

Process Book Individual Project

Design for Hangzhou garbage classification

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Individual project

2021 Winter Quarter

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01 RESEARCH

Introduction

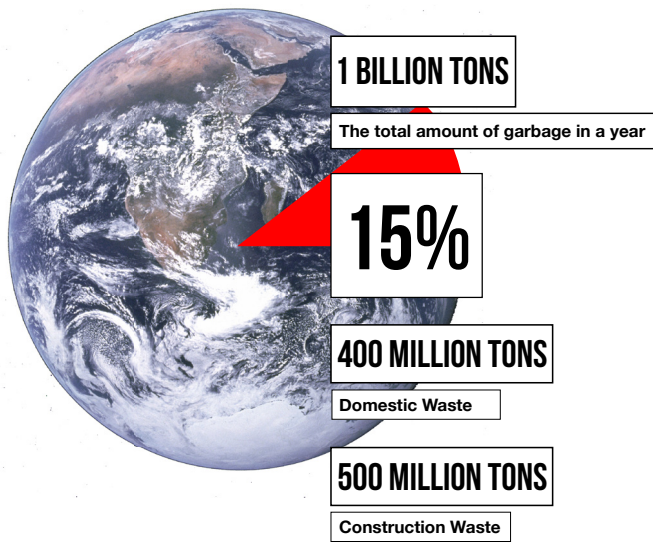
China officially began to implement waste classification in July 2019. Among them, Shanghai and Hangzhou, as the main cities, have implemented strict classification policies, classification facilities, and strict fines systems.

At the same time, in order to welcome the 2022 Asian Games, Hangzhou, my hometown, has made new changes to garbage classification. And garbage classification China is only a new concept, and people are still very unfamiliar with it.

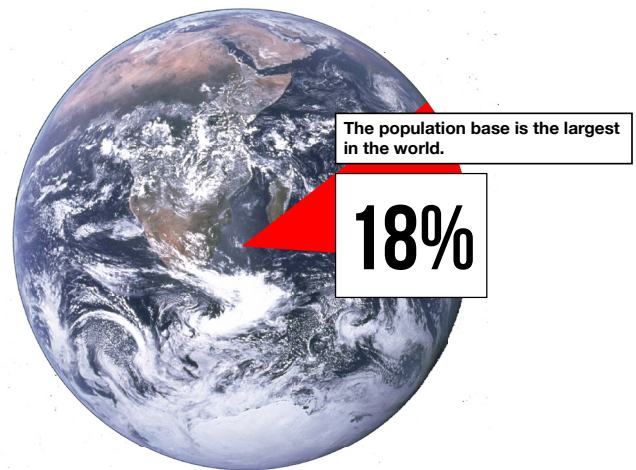
01 RESEARCH

Secondary research – *Situation in China*

Proportion of China's Waste in the World in 2019



Proportion of China's population



China became the world's largest waste producer in 2019.

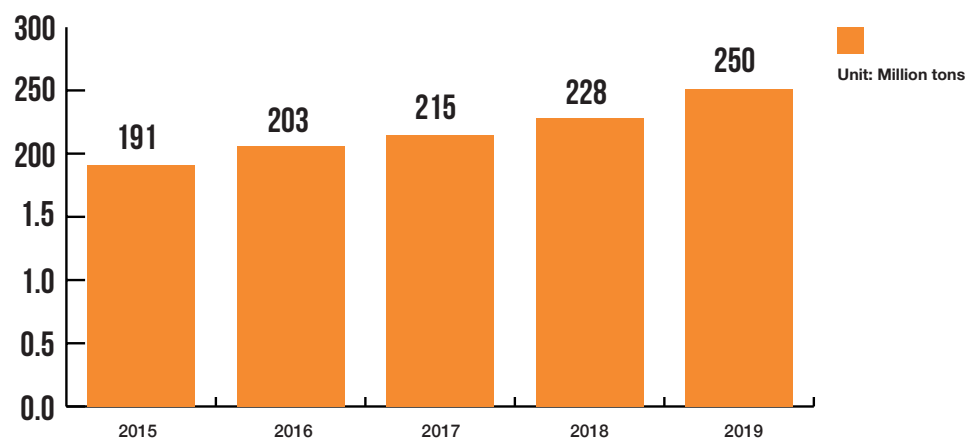


As the most populous country in the world, China accounted for over 15 percent of the global municipal solid waste volume with 18 percent of global population, which is the biggest share in the world.

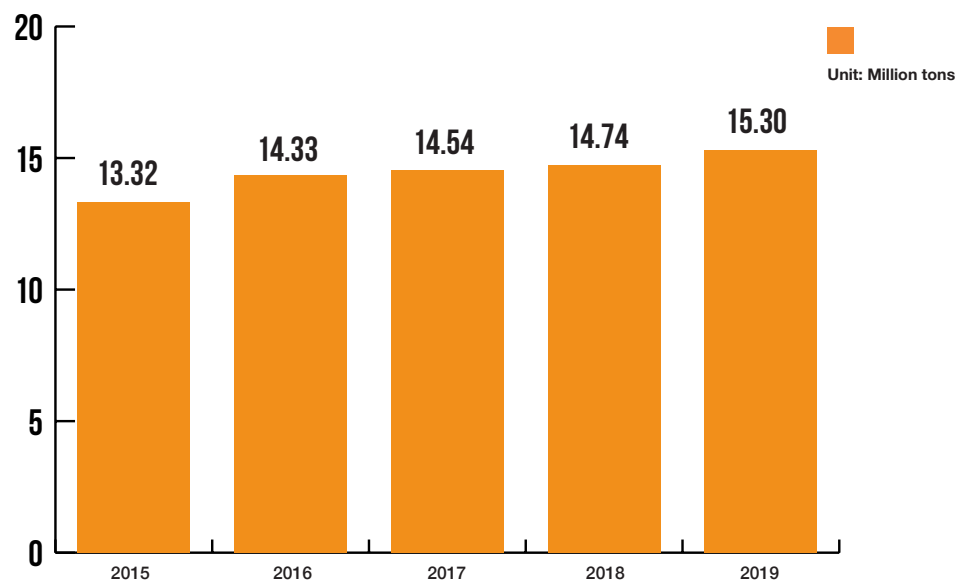
In 2019, China produced a total of about **1 billion tons** of garbage. Among them, **400 million tons** of domestic waste and **500 million tons** of construction waste.

01 RESEARCH

Secondary research – Situation in China



China 2015-2019 non-hazardous domestic waste removal volume



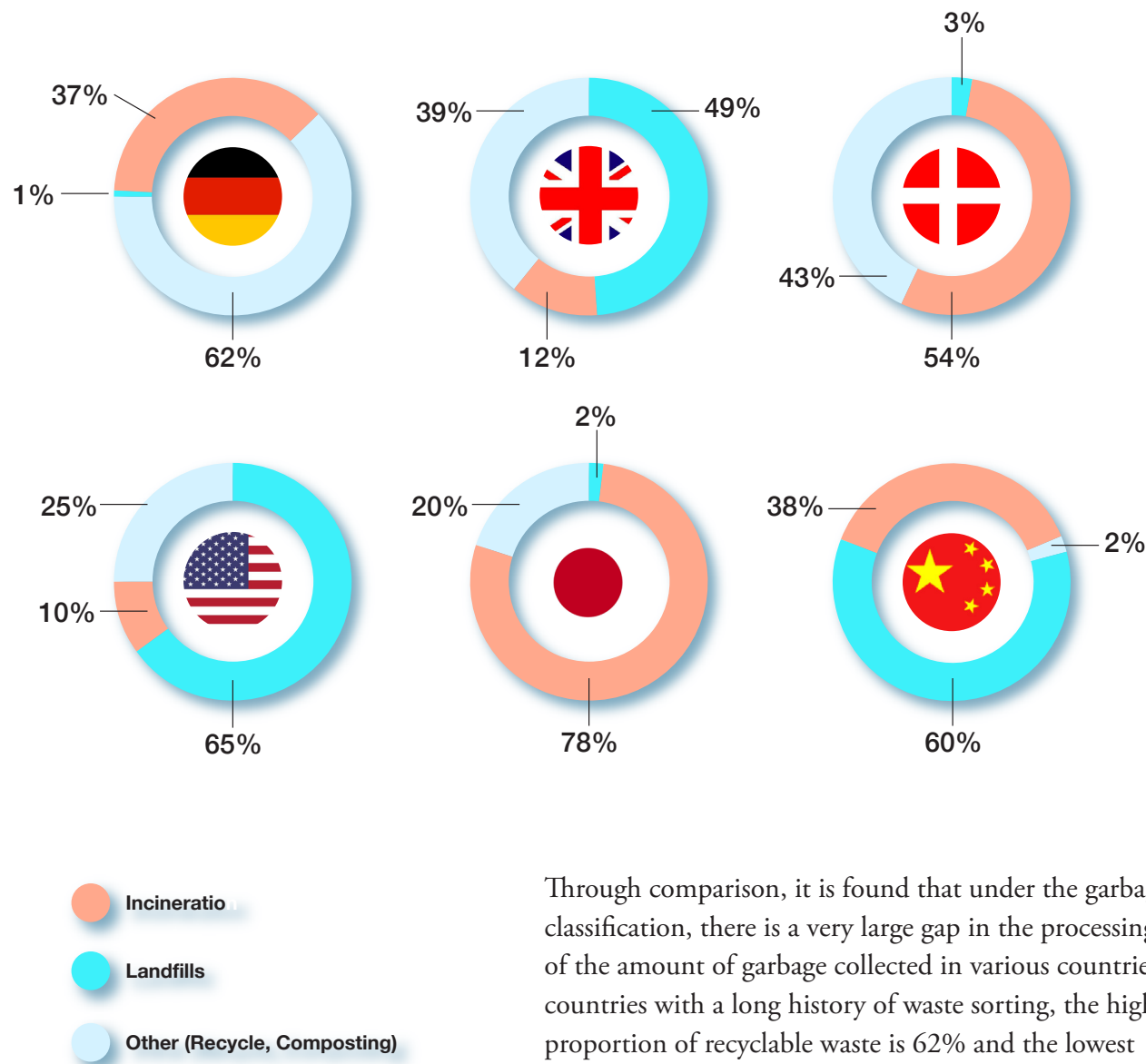
Hang Zhou 2015-2019 non-hazardous domestic waste removal volume

Data shows that the volume of non-hazardous domestic waste in China and Hangzhou has increased by a large percentage after the implementation of waste classification, which seems to have had a good effect.

01 RESEARCH

Secondary research – Situation in China

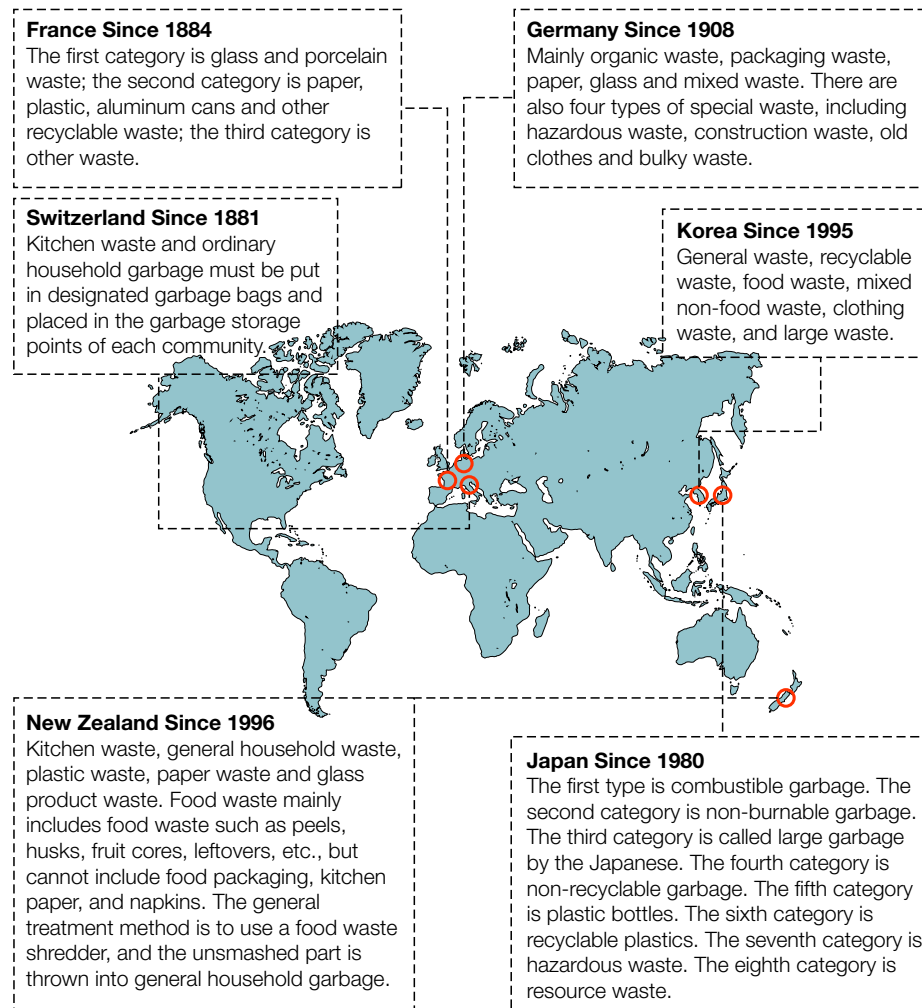
The status of garbage disposal in various countries after classification.



Through comparison, it is found that under the garbage classification, there is a very large gap in the processing data of the amount of garbage collected in various countries. In countries with a long history of waste sorting, the highest proportion of recyclable waste is 62% and the lowest proportion is 2%. This 2% belongs to China. After the implementation of the recyclable policy, China's garbage classification does not seem to be very effective. Even though the volume of non-hazardous domestic garbage has increased significantly, China's garbage classification is still in the same position. The difficult stage.

01 RESEARCH

Secondary research – *Situation in China*

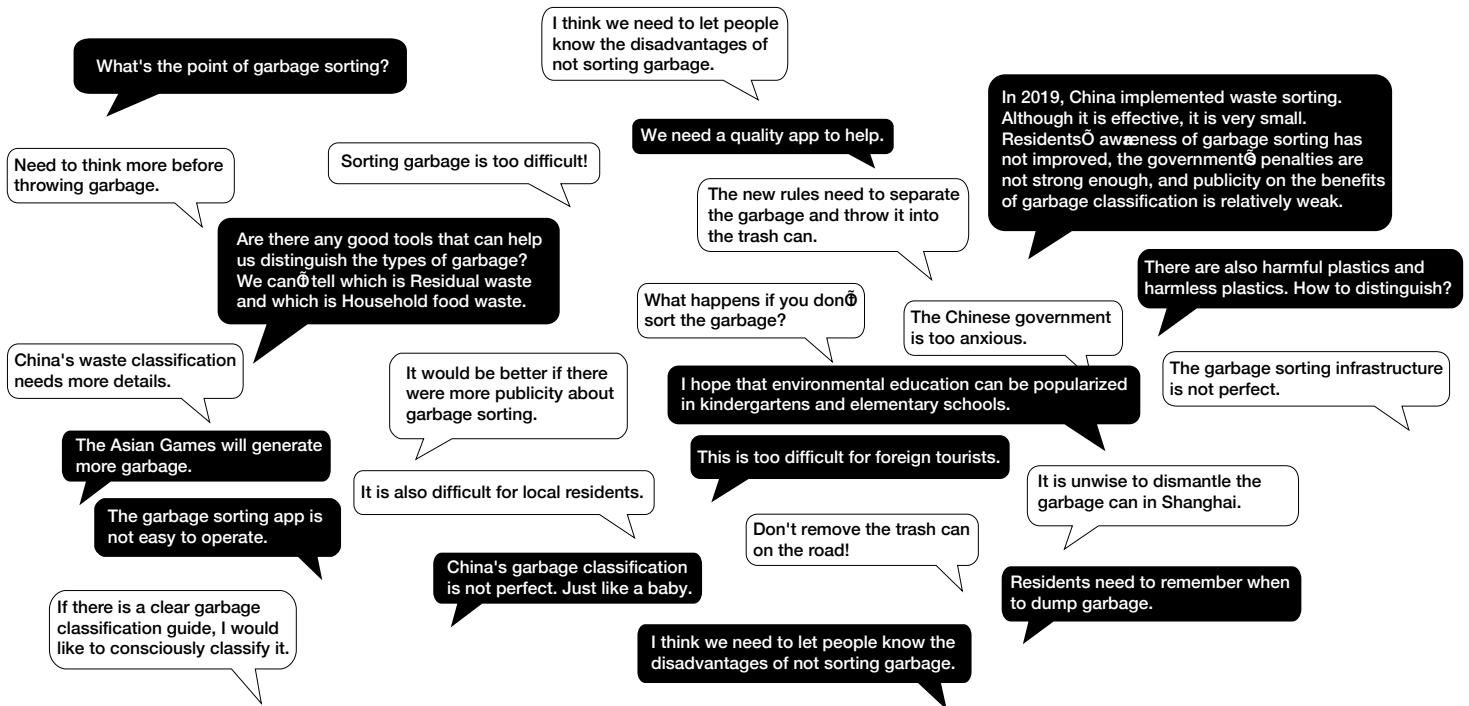


Through data collection, countries with high garbage collection rates start to implement garbage classification rules very early. For example, Japan started in 1980, Germany started in 1908, South Korea started in 1995, and Europe's earliest international world started in the 1880s. They all have a long history of waste sorting, a complete waste sorting system, a high level of public awareness of waste sorting, and deep education. In the absence of modern media, these countries have relied on non-stop practices and systems to achieve a conscious and barrier-free garbage classification.

In China, waste sorting began in 2019. All systems and awareness, and how to help people better sort waste will become new challenges.

01 RESEARCH

Secondary research – Situation in China

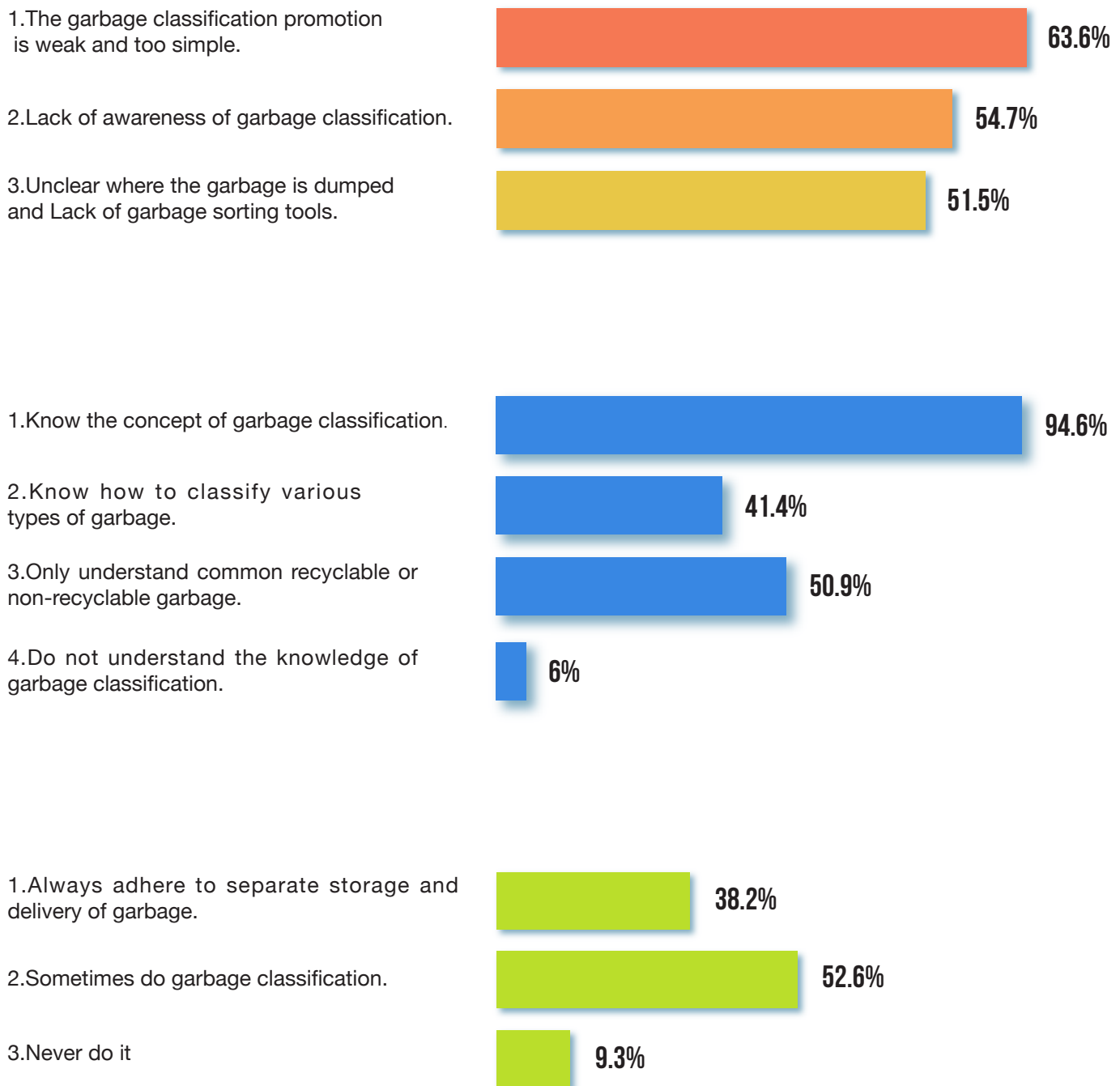


From China's Facebook-Weibo, I screened out some of the opinions and comments on China's garbage classification.

