

Sleep peacefully

This is an efficient system for the disposal of dead bodies. It applies in the event of a major public health disaster in which a large number of people die.

Functions:

1. Prevent body rotting quickly and extend the storage time, by using evacuating body bags.
2. Show the oxidation degrees of the body by color signals.
3. Package body with zippering evacuating bags.
4. Identify the information of the dead quickly by their fingerprint, and then inform the following body processing organization at the same time.

Values

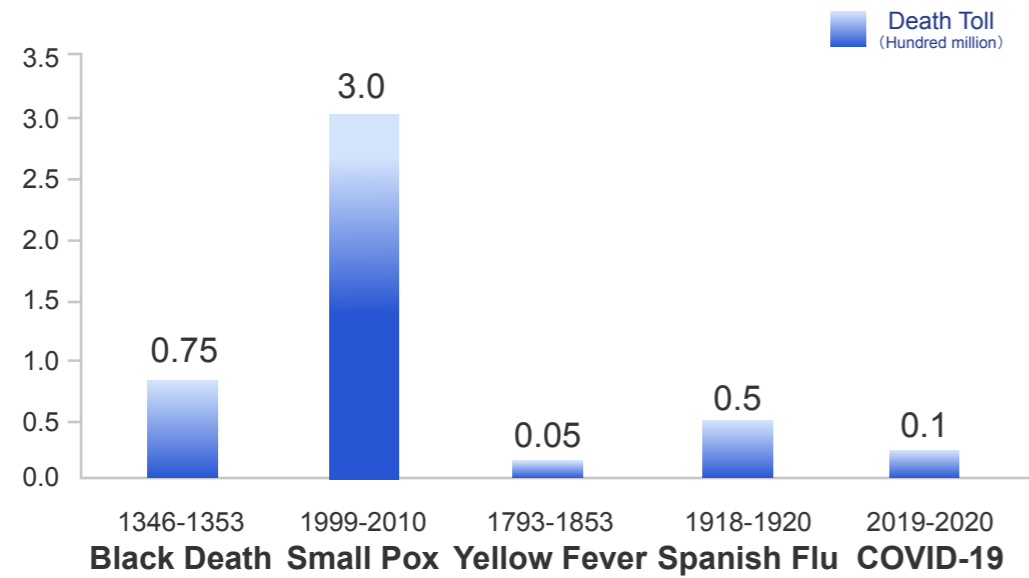
Show dignity of the dead. Give the following body processing with more dignity. Comfort family members of the dead without being regretful.



Background

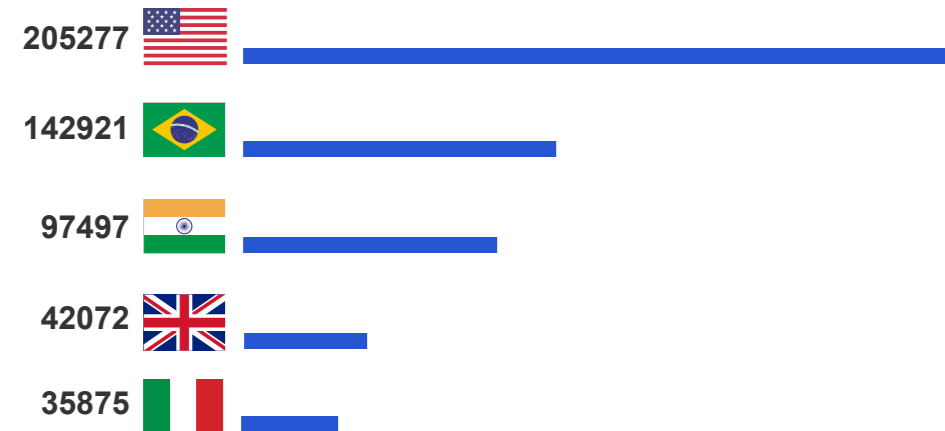
01

Statistics on deaths caused by large viruses.



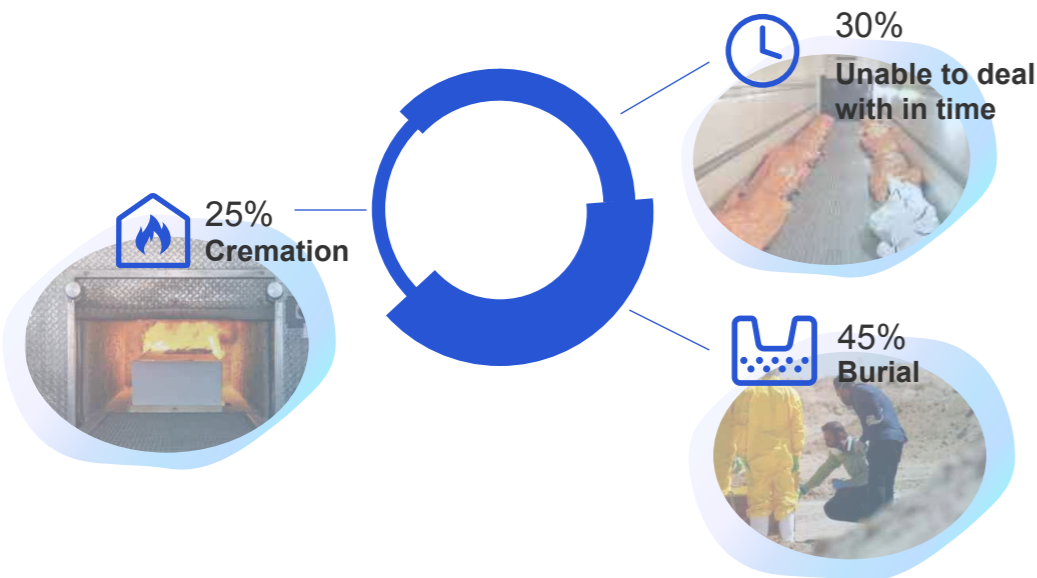
02

Death data for countries with the most COVID-19 outbreak from January to October 2020.



03

Corpse (cause by virus) disposal.



04

Disposal of COVID-19 Corpses.



“ The funeral industry in New York is overwhelmed, especially when it comes to storing the remains. The morgues in many hospitals are already full, and the number of temporary morgues and refrigerated trucks that have been built has exceeded one hundred. Even if the bodies in the trucks are stacked on top of each other, it is still not enough. A doctor in a local hospital said that the body is like a conveyor belt shipped out of the hospital, unable to cope with more and more patients. ”

— BBC



Local residents A: They were all living people, but now they are stacked one by one in the truck. The weather is getting warmer, because it's spring. You can smell rancid, which is too bad.



Local residents B: They are human beings and should be treated with dignity, but now it is like throwing them away, it really shouldn't be.

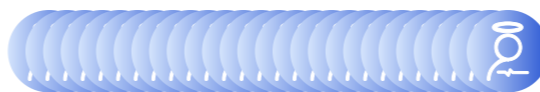
12

The corpses capacity of a hospital.



40

Deaths per day.



The dilemma of 2020 corpse processing: As the number of dead bodies increased more than the number of corpses processed. Therefore, the waiting time for the remains to be processed is long, and the bodies are backlogged.

05

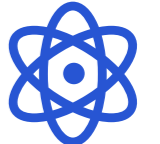
Reasons why the corpse cannot be stored for a long time.



Dead bodies stink



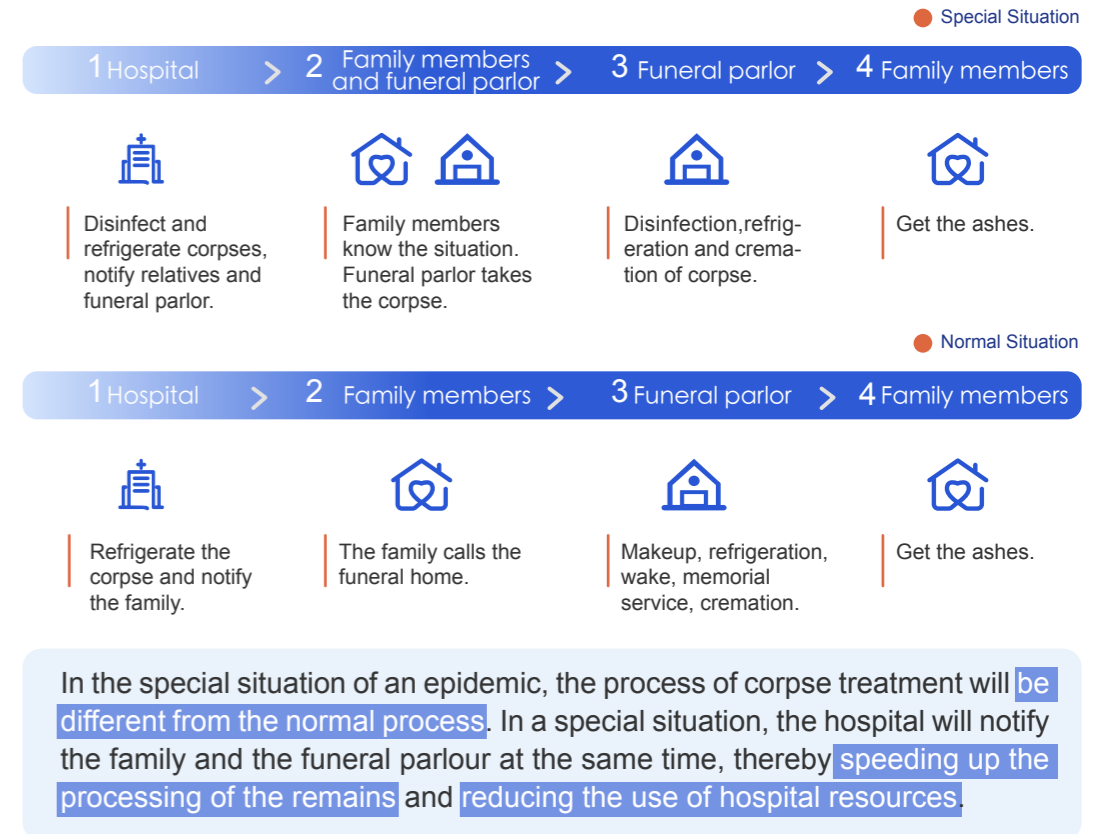
Germs



Virus cross infection

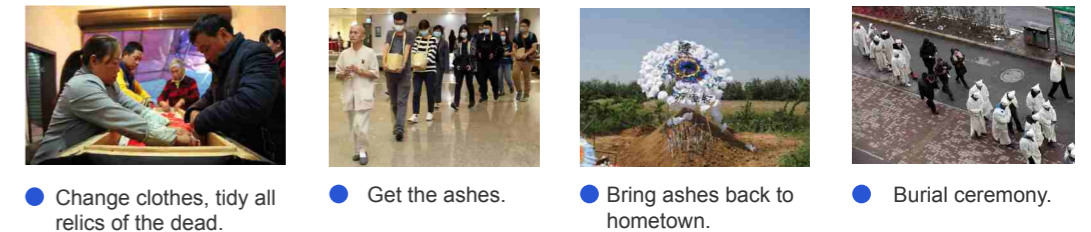
06

The process of handing the remains in China.



07

In China, the way people mourn the dead.



The Chinese have a culture and perseverance when in handling the ashes and relics of their relatives after their death.

Interview



PL

“ From hospitalization, medical treatment, death, burial, we are all confused and without dignity. ”

- The cemetery is full of monuments without words.
- Because too many people died and were buried in a hurry, So there is no time to engrave the name on the tombstone.



Wang Jun

“ This is my family affair, why did they interfered? ”

- The relative passed away in February of COVID-19, and the ashes in March have not been notified to claim.
- They must be accompanied by the staff of the deceased's unit to claim the ashes.



Mr. Sheng

“ There is no funeral and no ceremony is allowed. ”

- Because of the large number of people, I waited in line for an hour and a half to claim the ashes. After claiming it, I was not sure if the ashes belonged to my family.
- Bringing the dead back for burial is still not easy.

1. In major public incidents, after facing death, it is impossible to determine whether the ashes belong to one's own relatives.

2. The relatives of the deceased can only feel the basic humanitarianism in the current way of handling the remains, but they have not met their psychological and emotional needs too much.

3. The methods and efficiency of handling dead bodies are limited.

Design goals



Reasonably use the existing basic measures to reduce the cost of the process of disposing of the remains and improve its efficiency.

Fingerprint identification of the dead identify information.

Generate QR code.

A body bag with evacuating compression function.



Pay attention to and meet the emotional needs of the relatives of the deceased.

The family members of the deceased receive news of the deceased as soon as possible.

Find the ashes of loved ones accurately and quickly, and reject the phenomenon that the ashes are not right.



Identify the order of the remains to be processed.

The body bag adds the function of oxidizing color change, which can identify the length of time for the body to decay, which is helpful for the doctor to distinguish the sequence of body disposal.



Information privacy protection of dead.

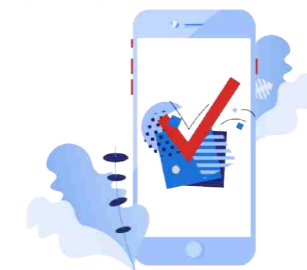
Encrypt the deceased's medical information.

Concept

01 The doctor enters the fingerprints of the patient and generates the data QR code.



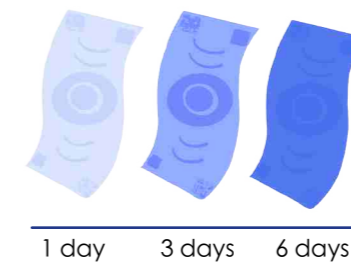
02 Recognize the fingerprints of the deceased after death. Print the QR code information to notify relatives and funeral homes.



