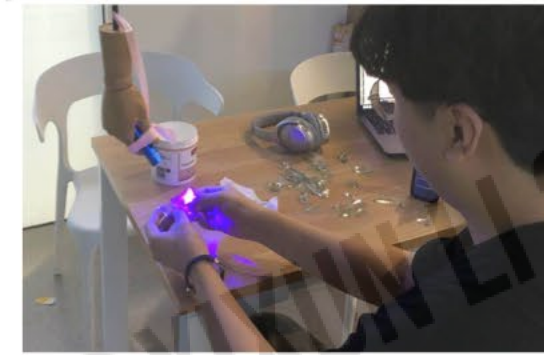
One of my previous poster design for my Graphic Design 1 project. The concept was about the difficulties of parking in San Francisco. I used the glass bottle to emphasize the small space of parking spots and occupying the space of the street.

### Initial Concept 2



In the second poster of my previous parking project, I used two images, scanned them, and put them together, and scanned them again. I wanted to show that in just a bottom of a glass bottle, there are a lot of cars parking in it, as well as how they are twisted and squeezed together.

### Final Concept



The glass cullet has been collected from multiple beer bottles in a dinner. At first, I was trying to glue them together edge by edge, I tried five different types of glue. However, none of them works because the edge of the cullet is too glossy to bond, so I have to find another way. I use the flashlight to test the refraction, the light going diffused by putting a glass in front of the illuminant.

## DEVELOPMENT





## INSPIRATION FROM ARTISTS

Shards – 1969 Nissan Skyline GT-R [FULL CGI] by Curve Digital

“Playing with refraction through broken glass, this series of the Japanese classic lives in a dark and moody world of the gangster, the Yakuza.”

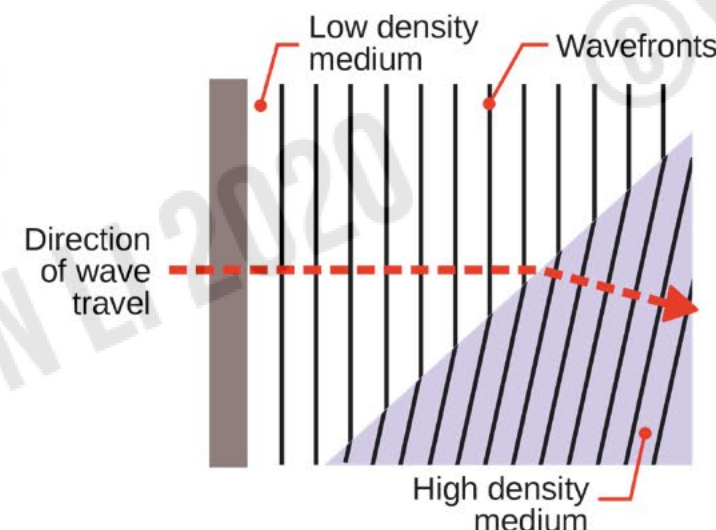


Source: Shards – 1969 Nissan Skyline GT-R

## DEVELOPMENT

### Refraction

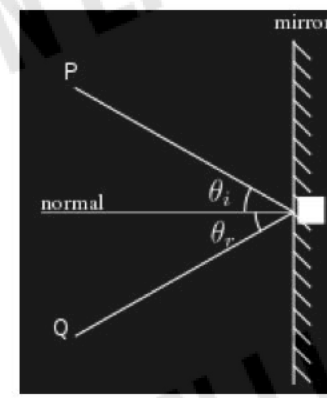
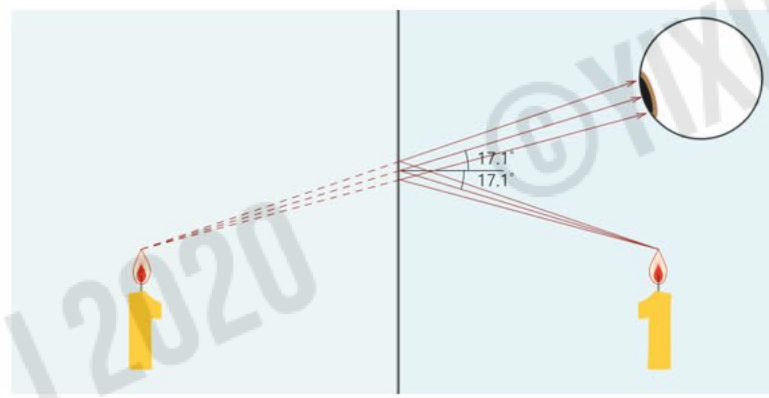
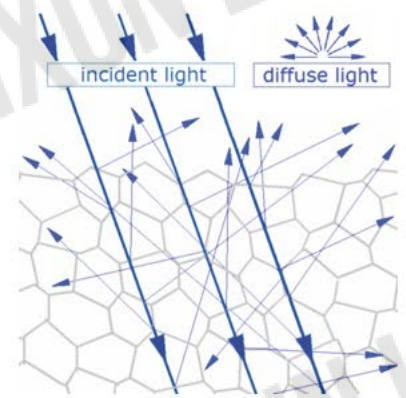
Refraction is a physical change in the direction of propagation of a wave as it passes through a medium or undergoes a gradual change in the medium. The light goes through the medium, it causes natural optical phenomena and makes the dispersion of the light.



$$\frac{\sin \theta_1}{\sin \theta_2} = \frac{v_1}{v_2} = \frac{n_2}{n_1}$$

### Reflection

Reflection of light could be a specular and diffuse reflection. Specular reflection is the most common reflection, it requires the surface is glossy and opacity. The diffuse reflection requires the surface is nonmetallic, the dispersion of the light will be random because of the roughness and irregular of the surface.



### Testing & Experiment

Bad Rotation Angle (using Rectangle)

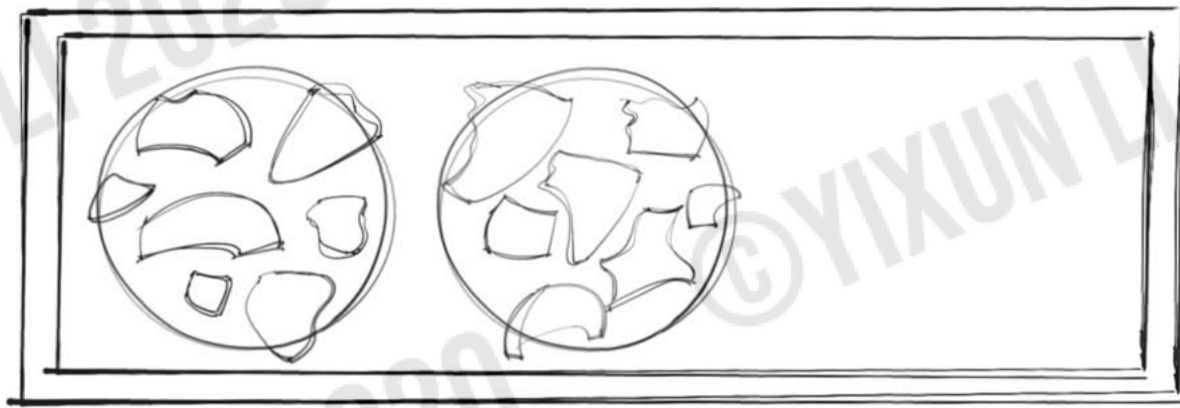
Too much blur (dirty glue)

Space dislocation (with mirror)

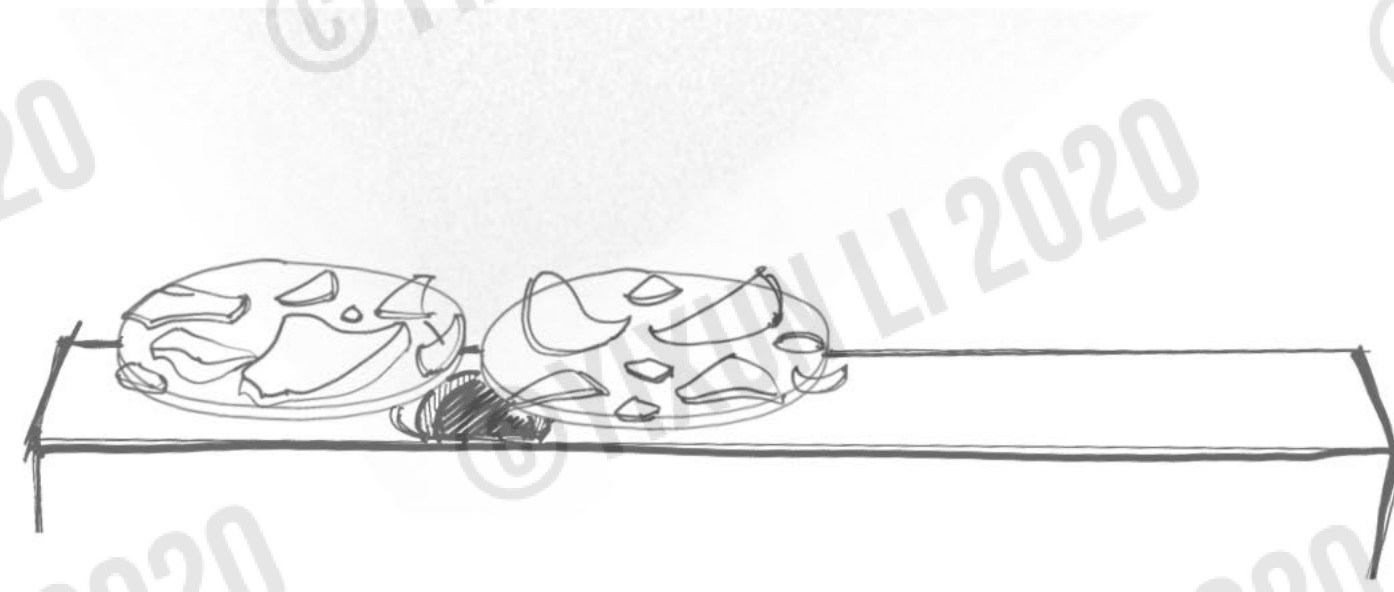




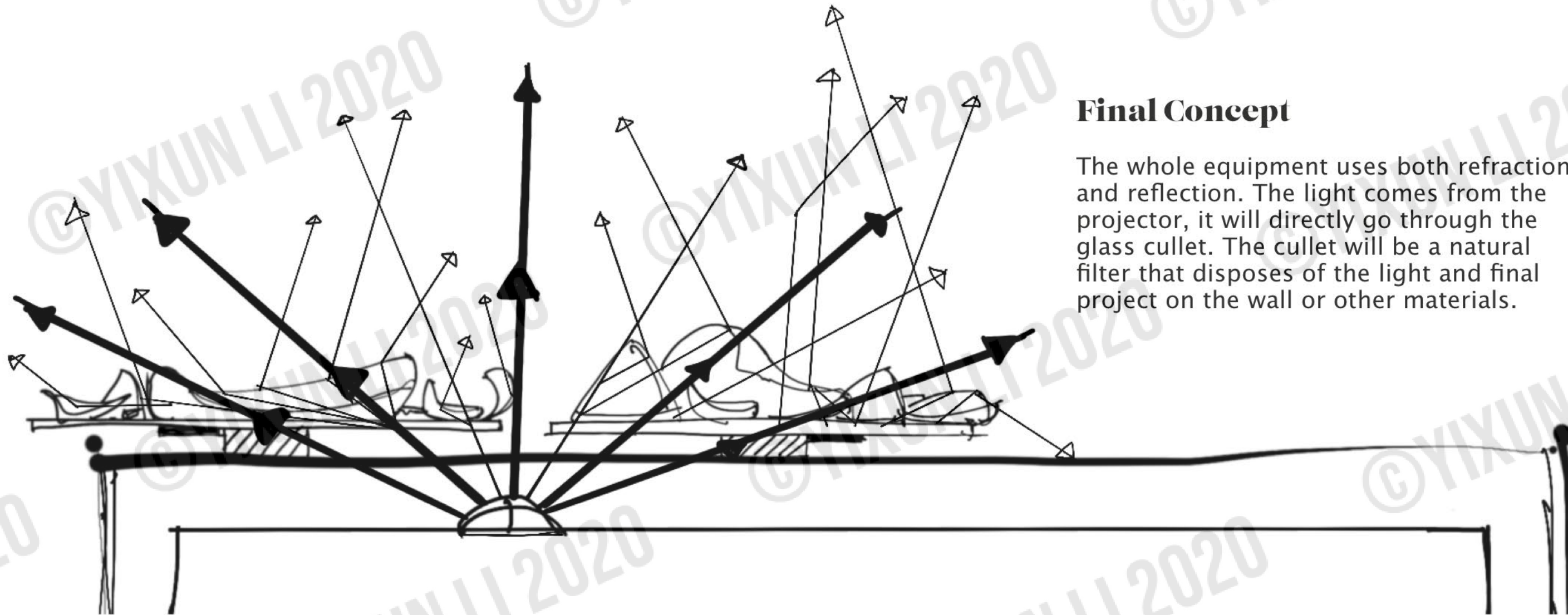
# DEVELOPMENT



Finally, there is a solution that I could use a transparent acrylic board as a carrier to hold the cullet. In this way, the glass does not need to be bond together. The two circular acrylic boards will be on the top of the projector.