01 RESEARCH

Secondary research – *Situation in China*

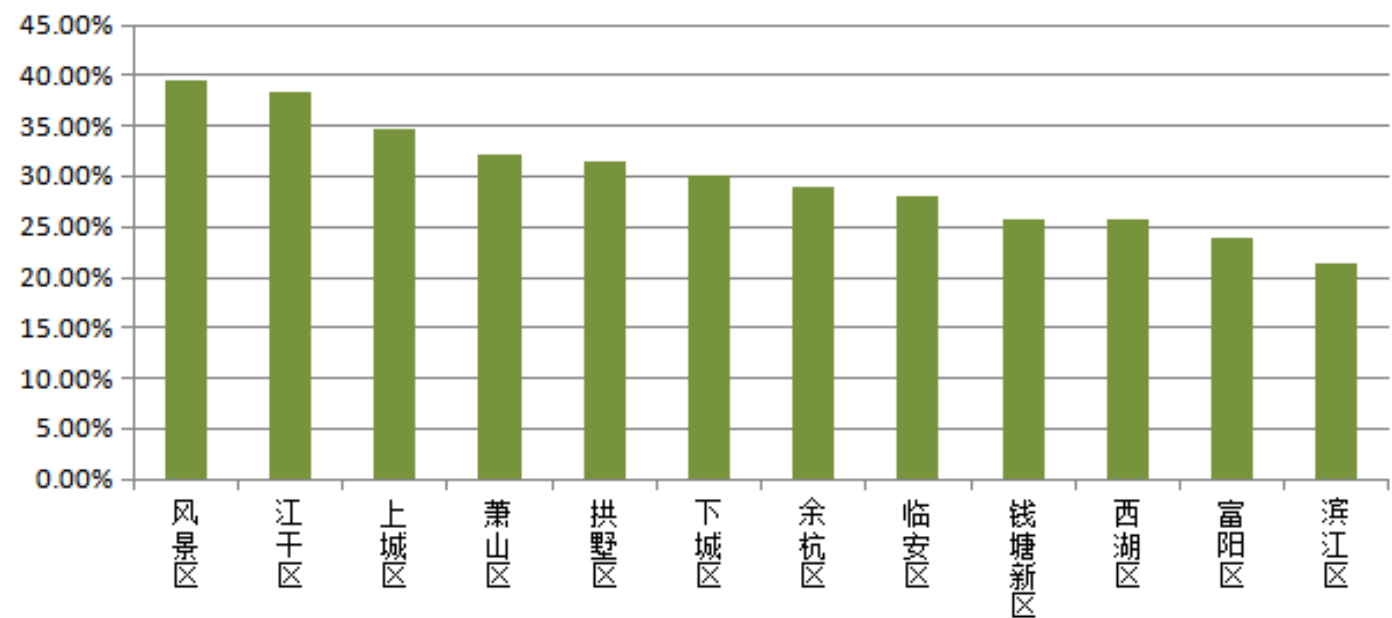
People think that it is difficult to implement garbage classification in China.



01 RESEARCH

Secondary research – Situation in Hangzhou

2019 Correct rate of garbage classification in each district of Hangzhou



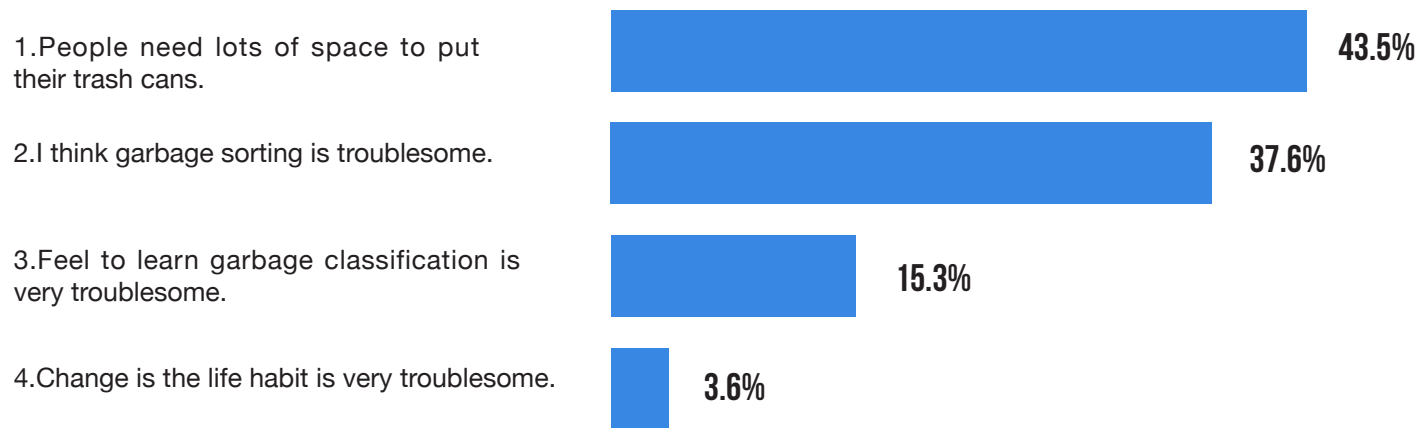
Scenic area, Jiang Gan district, Shang Cheng district, Shang Cheng district, Xiao Shan district, Gong Shu district, Xia Cheng district, Yu Hang district, Lin An district, Qian Tang district, Xi Hu district, Fu Yang district, Bing Jiang district

Even in scenic areas, the correct rate of garbage classification is less than **40%**, and in the worst area, only **21%** of the correct rate.

01 RESEARCH

Secondary research – Situation in Hangzhou

Attitudes of people to garbage classification in Hangzhou



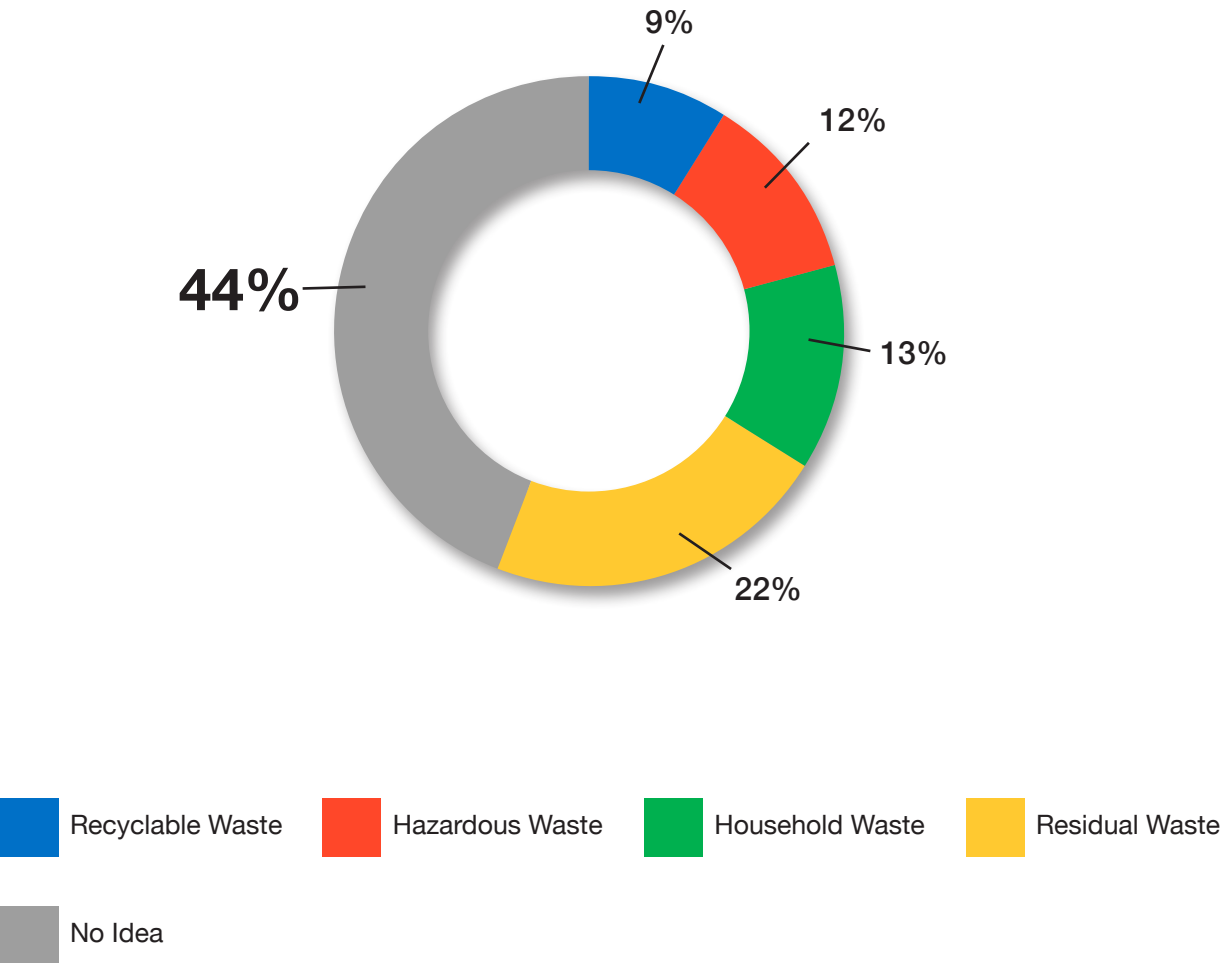
According to the data, **52.9%** of Hangzhou residents think garbage classification is troublesome. This will cause them to resist garbage sorting, as well as garbage sorting learning, if there is no hardware support.

01 RESEARCH

Secondary research – Situation in Hang zhou

- 1. Residents' knowledge of garbage is weak. Without volunteers, it is difficult to classify garbage correctly, especially in old communities where people with less education have a higher error rate.
- 2. The setting and opening time of garbage collection sites lead to residents throwing them away when they miss the time or impatience to wait for the next delivery date.

Do you know what kind of garbage yellow trash cans are usually used for?



01 RESEARCH

Secondary research – *Situation in Hangzhou*

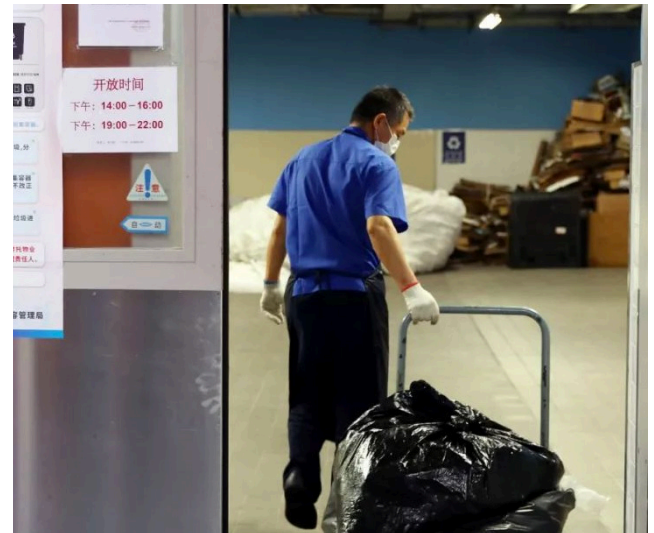
This data from Baidu report (Investigation report on garbage sorting activities in Hangzhou, 2019)

60.8 % of respondents were worried about whether the government was making good use of recycled waste.

In the real-time observation, 12 residents put garbage, 2 people do not understand garbage classification, in the other 10, only 2 people carefully classify, the other 8 people do not carefully classify. **They say they don't know where the waste will go and how it will be used.**

01 RESEARCH

Secondary research – *Situation in Hang zhou*



Hangzhou refers to the garbage transport rules in Shanghai, and sets the garbage delivery time for each community. Each district has two hours in the morning and afternoon, and the time is determined by the district. Every month the schedule will be different, different days, different types of garbage.

In some communities, the garbage can is pulled out on the same day at the time of delivery; in some communities, the garbage release room is used; in others, the garbage can gate is locked and opened at the time of delivery.

01 RESEARCH

Secondary research – Situation in Hangzhou



90% of the residents are aware of putting out garbage on a regular basis.

Hangzhou has completed a plan for the location and time of garbage disposal in all districts before June 2020.

But about **45%** of the residents put out garbage on time.

Many residents who miss the delivery time will put their garbage directly on the garbage disposal site on that day, causing serious environmental problems.

01 RESEARCH

Secondary research – Situation in Hangzhou

小区居民不会因为垃圾分类的实施，不会因为垃圾分类的困难，就减少自家的垃圾总量，该吃吃该喝喝，居民家里的垃圾总量在垃圾分类实施前后是总体不变的，那么原本适应小区垃圾总量的垃圾桶被大部分撤除（以我所在小区只保留原本的30%），就会产生垃圾桶不够用，垃圾遍地，污水横流等现象。这一情况其实很好理解，前端产生的垃圾总量不变，但装垃圾的垃圾桶却显著变少了，能不产生现在的后果吗？其实何必撤除垃圾桶，把原来的1个大垃圾桶分配为4个小的分类垃圾桶，易腐垃圾和其他垃圾稍大些（因为量大），有害垃圾和可回收物小一些，总量等于原来的1个大垃圾桶，分散放置，既便于垃圾分类，又便于百姓倒垃圾。

2、垃圾定时投放 *Garbage is put on time, different kinds of garbage every day.*

很明显这也是错误的，没有考虑到百姓的实际生活。杭州虽然老年人较多，但依然是青年居多的年轻城市，目前各小区基本上都是上午和下午2个时段定时投放垃圾，以我所在的小区为例，上午6点~8点，下午18点~20点，是否考虑过年轻人早早上班，晚上还要加班的情况呢？不是所有百姓家里都有老人可以帮忙去扔垃圾的，年轻人自己过日子的，租房子的，每天早出晚归吃完饭，去倒垃圾发现过时间了没法扔，最后只有两种情况，要么扔在垃圾桶边上，要么带回家放一周等周末再扔。可是政府有想过一周垃圾堆在家里所带来的异味、病菌等问题吗？长此以往，百姓只会把垃圾扔在已经关闭的垃圾桶边上，这就失去了垃圾分类的意义。

我知道杭州的垃圾分类是借鉴了上海市的经验，那么请杭州的领导自己去上海看一下目前他们的垃圾分类情况，上海市目前除了市中心有警察、城管到处巡逻的地方还能管的住，底下各个区的小区内已经形成我上述所讲的情况，上海这几个月的实践已经证明了现有垃圾分类政策是错误的，实践是检验真理的唯一标准，希望杭州能够纠正以上三点问题，形成自己特色的垃圾分类政策。

There has also been opposition to the policy among Hangzhou residents, especially **young people**. The picture shows the opposition of young people in Hangzhou to the policy of placing different garbage on different days at different times. Nowadays, China is in a state of rapid development, young people spend more time on work. Garbage classification has been very confusing, and garbage disposal time needs to be recorded every month, and every week to remember the type of garbage released every day, which is a very painful thing for them young people. Once the time is missed, it may be many days before the next delivery of this kind of garbage.

01 RESEARCH

Secondary research – *Situation in Hangzhou*



2018 DATA ON THE NUMBER OF ARRIVALS IN HANGZHOU

180 MILLION

Total number of tourists

4.02 MILLION

Number of foreign tourists

In 2018, the total number of tourists in Hangzhou reached 180 million. Among them, 4.02 million were foreign tourists. That's a 13% increase from 17 years ago. With more and more developed transportation, Hangzhou, as a famous international city in China, will continue to receive more and more tourists every year.

The 2022 Asian Games will be held in Hangzhou. It is expected that there will be more Chinese tourists and foreign tourists, and with them will come the garbage generated by tourists from different cities and countries.

01 RESEARCH

Secondary research – *Situation in Hangzhou*

Conclusion 2019 Hang Zhou garbage classification situation

- 1. The average correct rate of garbage classification in all residential areas in Hangzhou is about 30%.**
- 2. In Hangzhou, 52.9% of residents think garbage sorting is troublesome.**
- 3. 44% of people are very vague about garbage classification. 35% will select wrong trash can, just only 22% select correct trash can. This is why it leads to a 30% correct rate.**
- 4. 45% of residents can throw away garbage on time.**
- 5. 60.8% of the residents are skeptical of the government's garbage recycling treatment, resulting in a reluctance to classify.**
- 6. Visitors from outside the city, from cities with lax garbage sorting or from countries with no garbage sorting rules, will pose a new challenge for Hangzhou.**

01 RESEARCH

Primary research

3 days my garbage recording

1.29.2021

Plastic takeaway box x3.

Tissue. x 20.

Straw x 1.

egg shell.

Instant noodle packaging.

Tracing Papers x 10.

Cola cans x 3.

Tee bag x 1

Disposable chopsticks.

Starbucks coffee cup x1

Coffee cup cap x1.

1.30.2021

Tissue x 15.

Paper bag x1

Plastic takeaway box x1

Foam boxes x2.

Food residual.

Popoys boxes x1

Plastic bags x3.

Tee bags x3

Coffee bags x2.

Plastic forks x2.

Laundry detergent packaging

Cigarettes x 6

Tissue x 5.

Plastic cups KFC x1

Paper boxes KFC x1

1.31.2021

Tee bags x1

egg shell x1

Paper mat x1

Residual bun x 0.5

Tissue x 5

Apple peel x1

Apple core x1

Biscuits plastic packaging

Cola cans x2

Plastic forks x1

Plastic spoon x1.

Disposable chopsticks x1

Dryer ball x1

I recorded how much garbage I generated in three days to predict how much garbage tourists might generate in a single day in Hangzhou.

01 RESEARCH

Primary research – *Interview*



Name: Zoli

Age: 36 yrs

Gender: Male

Profession :English teacher

Location: Hang Zhou

From : UK

1.Does your neighborhood need garbage classification?

Yes we do.

2.Can you sort garbage clearly?

There are no labeled garbage can. Even if I sort my garbage it's all put in one garbage can. The bin are not label not classified.

3.When you first came to China, did you get some trouble about sort garbage? If you do, please tell me what it is.

No I didn't get in trouble I followed the rules on garbage sorting.

4.Do you think foreign tourists who come to China for the first time will face any problems in garbage sorting?

We depending on where there are from. China is putting effort in education Chinese citizen but most country don't put the same effort.

5.What do you think are the weaknesses of Chinese garbage classification? If there is a tool that can help you classify faster and more accurately, would you try it?

The only weakness is the lack of translated materials for foreigner to follow.

Of course. Why not? If it can help resident a lot.

01 RESEARCH

Primary research – Interview



Name: Alex

Age: 29 yrs

Gender: Male

Profession: Kindergarten International teacher

Location: Hang Zhou

From : USA

1.Does your neighborhood need garbage classification?

It does. I think in my area there is already garbage sorting, but it is carried out by a special person who sort the garbage, but not by the residents of this area.

2.Can you sort garbage clearly?

Yes, I can, but i think sometimes i might get confused. Sometimes I don't know for some special garbage.

3.When you first came to China, did you get some trouble about sort garbage? If you do, please tell me what it is.

A little bit.

4.Do you think foreign tourists who come to China for the first time will face any problems in garbage sorting?

I don't think foreigners will have a problem with waste sorting. Well, also need to consider that there are many countries where there is still no concept of garbage sorting and I think that these Foreigners will have a problem with it, because they have no idea how to sort garbage clearly.

5.What do you think are the weaknesses of Chinese garbage classification? If there is a tool that can help you classify faster and more accurately, would you try it?

I think the weakness of China in sorting garbage is that the Chinese are just learning how to do it, since it's still new to the Chinese. Yes i think, i would love to try it, instead of googling it .

01 RESEARCH

Primary research – *Interview*



Name: Yimin Chen

Age: 57 yrs

Gender: Male

Profession : Doctor & My father

Location: Hang Zhou

From : China

1.Does your neighborhood need garbage classification?

Yes.

2.Can you sort garbage clearly?

I think this is very complicated, and not pleasure to do it.

I have to check online to sort out some garbage.

3.Do you think foreign tourists who come to China for the first time will face any problems in garbage sorting?

The locals are not clear, let alone foreigners. But apart from being like the Japanese, they have a long and great experience.

4. Have you encountered any inconveniences in garbage sorting so far?

I miss the time to drop the garbage, sometimes the garbage stinks, but I miss it, I don't know where else I can drop the garbage on the day.

5.What do you think are the weaknesses of Chinese garbage classification? If there is a tool that can help you classify faster and more accurately, would you try it?

The content of the promotion is too boring and there is no better assist tool to help people complete it. If so, of course I am pleasure to try.

01 RESEARCH

Primary research – Interview



Name: Qimei Yin

Age: 55 yrs

Gender: Female

Profession :Kindergarten Principal & My motherh

Location: Hang Zhou

From : China

1.Does your neighborhood need garbage classification?

Yes.

2.Can you sort garbage clearly?

No problem.

3.Do you think foreign tourists who come to China for the first time will face any problems in garbage sorting?

Tourists from countries with garbage sorting rules will not be bothered.

But more countries do not have rules, and each country has different rules.

Foreign tourists who come to Hangzhou may be troubled.

4. Have you encountered any inconveniences in garbage sorting so far?

Hangzhou needs to rectify the garbage cans on the streets and turn them into an area and place them in every corner of the city. I think this will become a new problem. *It is possible that first-time visitors to Hangzhou may not be able to find a trash can when they need to throw rubbish on the street, which may also be inconvenient for local people.*

It's not too much of a problem for me, but it's not friendly to the elderly, and my mother has a hard time distinguishing the types of garbage.

5.What do you think are the weaknesses of Chinese garbage classification? If there is a tool that can help you classify faster and more accurately, would you try it?

Lack of student education. The government pays attention to the publicity classification method, but does not pay attention to how to better publicize the advantages and disadvantages.

01 RESEARCH

Primary research – *Interview*



Name: Chen Lin

Age: 28 yrs

Gender: Female

Profession: Translator & My cousin

Location: Tokyo

From : China

1.Does your neighborhood need garbage classification?

Yep.

2.Can you sort garbage clearly in Japan?

No problem. Most people in Japan are very conscious.

3.Why do you think Japanese garbage sorting is so successful?

This is related to history. Japan started garbage sorting in the 1980s, and it has a strong foundation. At the same time, the education of children is very important, so that they have a good environmental awareness since childhood. And most women pay more attention to household garbage sorting after they get married because the penalty amount is high.

4.What do you think are the weaknesses of Chinese garbage classification?

Because China has just started and Hangzhou is facing the Asian Games, *it would be a good choice if intelligent tool for garbage sorting can be improved and foreign users can be supported.*
And government need to design more interactive propaganda.

01 RESEARCH

Primary research – Interview



Name: Yizhe Chen

Age: 25 yrs

Gender: Male

Profession: Graphic Design

Location: Shang Hai

From : China

1.Does your neighborhood need garbage classification?

Yes.

2.Can you sort garbage clearly?

I don't want to sort when there is a lot of garbage. Need someone to assist in this.

3.Do you think foreign tourists who come to China for the first time will face any problems in garbage sorting?

I think it will. Because the rules of each country are different, China's rules are still imperfect. However, Shanghai has removed all trash cans, which makes tourists feel inconvenient.

4. Have you encountered any inconveniences in garbage sorting so far?

The trash cans in Shanghai have all been removed, so it is very inconvenient to walk on the street.

If I travel to Hang Zhou, may be I will make mistakes, because it has different classification rules.

5.What do you think are the weaknesses of Chinese garbage classification? If there is a tool that can help you classify faster and more accurately, would you try it?

The supervision is not strong and the punishment is not strong enough. Propaganda is too politicized, and people cannot feel the meaning of garbage sorting. Without good app auxiliary tools, especially for the elderly, it is extremely difficult to operate. The current app lacks many functions and categories.

01 RESEARCH

Primary research – *Interview*



Name: Meiyao Zhao

Age: 68 yrs

Gender: Female

Profession: Teacher (Retired)

Location: Hang Zhou

From : China

1.Does your neighborhood need garbage classification?

Yes.

2.Can you sort garbage clearly?

This is a difficult thing for me, except for the recyclable garbage, I may need volunteers to help me, so I can distinguish.

3.Can your friends tell the difference between different types of garbage?