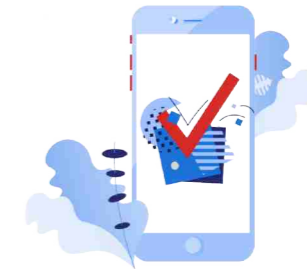
03 Put the corpse into the body bag and draw air and paste the QR code.



04 Determine the order of the corpses to be processed according to the color of the body bag.



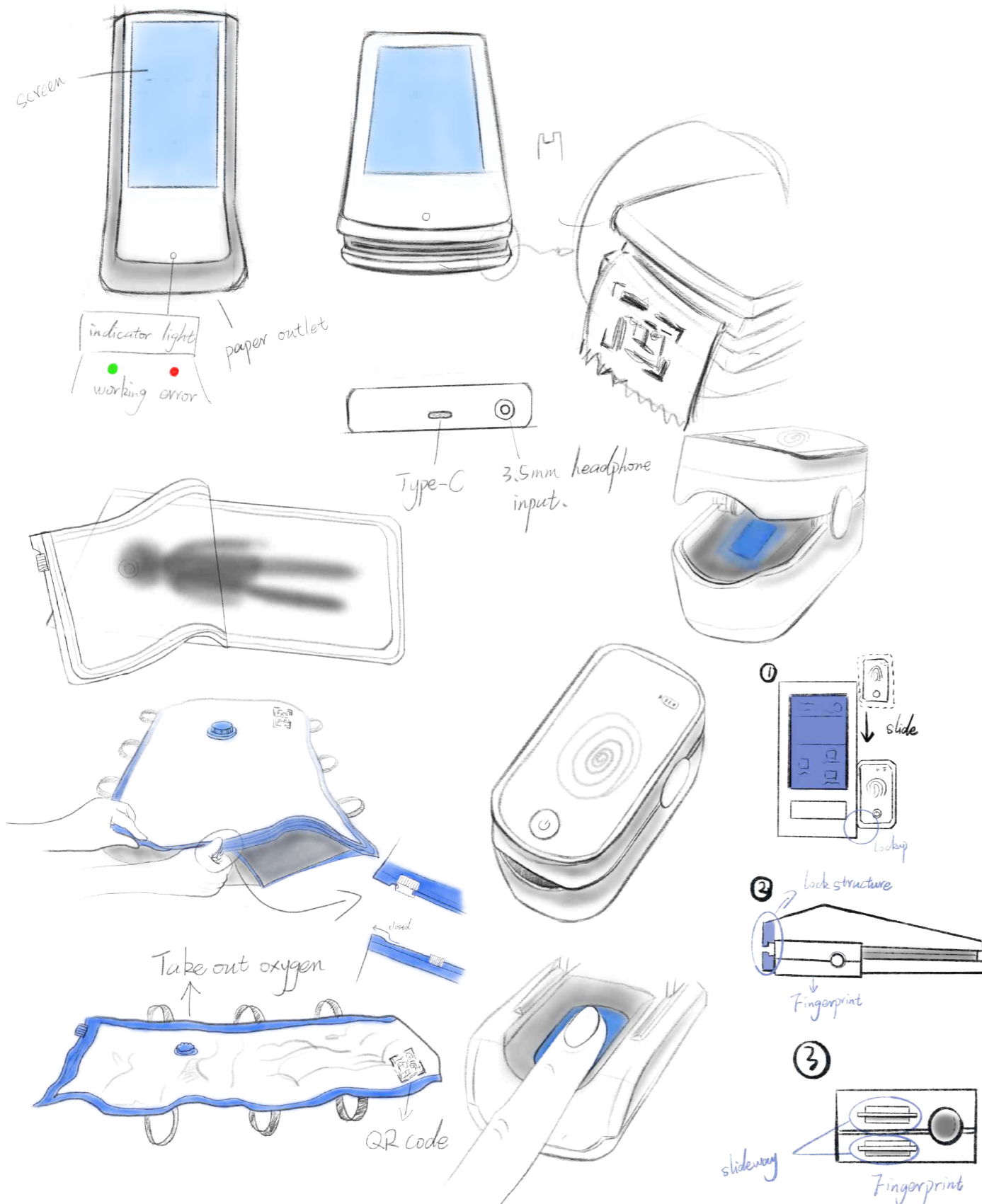
05 After sending the body to the cremation site, notify relatives according to the QR code information.



06 Relatives use QR codes to find the ashes of family members.



Sketch

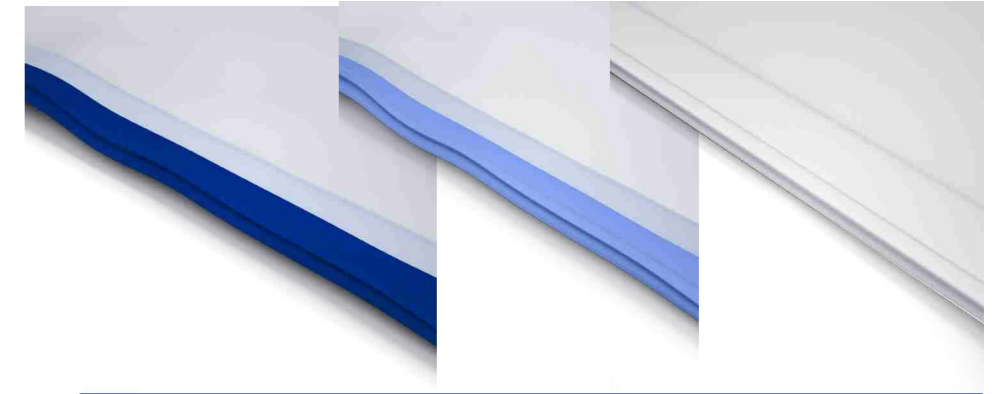


Outcome

Fingerprint machine: identify fingerprint



Body bag: the color depth represents the priority of processing



6 days

3 days

1 day

Body bag: carrying ring

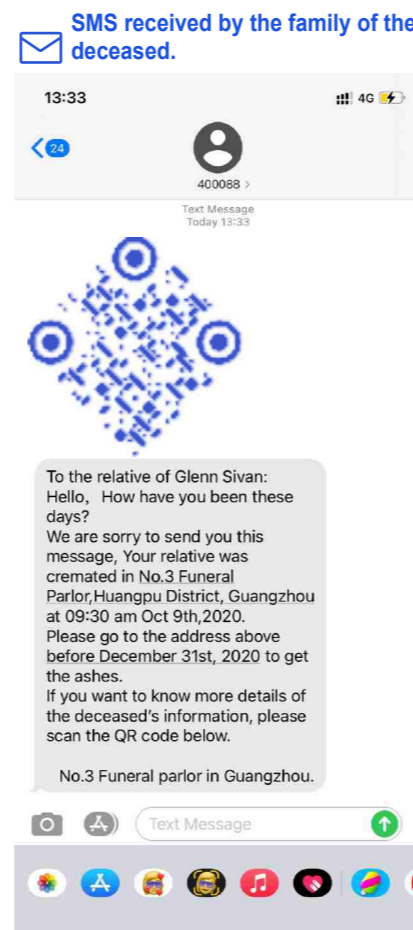
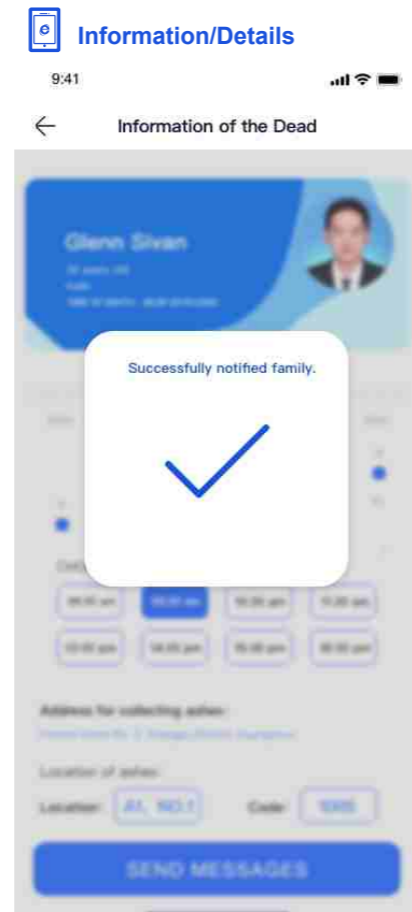
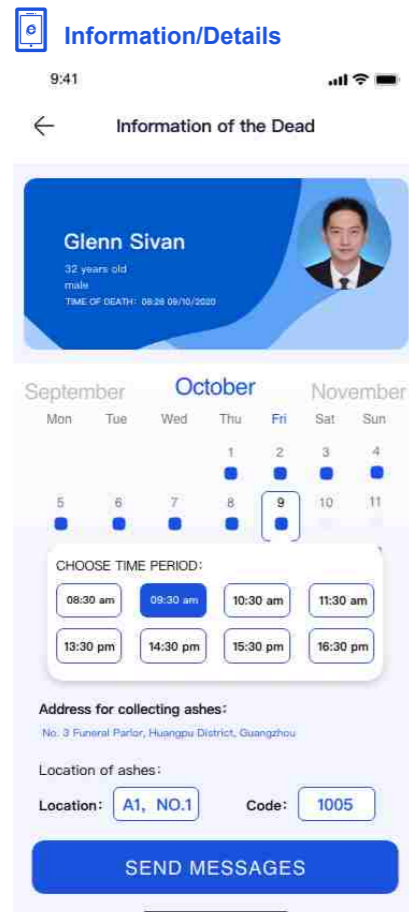
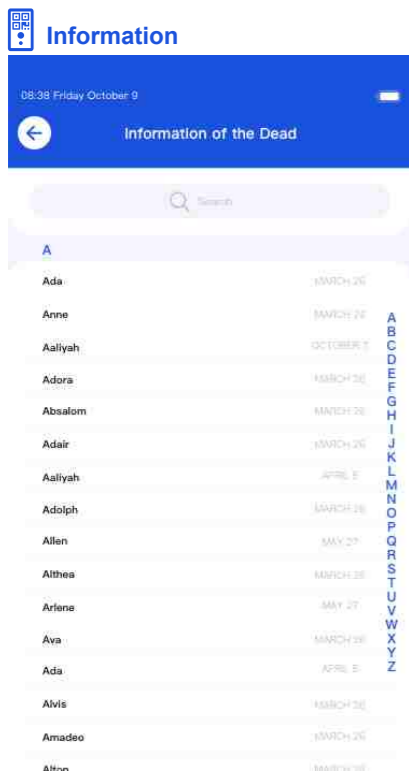
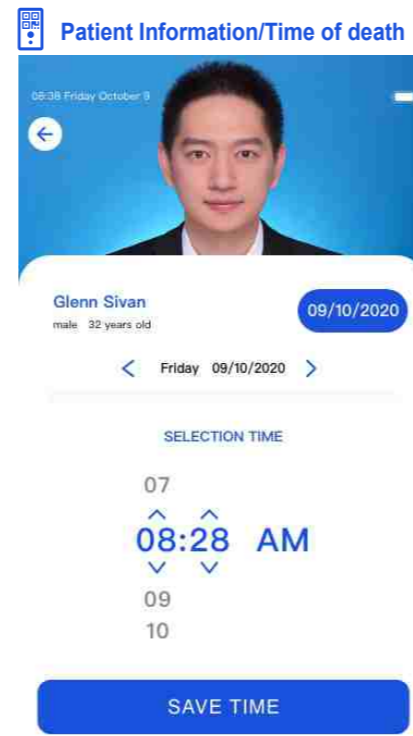
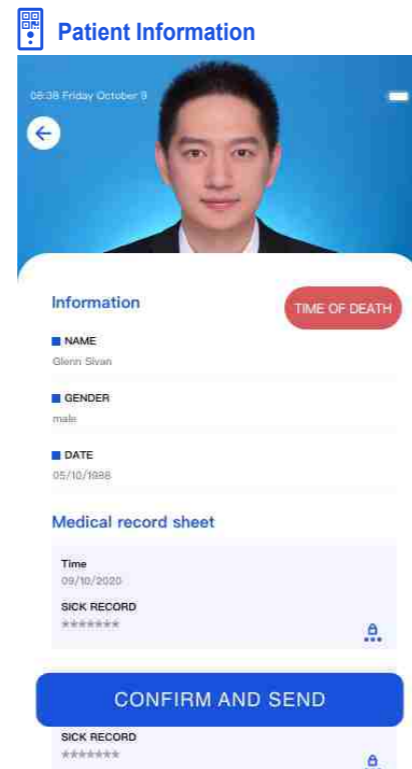
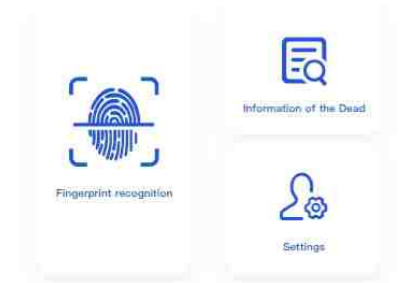
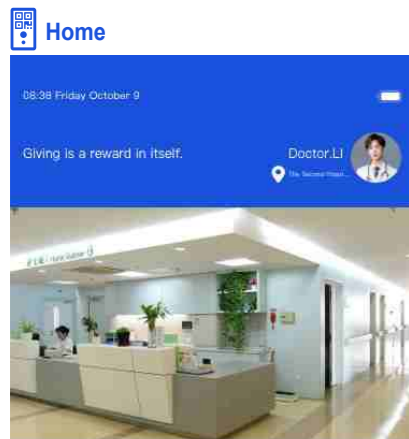


Body bag: portable zipper, evacuation function and information of the dead.



Information collector: query information, input the death time of the dead, print QR code.