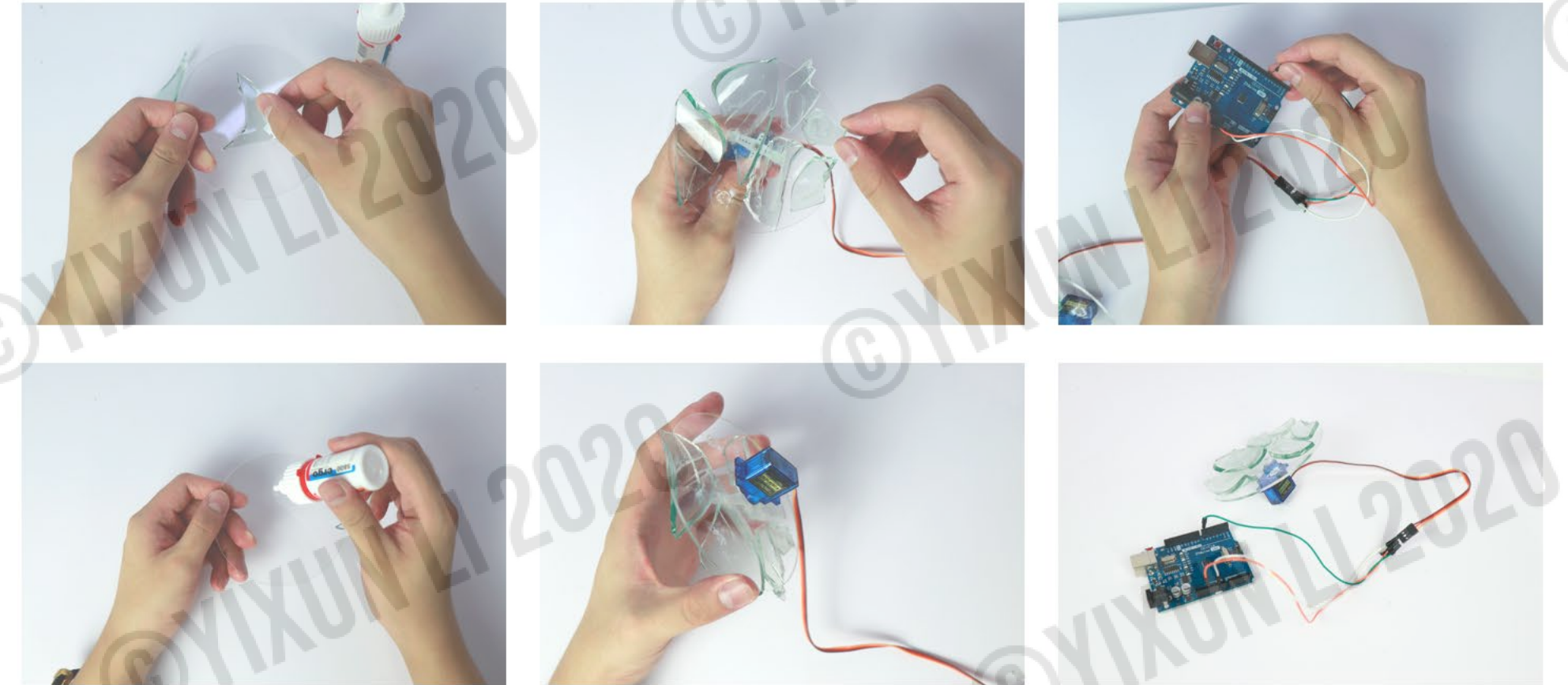
Each acrylic board will have a micro servo taped at the bottom, also the minor servo will be taped on the top of the projector right above the camera lens.



## Final Concept

The whole equipment uses both refraction and reflection. The light comes from the projector, it will directly go through the glass cullet. The cullet will be a natural filter that disposes of the light and final project on the wall or other materials.

## Circuit Connection



```
Sweep | Arduino 1.8.5
Sweep $
#include <Servo.h>

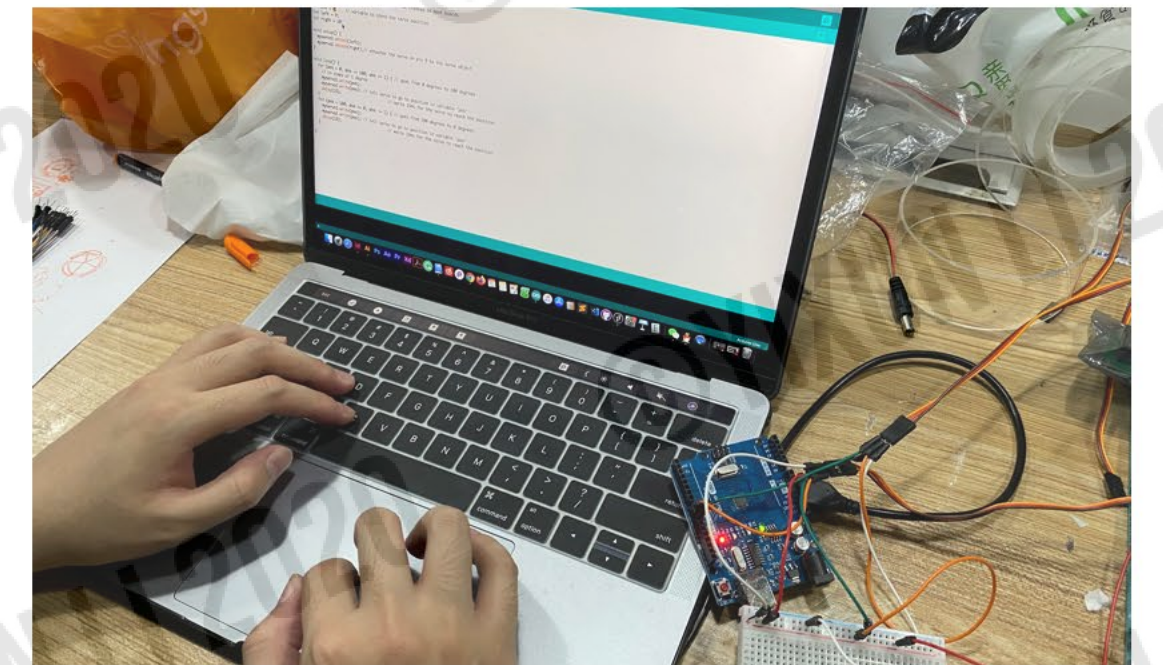
Servo myservo1; // create servo object to control a servo
Servo myservo2; // twelve servo objects can be created on most board

int pos = 0; // variable to store the servo position
int left = 9;
int right = 10;

void setup() {
  myservo1.attach(left);
  myservo2.attach(right); // attaches the servo on pin 9 to the serv
}

void loop() {
  for (pos = 0; pos <= 180; pos += 1) { // goes from 0 degrees to 1
    // in steps of 1 degree
    myservo1.write(pos);
    myservo2.write(pos); // tell servo to go to position in variabl
    delay(15); // waits 15ms for the servo to
  }
  for (pos = 180; pos >= 0; pos -= 1) { // goes from 180 degrees to
    myservo1.write(pos);
    myservo2.write(pos); // tell servo to go to position in variabl
    delay(15); // waits 15ms for the servo to
  }
}

上传成功。
项目使用了 2284 字节, 占用了 (7%) 程序存储空间, 最大为 32256 字节。
全局变量使用了 55 字节, (2%) 的动态内存, 余留 1993 字节局部变量, 最大为 2048 字节。
30 Arduino/Genuino Uno 在 /dev/cu.usbserial-1420
```



## Digital Solution - Coding

The coding part involves the function of controlling the micro servo to rotate. (Move faster if the audience goes closer)





Digital Solution



# OUTCOME

I made a motion poster use the different languages of the word GLASS. From the projector, the motion poster will be on the wall, and the image through the cullet equipment, the words are twisted and blurry.



When we see through the glass,  
There is something out there.  
But, are they the objects that you recognized?  
Are they real?  
Does the glass just a filter?  
Or they are the key to a new world?  
Okay, I got it.  
There are no right and wrong,  
Rich and poor,  
Straight and queer.  
...  
Fragile?  
I'd rather say it's unreachable.



When we see through the glass,  
There is something out there.  
But, are they the objects that you recognized?  
Are they real?  
Does the glass just a filter?  
Or they are the key to a new world?  
Okay, I got it.  
There are no right and wrong,  
Rich and poor,  
Straight and queer.  
...  
Fragile?  
I'd rather say it's unreachable.





### 03 FLOOPY

Deformed fruit has been a big part of food waste. Although during a highly developed technology period, there are a lot of farmers in China do not know any method to make deformed fruit valuable. The reasons for this problem are that fruit farmers need a platform to connect with more retailers or dispose of the deformed fruits by themselves and then sell the products and pricing advice. The app is called Floopy, gives fruit farmers the chance to sell and get to know more retailers. This app contains a unique scanning program that can easily identify the deformity of the fruits, then guide the user to pricing them or make their own products. From a marketing perspective, this app focuses on deformed fruits that can make more benefits for both fruit farmers and retailers. Also, this product could solve food waste and environmental problems.

Click to view: <https://youtu.be/DOfwLsRqwHc>





# RESEARCH

The most used method of disposing the deformed fruits in China is to landfill, which is an extreme waste of food way. Also the customer's willingness.

## None

of the store owners surveyed used advertising or digital displays to encourage the purchase of unattractive produce.

**34%** of store owners just throw out substandard fruits and vegetables

**30%**

of fruit will be left in the field because it isn't aesthetically pleasing enough to pick and sell.



**55%** of the customer would more likely to choose the fruits that looks pretty

This pie chart compares the different willingness to choosing fruits by customers. The data includes "good-looking, fresh, ripe, size, dry fruits, color, and others."

## Survey Results



## Competitor Analysis

**拼多多**  
Low price online shopping

**PDD**

**Advantage**  
Directly connect with dealer  
Share order with others

**Disadvantage**  
Does not indicate the composing methods for deformed fruit

**百果园**  
Fruit selling platform

**Pagoda**

**Advantage**  
Big platform for selling fruits

**Disadvantage**  
Sell only good-looking fruits  
Does not sell deformed fruits

**美团外卖**  
Platform contains fruit selling shops

**Meituan**

**Advantage**  
Shops sell juice, fruit bowls, and other fruit products

**Disadvantage**  
The disposing methods are not transparent

**三只松鼠**  
Candied fruit  
Dried fruit snacks  
Canned Fruit

**Three Squirrels**

**Advantage**  
Well-known brand  
diverse products

**Disadvantage**  
Inconvenience after-sales

## Methods of Fruit Trade

**HOW DO FARMERS SELL THEIR FRUIT?**

Based on this research, I found that the most fruit farmers who use more smartphones are doing online sellings, but the problem is there no platform for them to sell deformed fruits

7/10	Direct supply to supermarket
3/10	To Dealer and Franchiser
5/10	Independent Sales
8/10	Let Customer Picking at the farm
8/10	Export to Other Countries
10/10	Online Selling
1/10	Unified Acquisition by the Government

## User Interviews

**Zhou Fruit Franchisers 46**

**Liu Fruit Famer 63**

I rarely use smartphones, most of the imperfect food will be **eaten by ourselves** or go to the landfill, but sometimes there are **too many to eat**.

I wish the substandard food should **be in use for other approaches**, There will be a huge business opportunity for the **deformed fruits**.

**Yang Fruit Famer 33**

I think the fruits that look **ugly are not poisoned**, they are still fruits we can eat. I wish some companies could massively reclaim them make **dried fruits** or other products.

**Grace Zhu Customer 23**

It is **wasteful** that we throw away the fruits that just not looking good. There are always a lot of fruits leftover only because they look not right.