Very few, older people do not seem to be very good at this, although there will be classes in the community, but other than food and the usual recyclable waste, others will need help.

4. Have you encountered any inconveniences in garbage sorting so far?

I don't miss the time to take out the garbage, because I get up early, but I can't remember what garbage to take out that day. Sometimes I pick up the wrong garbage and have to go back and pick up the right garbage.

5.What do you think are the weaknesses of Chinese garbage classification? If there is a tool that can help you classify faster and more accurately, would you try it?

There can be intelligent robots or other tools to help the elderly.

Must use it, it will help me a lot, even when no one is around to help me.

01 RESEARCH

Primary research – *Interview*



Name: Hanbin Huang

Age: 30 yrs

Gender: Male

Profession: High school teacher & Garbage classification volunteer

Location: Hang Zhou

From : China

1.Does your neighborhood need garbage classification?

Of course.

2.Can you sort garbage clearly?

No problem, I am a professional.

3.What kind of problems do you encounter most when you volunteer? What age group?

It's gotten a lot better, but **there are still people who confuse the types of garbage**, and that's why we're educating them all the time.

It is difficult for the elderly to classify. The office workers do not have as many classification problems as the elderly, but they also have problems. For the office workers, they have more problems in the time, place and type of garbage. **Some people may miss the time to throw the garbage because of the early shift, some people may not have the garbage he can throw on this day, it will be very troubled in the summer.**

4.What do you think are the weaknesses of Chinese garbage classification?

In fact, the public's awareness of garbage classification has already been developed. However, **because of the lack of auxiliary tools, people are unwilling to separate garbage because of the trouble of classification even though they are aware of it.**

01 RESEARCH

Paint point

- 1. In the process of garbage sorting, people are not clear about the types of garbage, and they think garbage sorting is troublesome in the absence of volunteers, especially the elderly.**
- 2. Trash time is often missed. The types of garbage thrown on different days are complicated and inconvenient to remember.**
- 3. According to feedback, Hangzhou will build street trash can areas, and it may become difficult to find garbage cans.**
- 4. Non-local tourists and foreign tourists from areas with low requirements for garbage classification will encounter the above problems.**
- 5. Waste classification knowledge is lacking in education.**

01 RESEARCH

Problem and Purpose

Problem Statement

There is a lack of tools that can help people classify waste, remind them of the time to throw waste and search the location of waste dropping area. At the same time, Hangzhou people's waste sorting problem will also happen to tourists.

Purpose

1. It is convenient for local people to carry out garbage classification, because it is convenient, so people will not feel troublesome and do not classify.
2. It is better to ensure that garbage can be thrown away on time, so as to avoid garbage appearing in the corners of living areas, and people no longer worry about missing the delivery time and don't know where to throw garbage.
3. To realize that foreign tourists can also easily and quickly get familiar with the garbage classification rules of Hang Zhou, easily do garbage classification, avoid the increase of tourists leading to garbage classification can not be carried out, to realize the local people and the world together to protect the environment.

02 AUDIENCE

- **20–70** years old Hang Zhou local people and **tourists from other cities and foreign tourists**

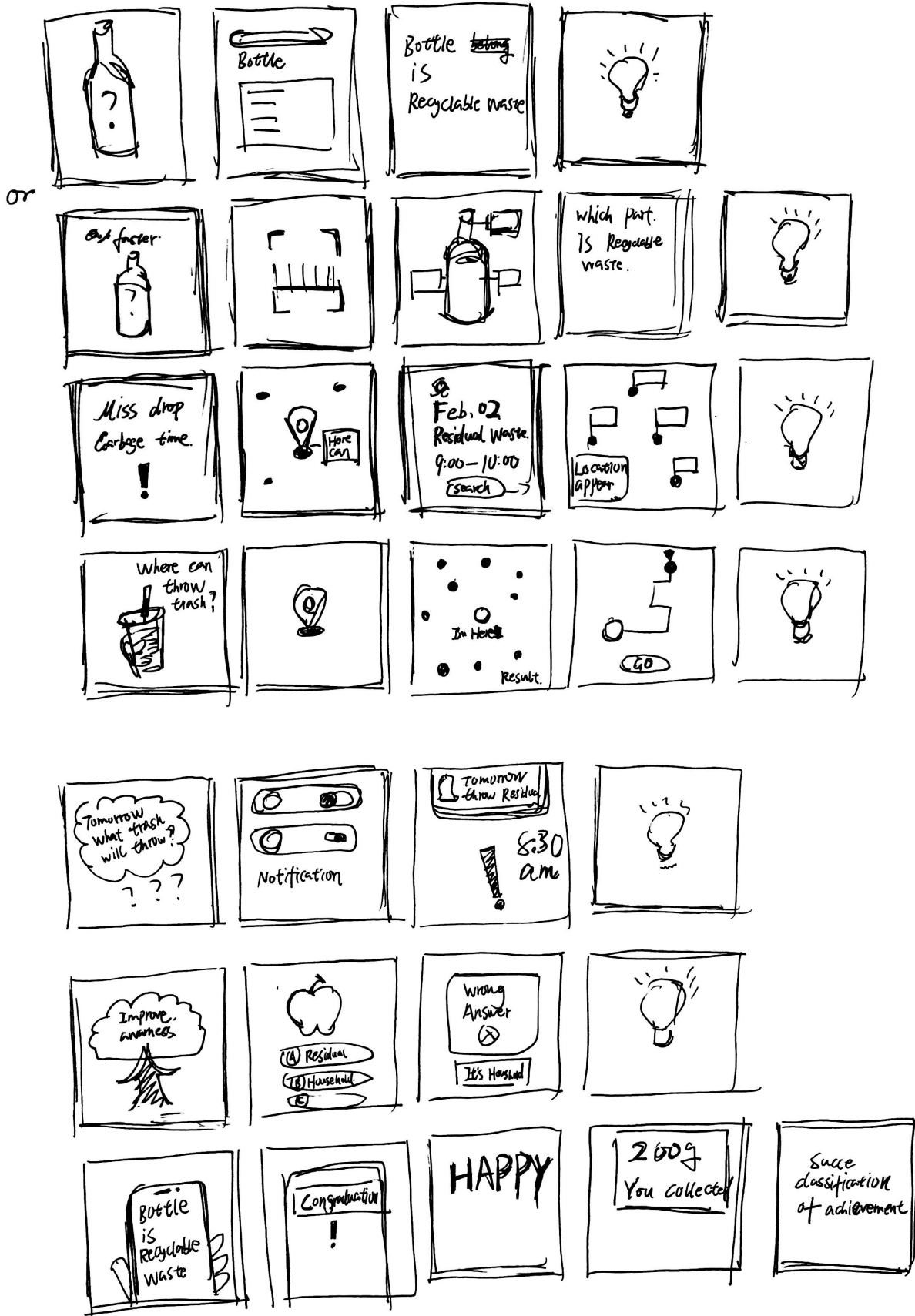
Reason for selection

When they are 20 years old, they start to contact the society and working. They need to live independently, and will be more exposed to garbage classification. The office workers also have problems in garbage classification, while the elderly are particularly weak in garbage classification area, so the target age is set at 20-70.

According to the feedback of Interview and the data of garbage classification in China in the secondary research, people from areas outside Hangzhou may encounter garbage classification problems in Hangzhou. In order to ensure that tourists to Hangzhou can quickly and correctly abide by the garbage classification rules of Hangzhou, and also effectively ensure that garbage classification can still be carried out normally in the case of the surge of tourists.

03 PLANNING

Ideation – Storyboard



03 PLANNING

Ideation

Idea

- 1.Quick identification and classification of garbage.
- 2.Quick location of the nearest trash can and disposal area.
- 3.Reward system. Each recognition has a reward system.
- 4.Convenient workers do not miss the garbage time.
- 5.Learn knowledge in entertainment.

Functions

- 1.Garbage classification.
- 2.Localization of trash can area.
- 3.Education -- Learn through play.
- 4.Calendar (Notification).

03 PLANNING

Ideation

A good assistant to help classify garbage

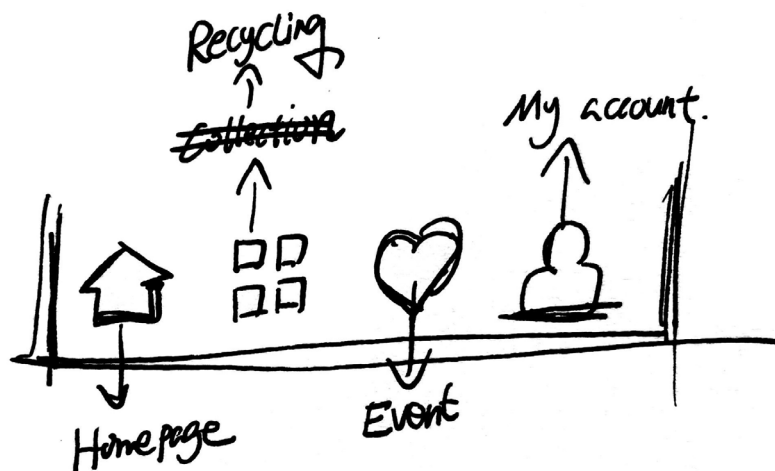
GHelper 分类助手

Concept about app name

I started with the idea of Garbage Helper. But I found the name was too long and not suitable for the app, so I shortened it. To make it clear to the user that this is a tool app, I kept the Helper, shortened the Garbage to G, and hence the name **GHelper** was born.

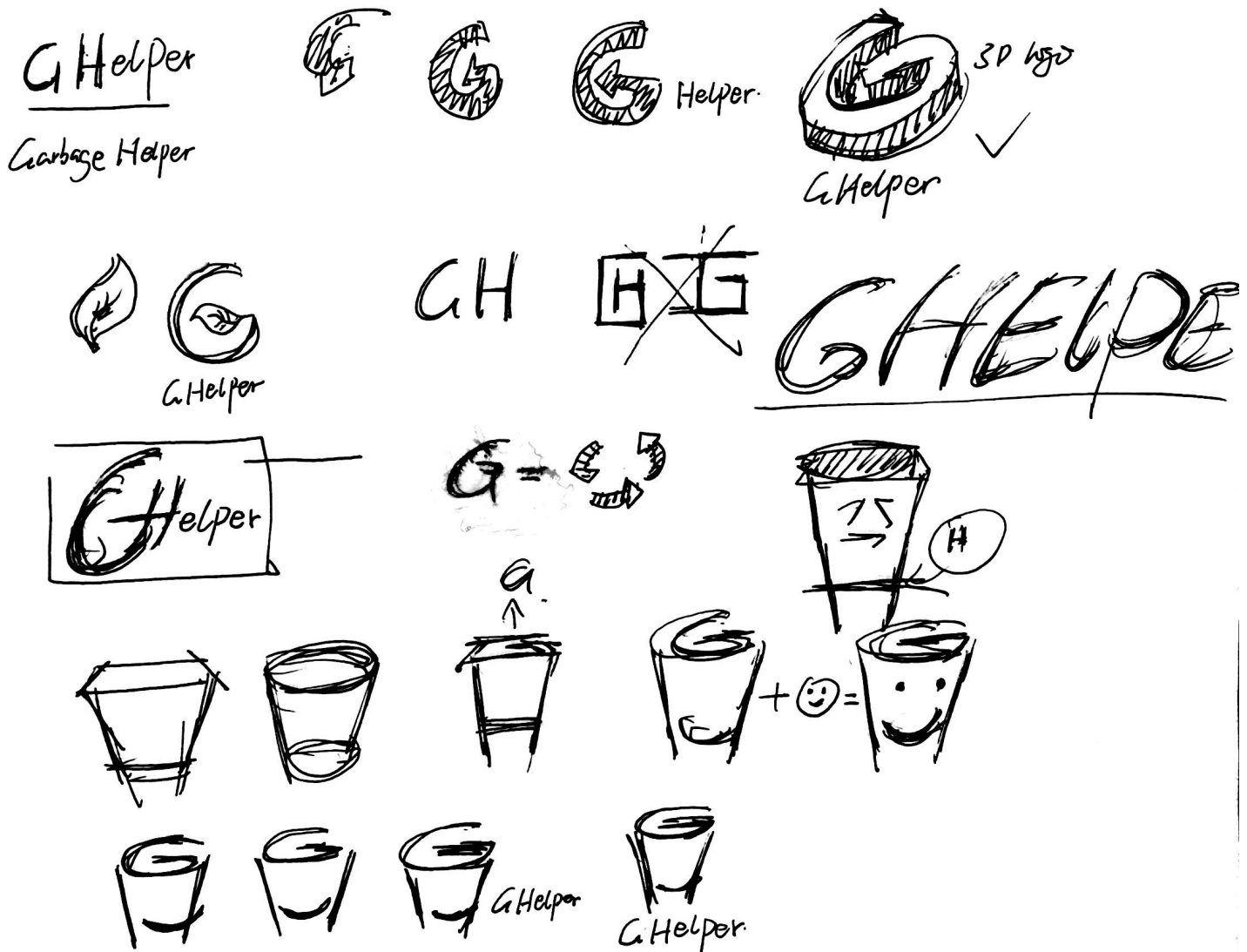
Concept about app bottom line

My idea in the navigation bar at the bottom is to have an achievement table, as each time you **successfully classify garbage**, you can get some points, which will be collected in the **Recycling Page**. When the Recycling Page's points are full, you can check the offline environmental protection activity sites in the **Event Page** to redeem the prizes. **This encourages users to use the app better and more actively, and to be more willing to categorize.**



04 CREATIONS

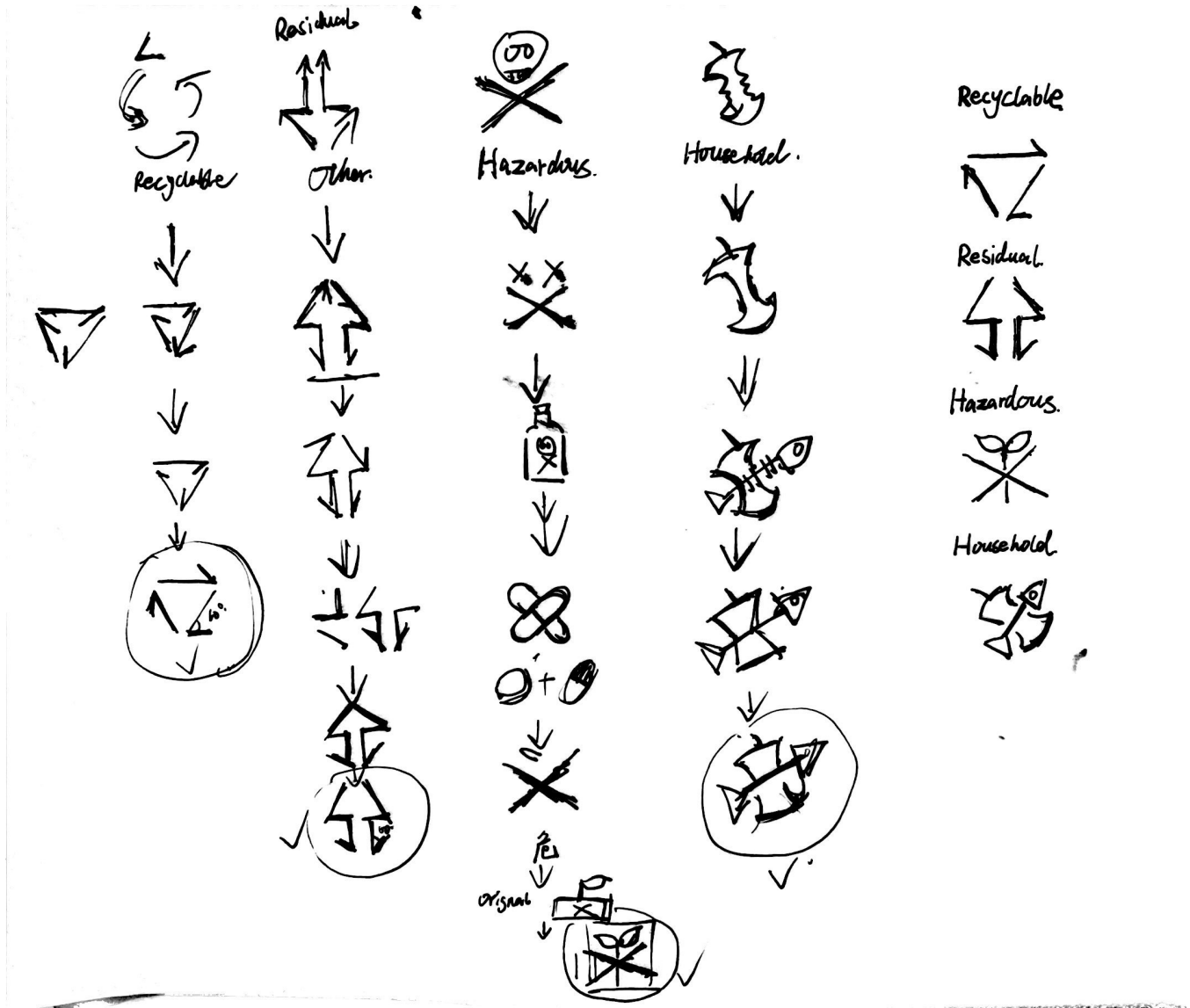
Sketches – Logo



Garbage classification is related to garbage cans, so I think it can be combined with garbage cans. Tried to use the square mouth garbage can as the logo, but found a little stiff. The round mouth of the trash can can be represented by G, while the body of the trash can can be represented by H. The lower part forms a smiling face, just like a smiling trash can.

04 CREATIONS

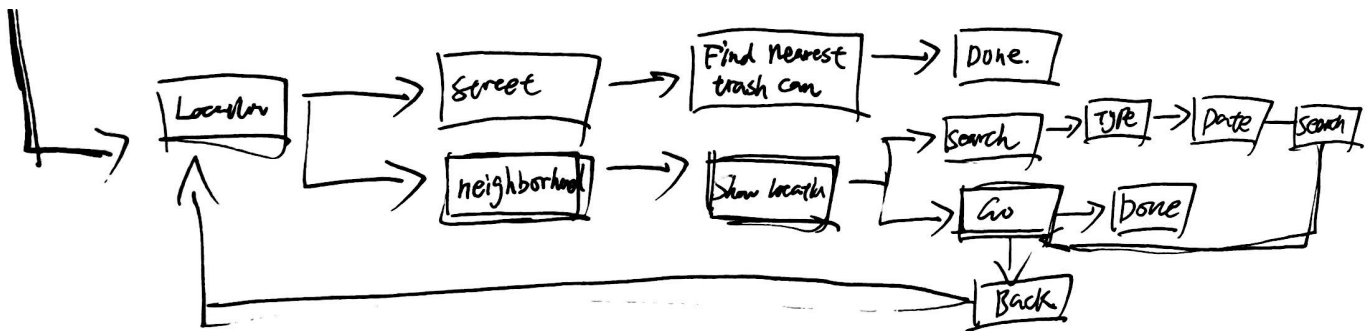
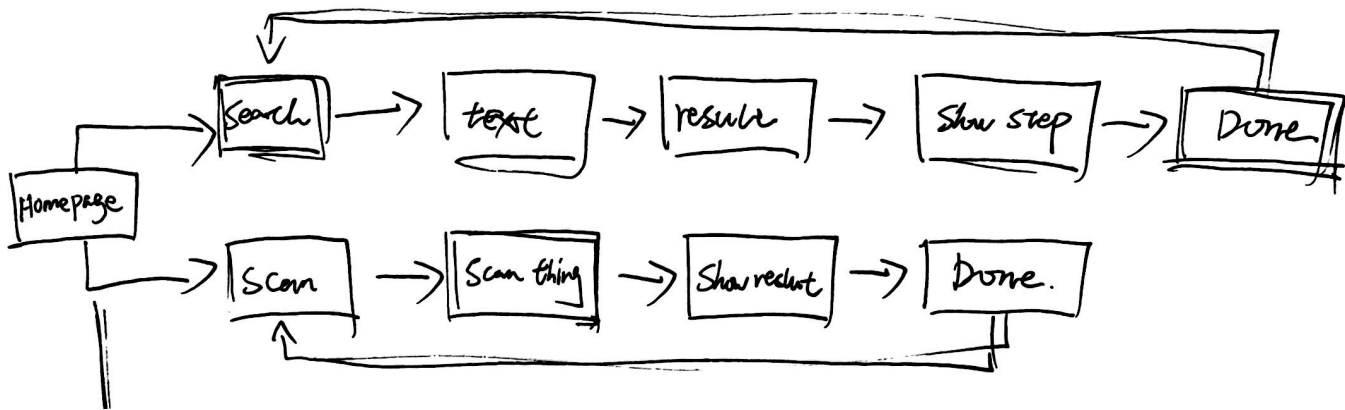
Sketches – Icon



I want to simplify the original icons of the four garbage categories and redesign the icons of the garbage category with clean lines.