UI Design



Scanario



Happiness Canteen



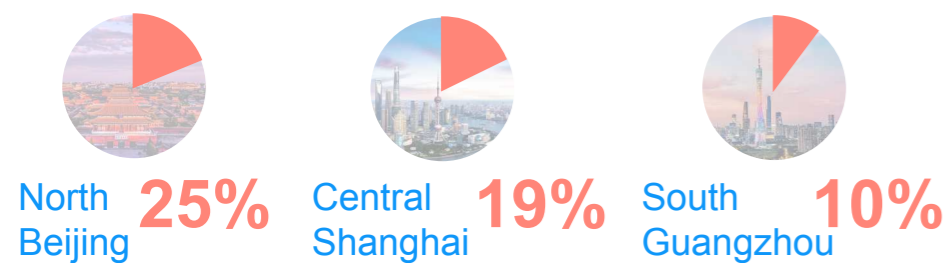
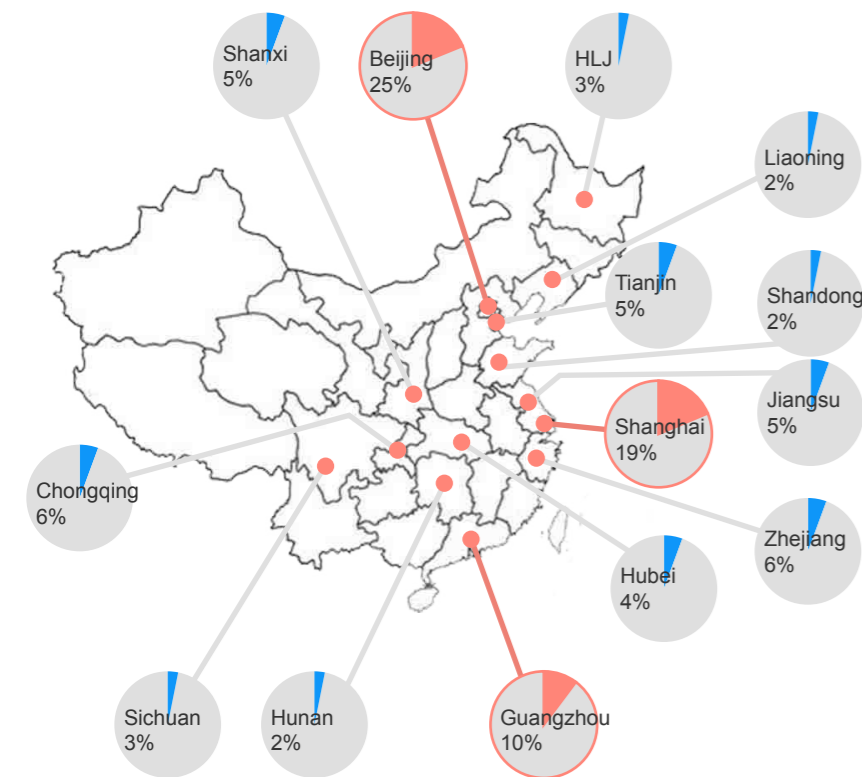
This is a **service system** that medical seekers trans-regional to **eat hometown food** in hospitals in unfamiliar cities.

The service system:

- ▶ **Online appointment sharing kitchen**
- ▶ **Offline hospital canteen changes**

The value of this project is that it can bring spiritual encouragement to patients and their families through a catering service that provides familiar tastes.

1 Proportion of cities in China's tertiary hospitals



The medical level is **unevenly distributed** in China. Good medical resources are concentrated in **first-tier cities**. Many **medical seekers** brought their relatives with difficult and severe **illnesses** to the third-tier **hospitals** in unfamiliar **first-tier cities**.

2 Observation on the life of medical seekers trans-regional



Cost : **£180** /
 Residence time : 6.30am-10.00pm
 Population : **ONE**



Cost : **£80** /
 Residence time : 24h
 Population : **ONE**



Cost : **Up £2** / **ONE**
 Time : 06.00am-09.00am
 12.00am-14.00am
 06.00pm-08.00pm



Cost : **Up £3-4** / **ONE**
 Time : 06.00am-20.00pm

1. The **daily life** of patients and their families is **monotonous**.
2. **Daily expenses control** is lower than medical expenses, resulting in generally **lower quality of life**.

3 Interviews on the lives of medical seekers trans-regional

ACCOMMODATION



PATIENT Zuo Cheng Wan

“ I **live in the hospital all day**. There are doctors, nurses and family members taking care of me, so I **don't need to worry** too much about accommodation. ”



PATIENT Guixiang Qin

“ Painful treatment every day. **Can't leave the hospital.** ”



PATIENT'S FAMILY Huihui Zhao

“ In order to take care of my family, I **rented a small room** near the hospital at a low price, so I could rest. ”



PATIENT'S FAMILY Fangfang Li

“ My child is still young, and I **live with him in the hospital** to take care of him. ”

Summary

Compared with accommodation, patients and their families have **higher expectations for meals**. The cost of hospital canteens and restaurants outside are relatively high, and the variety of dishes is relatively single. Medical seekers who tier cities **hope to eat familiar meals** during their hospitalization, which will **comfort their hearts**.

DIET

“ Some diseases cannot be cured, but let the patient **eat well**, the family members will have **less regret**. ”

“ Hometown food gives me an **appetite**. I can feel the taste of my hometown more than 1,700 kilometers away from Beijing. The moment my husband feeds the porridge with a spoon, this love makes me **feel like a healthy person**. ”

“ There is a **canteen** in the hospital, but it's more **expensive** than cooking by yourself. My father **doesn't like to eat**, and we're **tired of eating every day**. ”

“ The **hospital** is too **unfamiliar and deserted**. The food in the hospital is not up to the child's taste. He wants to eat what I **cook at home**. ”

4 Insight



A catering service that provides exclusive taste can bring familiar encouragement to patients and their families.

5 Design goals and challenges

Familiar tastes and dishes can bring spiritual comfort to medical seekers in an unfamiliar environment, negative emotions and monotonous life.

GOALS:

- Familiar taste
- Monotonous life has good changes
- Appropriate price
- Convenient way

CHALLENGES:

There are many kinds of food, The restaurant can't satisfy them.

- China has 56 ethnic groups.
- Vast territory.
- The food materials and preparation methods are different.

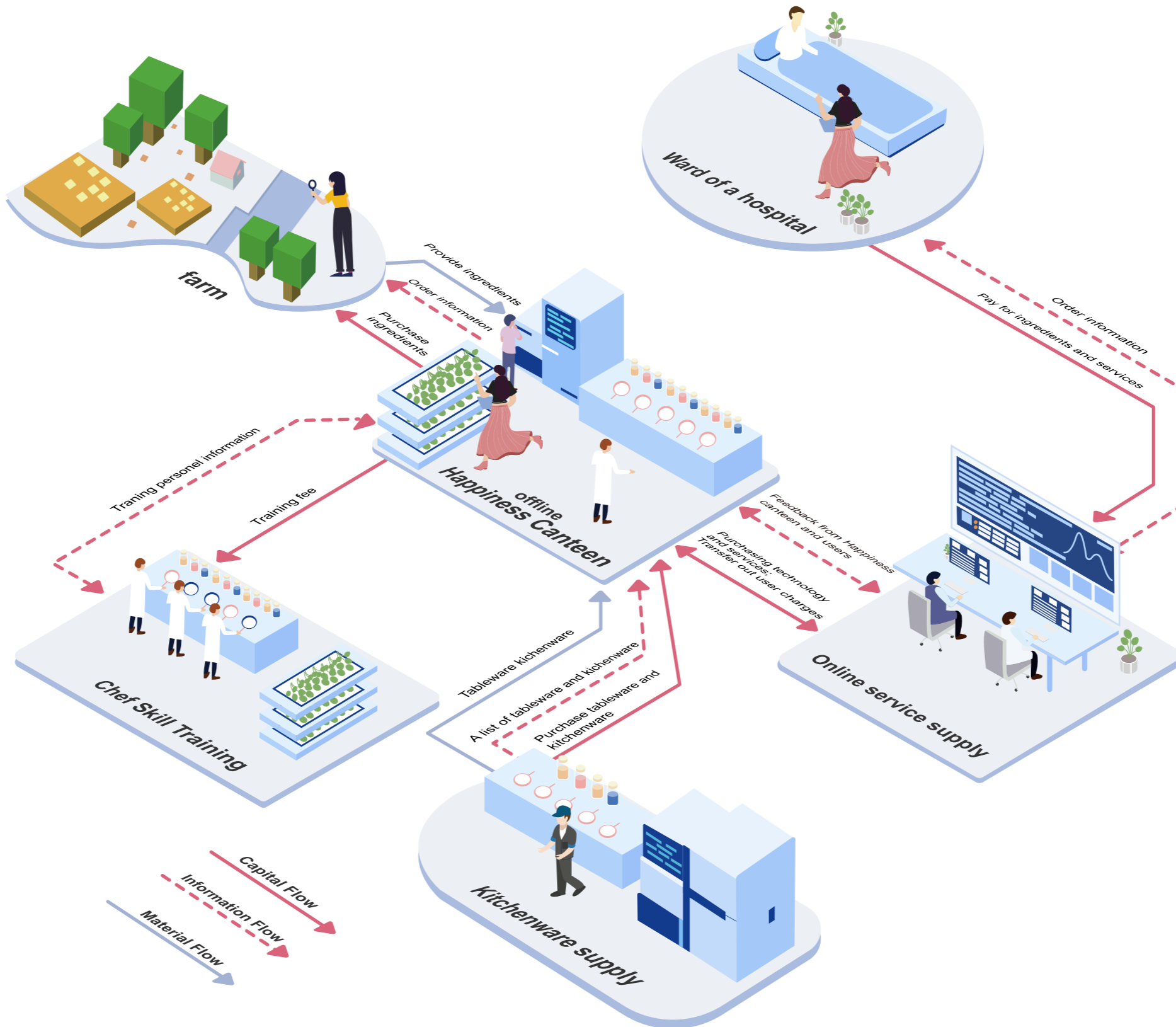
Limited free time

- Patient treated in hospital.
- Family members take care of patients in the hospital for a long time.

The treatment is expensive and economic pressure

- Limited food consumption budget.

6 Service system



7 Core stakeholders

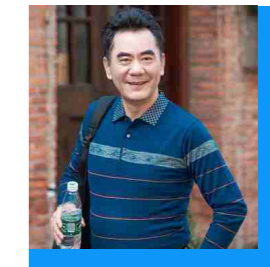


FAMILY MEMBER

Tingting Wang

Features: trans-regional; homesick; long-term care; cooking experience.

Goal: Cooking hometown food for sick relatives.



PATIENT

Qiang Liu

Features: Long-term hospitalization for cancer; homesick.

Wish: I want to eat my hometown food in the hospital (Guangdong chicken soup).



KITCHEN STAFF

Qingying zuo

Features: Kitchen working experience; support logistics.

Responsibility: cleaning the hospital restaurant, placing ingredients, washing tableware.



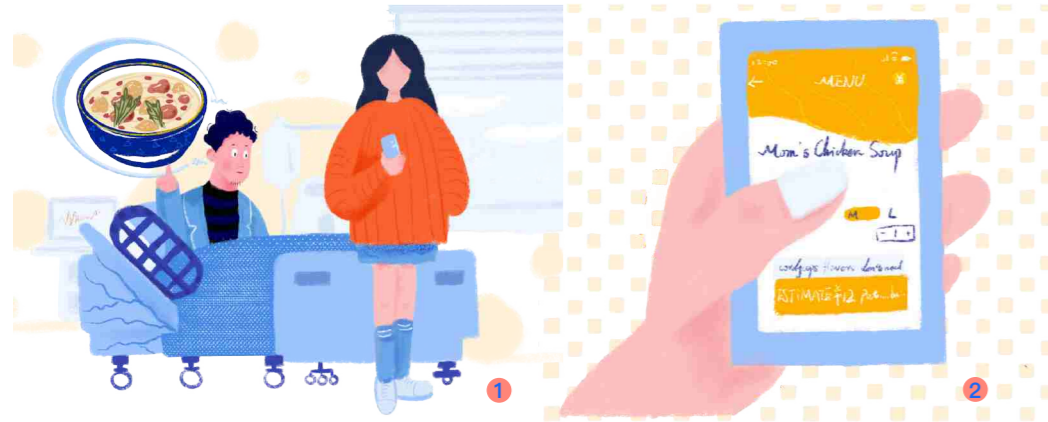
CHEF

Junkai He

Features: kitchen work experience; can assist cooking.

Responsibility: Assist the patient's family in the restaurant to cook in the happiness canteen.

8 User story



1. Tingting's father was sick and hospitalized. He wanted to drink the chicken soup from his hometown, but the chicken soup in this city has not the hometown-flavor.

2. Tingting's wanted to satisfy her father, so she made an appointment for the hospital's happiness canteen by APP.

3. Tingting went to the happiness canteen at the appointed time. She found her basket number, and took the food ingredients to her table.