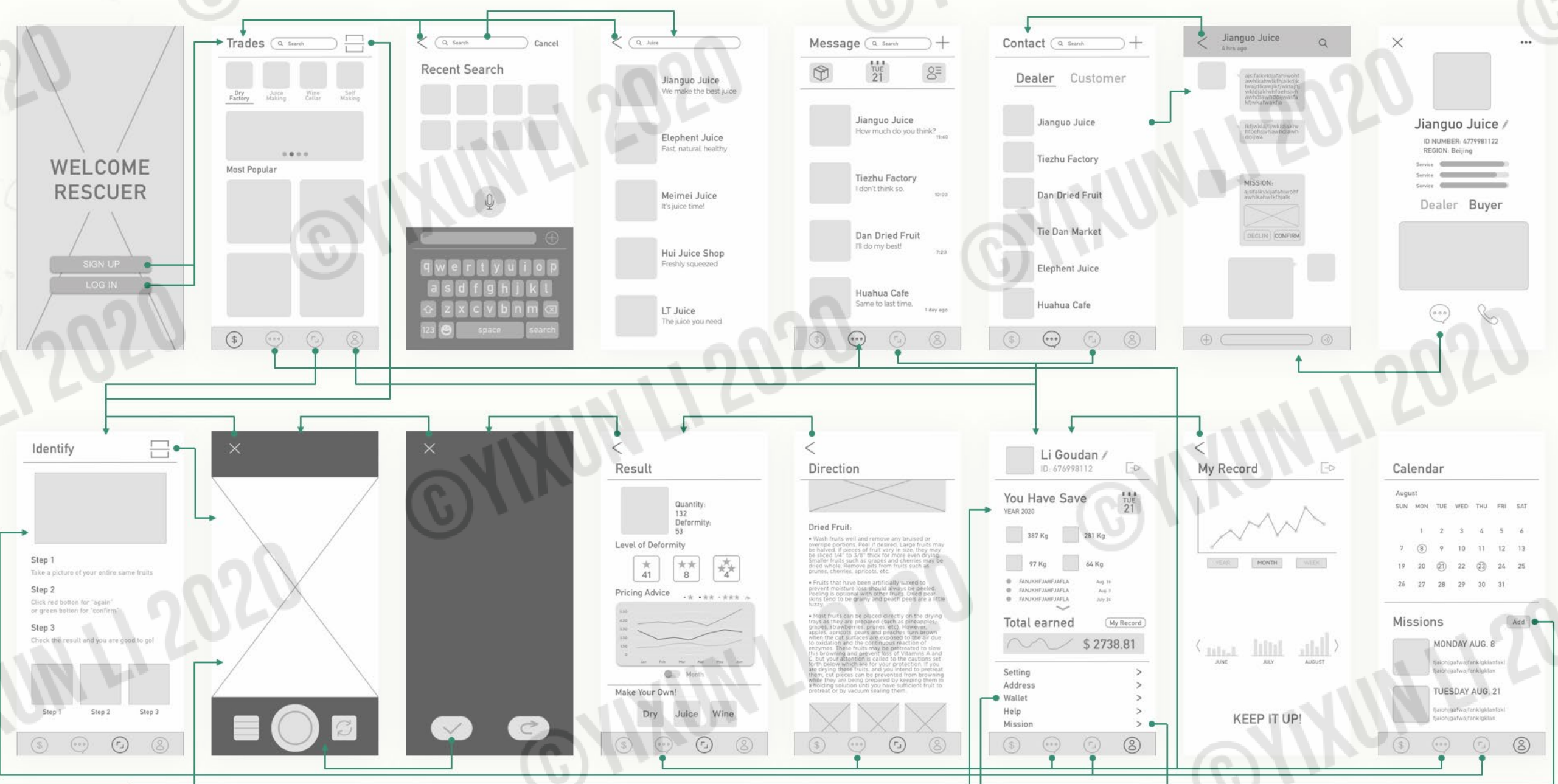
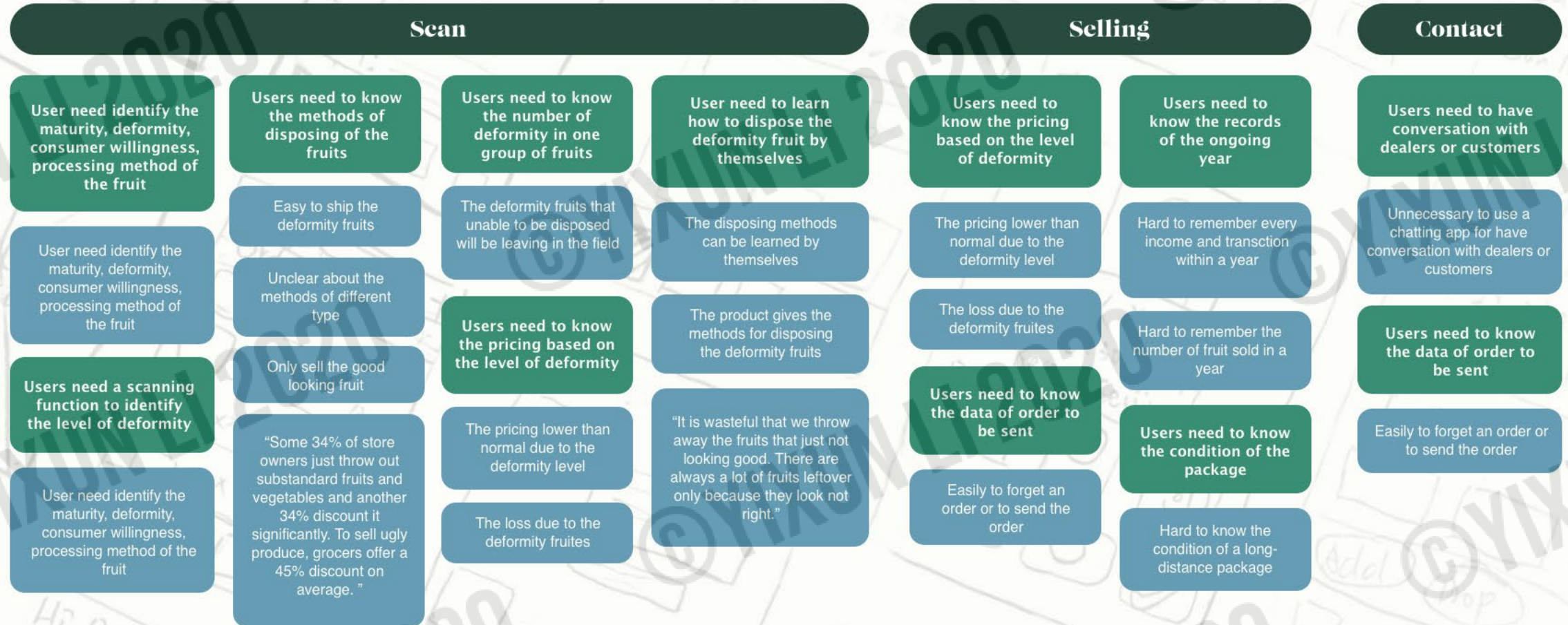




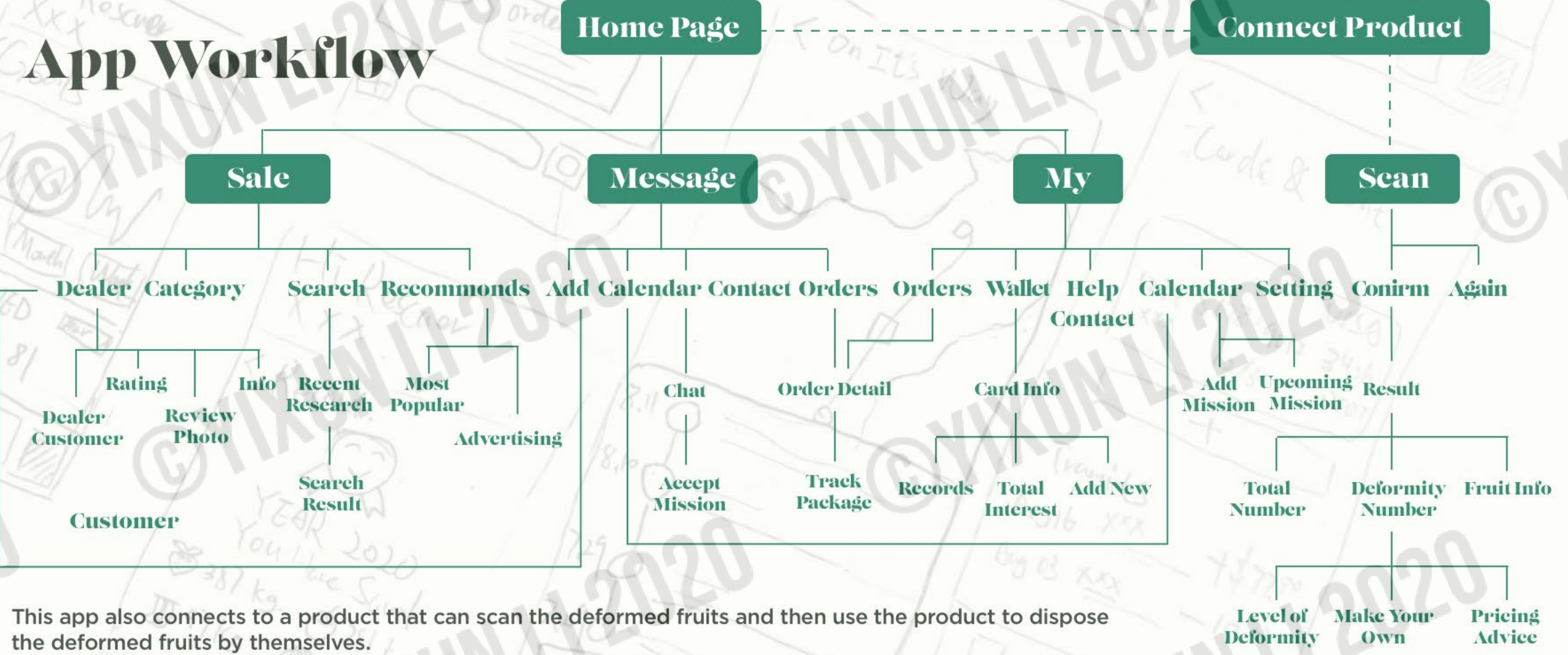
# CONCEPT

# Affinity Diagram

# LOW-FIDELITY PROTOTYPES



# App Workflow



This app also connects to a product that can scan the deformed fruits and then use the product to dispose the deformed fruits by themselves.

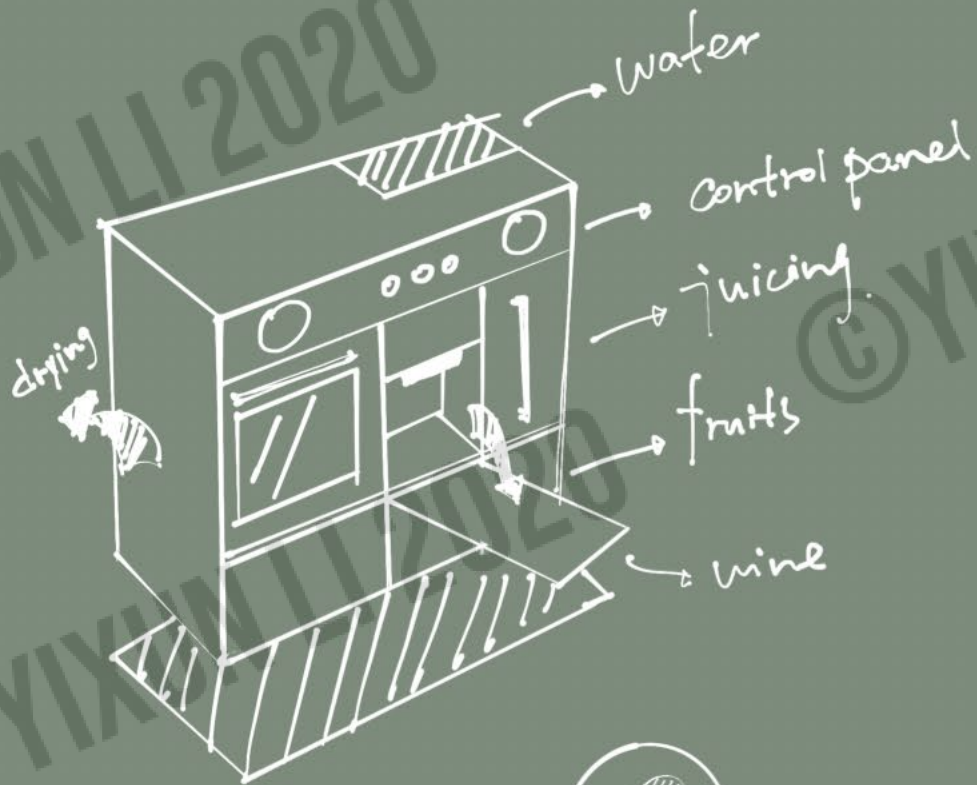
# App User Testing



1. Simplified contact person page
2. Added a page after taking a photo, a pencil icon on My page for "change my name", "Mission" function on My page, go Back function icon on Recent Research page, slide function for changing month on My Record page.
3. Homepage changed from list style to icon
4. Deleted the "Deleted" function on Mission page
5. Changed "mission" icon, changed the word "order" to "mission", enlarged the font size and "Most Popular" icon, changed "Bank into" to "Wallet". Chanaed "Mv Record" button.

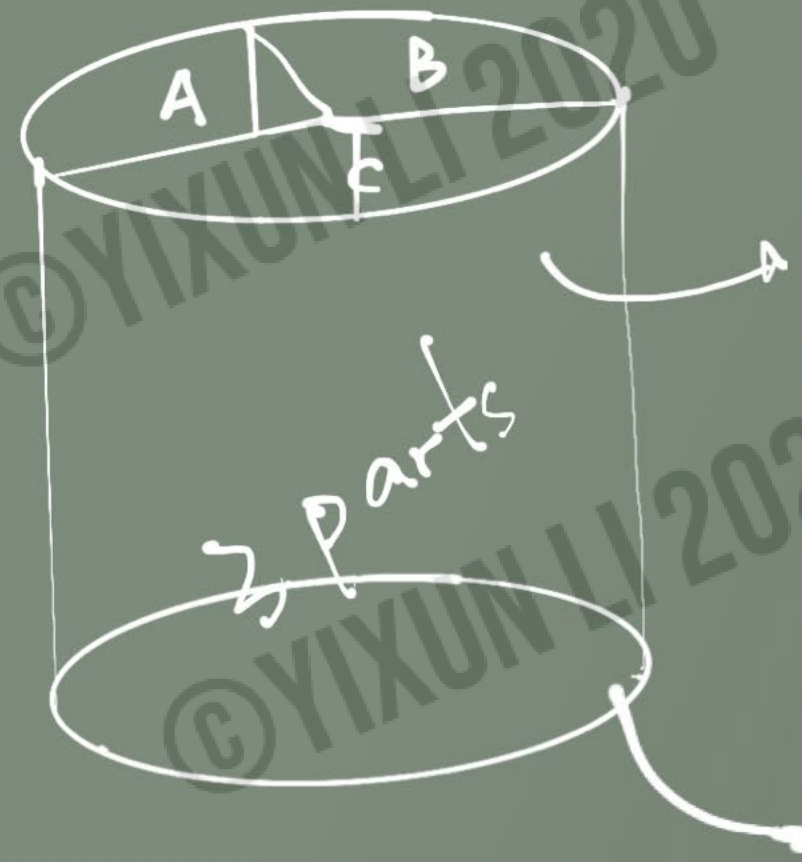


# PRODUCT Functions & Inspiration



## Concept

The entire machine breaks into three parts that contain wine-making, juice-making, and dry-fruit making systems.