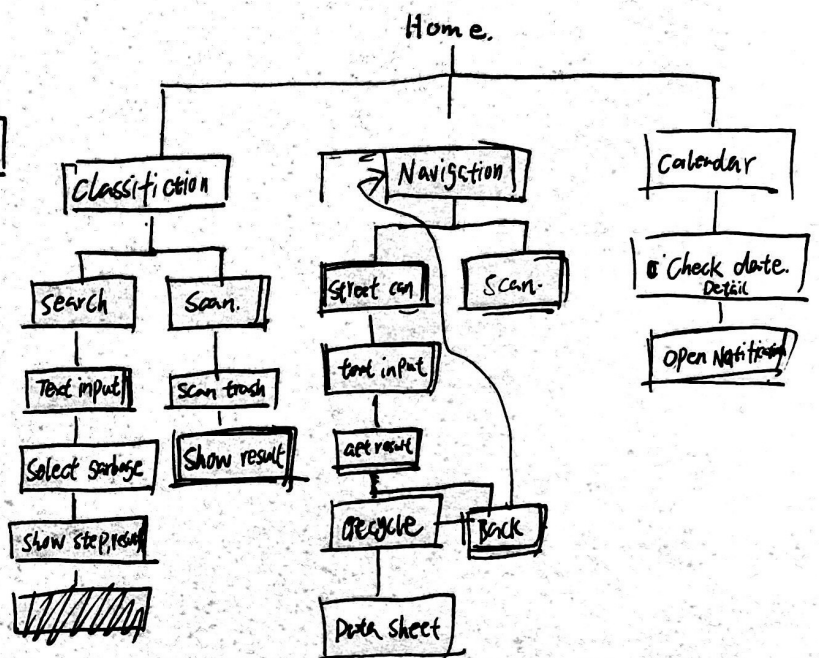
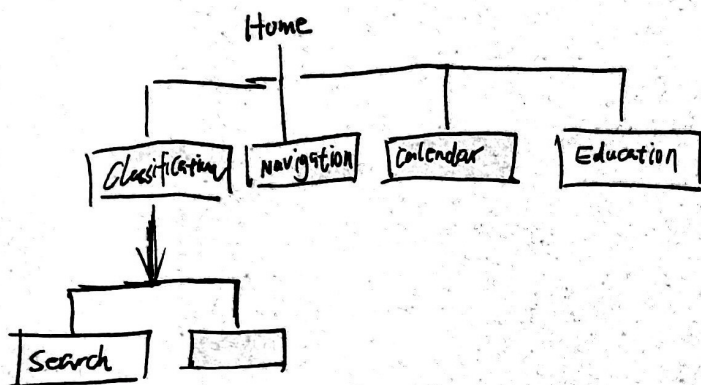
04 CREATIONS

Sketches – Work flow



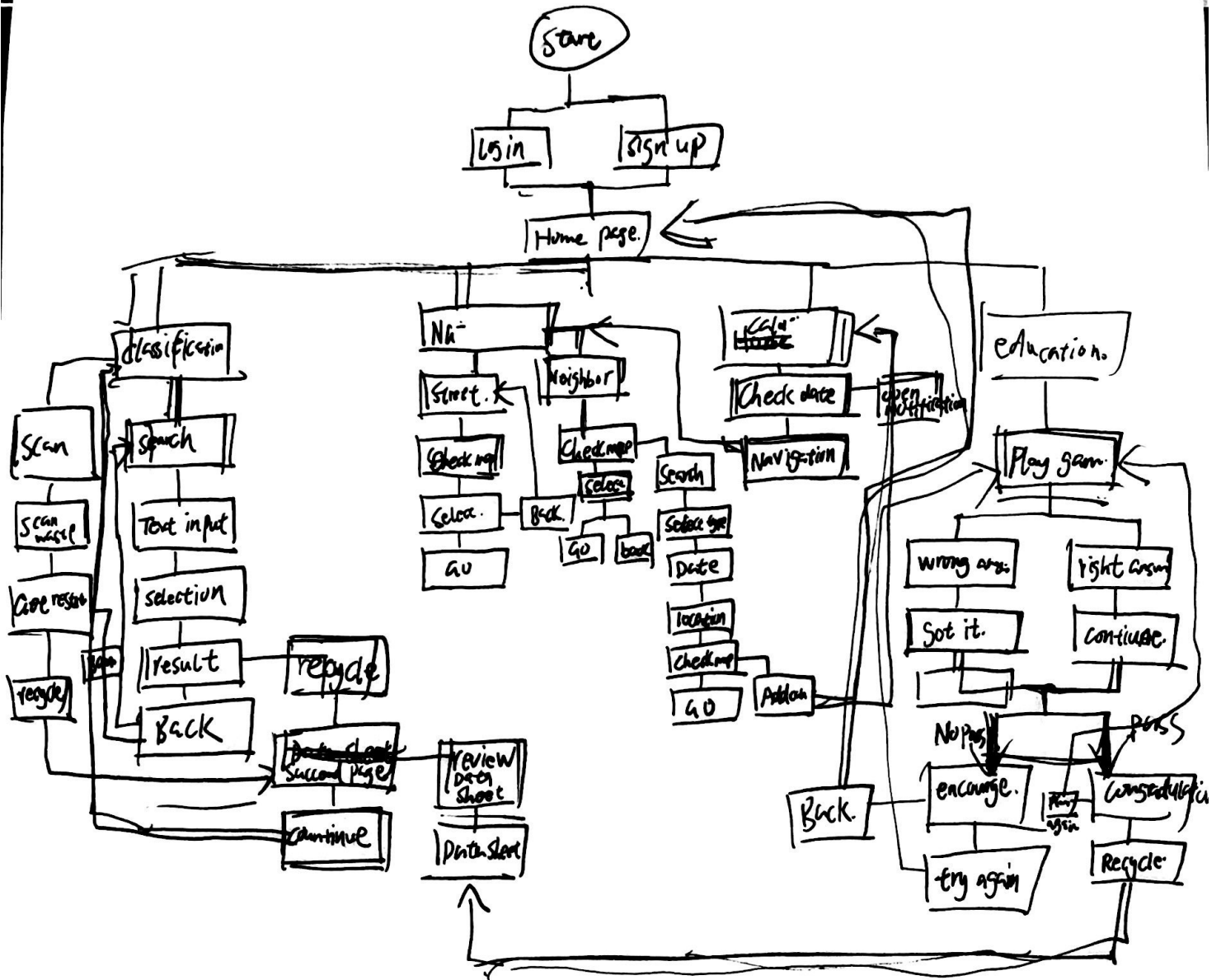
04 CREATIONS

Sketches – Work flow



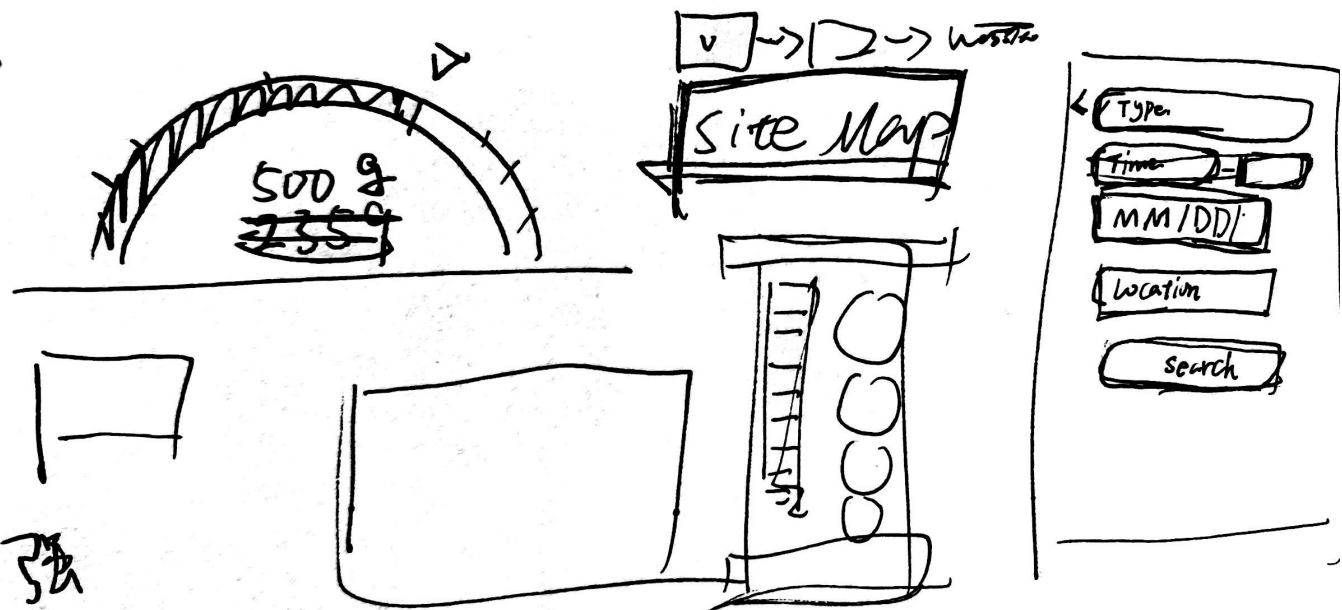
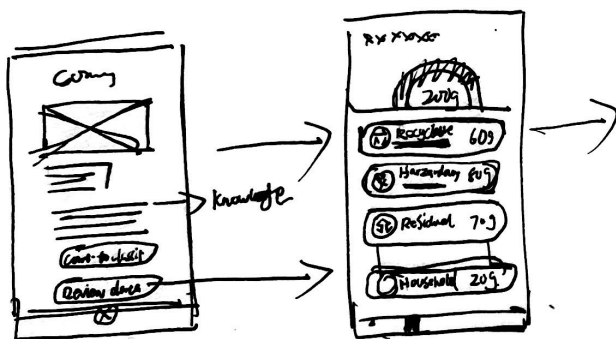
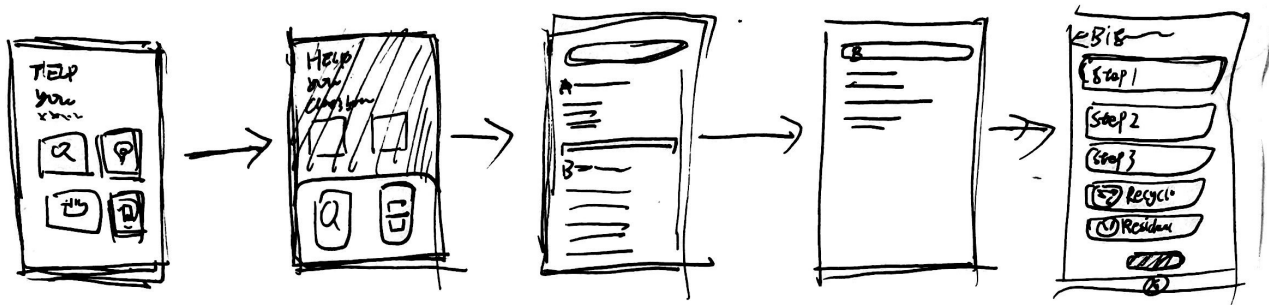
04 CREATIONS

Sketches – Work flow



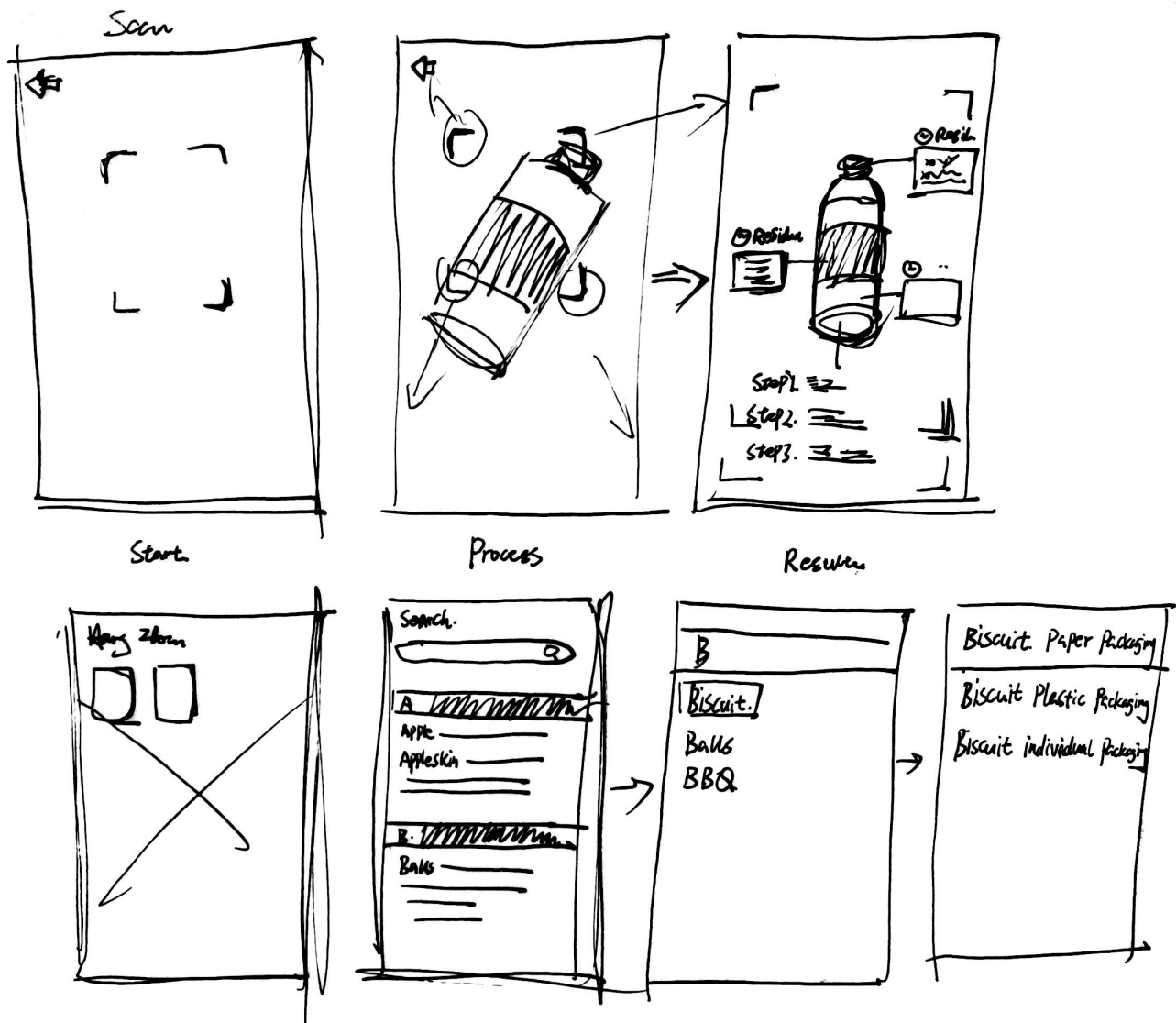
04 CREATIONS

Sketches – Layout



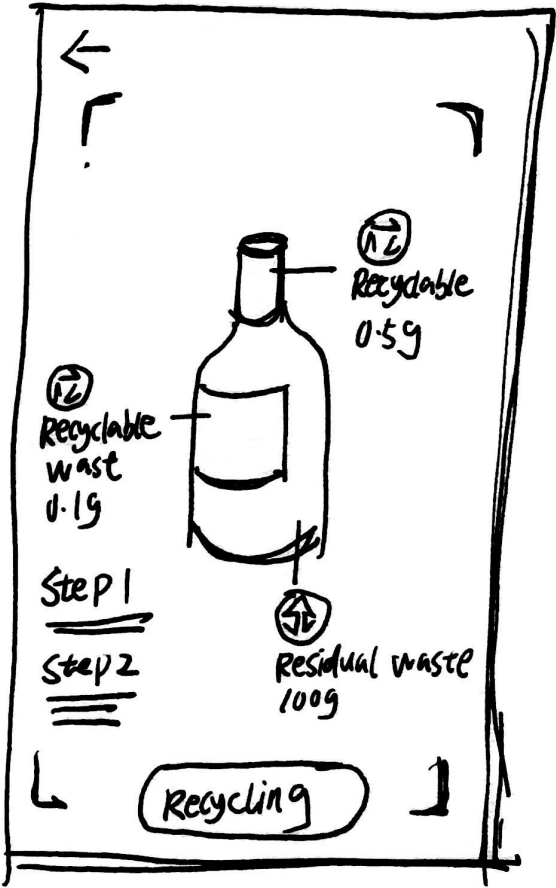
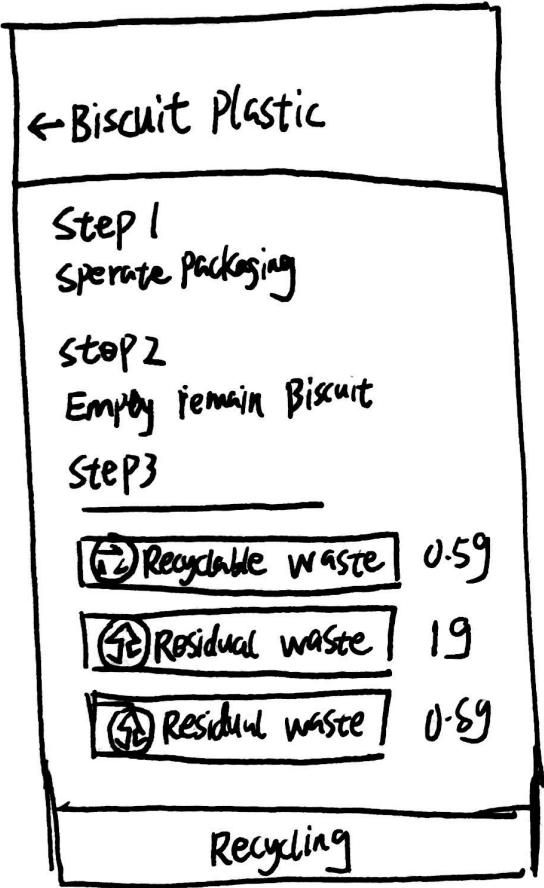
04 CREATIONS

Sketches – Classification layout



04 CREATIONS

Sketches – Classification layout details



04 CREATIONS

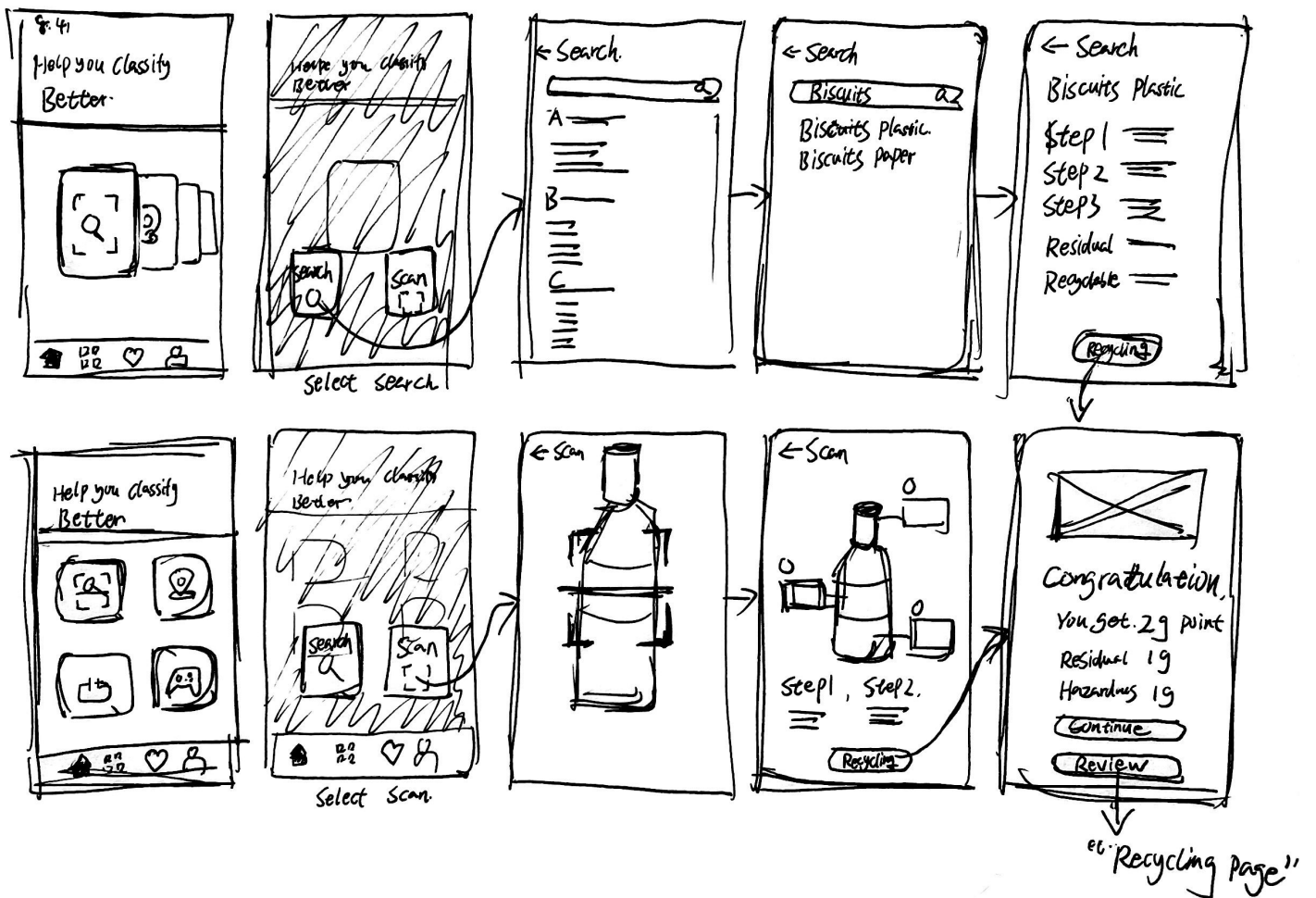
Sketches – Calendar layout



Different Month, Different schedule. by
Hangzhou Government system.