4. Chef taught Tingting how to safely use kitchen utensils and facilities.



5. Tingting cooked chicken soup and packed it.

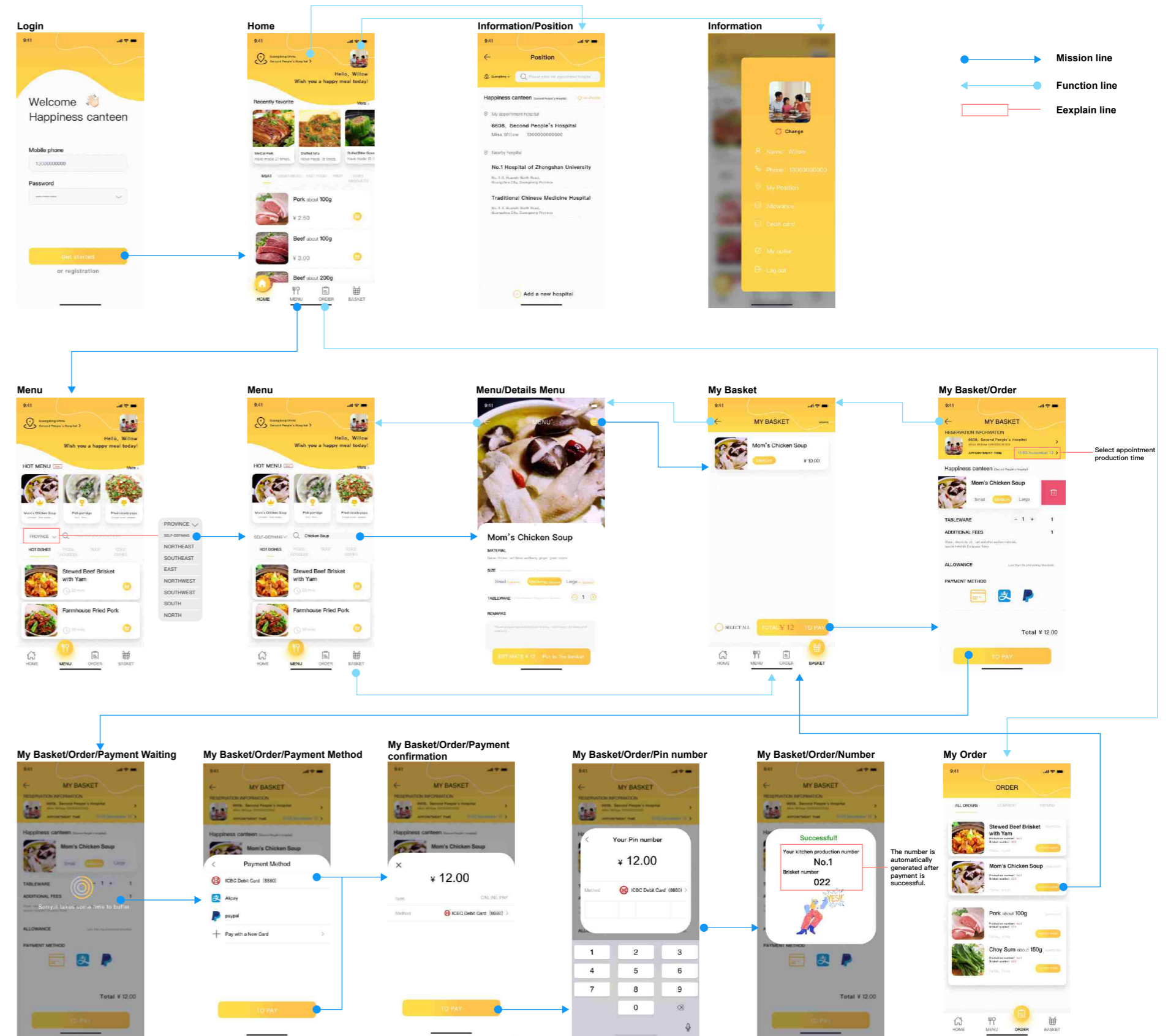
6. The kitchen staff cleaned the kitchen table after Tingting left.

7. Tingting's father was very happy to eat the hometown-flavor chicken soup.

8. The kitchen staff went to the ward to recycle the tableware.

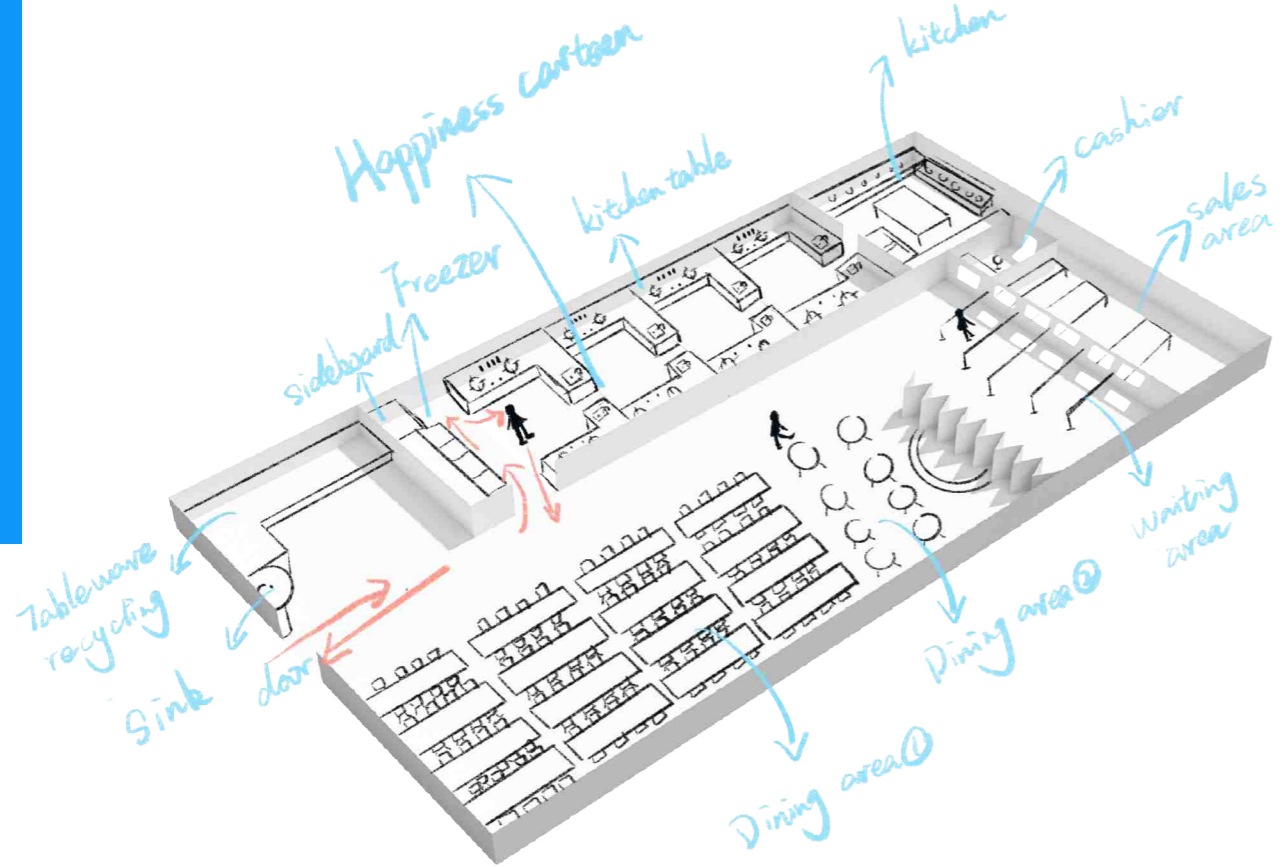


9 Happiness canteen's APP

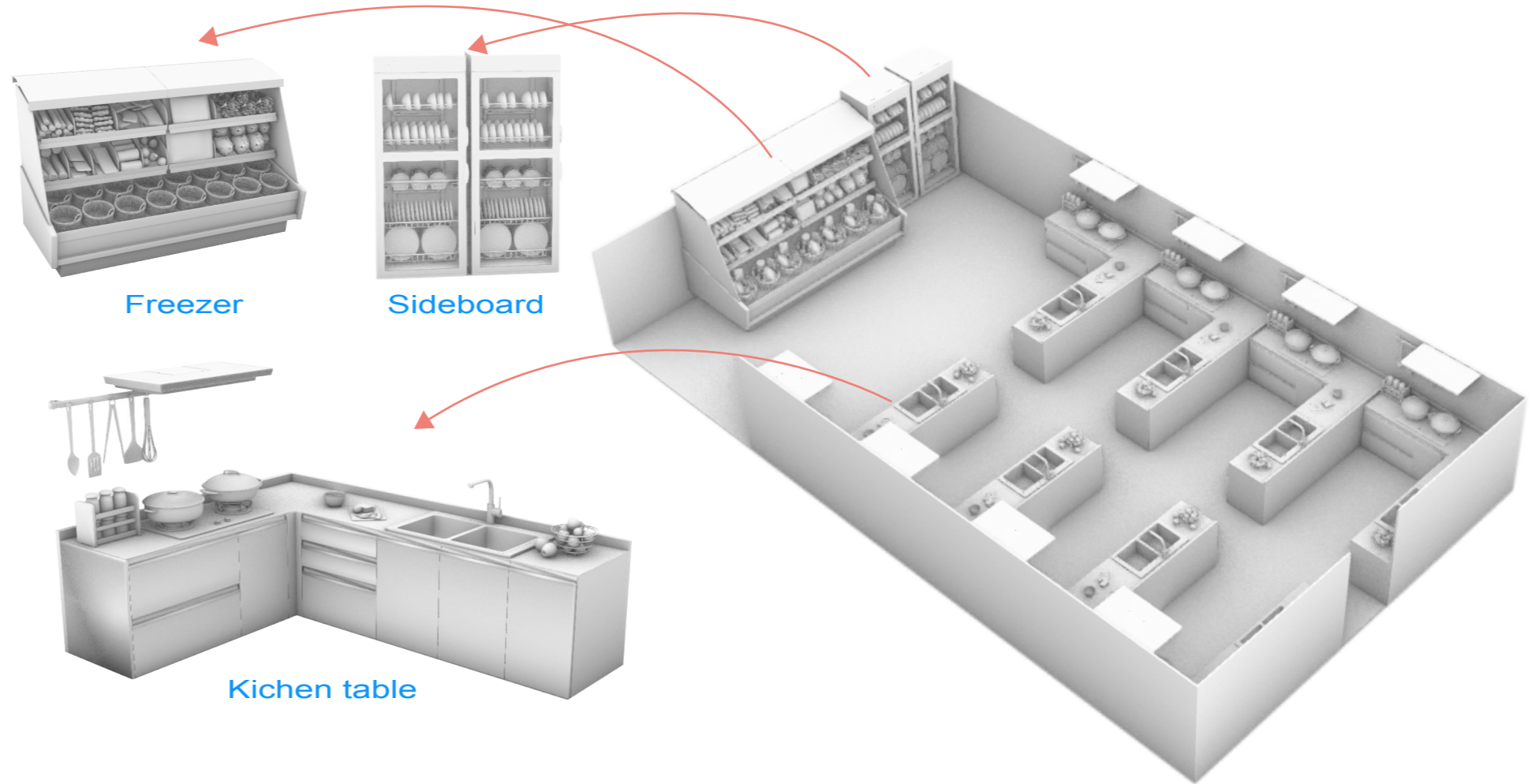
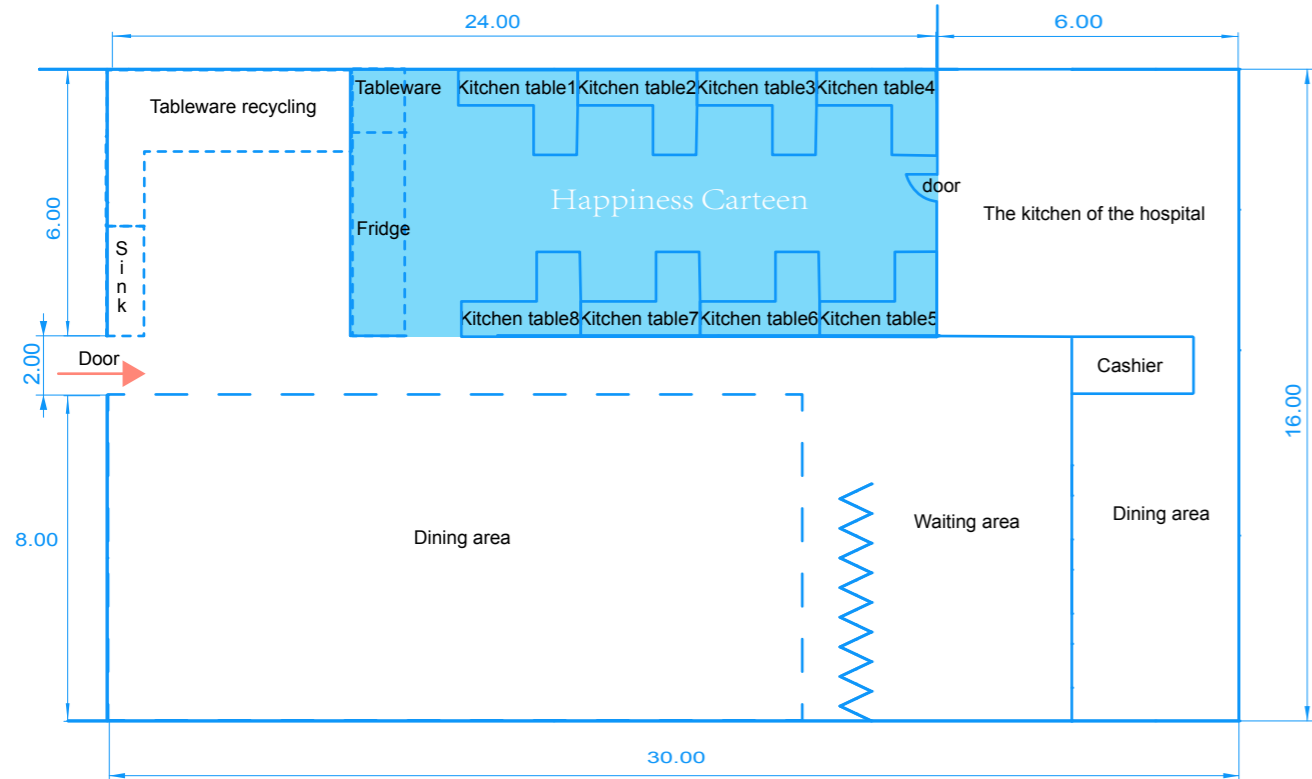
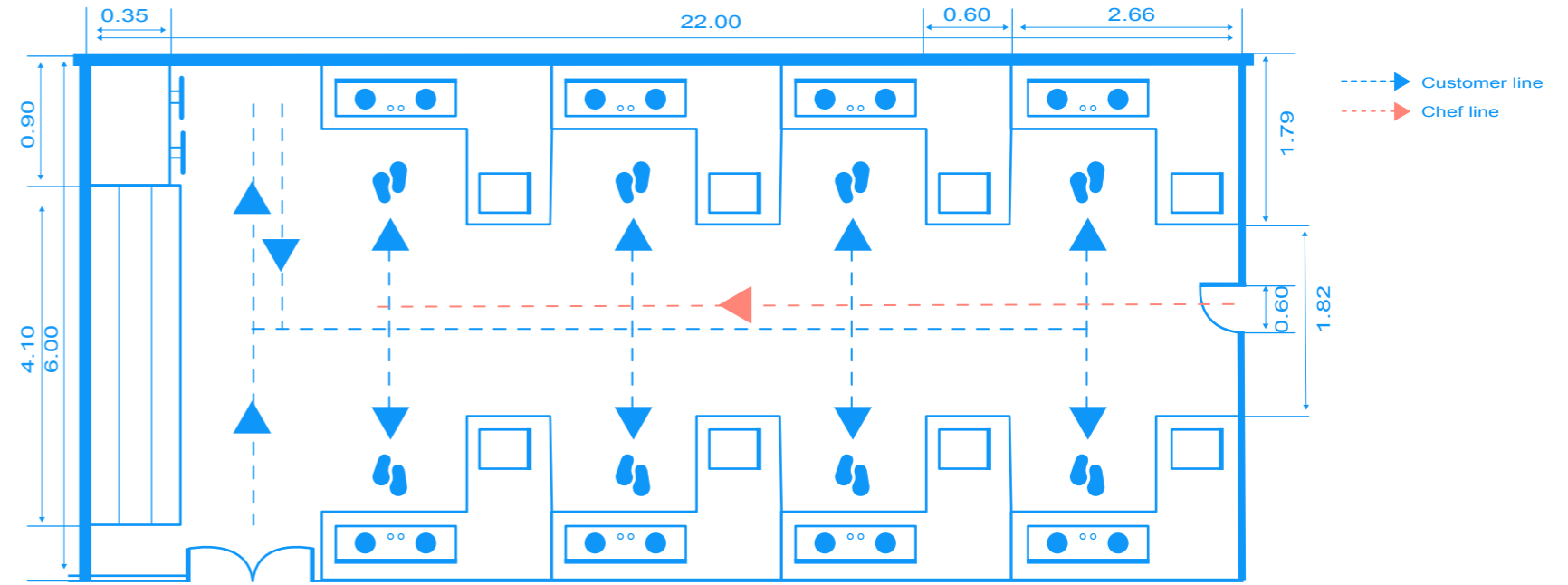