## Method 1: Drying

Surprise! This machine also contains the drying system, which you can make your own dried fruits. Don't through the fruits that look ugly, put them in it and this machine will meet all your requirements with an A+

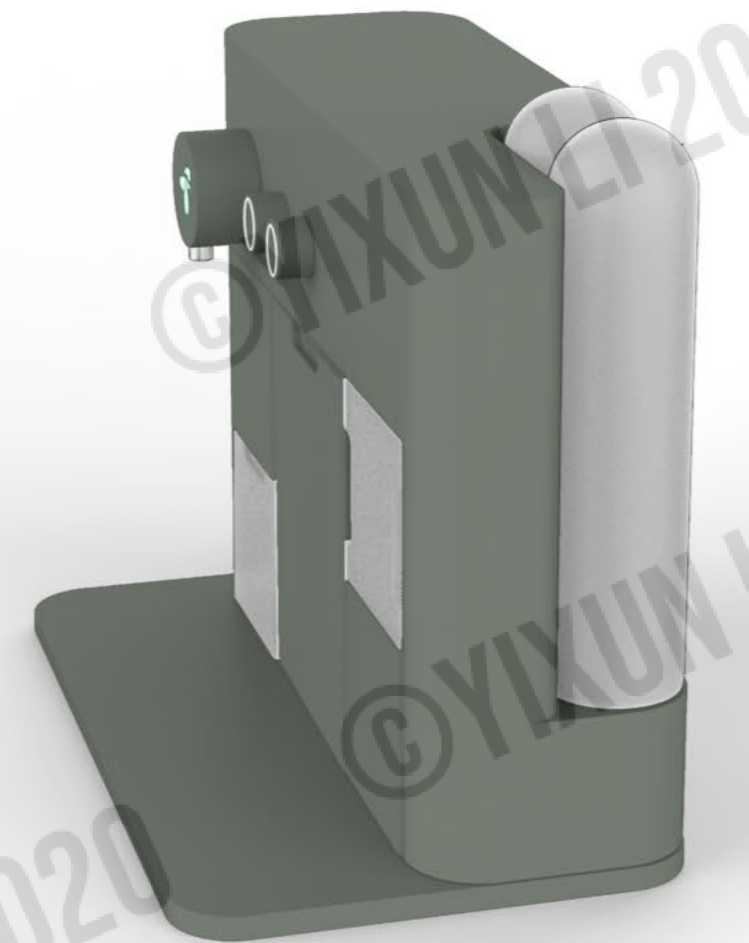
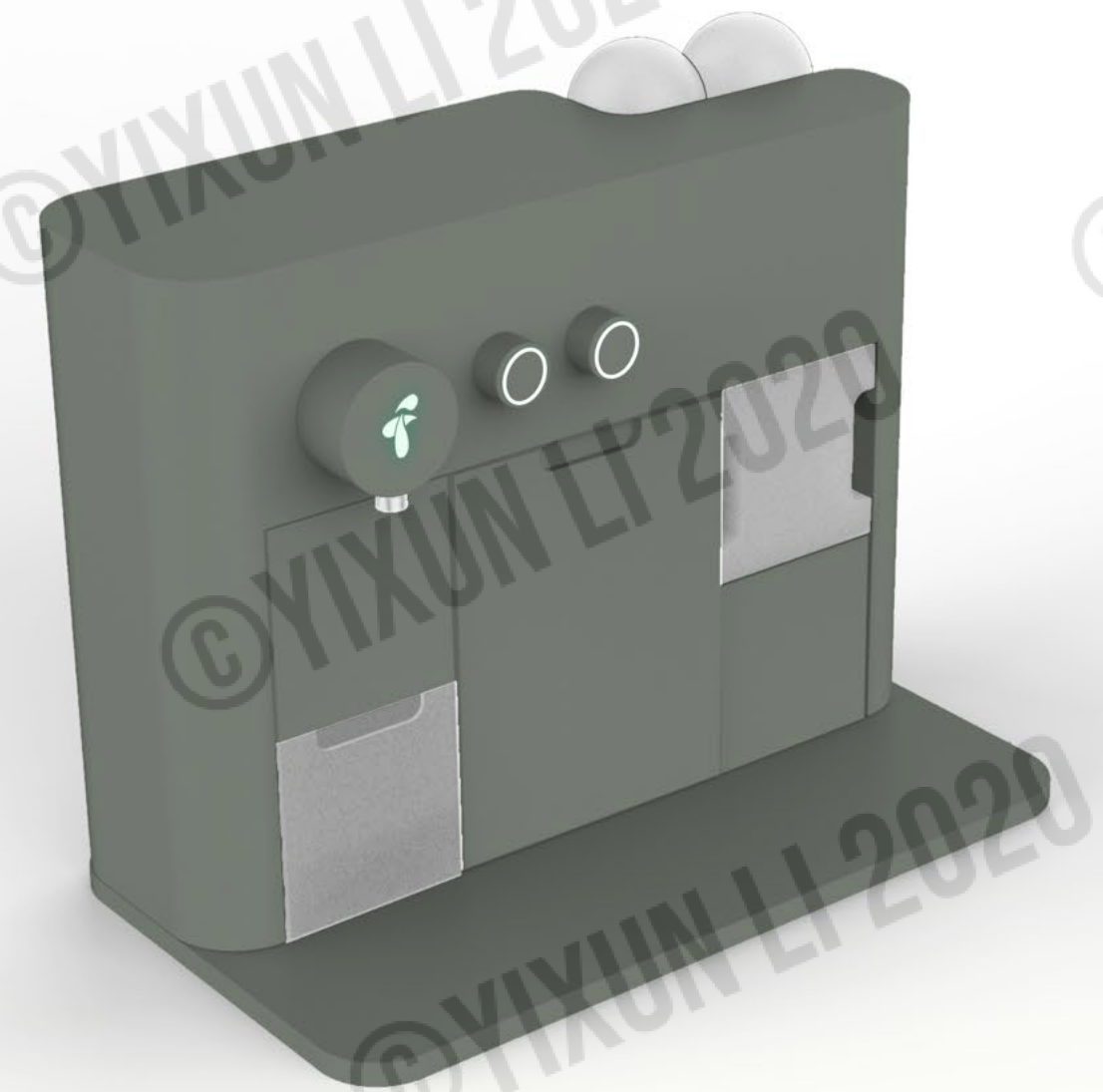
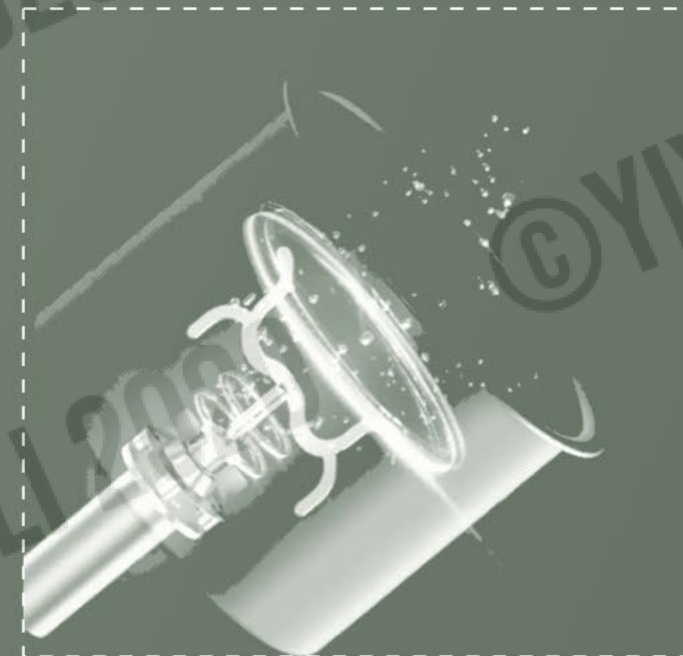
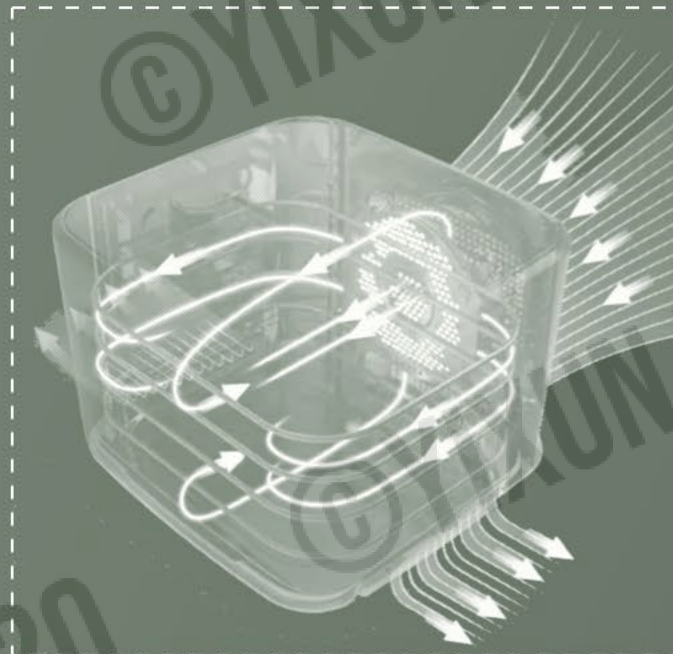
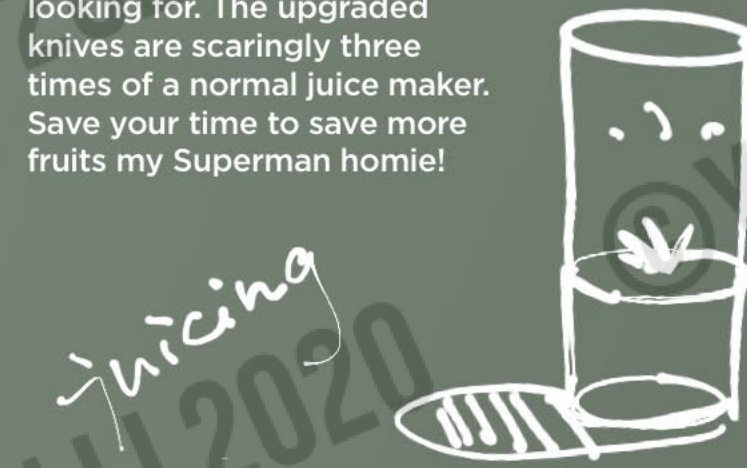
## Method 2: Distill

Fully stirred makes the fermentation more efficiently and outstandingly tasty. Enjoy and sell your 100% home-made wine with this machine!



## Method 3: Juicing

Juice-making system you are looking for. The upgraded knives are scarily three times of a normal juice maker. Save your time to save more fruits my Superman homie!



## Functions

This machine helps the fruit farmers to have their chance of making their own products with the deformed fruits products. In order to landfill the deformed fruits, this machine allows fruit farmers to make wine, juice, and dried fruits. Saves more benefits rather than through away the useable fruits.



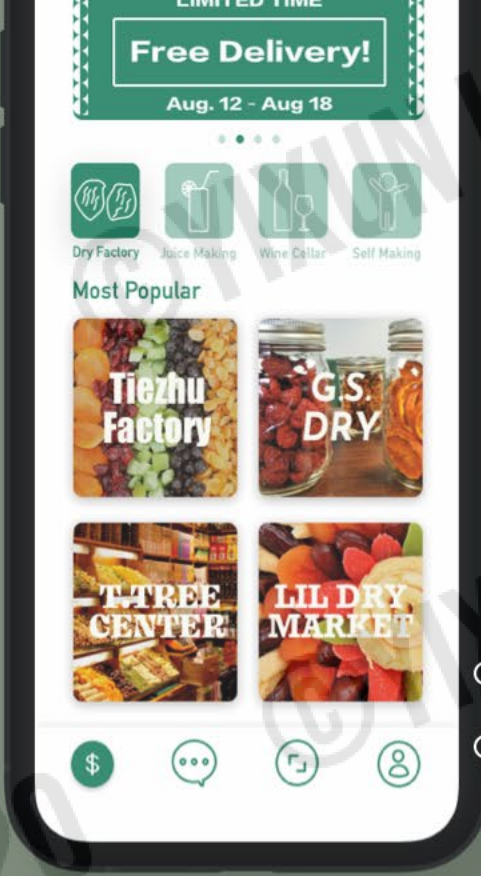
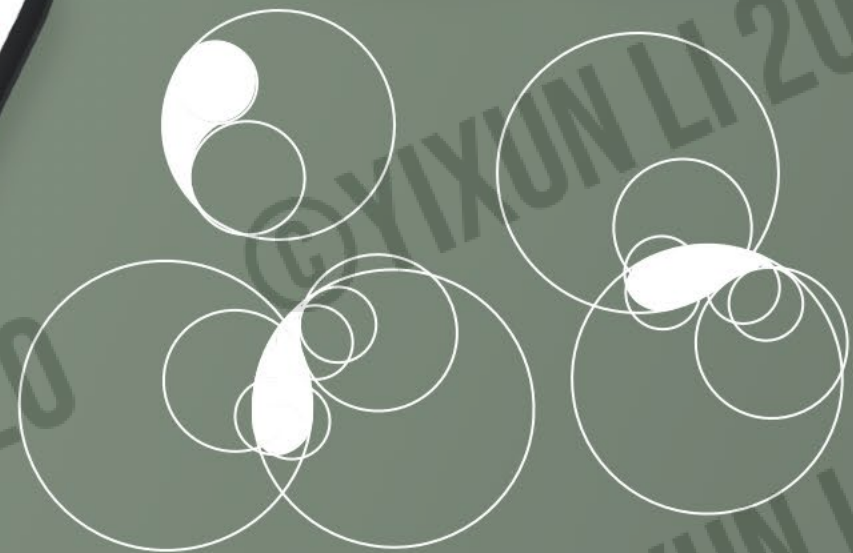
# INTERFACE & MOCKUP