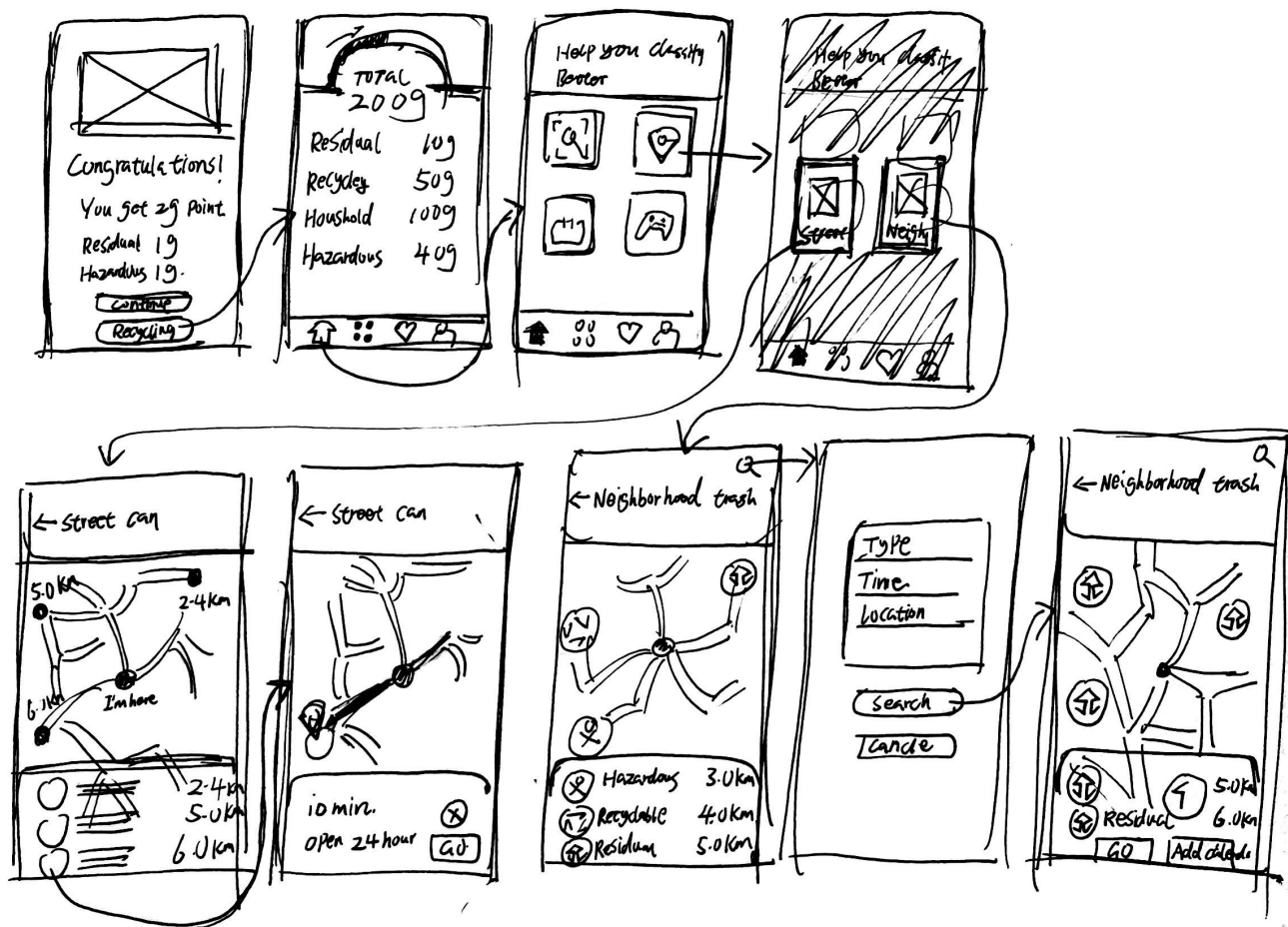
04 CREATIONS

Sketches – Layout work flow



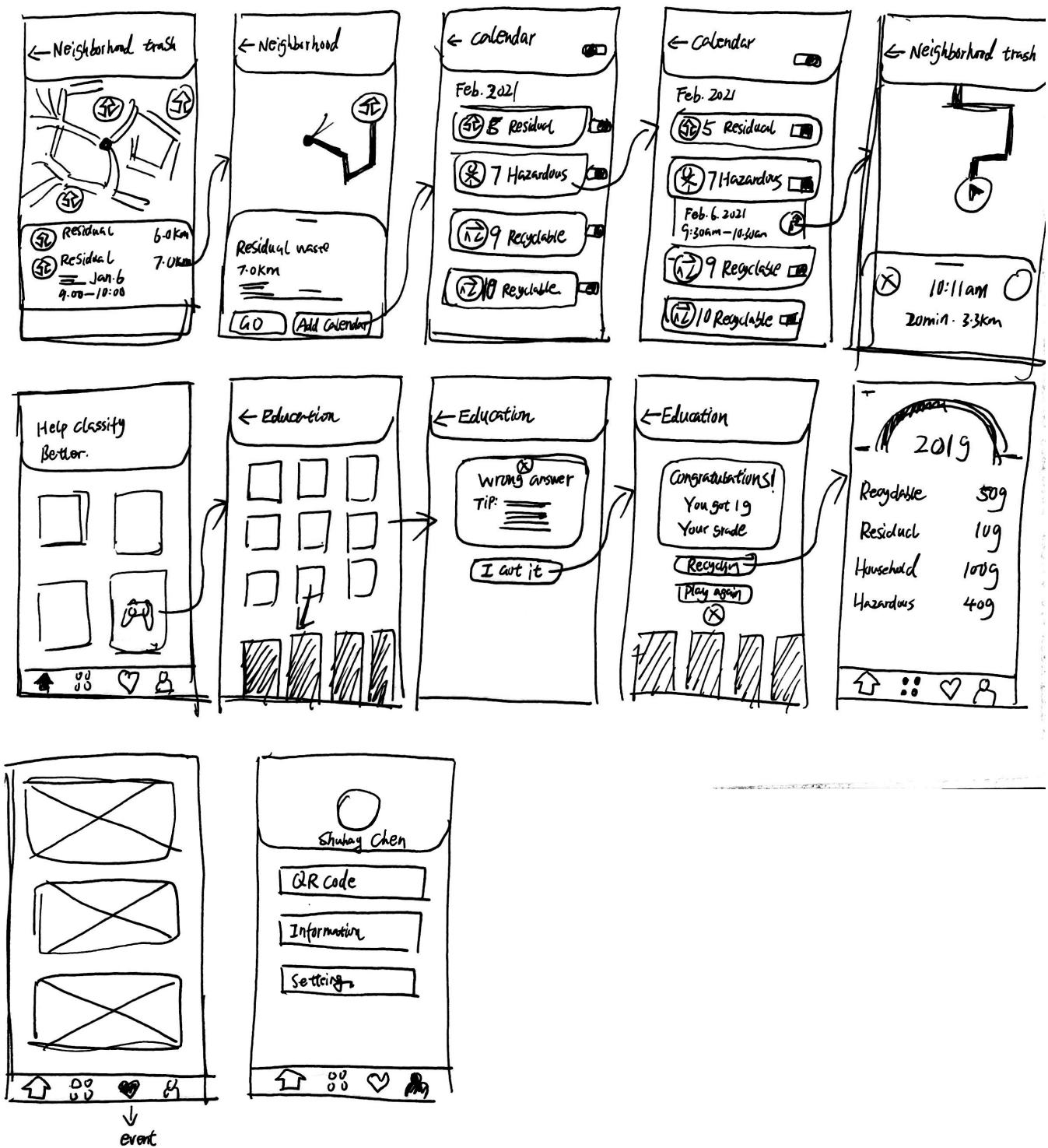
04 CREATIONS

Sketches – Layout work flow



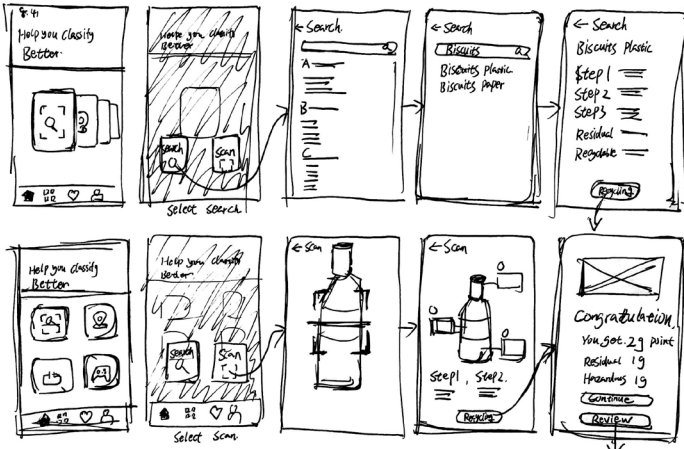
04 CREATIONS

Sketches – Layout work flow

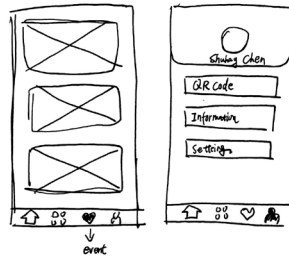
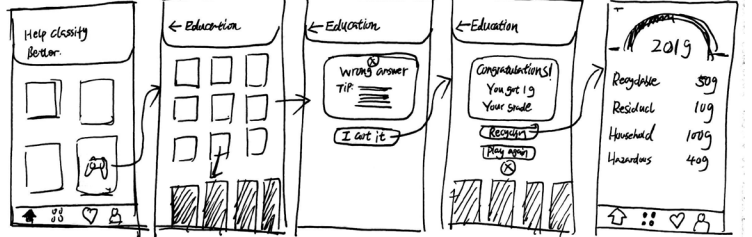
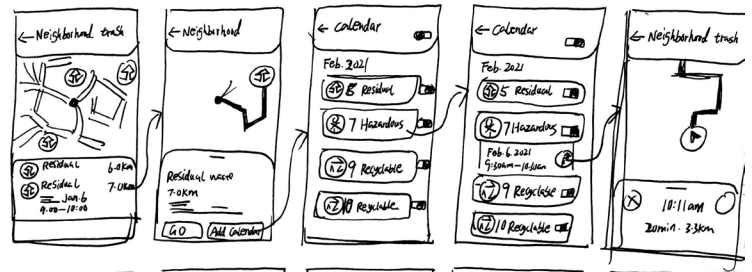
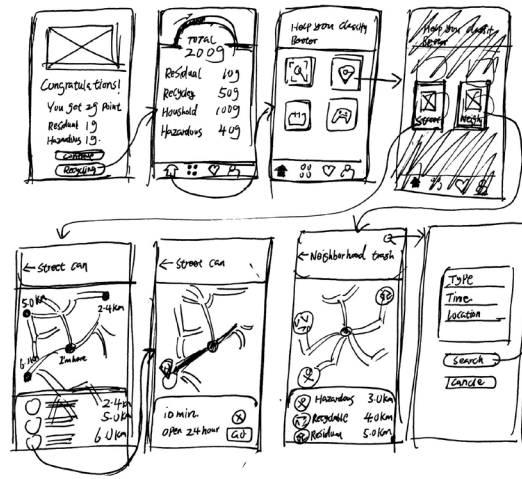


04 CREATIONS

Sketches – Layout work flow

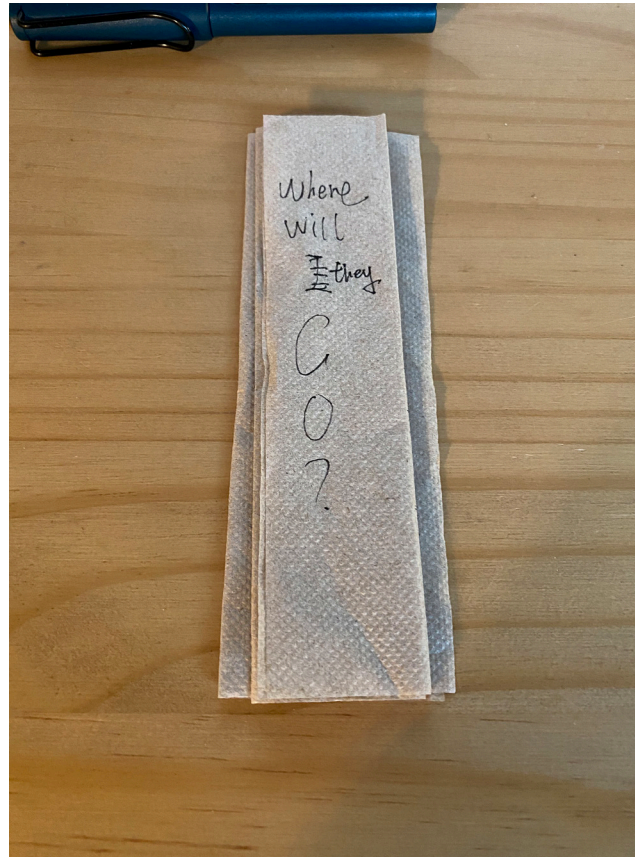
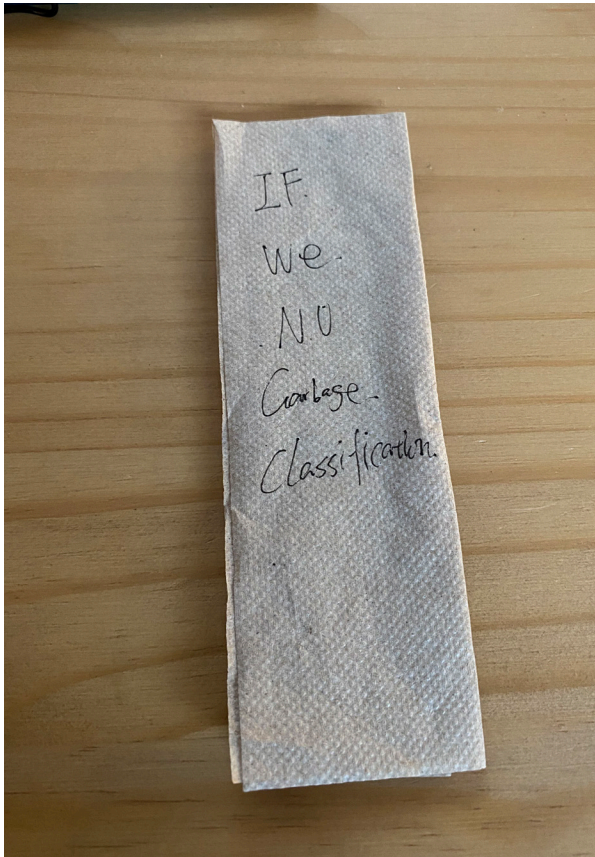


Page 1



04 CREATIONS

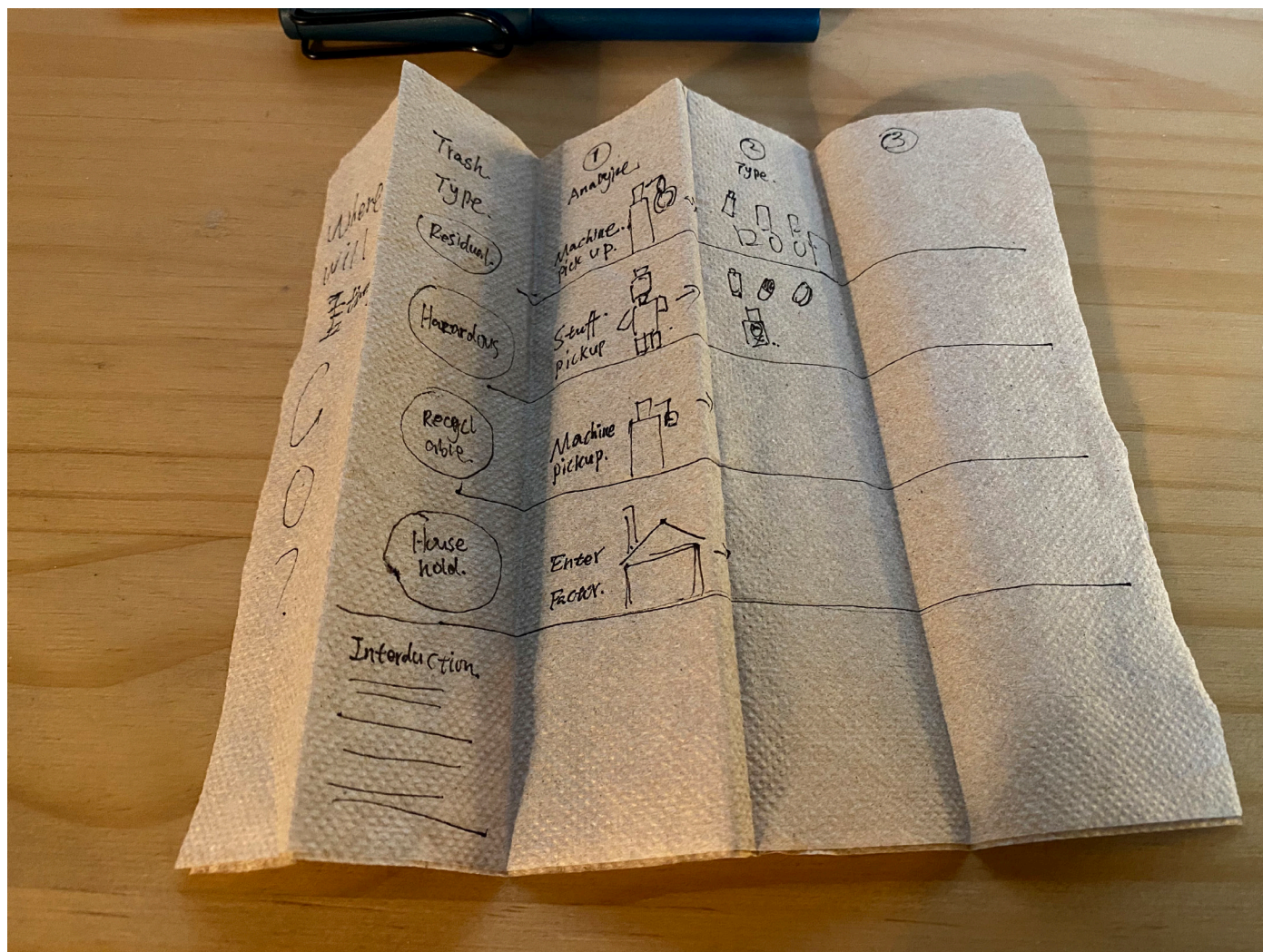
Sketches – Brochure



Quite by chance, I was preparing to use a paper towel delivered by takeaway. I held it in my hand and folded it into a folding sheet that could be unfolded. I tried how to fold the paper towel so that both sides of the paper towel could become front and back when folded.

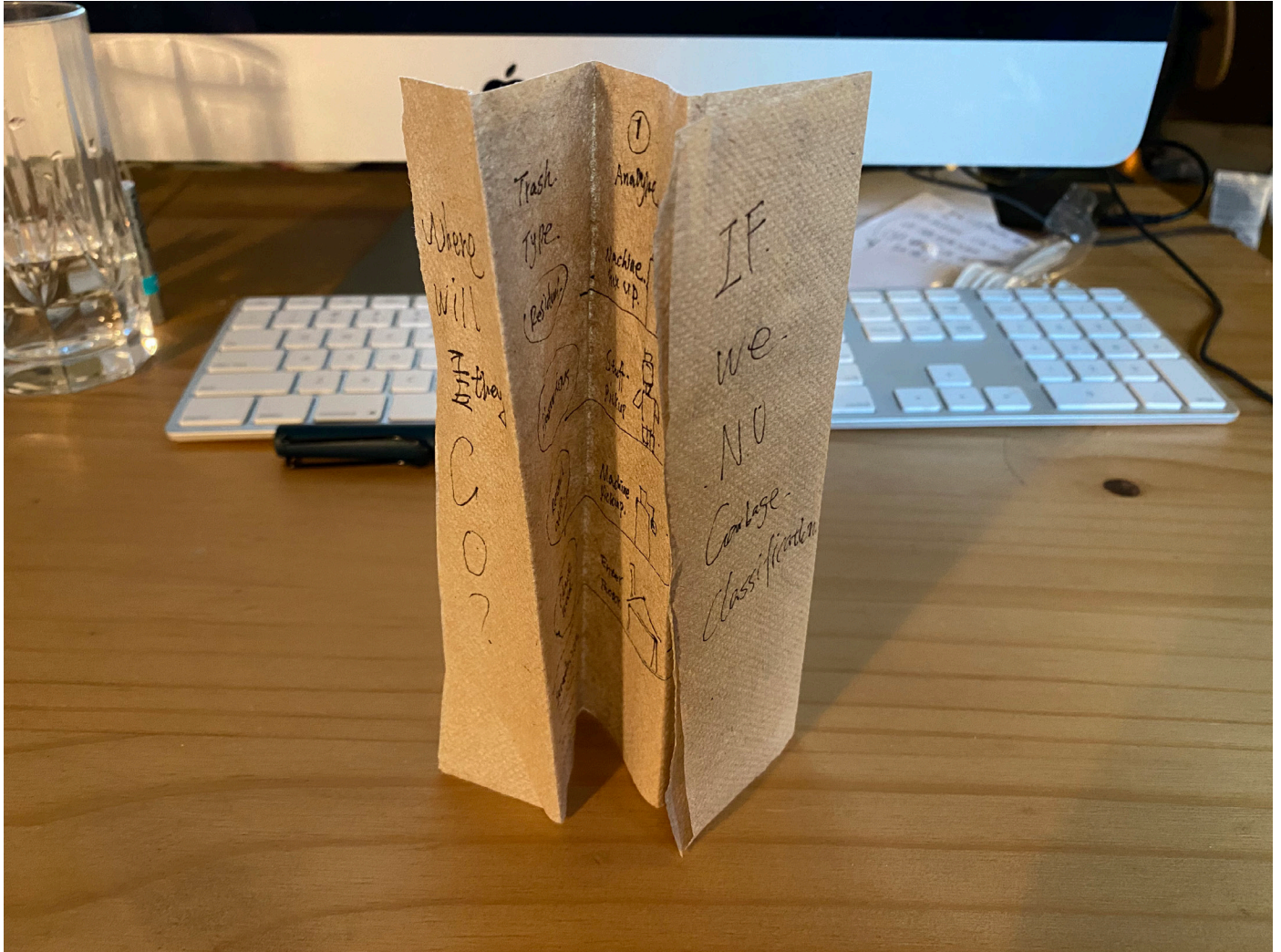
04 CREATIONS

Sketches – Brochure



04 CREATIONS

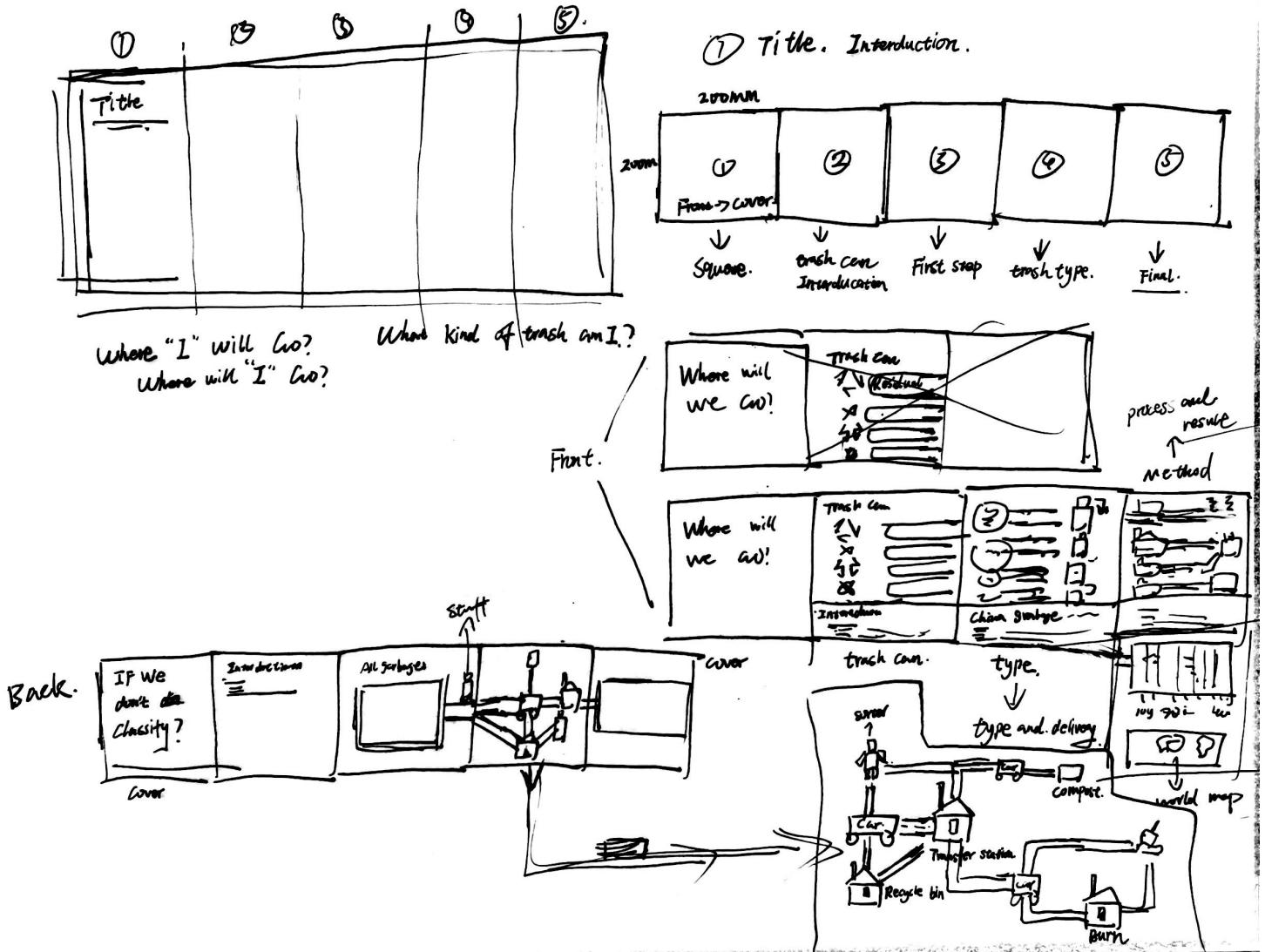
Sketches – Brochure



When it came to a five-fold, it looked like what I wanted it to look like, although the proportions were strange, but it gave me a new inspiration for offline brochures.