10 Happiness canteen's interior design

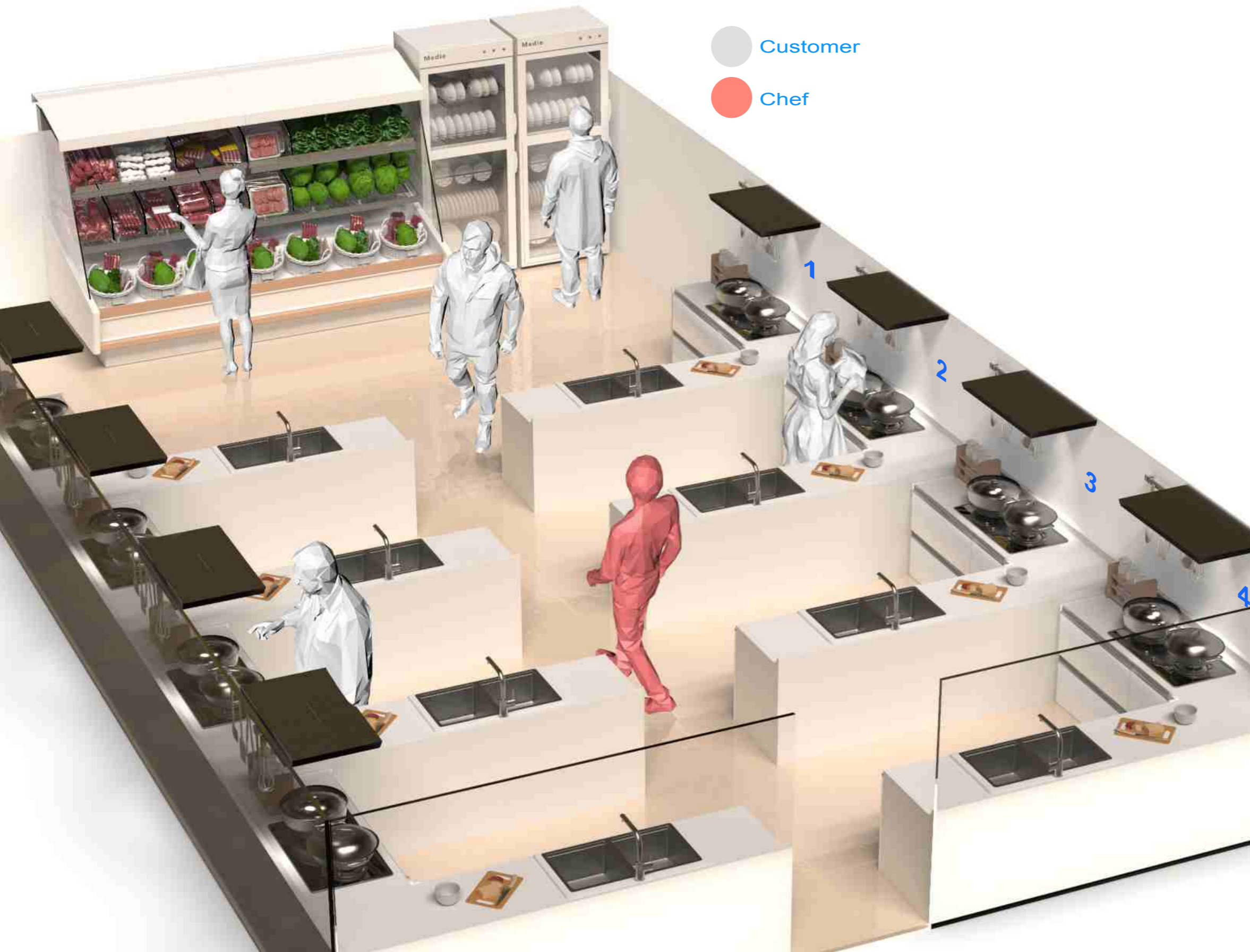
Hospital Canteen



Happiness Canteen



11 Hapiness canteen



Patient's family member look for the basket that she have reserved.



Patient's family member makes it at the second kitchen table.



Kite Warning

This is a kite device for people who fly a kite in public open space. It can provide them with warning signals.

Functions:

- Orange reflective decoration
- Infrared human body sensor with the kite reel

Value:

Protect pedestrians and improve the experience of kite flying.

Most people fly kites in public



Beside the river



In the park



On the beach



In the square

According to the survey, as kite flying requires more spacious ground and stable wind speed and direction, more citizens fly kites in four places: riverside, park, beach and square.

Accidents due to kite flying often happen



Event Ms. Zhang was cut by kite string while riding her bike.
Time November 14, 2019
Source There were tourists flying kites in Nanhu Park.
Result The kite string cut Ms. Zhang's neck.

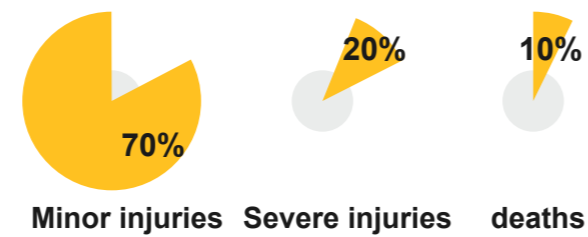


Event Mr. Liang was cut by kite string while riding a motorcycle across a bridge.
Time November 21, 2019
Source A group of children are flying kites on the bridge.
Result The kite string cut Mr. Liang's neck.



Event Two Indian children were killed by a kite string while watching a kite fight.
Time August 15, 2016
Source Every year on India's National Day, people fly kites by the roadside.
Result Two children died instantly.

The percentage of people hurt by kite string



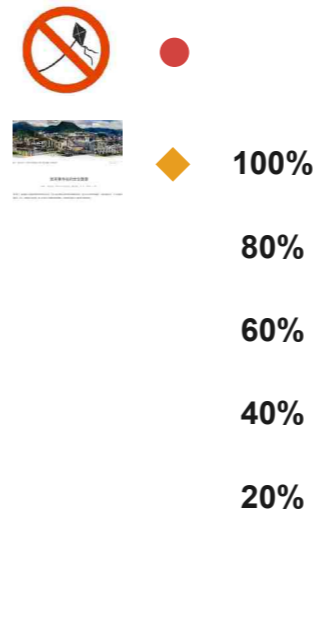
The number of people who were injured by kite string was relatively high, with **minor injuries** and even **deaths**.

Research on the Ways of Kite Strings harming people

According to the survey, there are four factors that the kite string to hurt people: the location, the height, the relative speed, and the pedestrian's failure to see the kite rope. The analysis is made based on the degree of injury.



Solutions to prevent kite-flying accidents today



Nowadays there are ways to prevent kite accidents: signs and government announcements. Signs are usually placed in parks, near high-speed rail stations, near beaches and so on. Although signs and government announcements are easy to make, they receive little attention and have little preventive effect.

Persona&Emotional Journey



Dong Chen



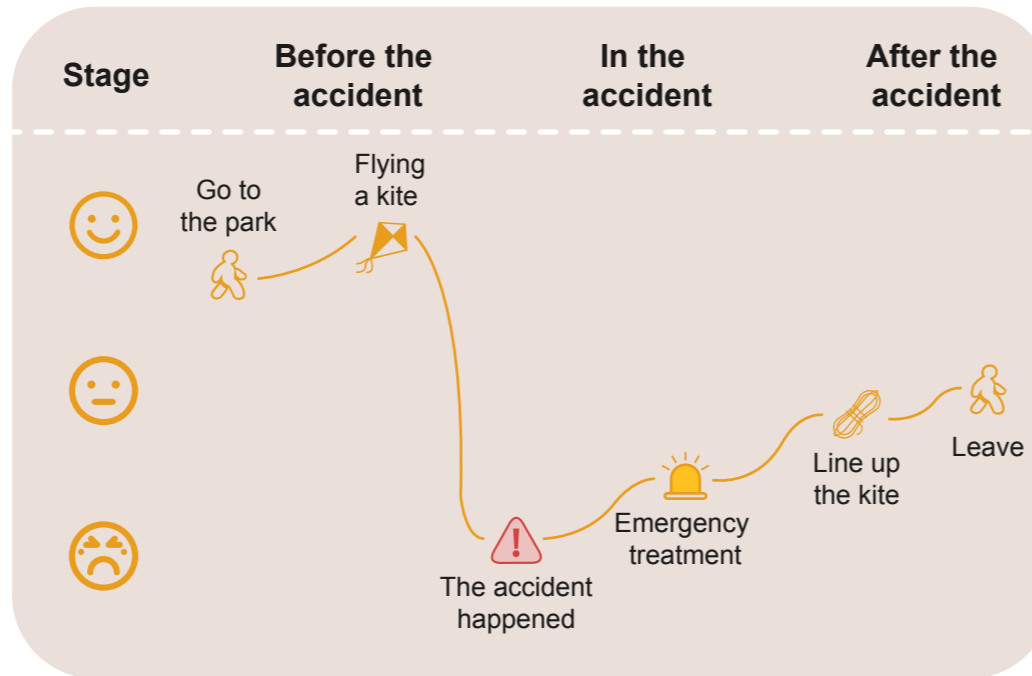
"I like flying kites very much, but there are few empty places in my city. We can only fly kites in the park, but there are a lot of people in the park. I worry about hurting others when I play."

Demand:

- ① Pedestrians aware that someone is flying a kite.
- ② When I fly a kite, I can know if there are pedestrians nearby.

Challenge:

- ① Space for flying a kite is limited.
- ② It is difficult to balance kite position and pedestrian while flying a kite.



Jingwen Li



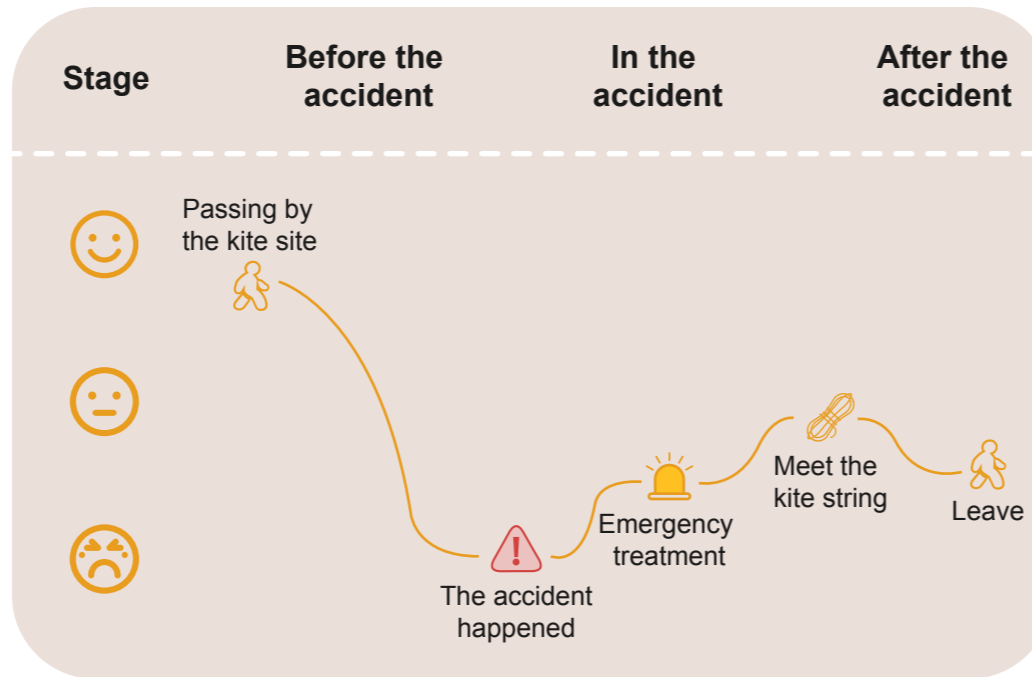
"Once My neck was cut with a kite string while walking my dog in the park, but I didn't ride my bike at the time, and now I'm afraid. The kite string is really dangerous"

Demand:

- ① I want to know if someone is flying a kite near me.
- ② I hope my position is safe.
- ③ I hope i can see the kite string better.