## Icon & Logo Design

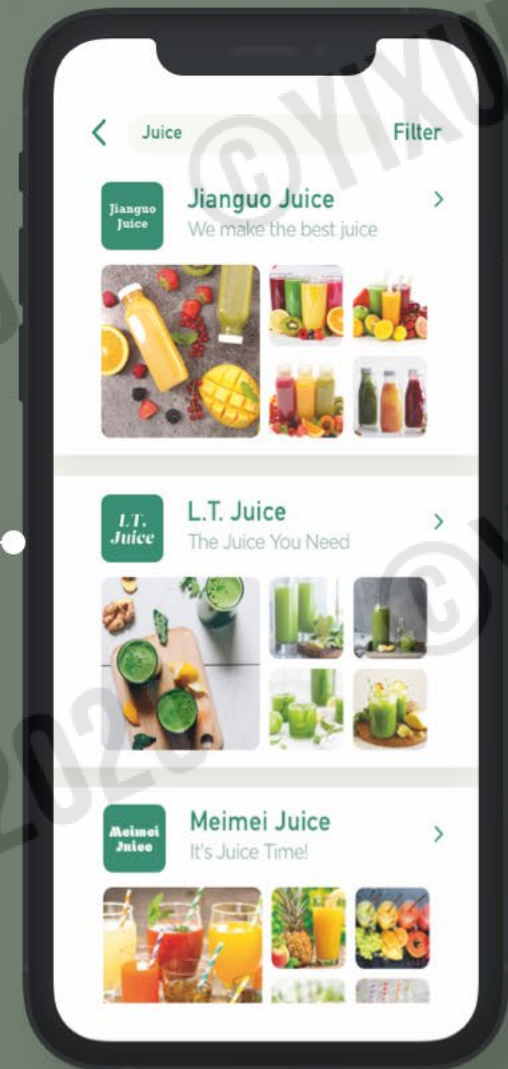


## Logo Design



### Home Page

The home page contains all the main functions. You can easily search for the result, see what's popular, see what's popular, and all the categories.



### Search Result Page

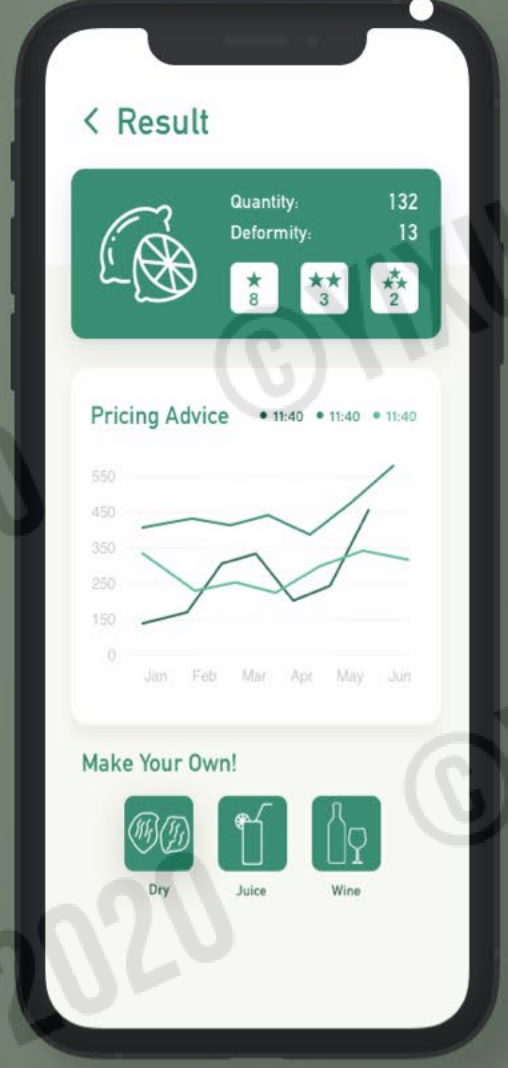
After you search for a category, there will come the result of all the stores with their brief product photos.

01 Firstly, Shufen picked the fruits from the plants put them on a surface flatly.



### Scan Result Page

After you scan and identifying your fruits, there will be a result page that you could check all the information of your group of fruit.



### Storyboard

02 Finally, Shufen can make their own products from the advice showed on the result page of the app.



03 After that, Shufen scan all the fruits together by the app, and the result will show on the result page. The number and levels of the deformed fruits will be showed.





## 04(MY) MUSIC MUSEUM

Sounds appear in our minds when we are hearing them. They are full of vitality even though they flash very quickly like writing in water. By connecting with our memories, they evoke the pictures in our minds that we have seen. Along with our moods and emotions, the music that we are listening to can also cause our mind to record those feelings into our memories, which, as a result, whenever we listen to the same music or just a single segment, the feeling can be triggered immediately. The only difference is the images in our mind are reconstructing and more consummated.

Every emotional fragment in our minds is a masterpiece for each of us. that we always keeping in our "museum".

**Click to view:** [https://youtu.be/c\\_-06NOdoBI](https://youtu.be/c_-06NOdoBI)



# INSPIRATION

The way of display was inspired by the idea of the museum and combined with the traditional Vinyl. The way to record sound is different in every period in history. The placement was inspired by Vinyl and gramophone.

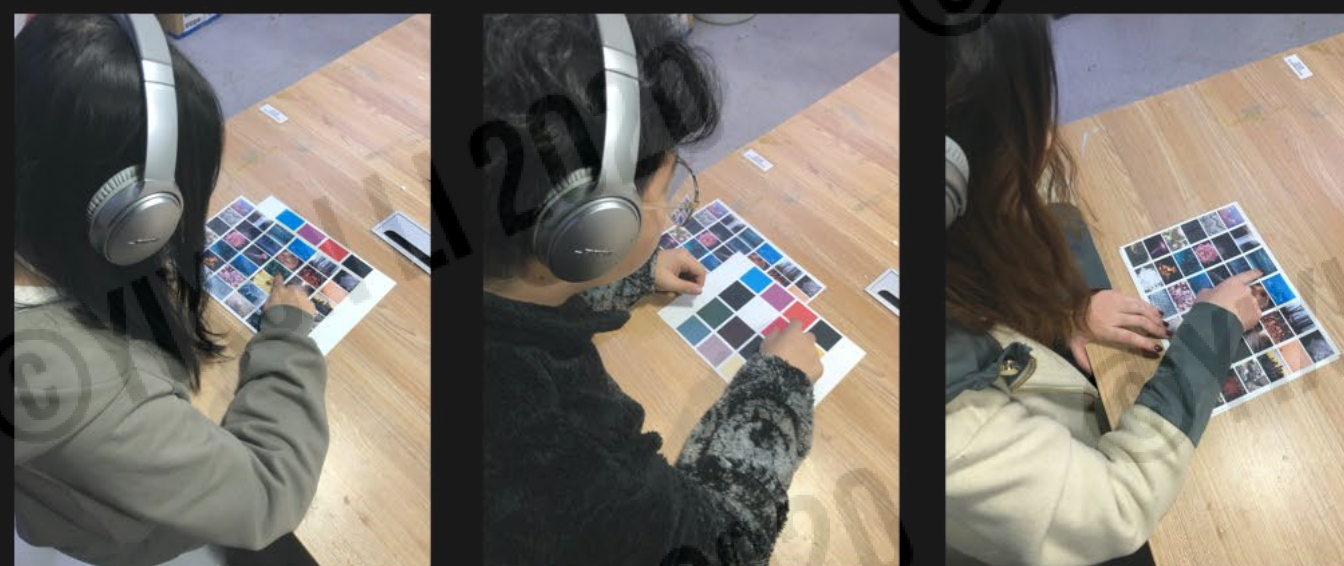
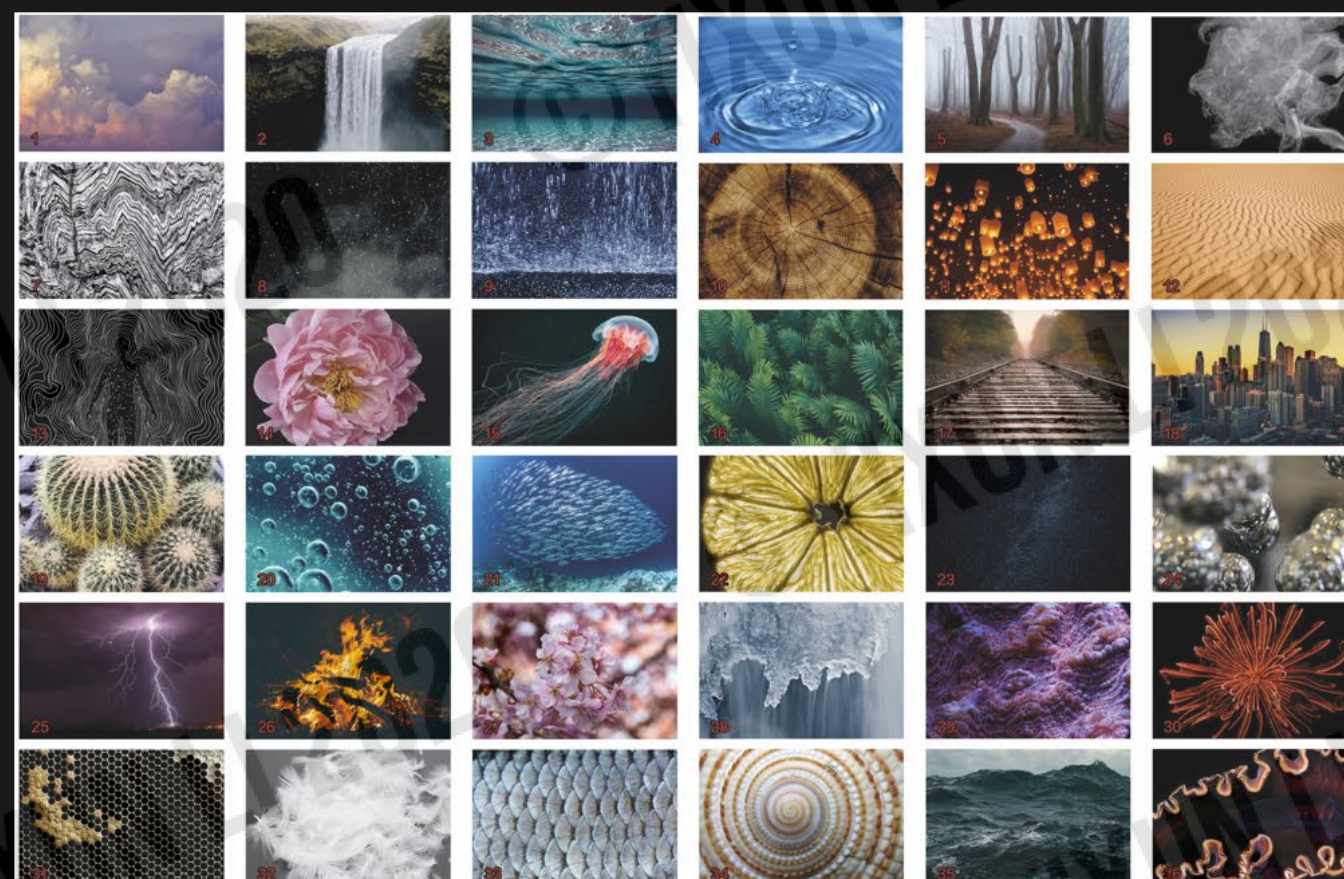
Each instrument could represent a shape or picture, by extracting each instrument out from the songs, the image is going to project on the placement.



# EXPERIMENT

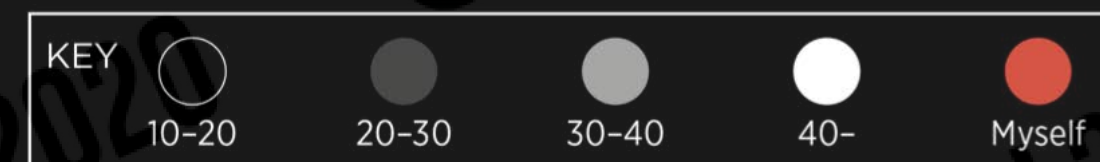
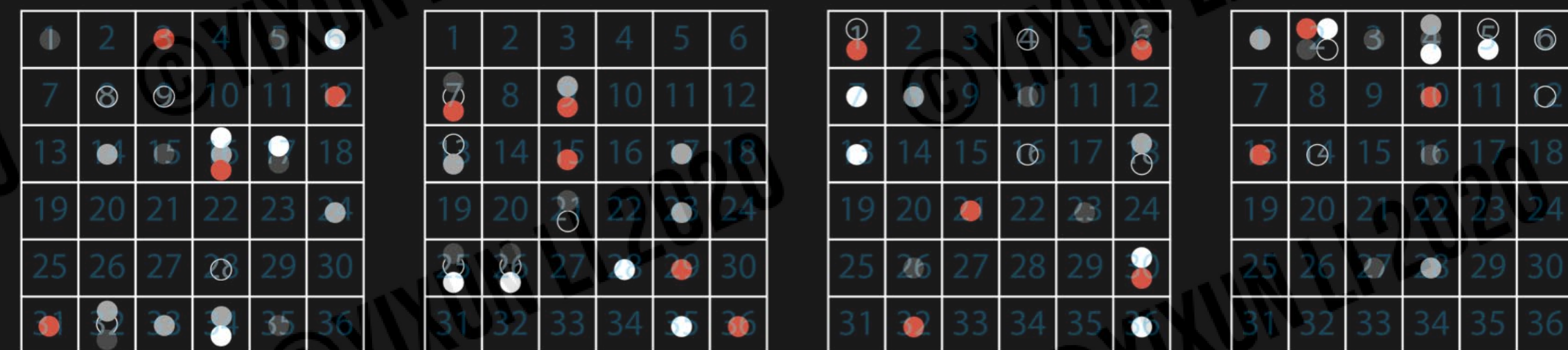
## USER EXPERIMENTAL TESTING

To research the audience's perspective of their thoughts by asking them what could they imagine when they are listening to the selected pieces of music and point out the images that the shapes might relate to each music. The images are from internet photographers.