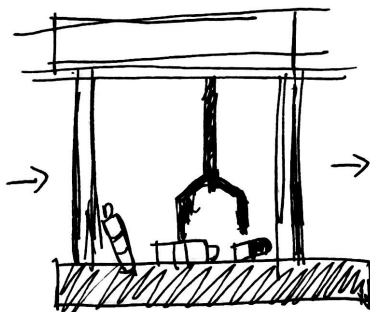
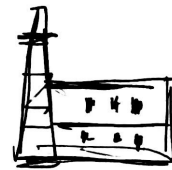
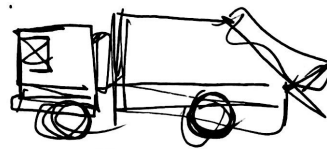
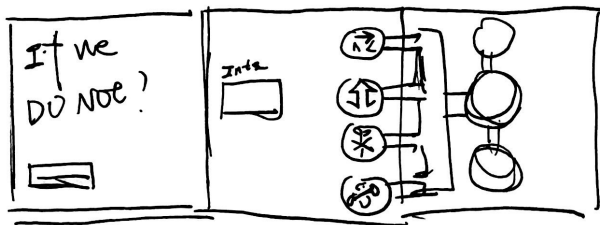
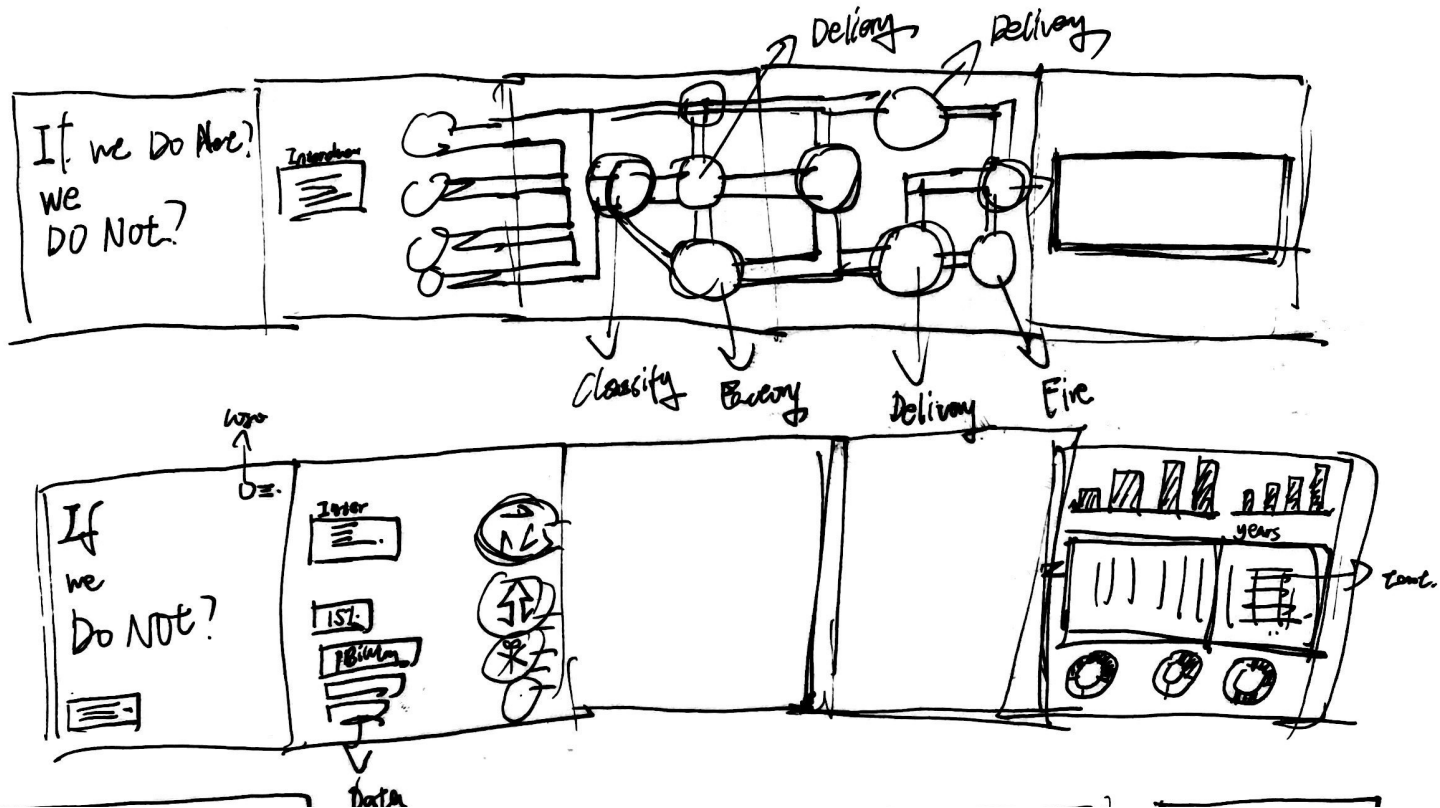
04 CREATIONS

Sketches – Brochure



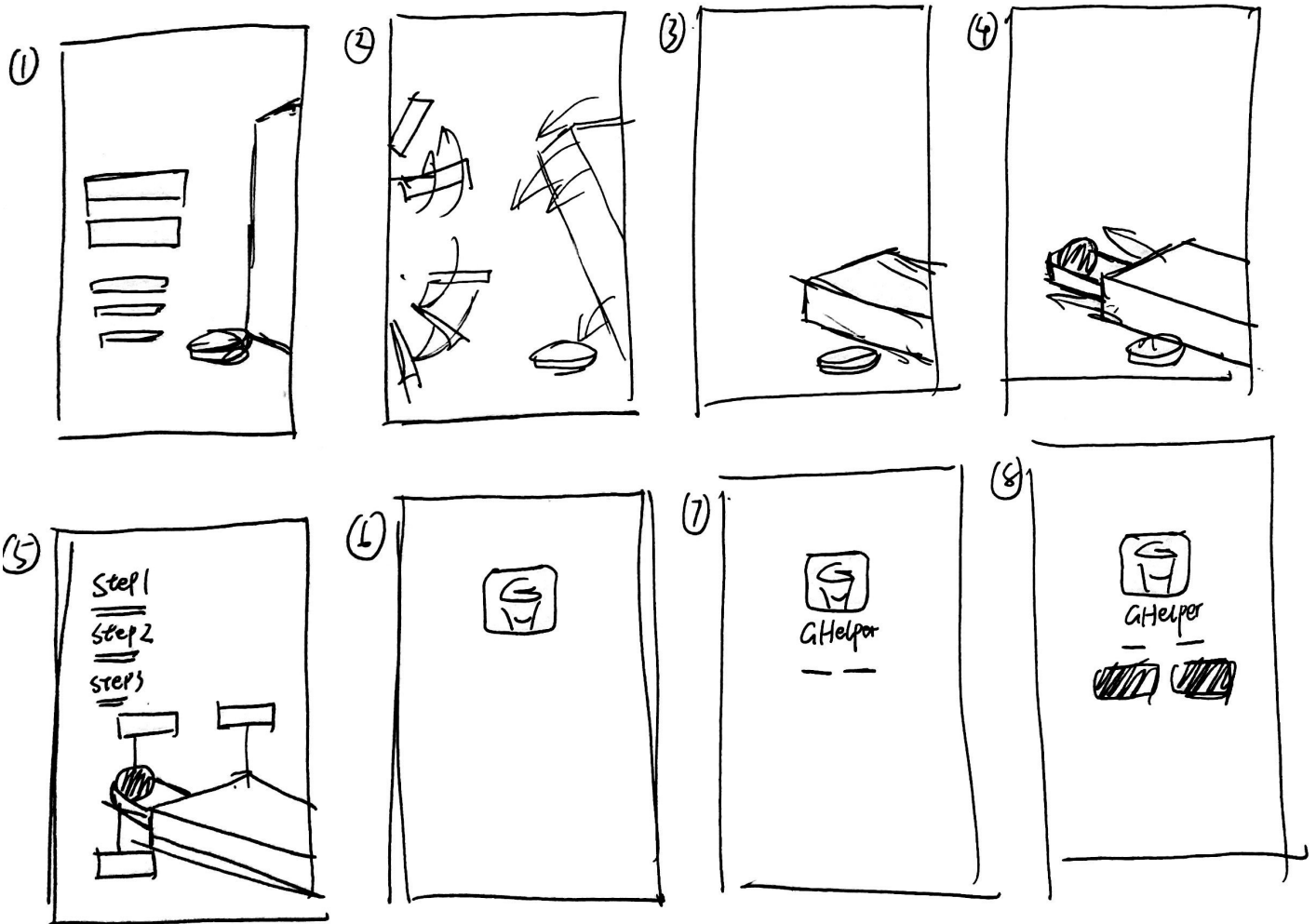
04 CREATIONS

Sketches – Brochure



04 CREATIONS

Sketches – Dynamic posters

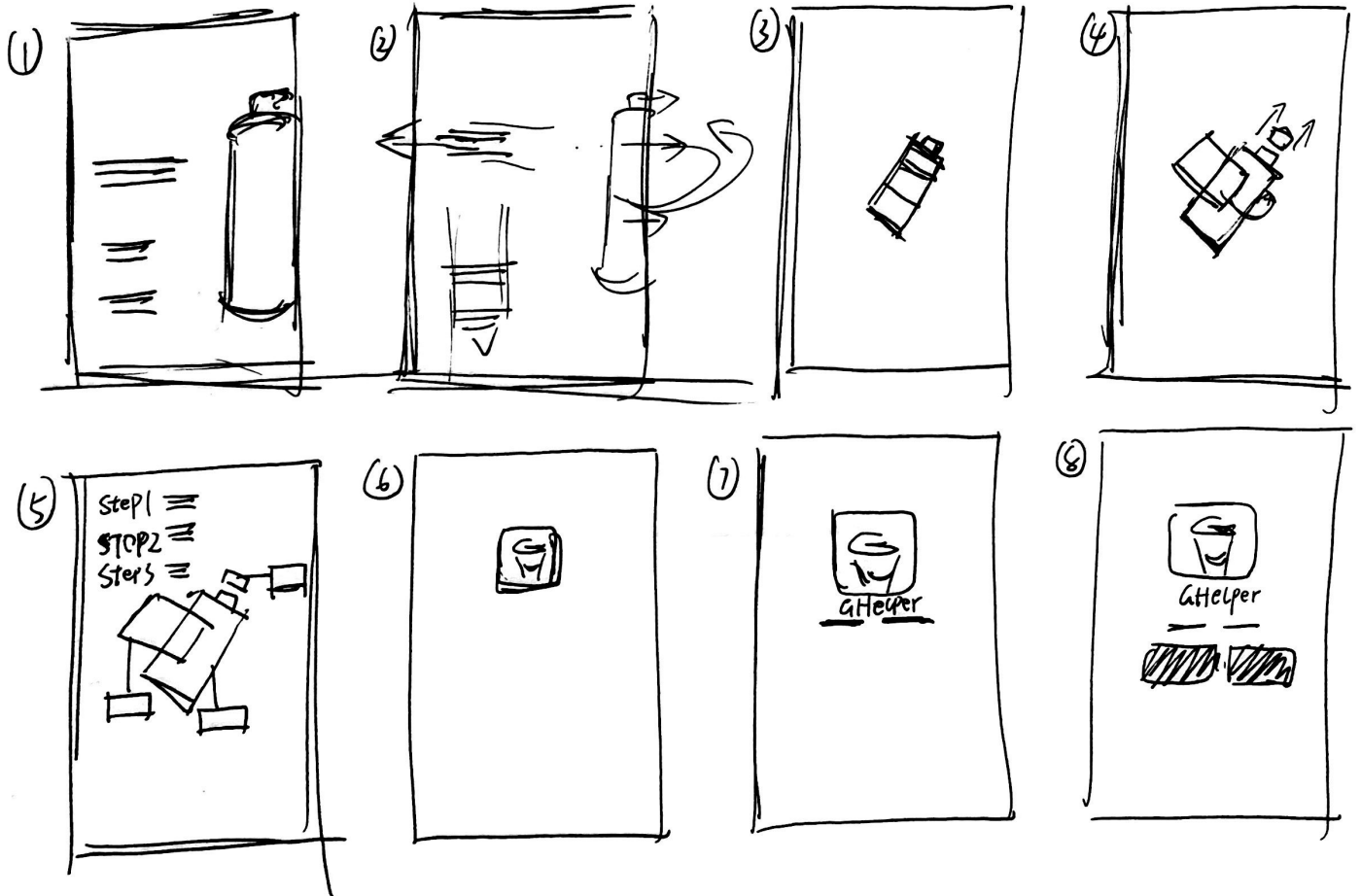


Dynamic posters are going to be a popular form of poster in the future. People will be more interested in capturing information quickly through interesting motion graphics.

At the same time, the interactive experience effectively enhances the environmental output of the artwork and guides the audience to focus on important information. And break the shortcomings of the one-time reading that is easy to exist in the design, and attract the public to read repeatedly.

04 CREATIONS

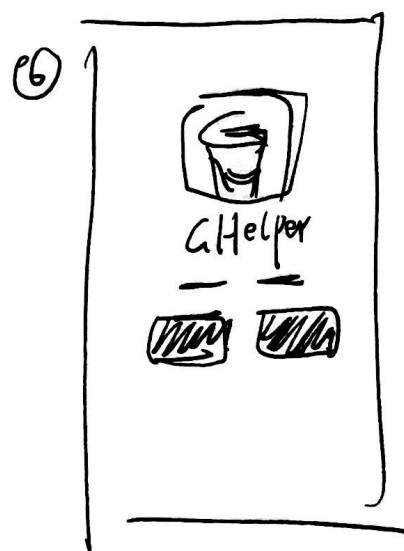
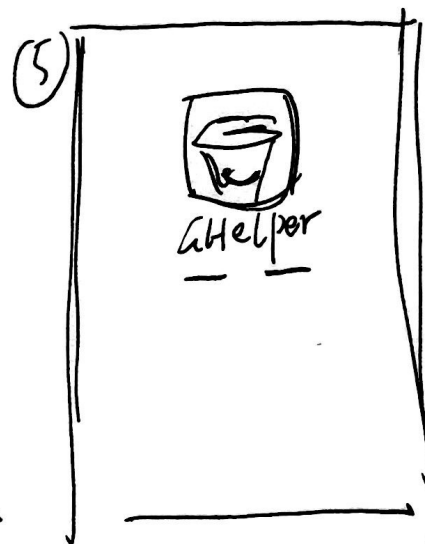
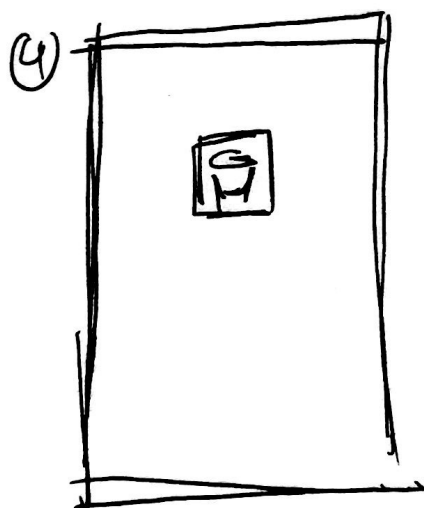
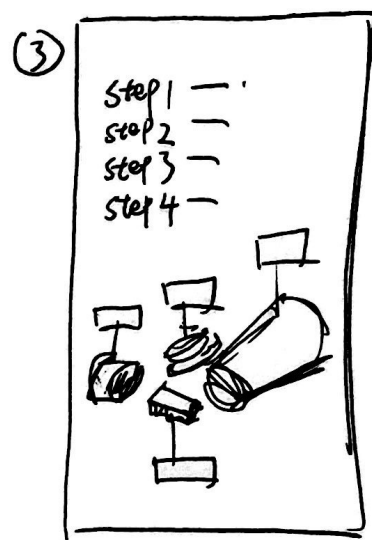
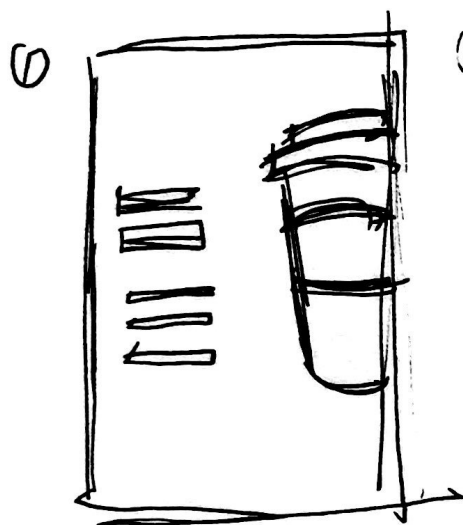
Sketches – Dynamic posters



In order to show the particularity of APP scanning, I hope that the objects in the poster can be separated to increase the interest of the poster. Meanwhile, through my knowledge of CINEMA 4D, I can successfully combine the 3D model with the poster, which is also a new attempt and challenge for me.