Challenge:

- ① There are many people flying kites in public places.
- ② Most people are unaware of the dangers of kite string.
- ③ There are a lot of people who move in public places, and they move relatively fast.



Problems and insights of kite flying in public

Problem

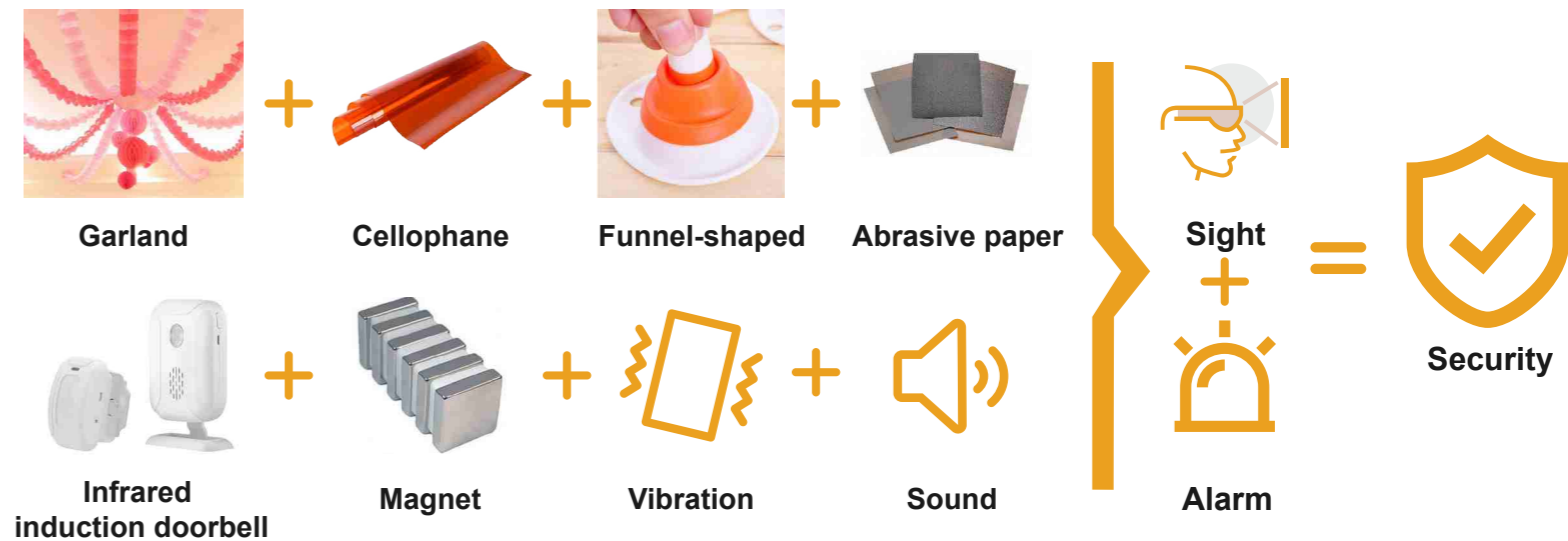
- Can't see the kite string.
- The kite flier had no idea what was happening to the pedestrians.
- Existing methods of prevention do not work well.

Insights

- The string is thicker.
- Fluorescent orange.
- Alarm sound.
- vibration.
- A variety of tips combined, comprehensive prevention of tragedy.

Design method and concept

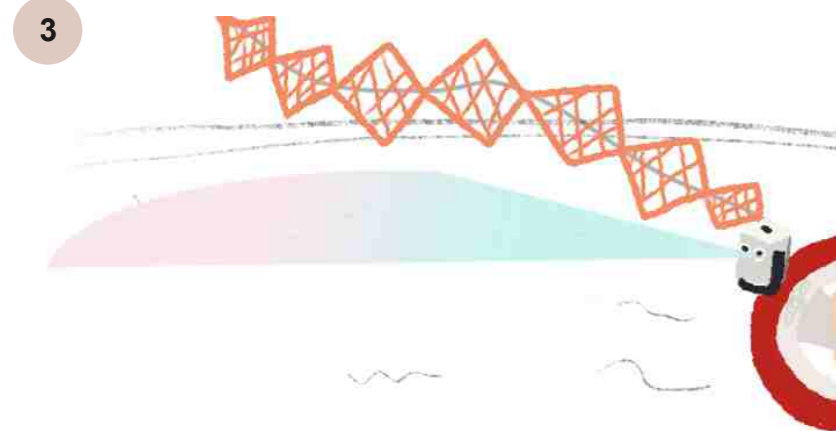
Because the kite string material is thin, it is difficult for pedestrians to see in life. The idea was to add 3M orange cellophane garland over the string, a bright color that could be easily seen in the glare of the headlights at night. The kite head is made of a funnel-shaped abrasive paper, and when the air encounters resistance from the abrasive, the pull will be pulled up. Get inspiration from the infrared induction doorbell, infrared range induction, let the kite flying people know whether there is a person around the kite, and through the encounter of vibration, sound, the first time to prevent accidents. To make it easy to mount the kite shaft, magnets were used.



Storyboard



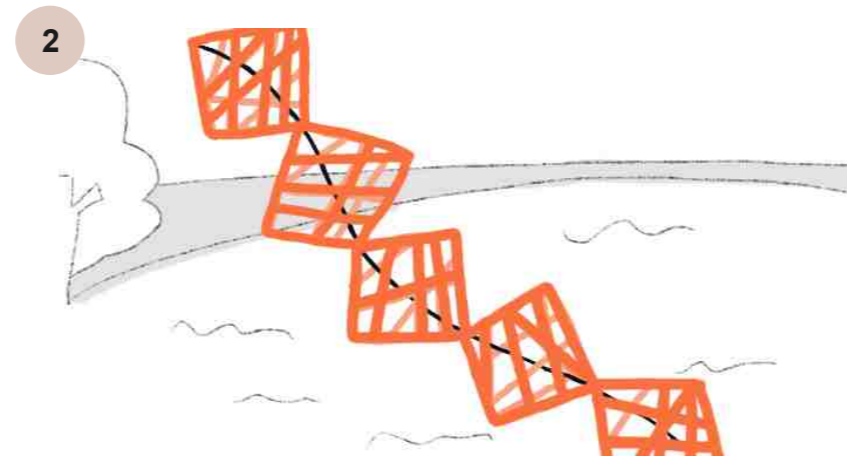
1 It was a sunny day. Kincen was flying a kite in the park.



3 A device on the handle of the kite is scanning.



5 The device detects an obstacle entering the scanning range, activates the vibration and emits warning music.



2 The kite string has a distinctive orange trim.

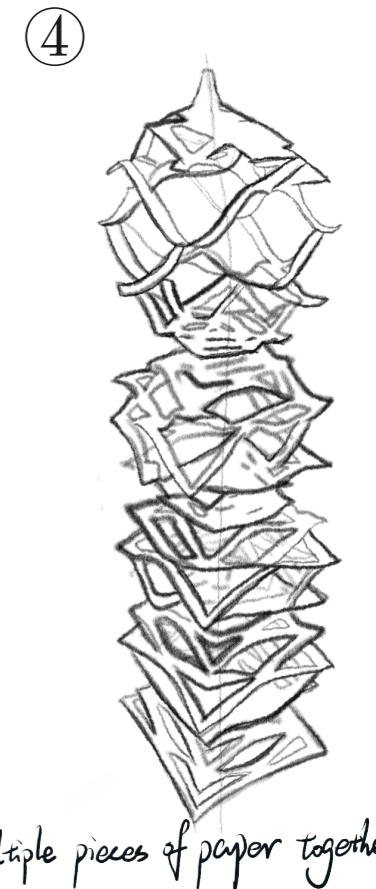
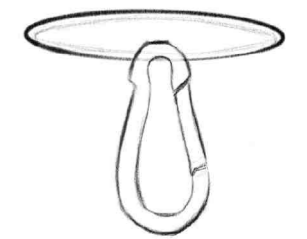
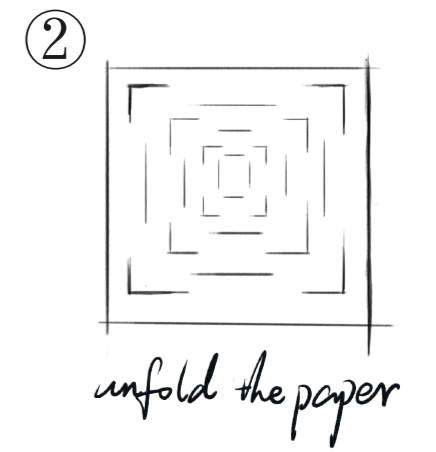
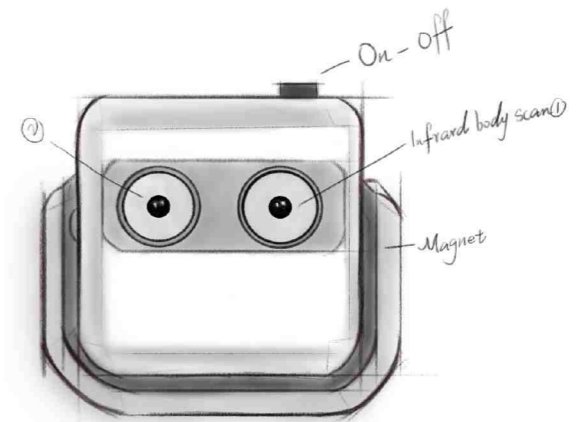
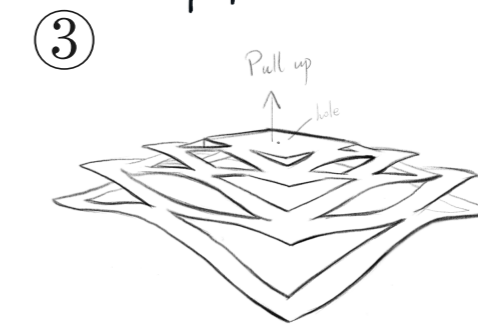
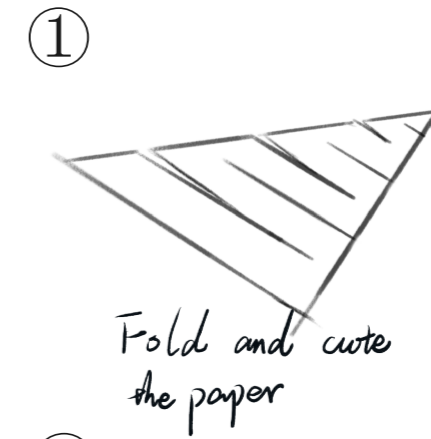
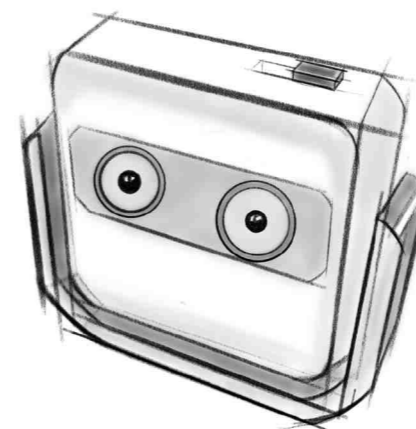
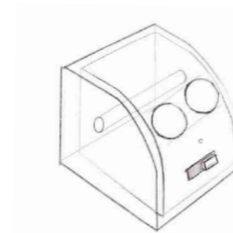
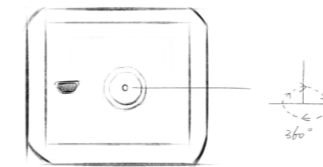
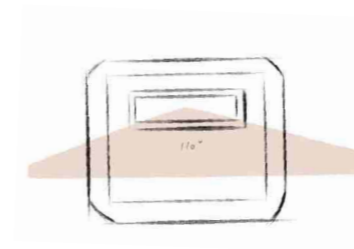