## THE EXPERIMENTAL RESULTS

The target audiences are sprayed by different age groups and a variety of jobs, which are 10-20, 20-30, 30-40, over 40 years old, and my own opinion. The reasons for that are because it could be more objective and inclusive of data. The testers are selecting from the shapes and colors from the four musics.



### SOUNDTRACK 1

Arthur Rubinstein - Nocturne No. 3 in B Major, Op. 9, No. 3

### SOUNDTRACK 2

Echolight - M.A.D

### SOUNDTRACK 3

Miles Davis - All Blues

### SOUNDTRACK 4

沼泽 - 1911第一回





**Mindmap**

# INSTALLATION SKETCHES



## PLACEMENT MODELING DESIGN



The placement is inspired by Vinyl, which is one of the traditional methods of recording sounds. The shape inside the placement made by modeling clay and the fluctuate shapes represent the uneven paths of the Vinyl.

## PROCESSING CODING

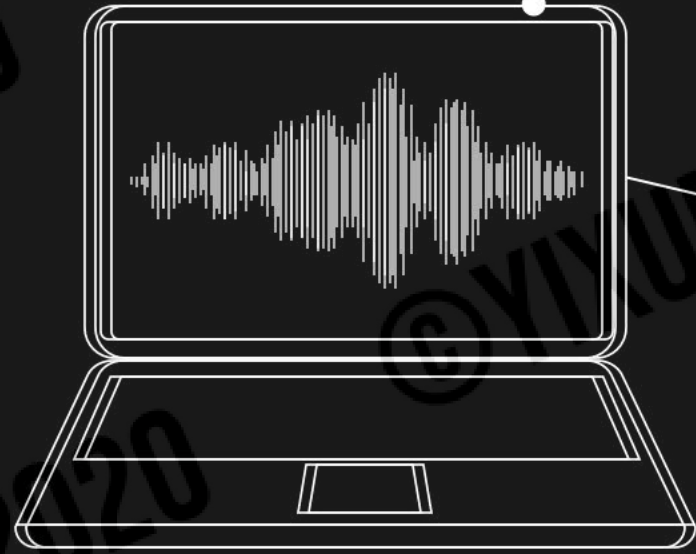
```

Scene 1
Particle[] particles;
float alpha;
import ddf.minim.*;
import ddf.minim.analysis.*;
Minim minim;
AudioPlayer groove;
float f;
void setup() {
  fullscreen();
  //size(1200, 800);
  background(0);
  noStroke();
}
  
```

## DROP MUSIC FILES



## SHAPE GENERATION



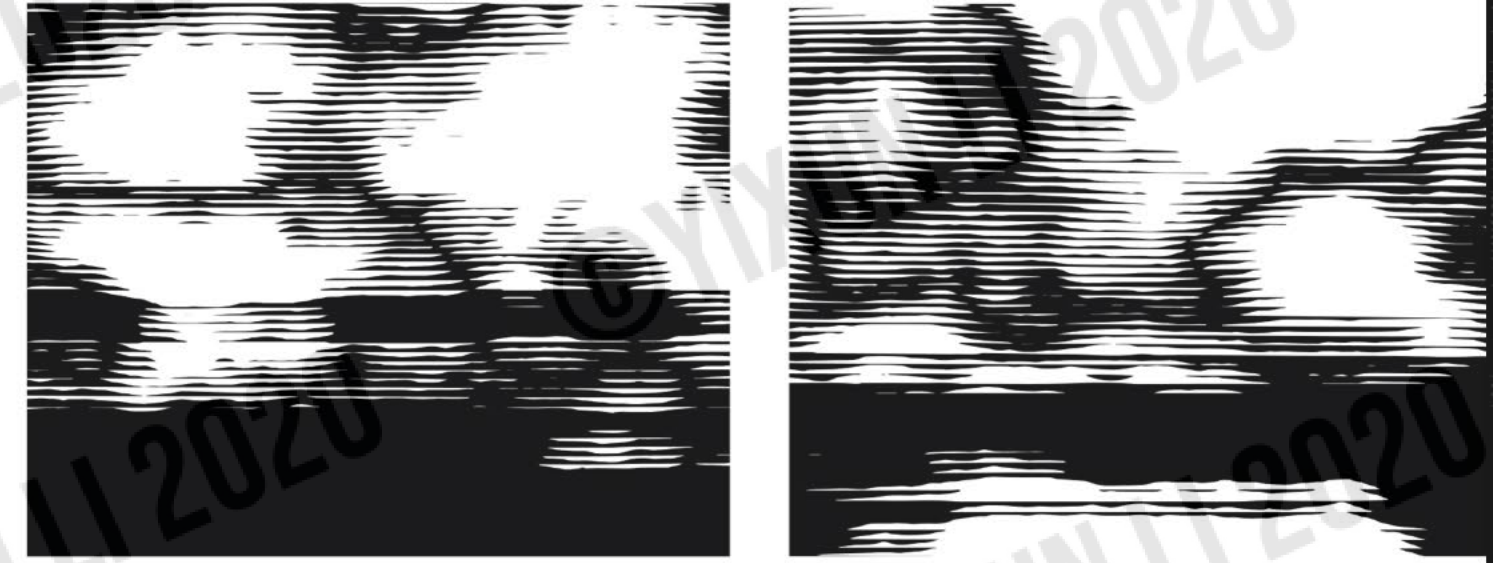
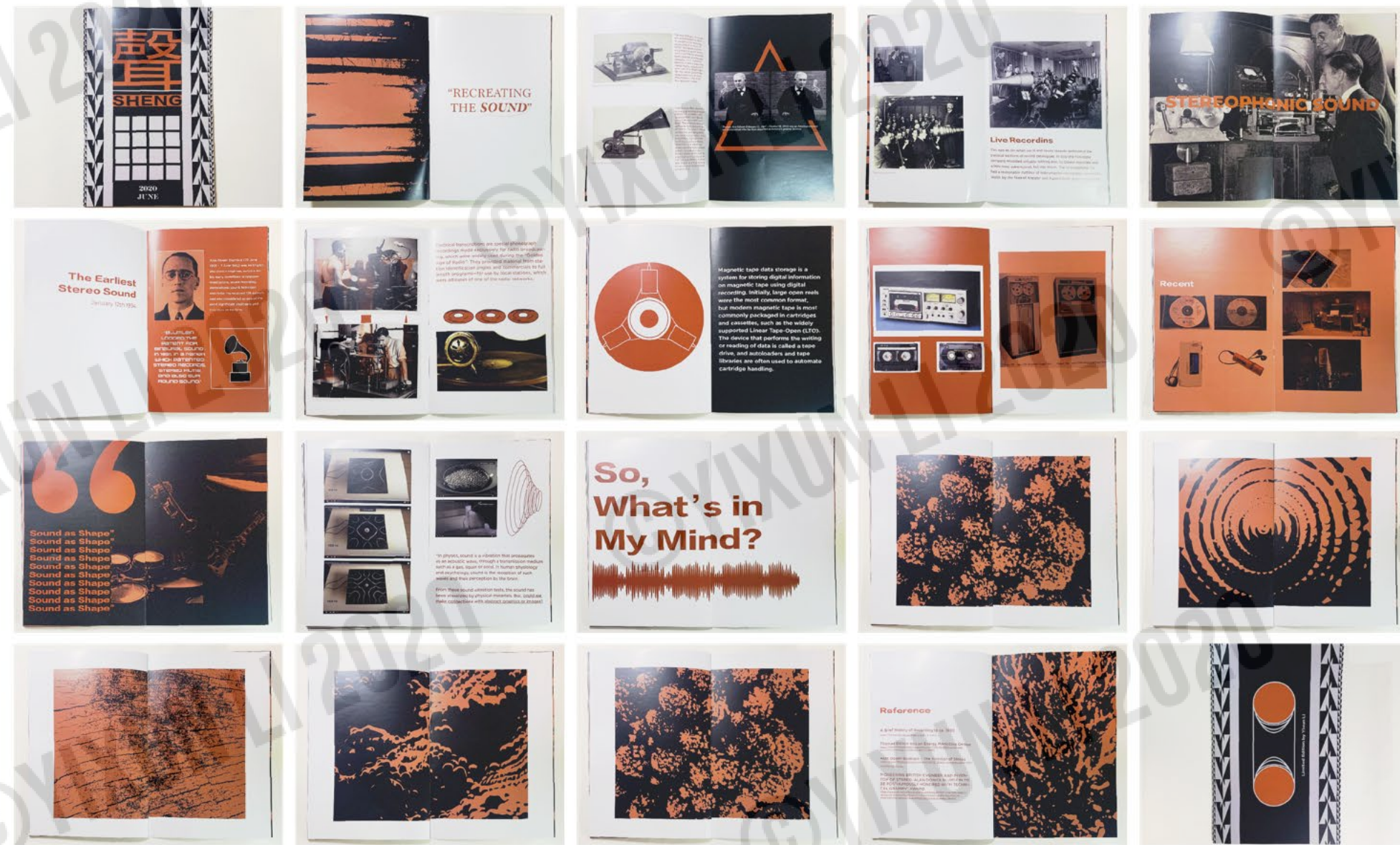
## DIGITAL PLACEMENT

The projector will project the beam to a Vinyl-like object, which is one of the traditional method of recording sounds

Use Processing to implement the sound visualization. Use the minim library to translate beats, frequency, pitch, etc into random and abstract shapes.

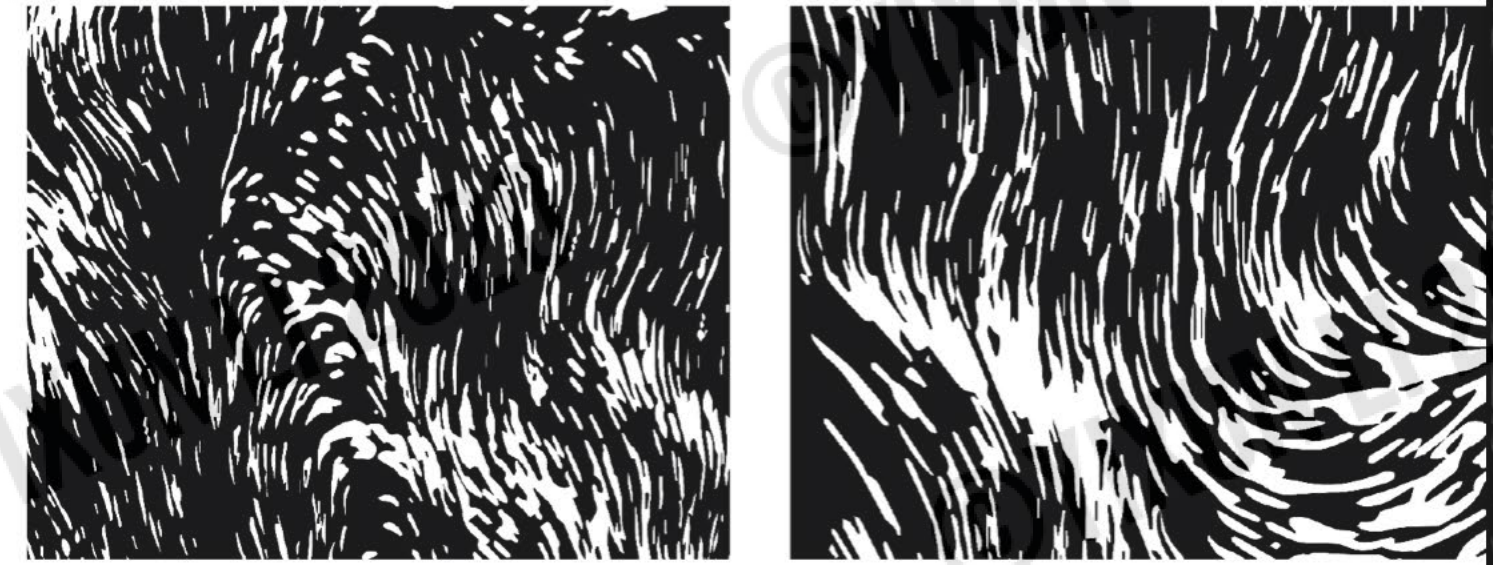


# DEVELOPMENT - SOUND SHAPE



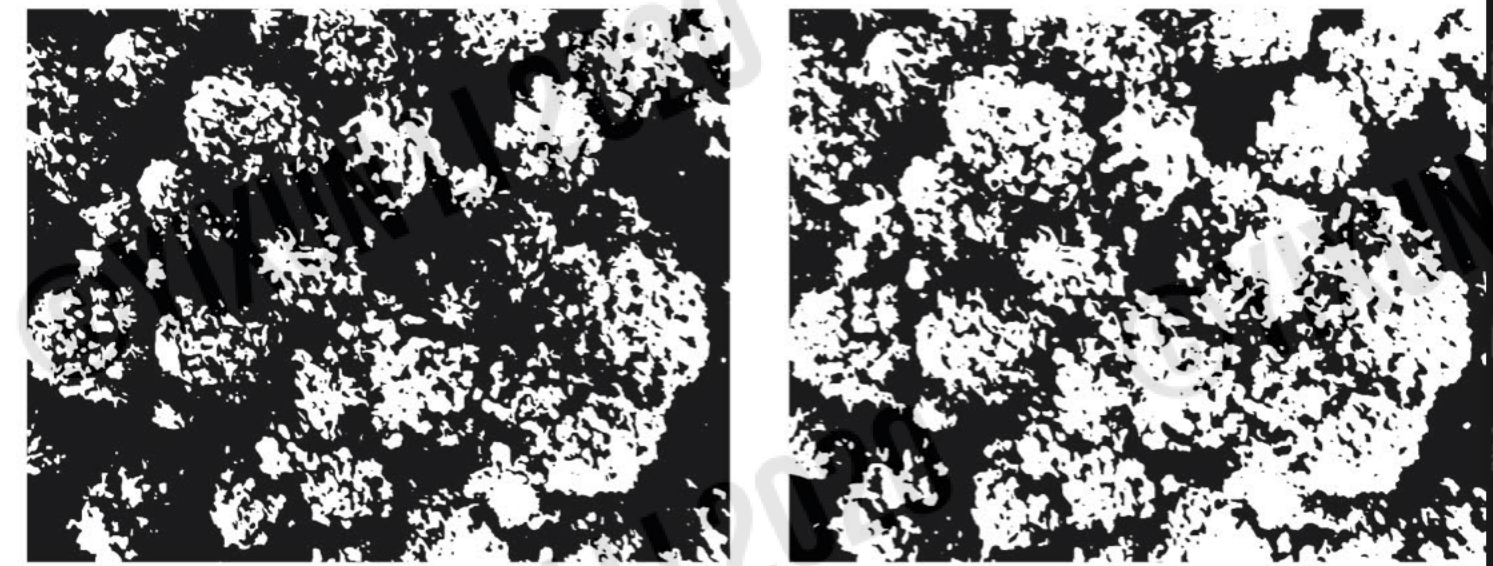
## Miles Davis - All Blues | TRUMPET

From the research, the most selected images have foggy shapes. Combining the shapes, they might look like a cloudy and psychedelic shape.