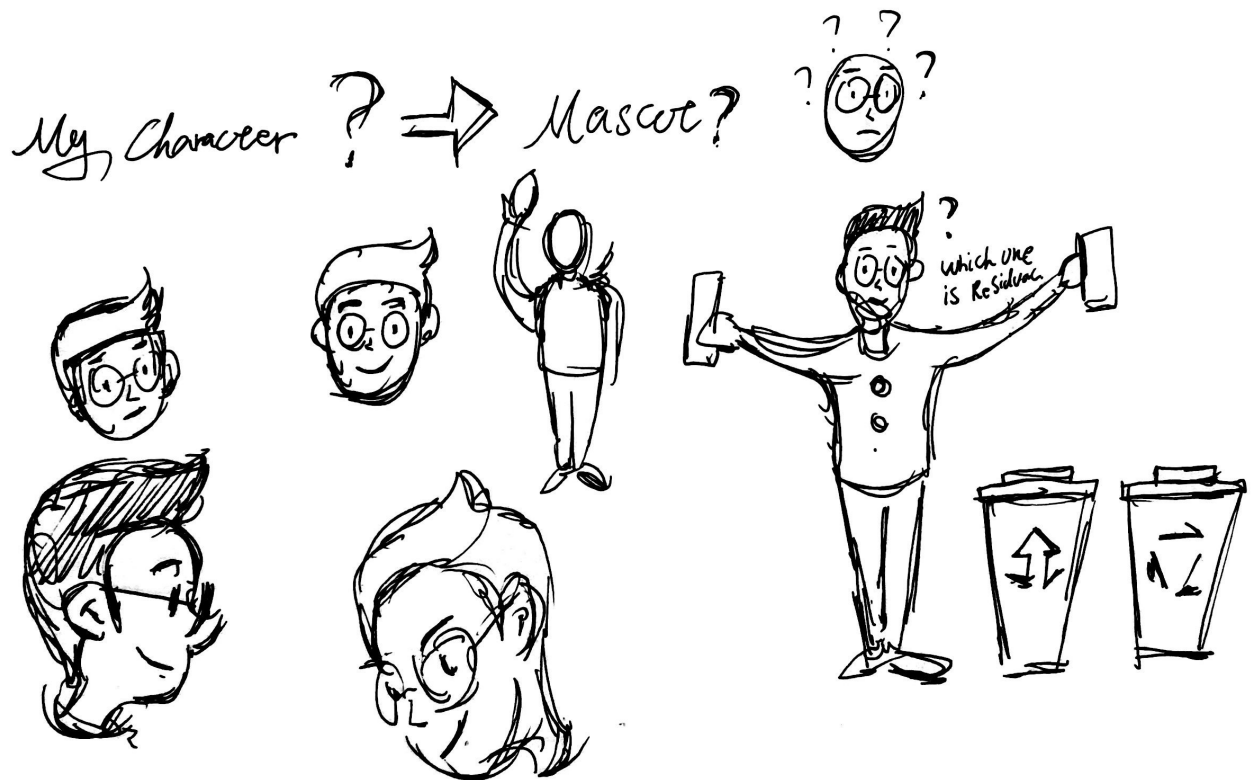
04 CREATIONS

Sketches – Dynamic posters



04 CREATIONS

Sketches – Mascot



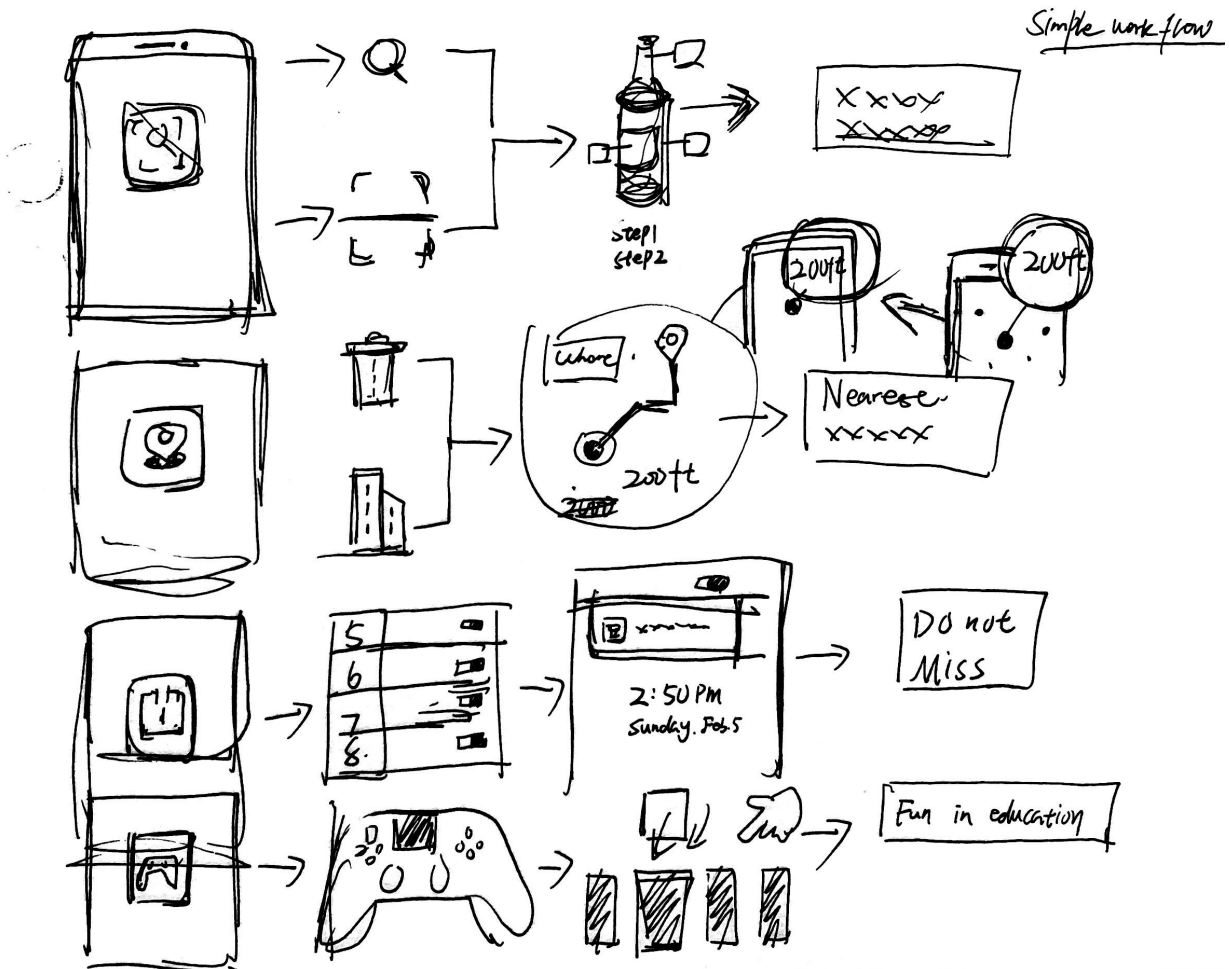
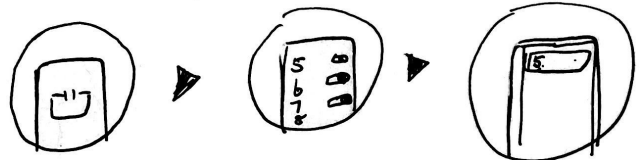
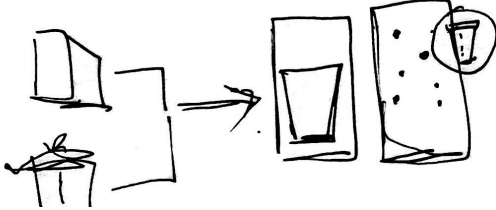
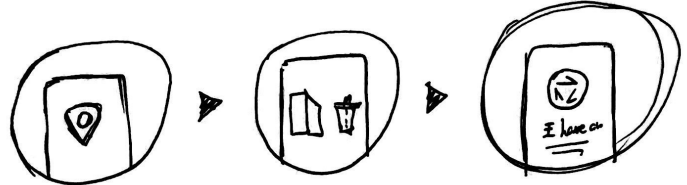
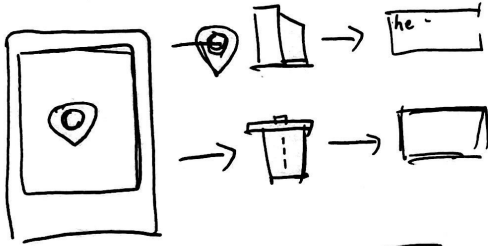
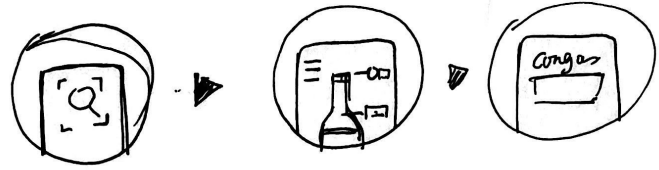
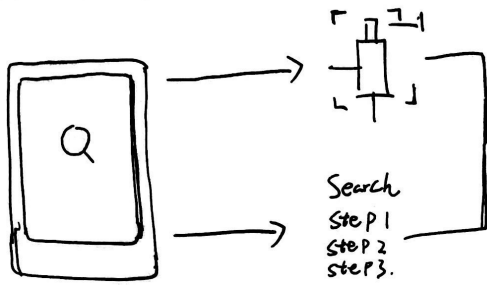
04 CREATIONS

Sketches – Mascot



04 CREATIONS

Sketches – Guide page



04 CREATIONS

Type Study

Arial Rounded MT Bold
ABCDEFGFG
abcdefg

For Logo

Helvetica Neue Regular
ABCDEFGFG
abcdefg

Helvetica Neue Medium
ABCDEFGFG
abcdefg

Helvetica Neue Bold
ABCDEFGFG
abcdefg

For App

Futura Medium
ABCDEFGFG
abcdefg

For Brochure

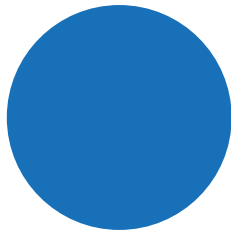
04 CREATIONS

Media Color

Main Color for app

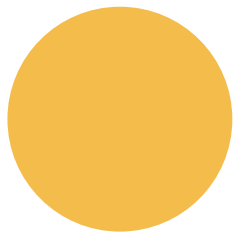


#F2F2F2

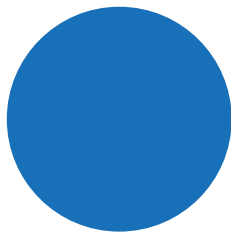


#006FC7

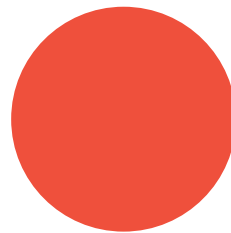
Color for Icon



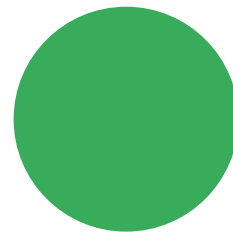
#FFC931



#006FC7



#FF4829



#00AF50

05 DESIGN

Design element – Logo



GHelper



分类助手



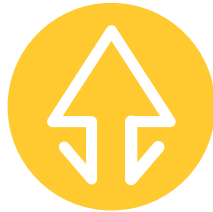
05 DESIGN

Design element – Icon

Garbage Icon



Recyclable Waste



Residual Waste



Hazardous Waste



Household Waste

Main Selection Icon



Classification



Calendar



Navigation



Education

The Second Selection Icon



Neighborhood
Trash Area



Street
Trash Can



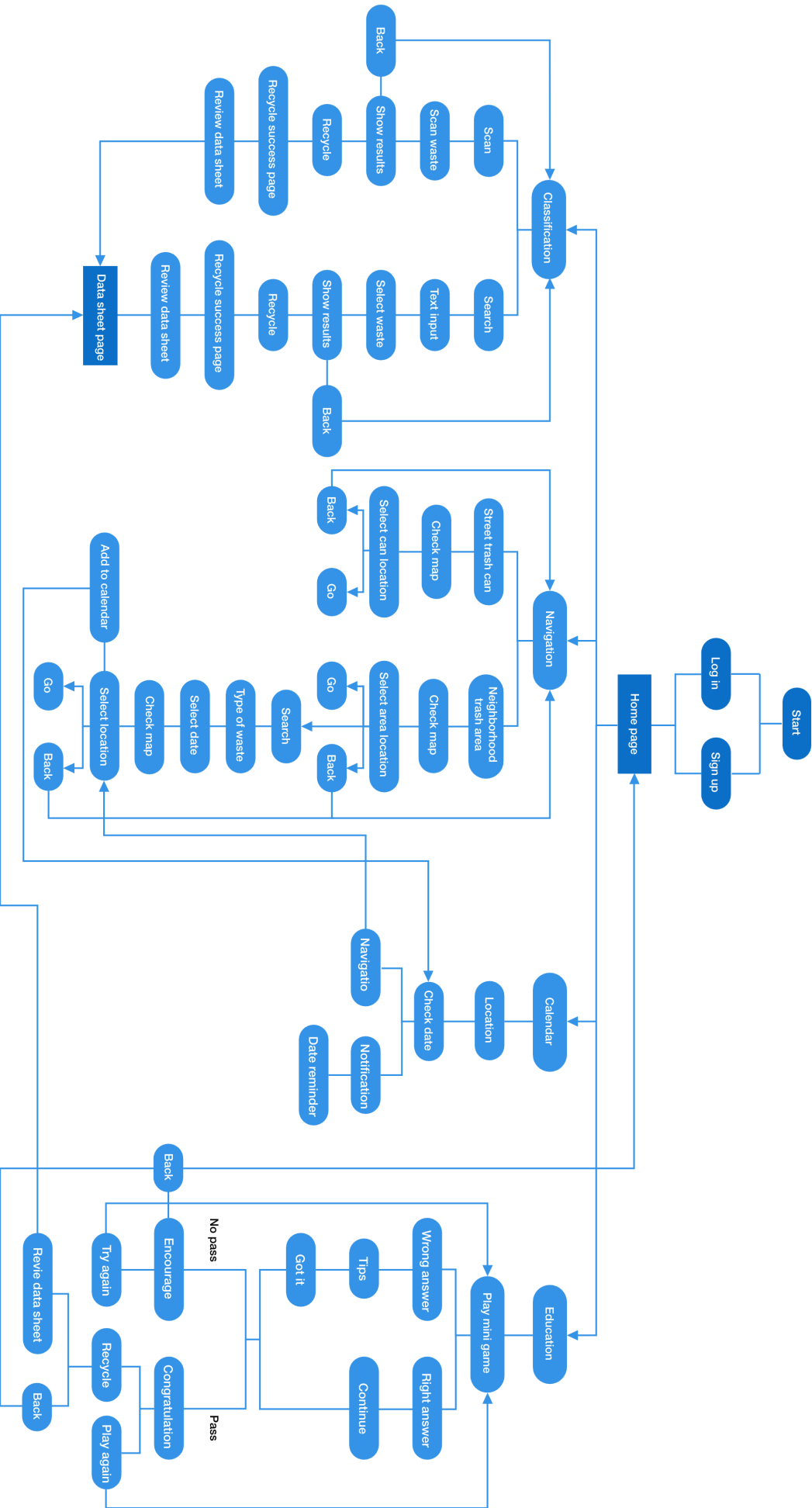
Search



Scan

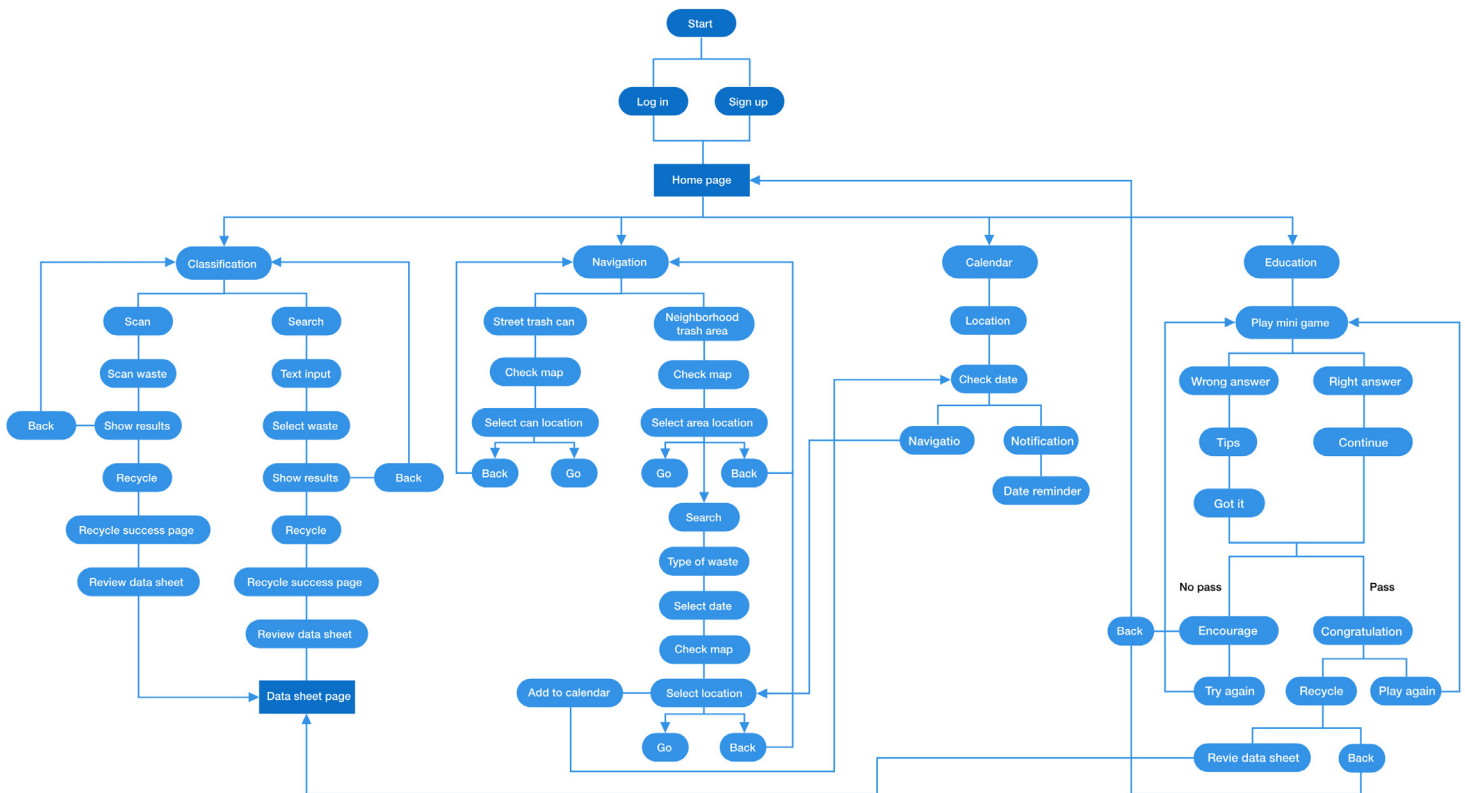
05 DESIGN

Work flow



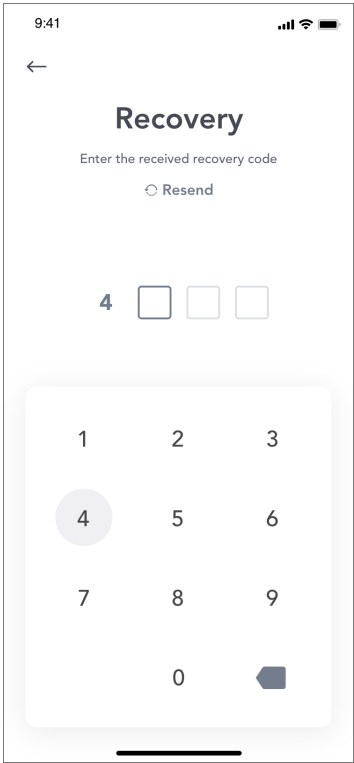
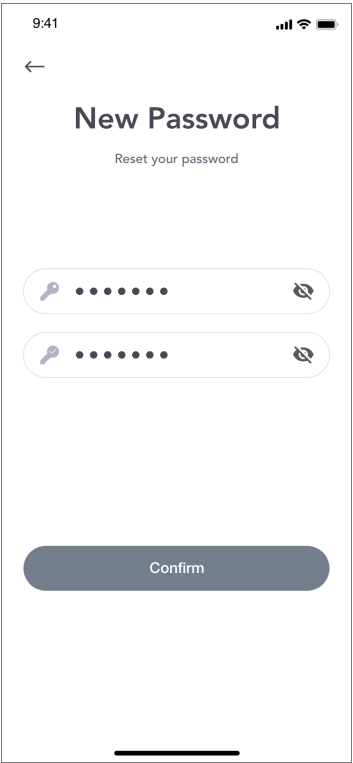
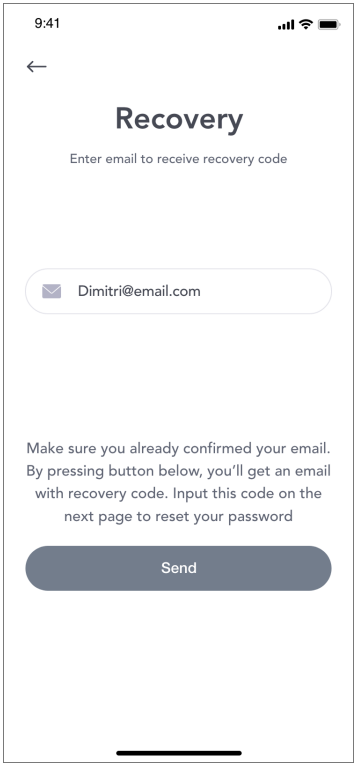
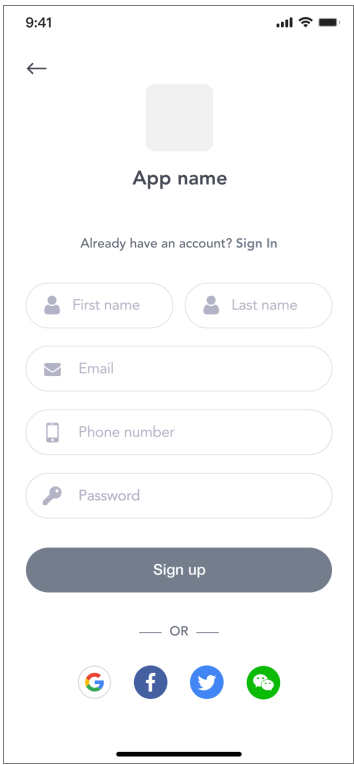
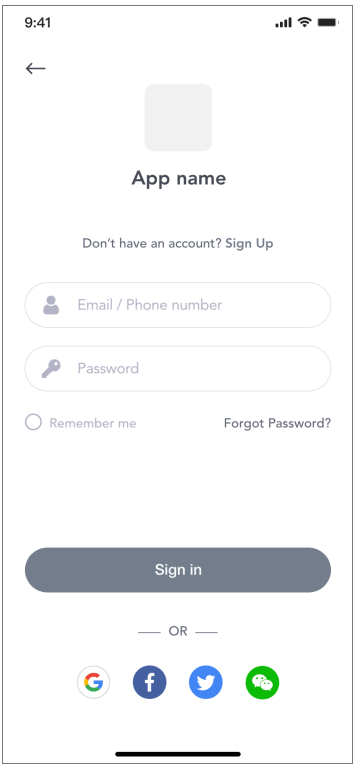
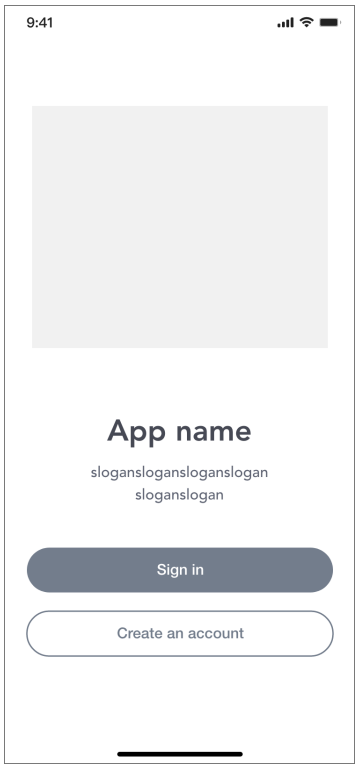
05 DESIGN

Work flow



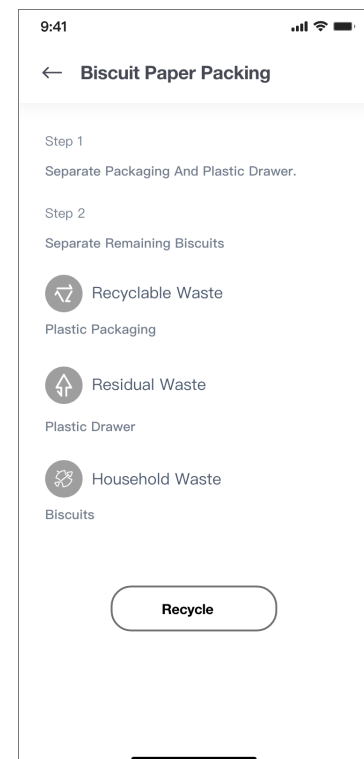
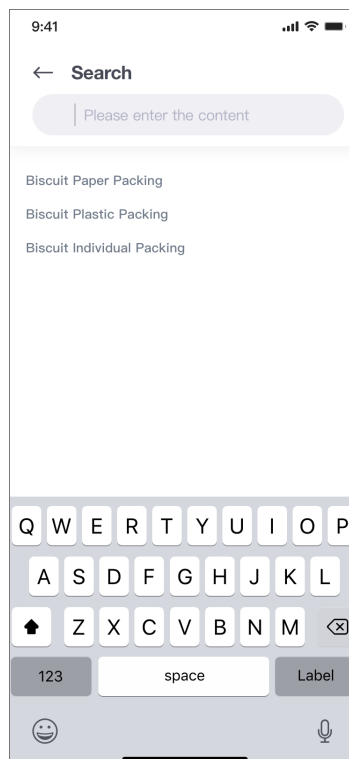
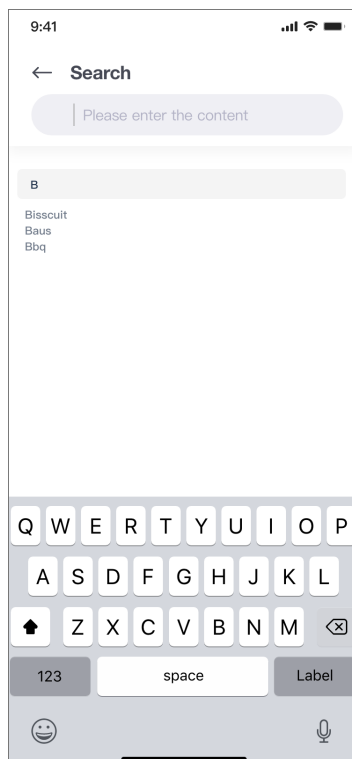
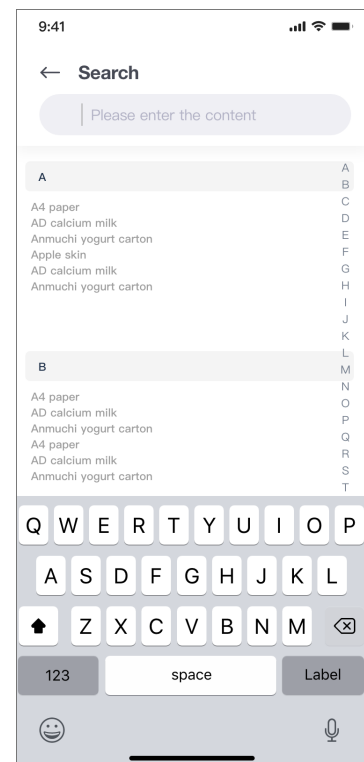
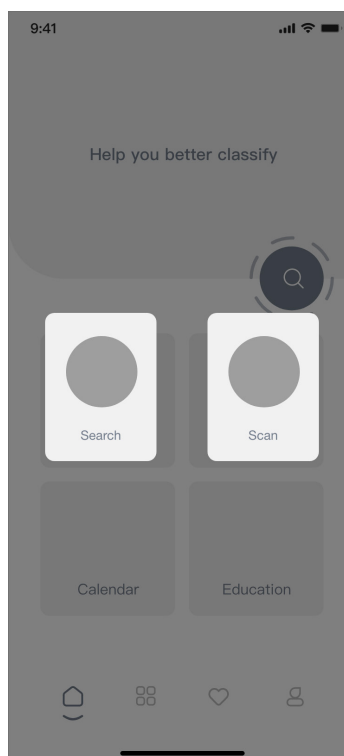
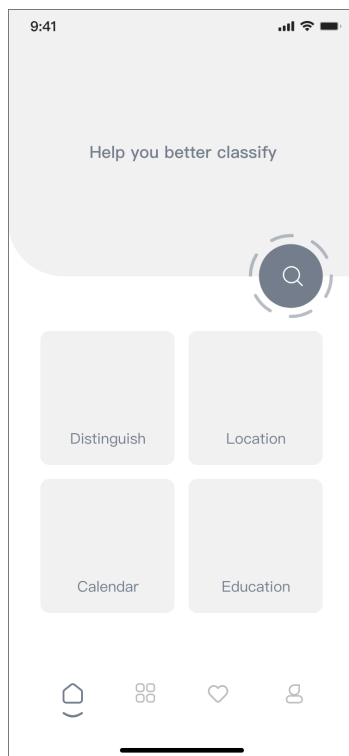
05 DESIGN