4 Suddenly a pedestrian stepped into the device's scanning range.

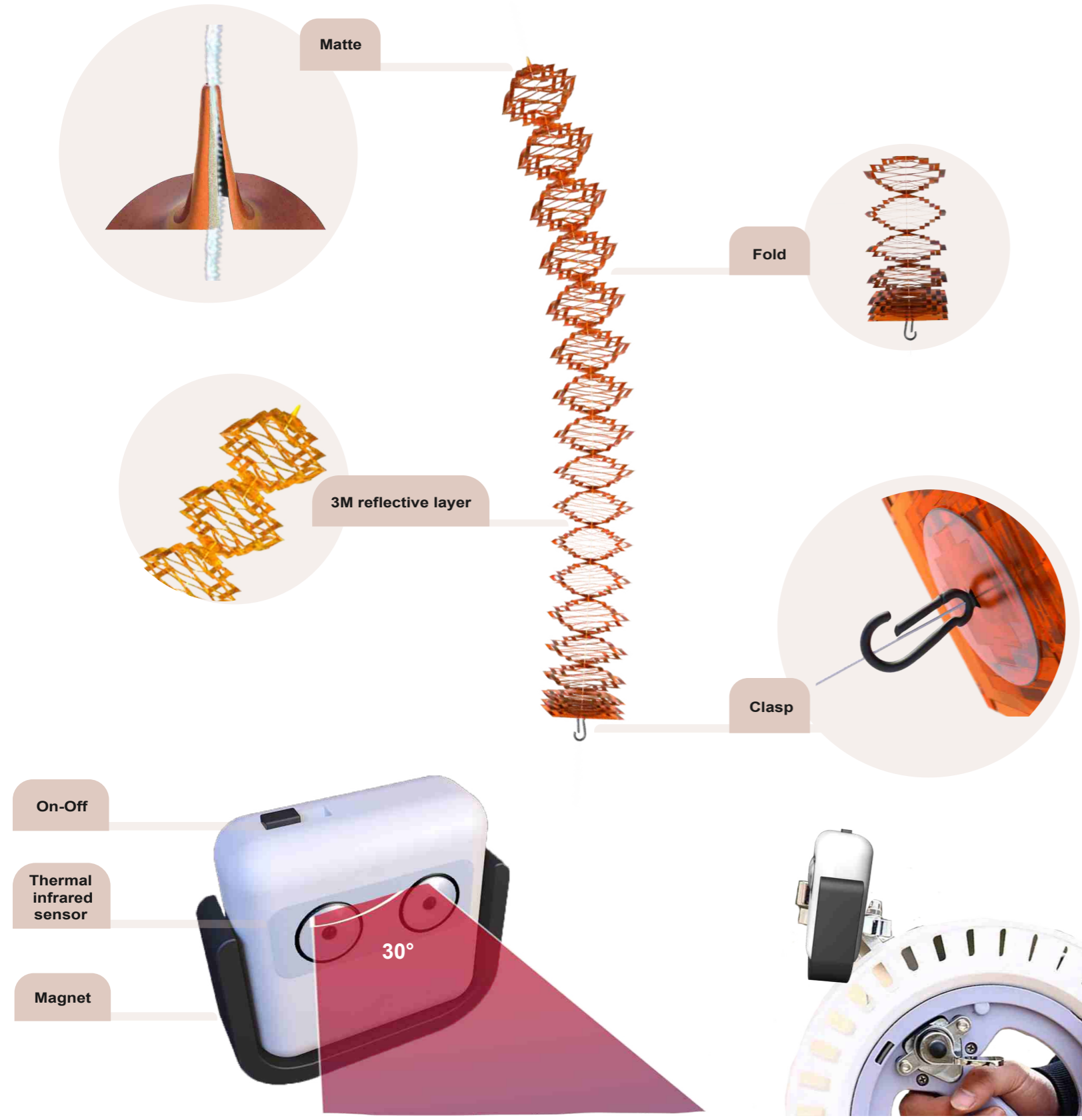


6 When Kincen heard the music, he told the pedestrian to "Watch out for the string, I'm flying my kite." Next, the pedestrian surroundings and pass safely.

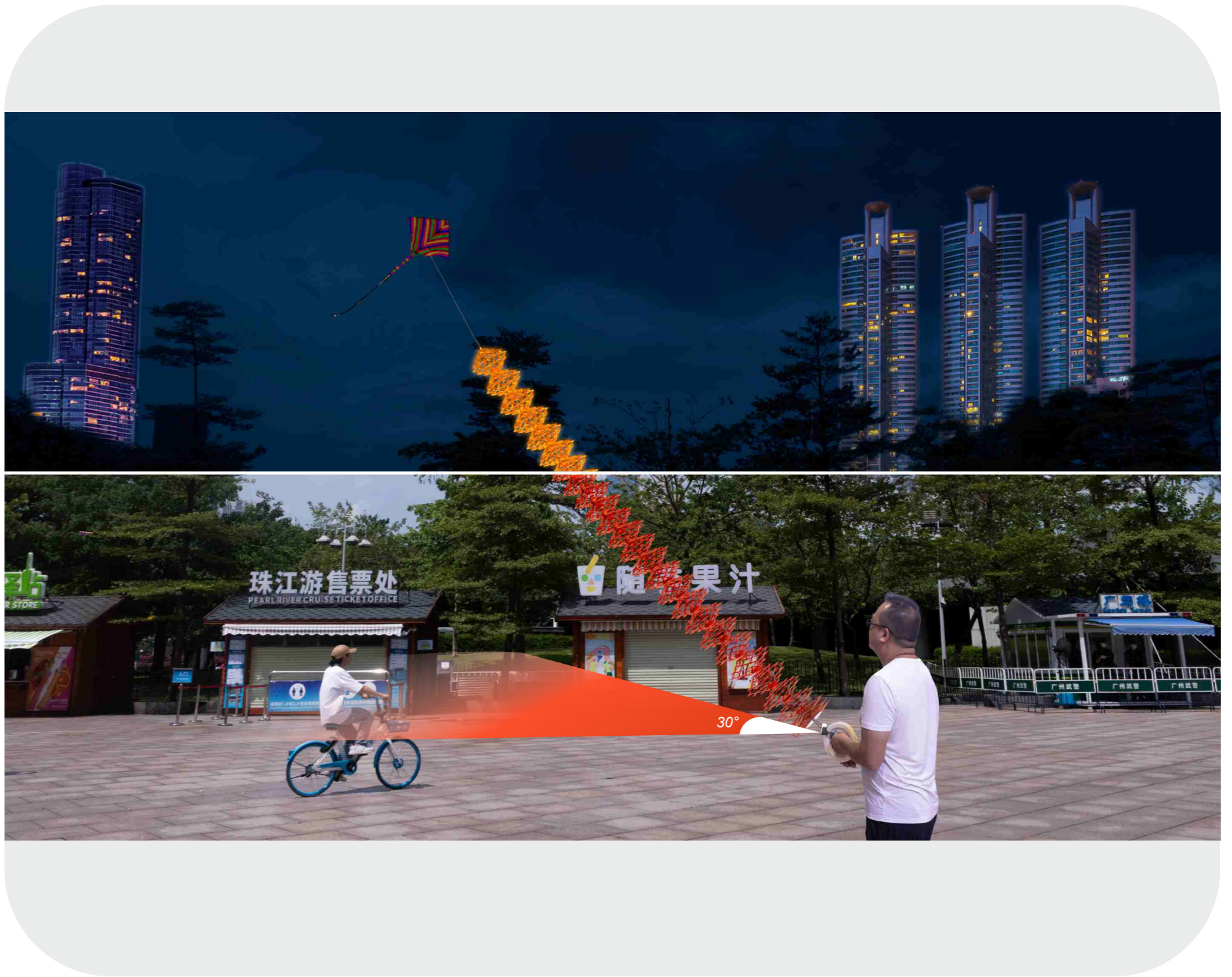
Sketch&Model



Design of kite decoration and buzzer



Day and night usage scenarios



Eat

A set of tableware that feels spicy's exciting.

spicy

Functions:

- ① Each end of tableware with a **microcurrent** stimulator.
- ② The tableware can show the **spicy level**.
- ③ The app can help to **adjust the flow of current** on the tableware.

Value:

Ease the people's annoyance that spicy food would make them feel uncomfortable.



1

How spicy food became popular in China



In China, **spicy food** has become a **popular phenomenon**. More and more people like to eat spicy food, especially those who do not eat spicy food. Eating spicy food can make people **addicted**.

More than half of the social business and friend gatherings are eating hot pot, sichuan and Hunan cuisine, spicy food and so on.

Spicy food has become a popular social way in China.




- 
Pickled fish
- 
Spicy hotpot
- 
Spicy Beef
- 
Spicy lamb
- 
spicy chicken

Chili peppers 

Placenta 

Endocarp 

Chilli seed 





Capsaicin stimulates capsaicin receptors in the mouth and travels through the brain in ways similar to **burning and needling**, which is called spiciness.

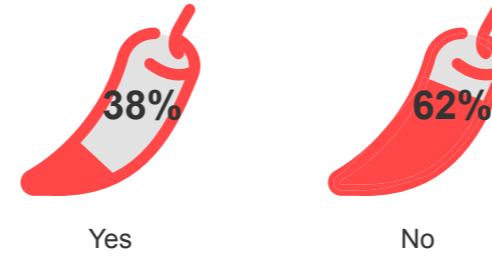
Like to eat spicy is actually a kind of benign self - abuse, if you do not add moderation will become vicious self - abuse.

2

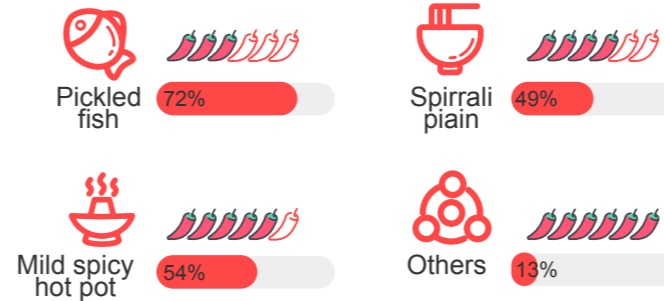
Questionnaire on the habit and acceptance of spicy food

 **223** samples in China.

 Do you have the habit of eating spicy food in your hometown?




 What kind of spicy food do you like to eat?




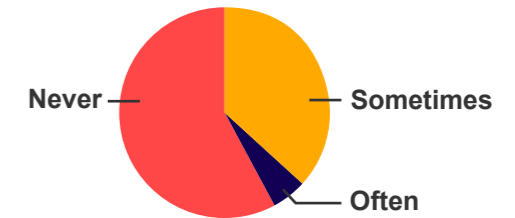
 Do you eat spicy food?



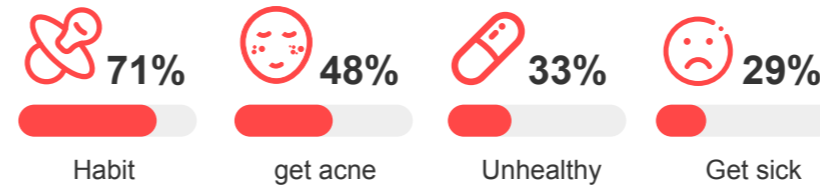
 Why do you like spicy food?



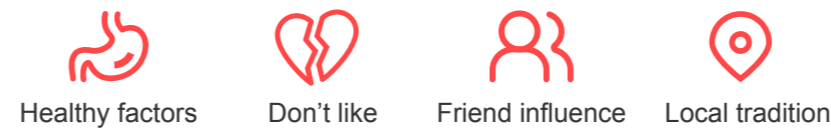
 Have you ever missed a social event because you can't eat spicy food or don't like spicy food?



 Why don't you like spicy food?



 Why did you miss the social event?



★ Summary

According to the questionnaire, **most people** are eating **spicy food**. However, due to their different eating habits and different acceptance of spicy food, their **health** and **physiological problems** are the biggest obstacle to their **social intercourse**.

3

Interview with spicy attitude



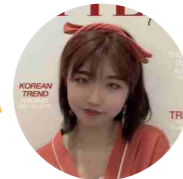
Kincen

My family does not eat spicy food, but I have the **habit** of eating spicy food.
When i am stressed, i eat more spicy food.
Afraid of **sore throat** and **loose bowels**, so do not eat supper spicy and will affect myself life.

Friends can eat spicy food when they get together. It's for **social** reasons. I'm **addicted to** the spicy food.

I **can't stop** eating it.

Afraid of **sore throat loose bowels**.



Ivy

I will not miss the **spicy activities**. I don't like eating spicy food very much, but I will go there because of my friends' organization. Eating spicy food makes you sweat and drink soda like mad.

Next day was painful.



Jacky

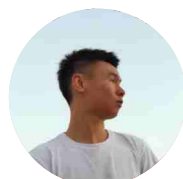
Eating spicy food make me very **appetizing**. Spicy food makes me **sweat**.



Kitty

I have a lot of friends who eat spicy food, and we like to go to **hot pot restaurants** to eat spicy food.

I like to eat spicy food, but I feel **sick** when I eat too spicy food.



Howard

Summary:

People who like spicy food but can't eat spicy food will have a lot of throat, stomach and body discomfort.



4

Observation of the spicy scene

--- Seeing --- Hearing
--- Touching --- Doing



Chopsticks Spoon Pick food



October 10th,2020 Guangdong Province, China

Summary:

People eat spicy food in many ways and spicy dishes, but these all require utensils, such as spoons, chopsticks and bowls.

5

Problem and insights on the body burden and effects of eating spicy food

Problem



Insights

- Decrease in chilli pepper eating.
- Experience the sensation of spicy food.
- Increase the social activity.