## Echolight - M.A.D | GUITAR

The most selected are the abstract shapes, and it might be because the electric guitar has both soft and strong characteristics, and the shape I want to represent will contain a lot of moving particles.



## 沼泽 - 1911第一回 | DRUM

Drum mostly strong and sounds like an explosion. The shape I want to represent will be like an explosion or blossom.

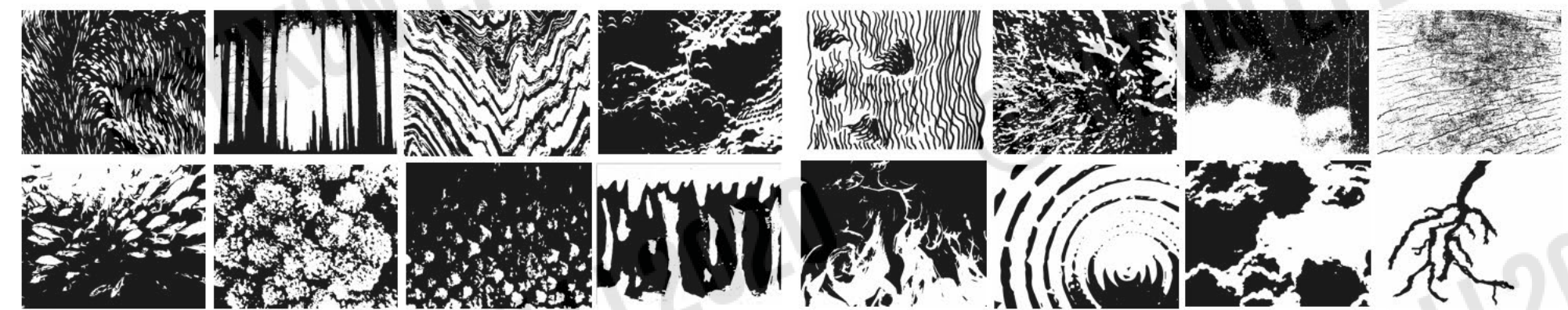


## Nocturne No.3 in B Major, Op. 9, NO.3 | PIANO

Piano music mostly contains a romantic feeling, the shapes from the data are also soft and relax. The shape that I could imagine will be like a spider web since it is both conceptual and abstractive.

## INITIAL SKETCHES

After collecting the data from the target audiences, I started to draw and use Adobe Illustrator to image trace the shapes of each soundtrack. The color mode I decided to use is only grayscale because I want to keep as objective as possible.





# PROCESSING CODING

During the coding process, it took me a lot of time to figure out how to make the shapes move that control by the sound. Since sound has multiple manifestations, for instance, the tone, frequency, beats, etc.

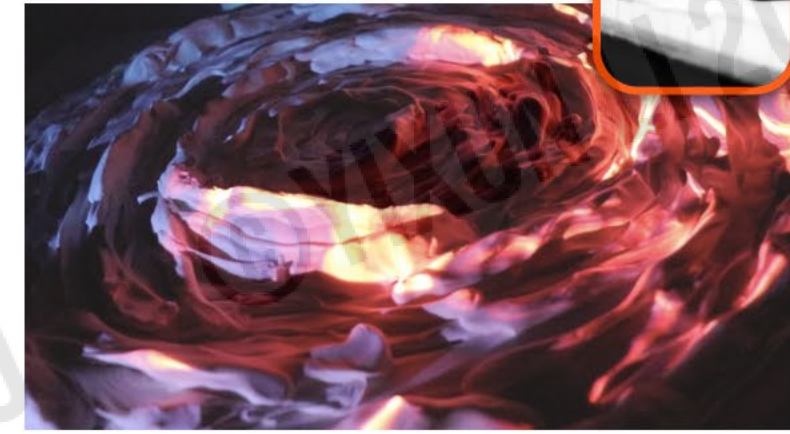


```

import def.minim.*;
import def.minim.analysis.*;
Minim minim;
AudioPlayer groove;
float f;
void setup() {
  size(1024, 768);
  fill(255);
  noStroke();
  rectMode(CENTER);
  frameRate(30);
  noiseData(4, 0.4);
  minim = new Minim(this);
  groove = minim.loadFile("audio-piano.mp3", 1024);
  groove.loop();
}
void draw() {
  background(0,10,0);
  for (int i = 0; i < groove.bufferSize() - 1; i++) {
    f = 100 - groove.left.get(i)*50;
    play(f);
  }
  void play(float b) {
    for (int x = 10; x < width - 10; x++) {
      for (int y = 10; y < height - 10; y++) {
        float n = noise(x * 0.009, y * 0.9, b * 0.009);
        translate(x, y);
        rotate(Y * TWO_PI * n);
        scale(10 * n);
        fill(255, n*400);
        rect(0, 0, 1);
        popMatrix();
      }
    }
  }
}
class Particle {
  float posx, posy, incr, theta;
  color c;
  Particle(float sin, float phi, color c) {
    this.posx = sin;
    this.posy = phi;
    this.incr = new Random(100);
    this.theta = new Random(100);
    this.c = new Random(100);
    this.incr = new Random(100);
    this.theta = new Random(100);
    this.c = new Random(100);
  }
  void update() {
    posx += incr * cos(theta);
    posy += incr * sin(theta);
    theta += TWO_PI * f;
    incr *= 0.9;
  }
  void display(float f) {
    fill(255, 255 * f);
    strokeWeight(1);
    stroke(255, 255 * f);
    rect(posx, posy, 10 * f, 10 * f);
  }
}
class Particle {
  float posx, posy, incr, theta;
  color c;
  Particle(float sin, float phi, color c) {
    this.posx = sin;
    this.posy = phi;
    this.incr = new Random(100);
    this.theta = new Random(100);
    this.c = new Random(100);
    this.incr = new Random(100);
    this.theta = new Random(100);
    this.c = new Random(100);
  }
  void update() {
    posx += incr * cos(theta);
    posy += incr * sin(theta);
    theta += TWO_PI * f;
    incr *= 0.9;
  }
  void display(float f) {
    fill(255, 255 * f);
    strokeWeight(1);
    stroke(255, 255 * f);
    rect(posx, posy, 10 * f, 10 * f);
  }
}

```

## SOUNDTRACK 1

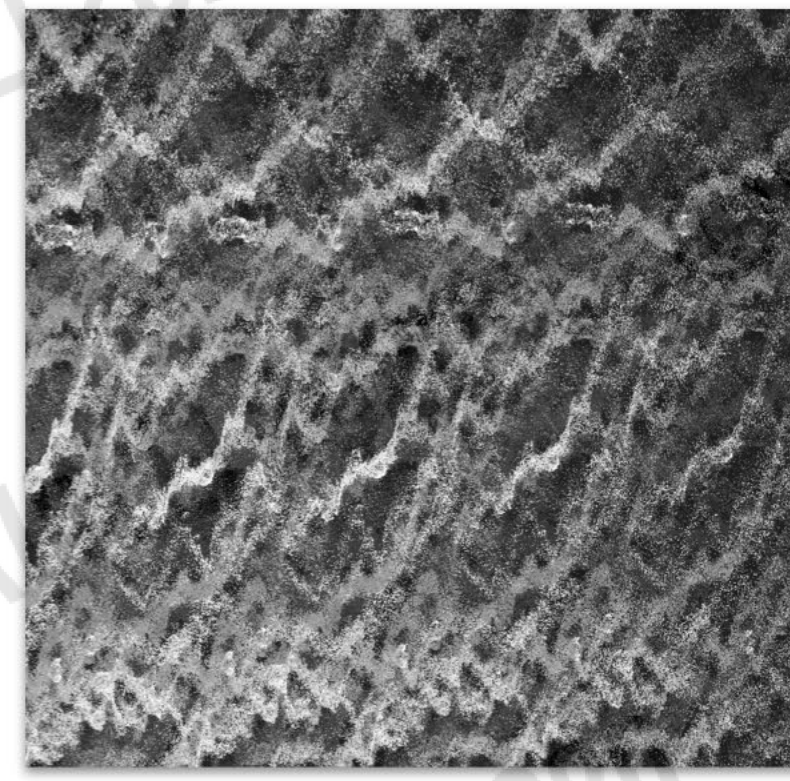


Nocturne No.3 in B Major, Op. 9, NO.3

The shapes are controlled by the volume, the louder the volume, the thicker the stokes.

PIANO

## SOUNDTRACK 2

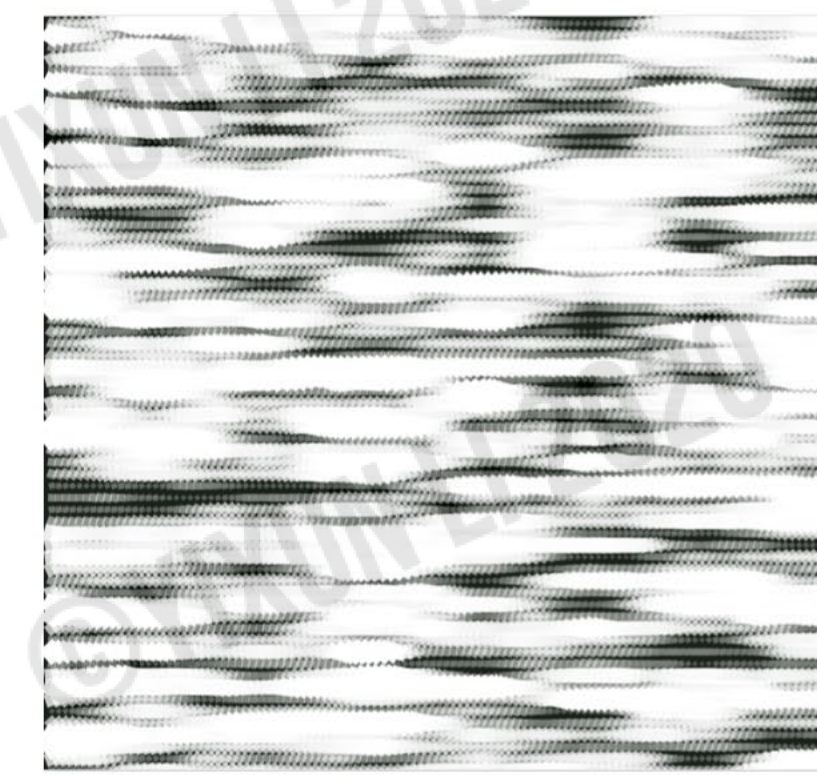


Echolight - M.A.D

The pixel particles are controlled by the frequency, the higher the frequency, the more the number of particles.