6

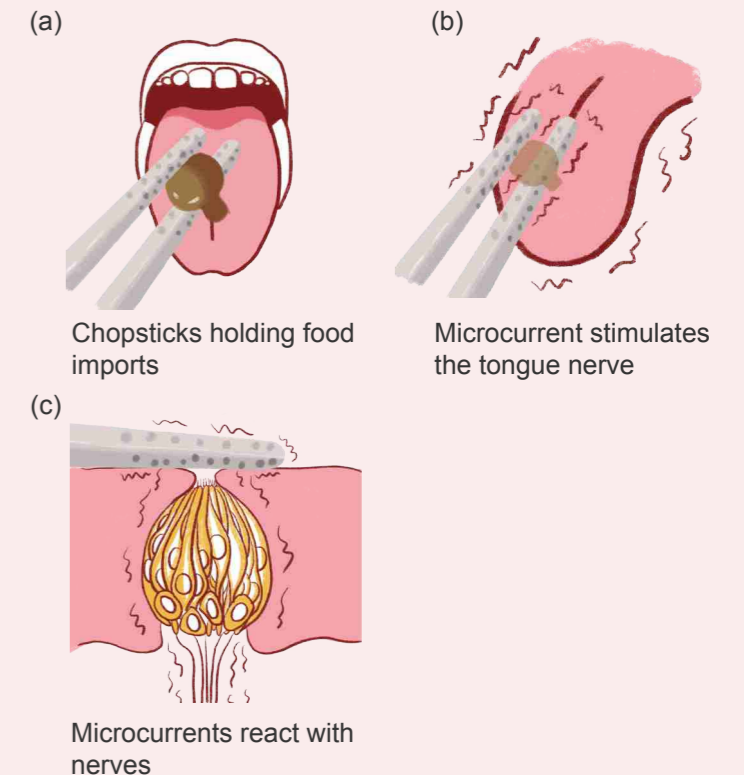
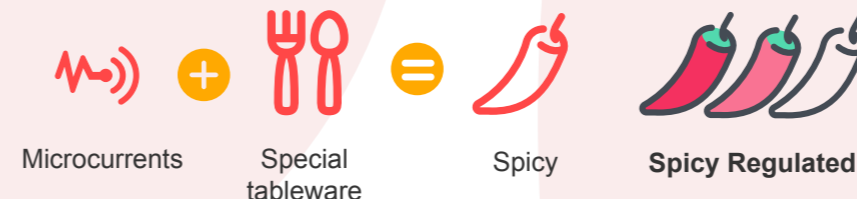
Design inspiration and principles

Spicy is **capsaicin** that stimulates the tongue, mouth, and nose. The body's sensation to this stimulation exists as a kind of **pain**. Excessive intake of capsaicin can cause loss of taste, stomach problems, and cancer.

If too much alkali is added to the food, it will directly cause the food to become astringent or even spicy, which will destroy the vitamins in the food, which is **not good for human health**.

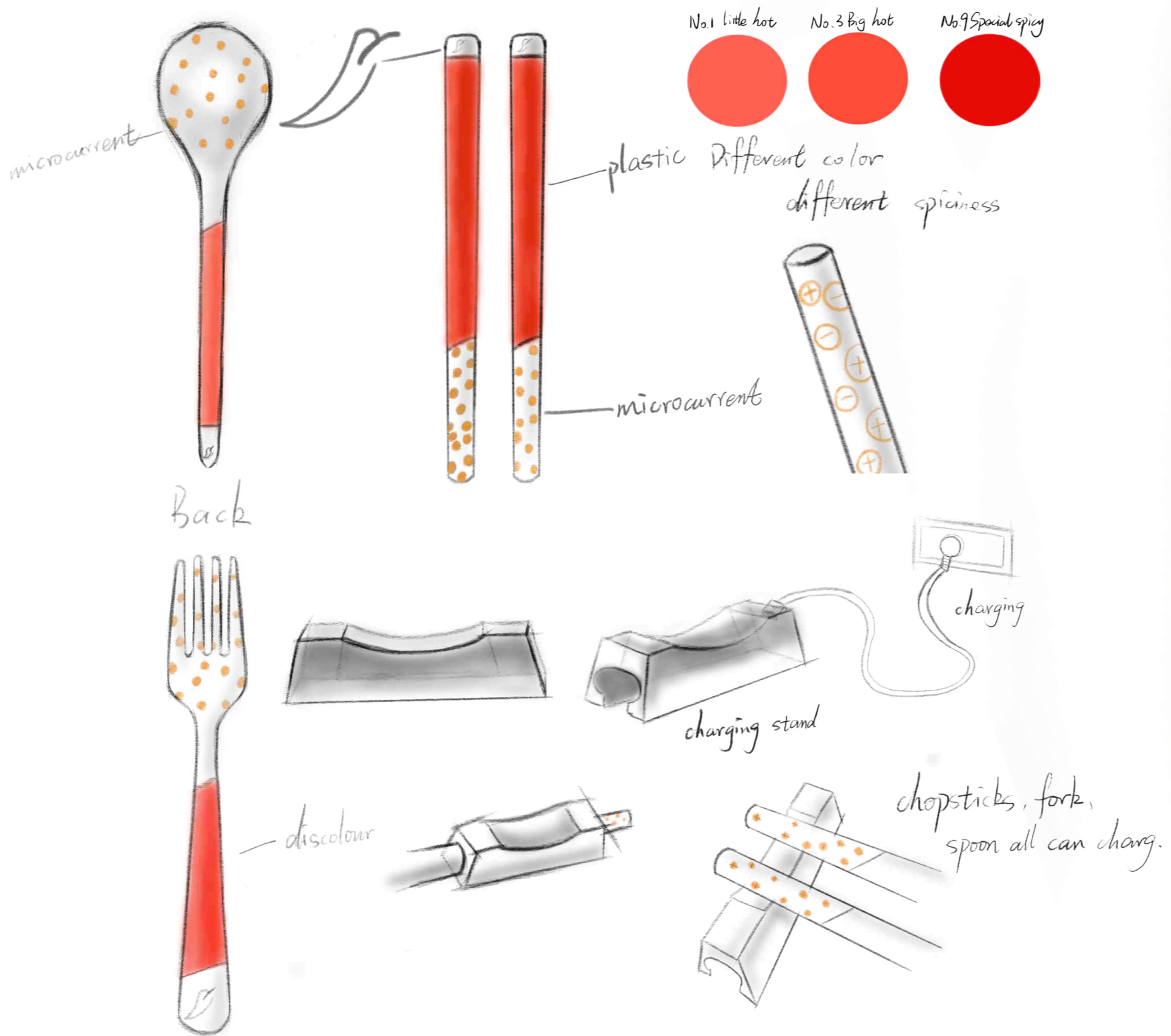
Excessive intake of sucrose can cause obesity, high blood pressure, diabetes and dental caries and other diseases. Eating a lot of sugar on an empty stomach **is not good for human health**.

Sugar substitutes are substances other than sucrose or syrup that can produce sweetness. Modern people try their best to **reduce sugar intake for health**. Only a small amount can provide the sweetness that people need.



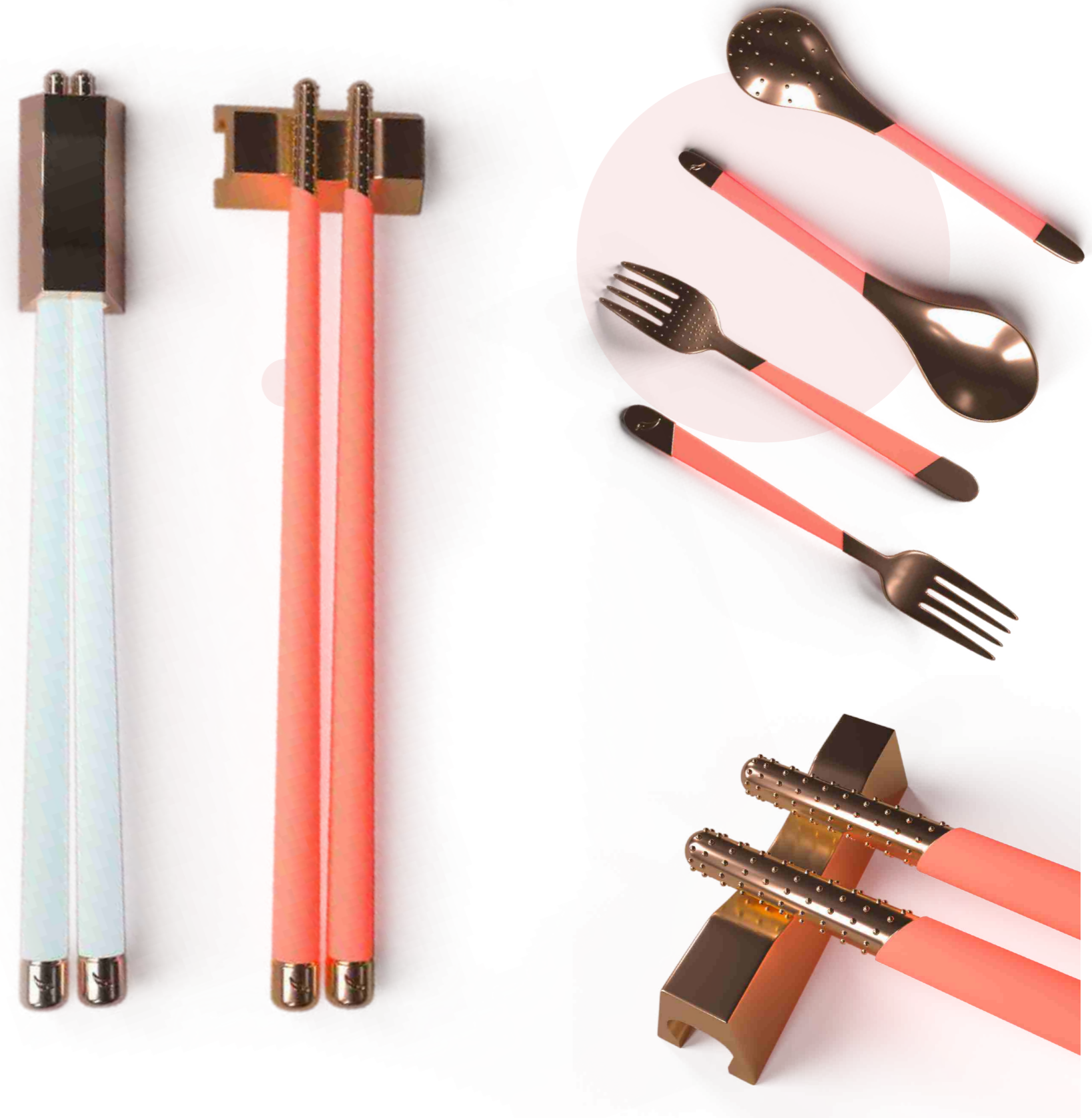
7

Sketch of tableware design with microcurrent



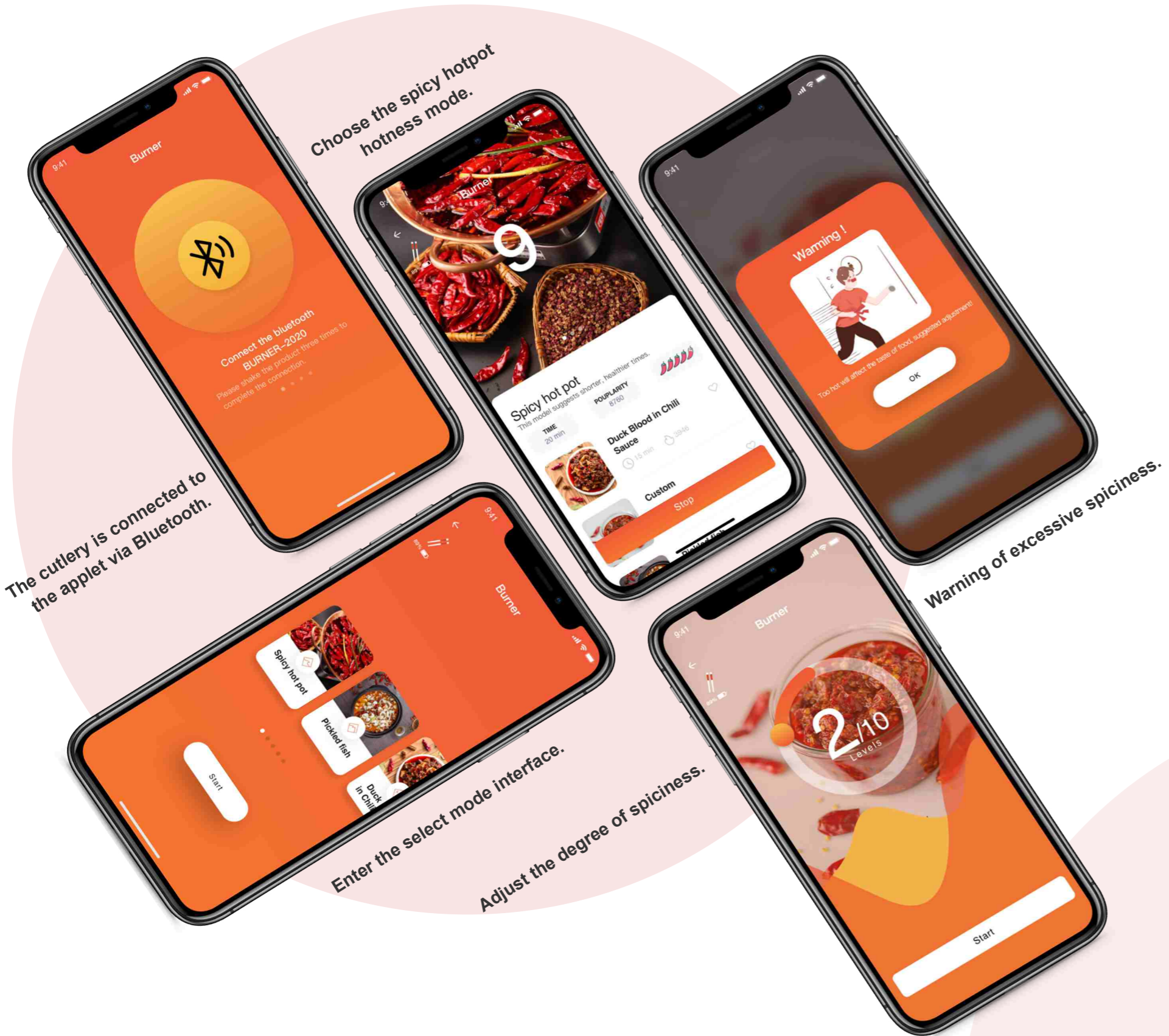
8

Microcurrent tableware design set





App to control the current of the spicy tableware



Scene renderings using tableware