GUITAR

## SOUNDTRACK 3

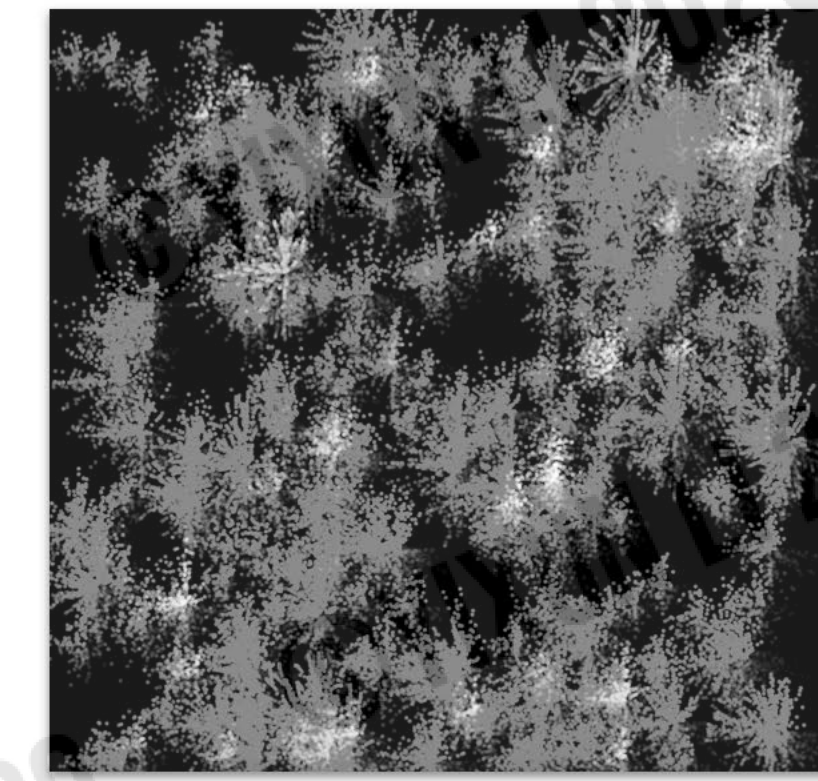
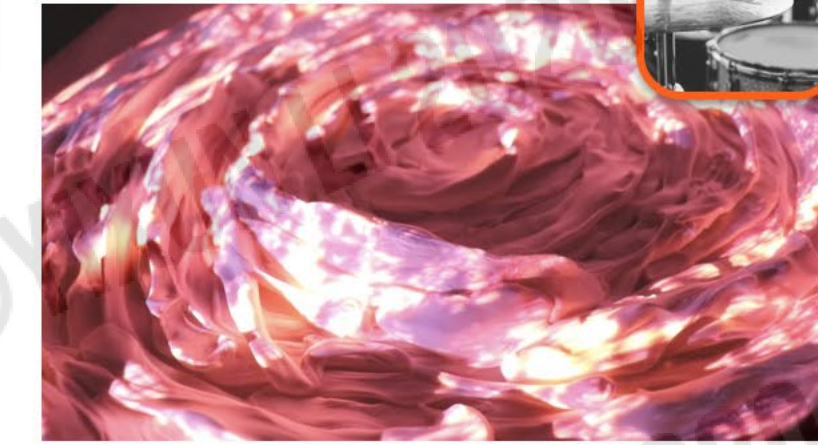


Miles Davis - All Blues

The frequency controls the speed and degree of rotation, the higher the frequency, the quicker the movement, and the bigger the degree of rotation.

TRUMPET

## SOUNDTRACK 4

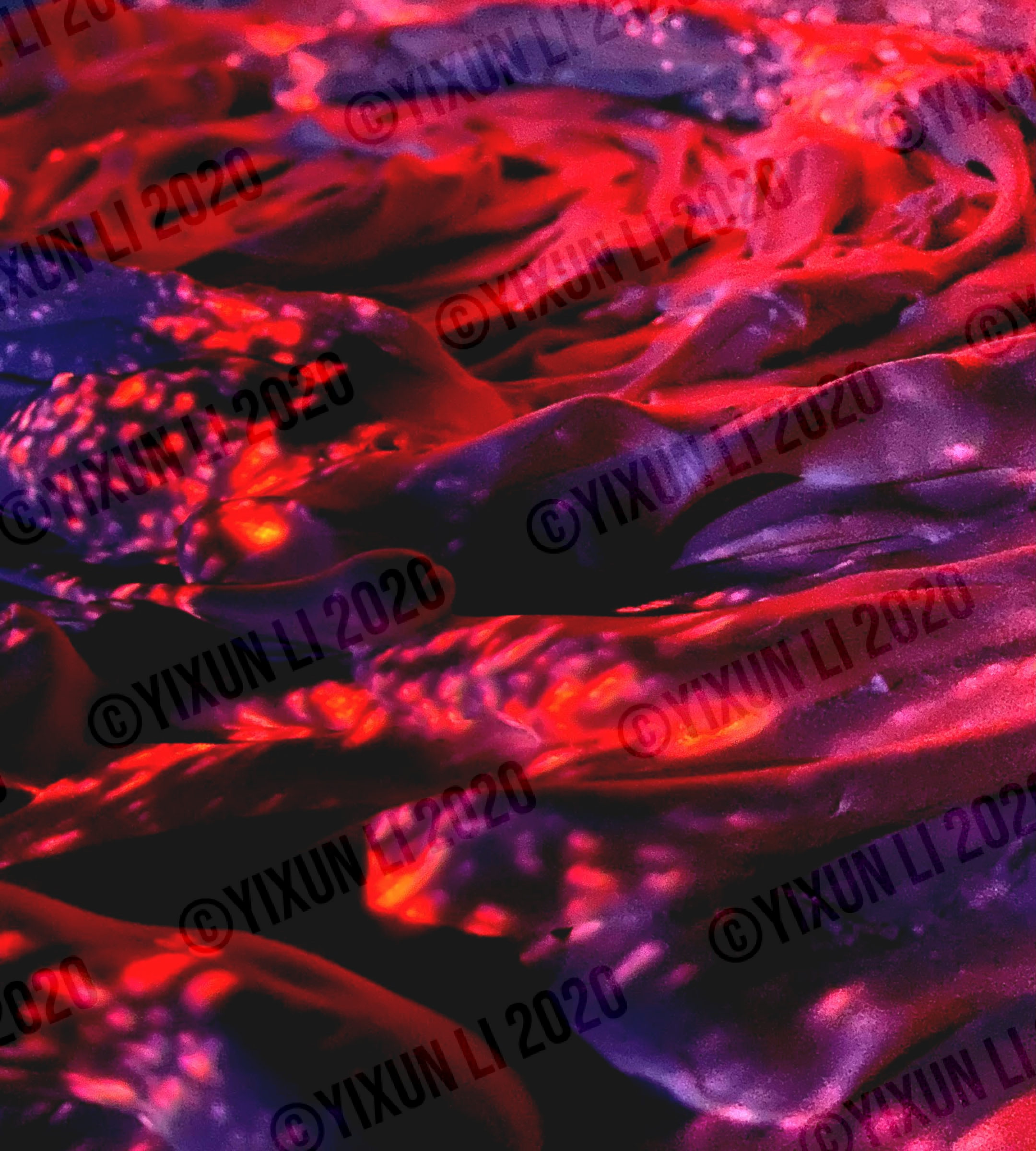


沼泽 - 1911第一回

The explosion particles are controlled by the beats, the louder the drum, the more the number.

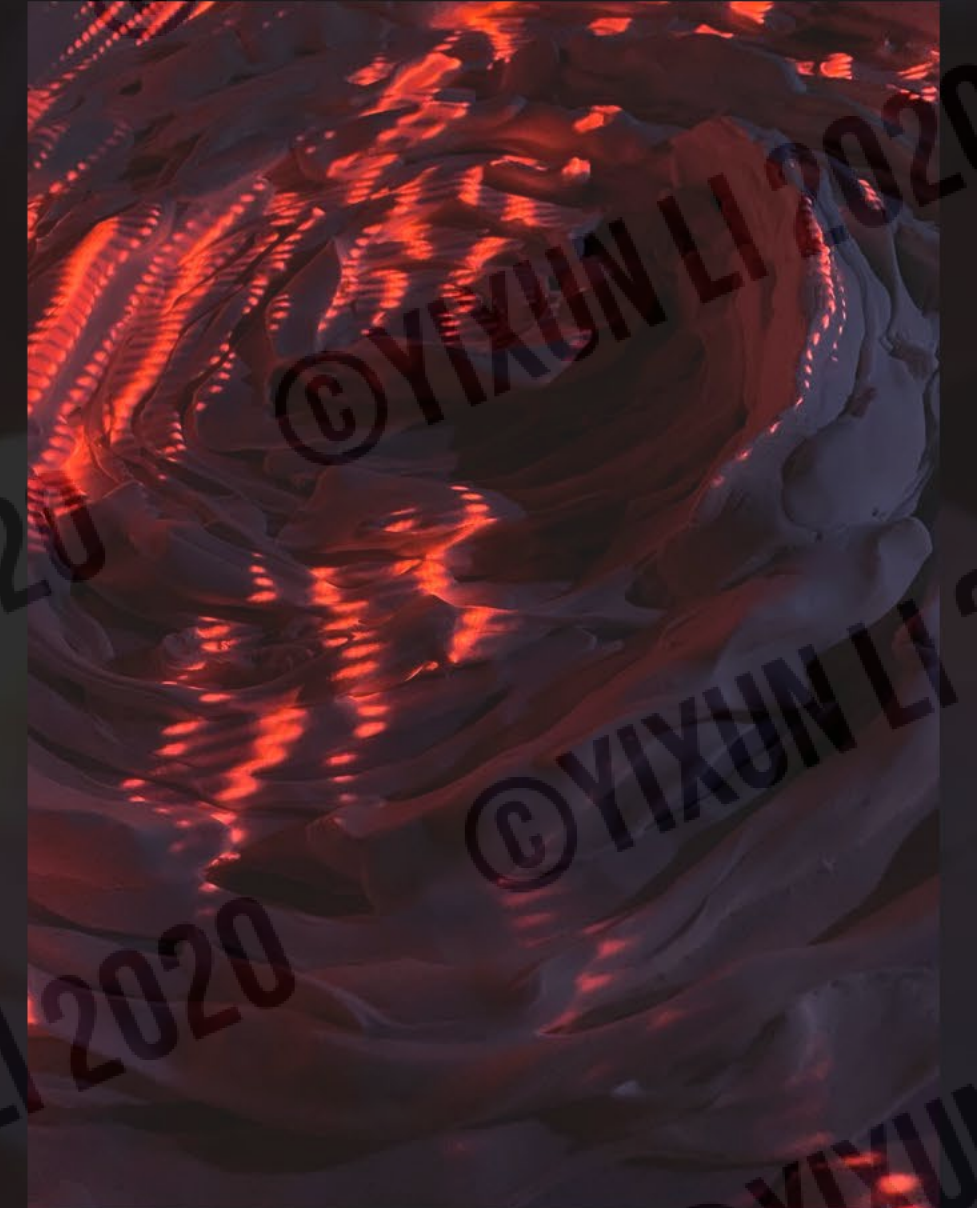
DRUM





## OUTCOME

The dynamic images from the projector go directly to the placement, in which audiences can have more involvement in the music. According to the evaluations from the audiences, they like the colors and shapes, but they also want the placement to be spin like the real Vinyl.





# Inclusive Music Festival

## Concept

Inclusive Music Festival is a Chinese music festival held in Beijing National Stadium from April 30th to May 2nd. The concept of this music festival combines the Music styles and Hot Pot elements in the festival in order to represent the various styles of music.

The identity of the festival is the word "inclusive" with round shape, and it represents the meaning of different layers and materials in the hot pot. The whole feeling of all the design is intended to be exciting and contemporary. The use of the word "inclusive" is to point out that this music festival has different themes, and in 2019, there will be Rock, Jazz, and Pop nights.



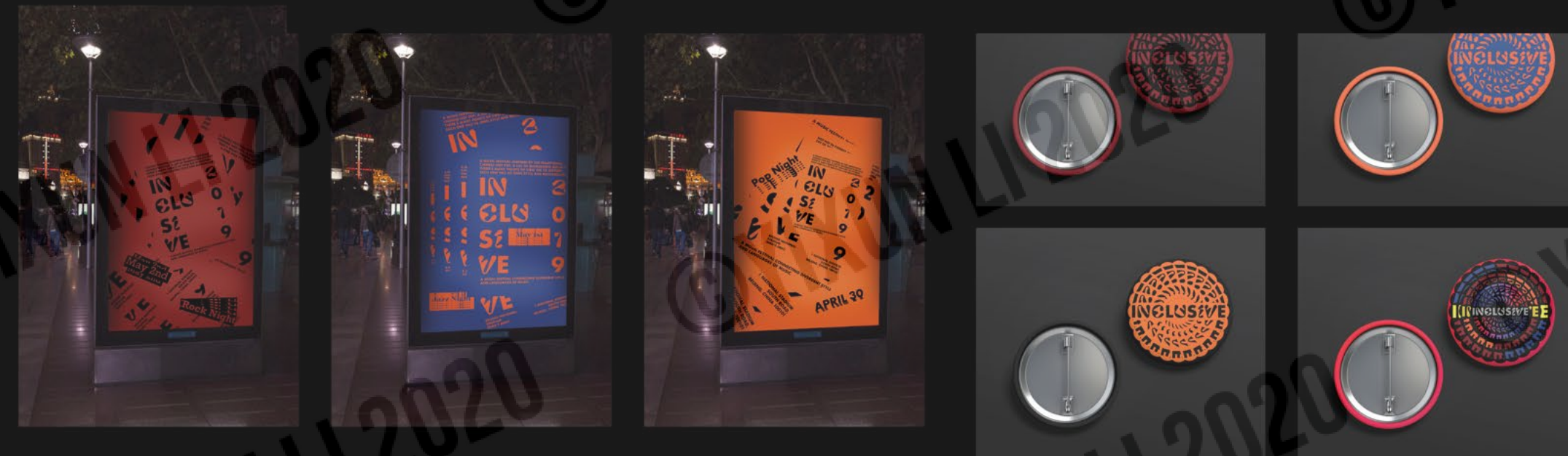
## Color System

The colors are basically took by the moods of different styles of music and each one of them has only two colors combines together.



## Typography

The concept of typography is to use multiple typeface for one word, and then combine them in sentences.



# OTHER WORKS 01 MUSIC FESTIVAL DESIGN





# OTHER WORKS 02

## BRAND IDENTITY

Bad Grade is a fashion brand with its website. The concept was inspired by the Scantron format. The logo and labeling took the "fill-in" elements in the Scantron, and the categories were named by the subjects from middle and high school.