Lo-Fi Wireframes – Sign page



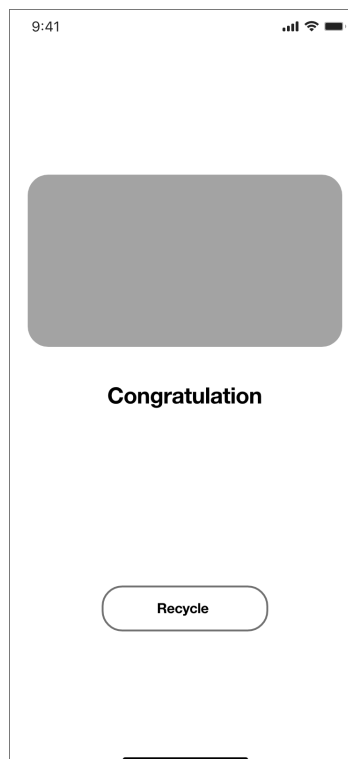
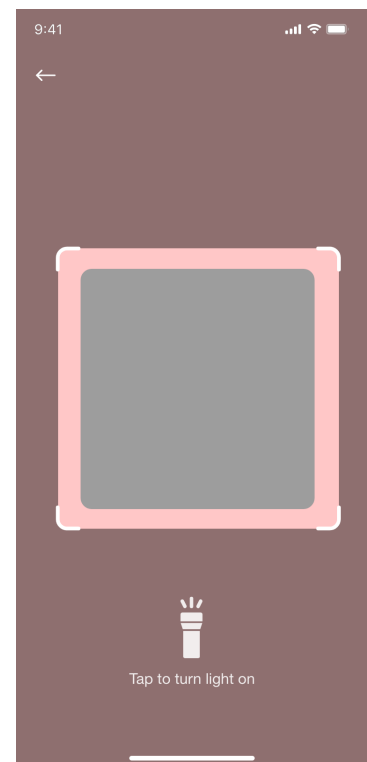
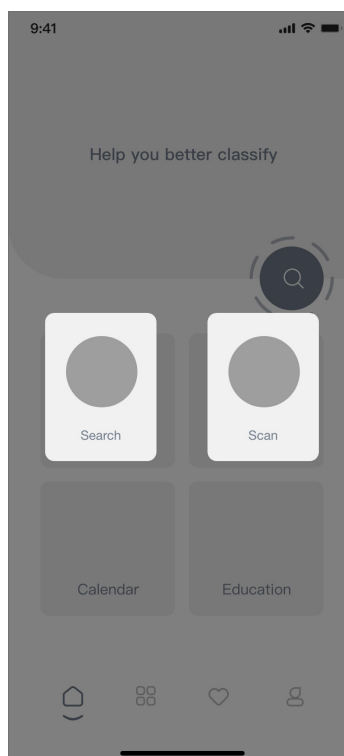
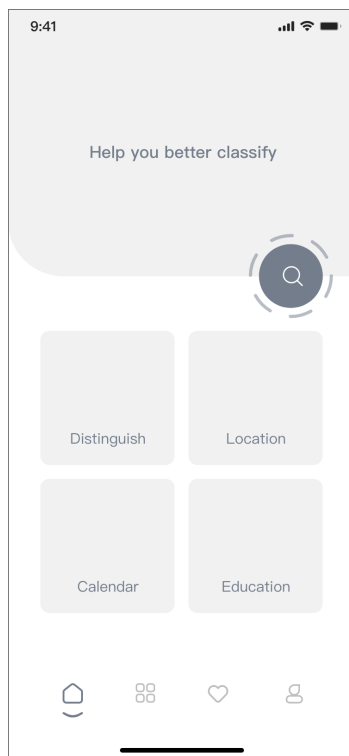
05 DESIGN

Lo-Fi Wireframes – Search garbage



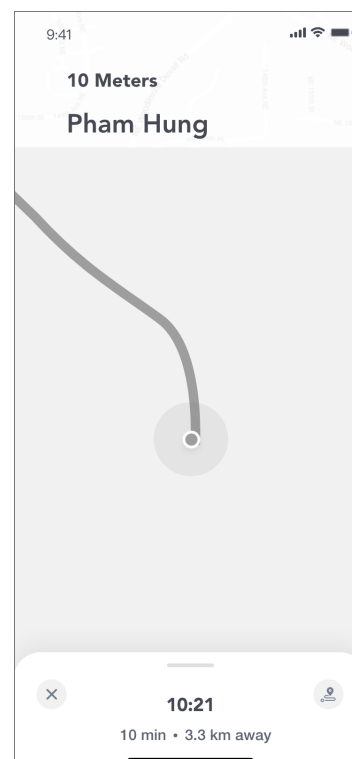
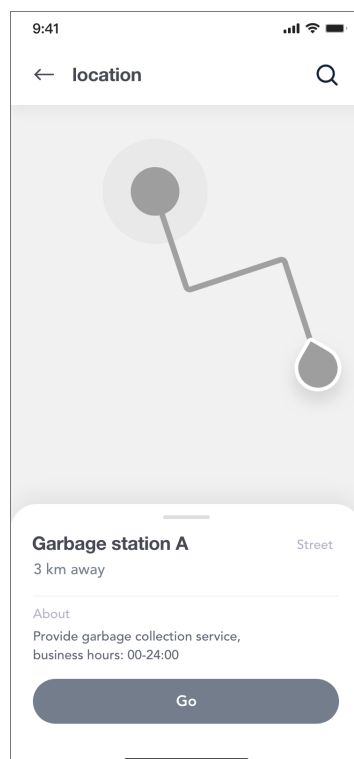
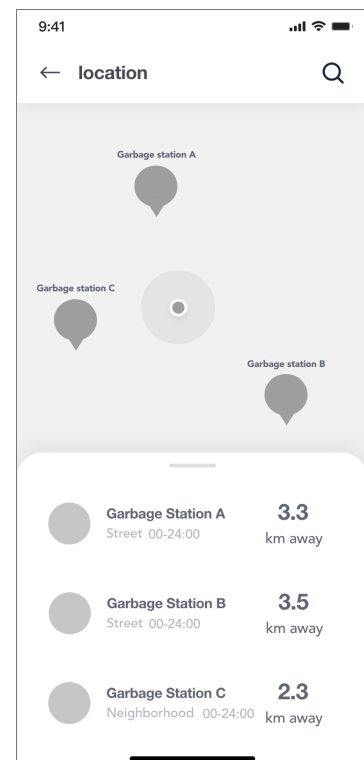
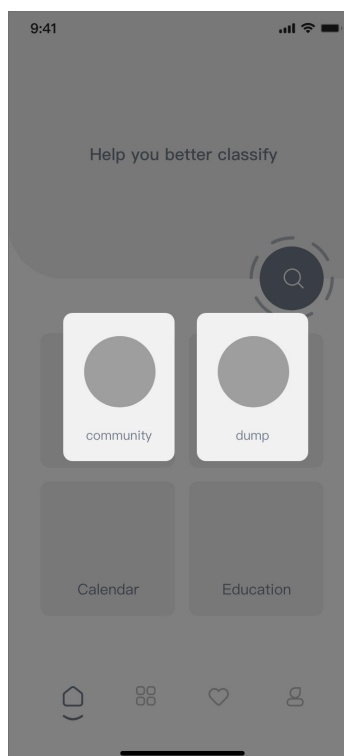
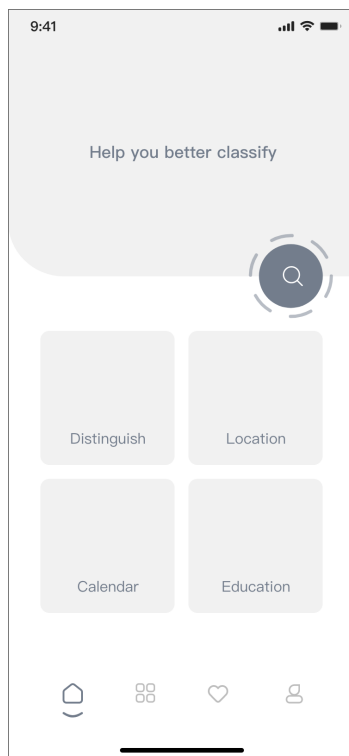
05 DESIGN

Lo-Fi Wireframes – Scan garbage



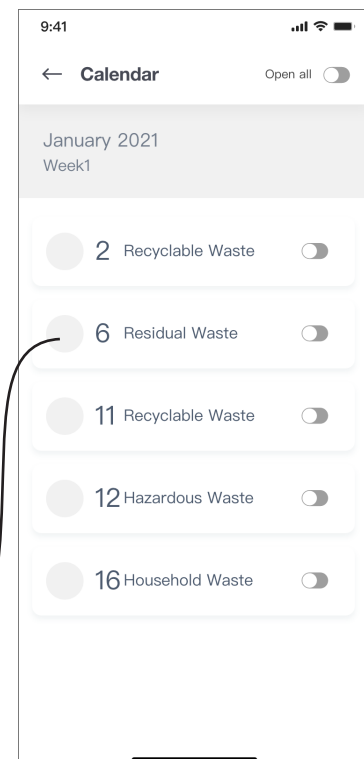
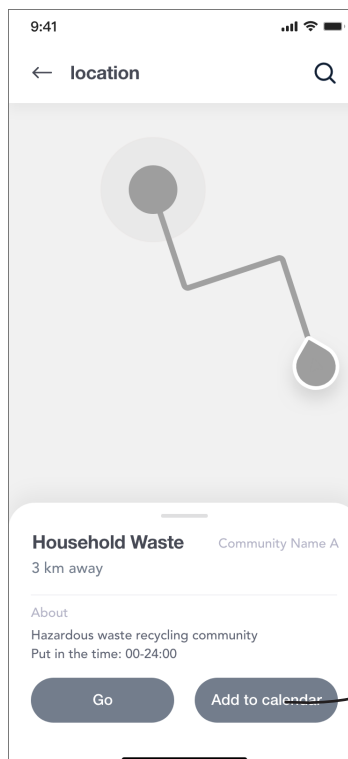
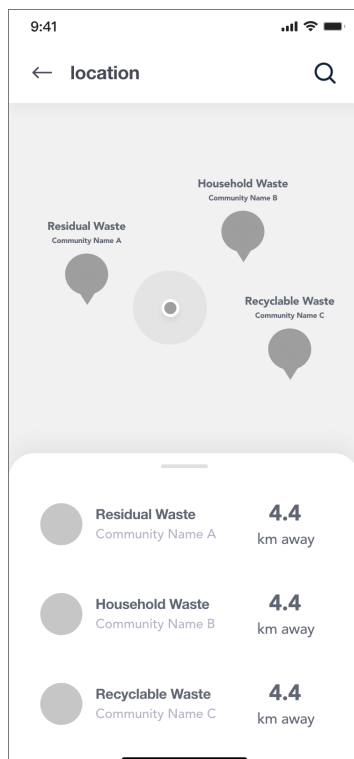
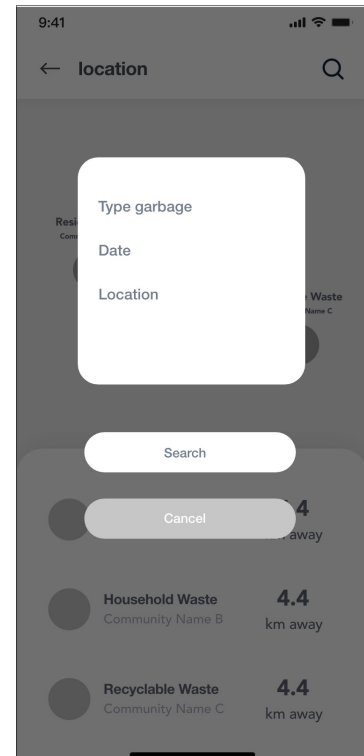
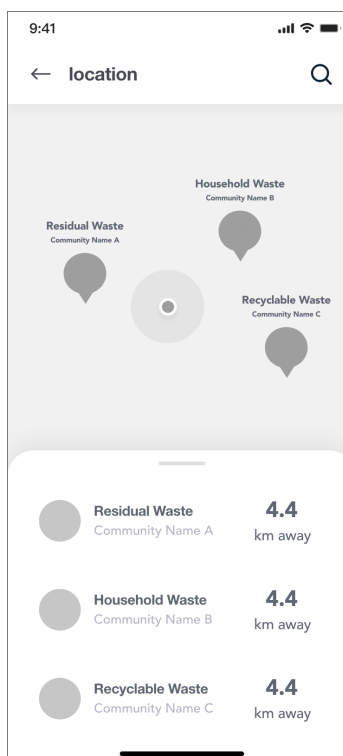
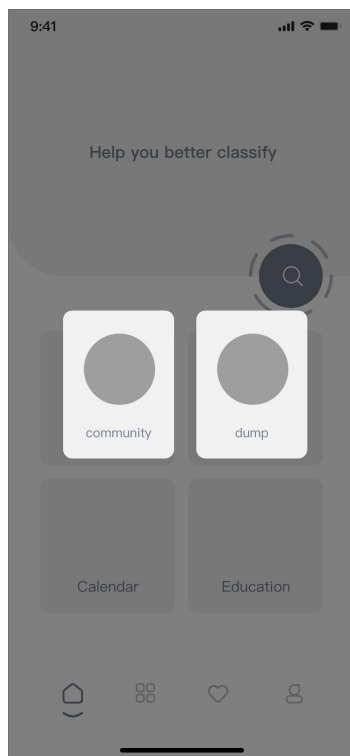
05 DESIGN

Lo-Fi Wireframes – *Street Trash Can*



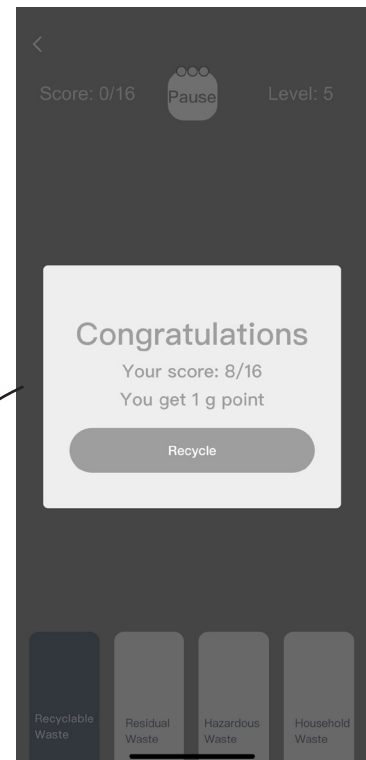
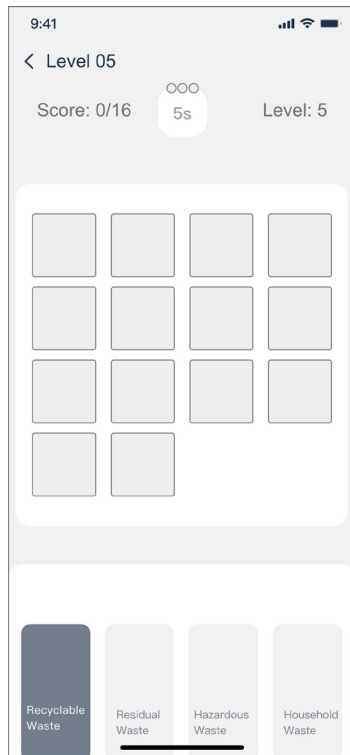
05 DESIGN

Lo-Fi Wireframes – Neighborhood Trash Area & Calendar



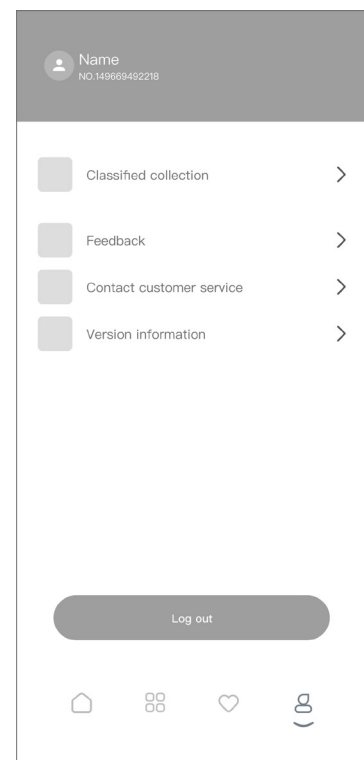
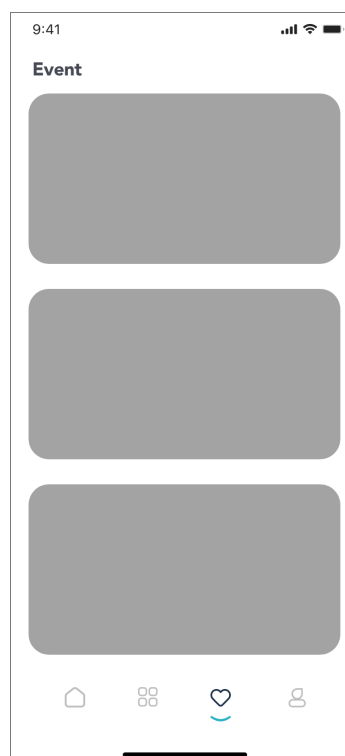
05 DESIGN

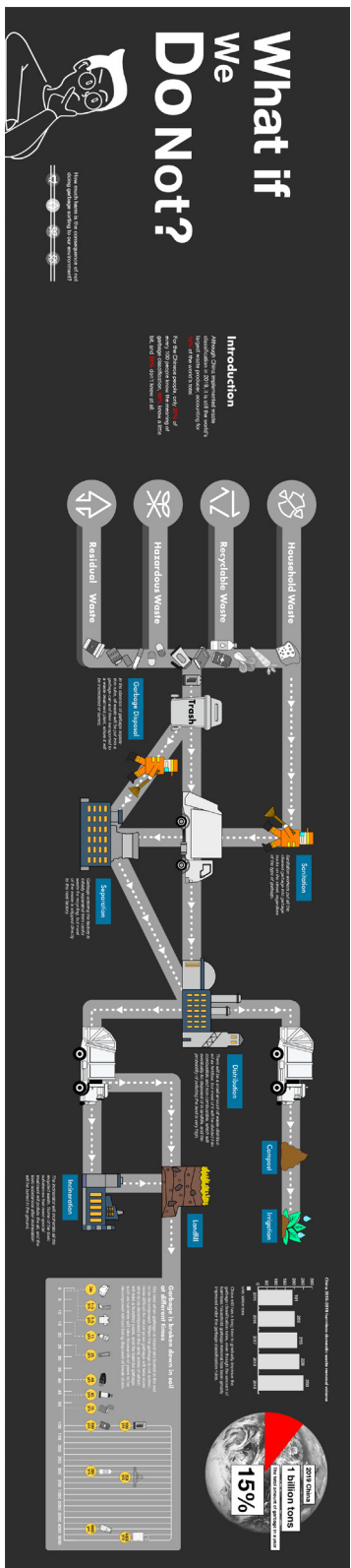
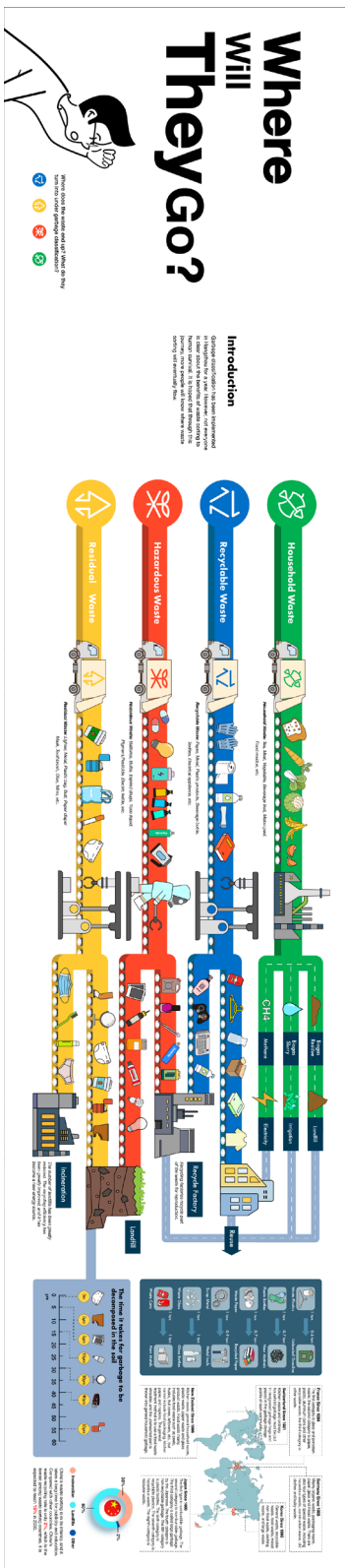
Lo-Fi Wireframes – *Education*



05 DESIGN

Lo-Fi Wireframes – Recycling page, Event page & Account





05 DESIGN

Guide Page



Guide Page will be simple and clear features of each APP function through graphic display, can quickly understand the advantages of APP to users.



05 DESIGN

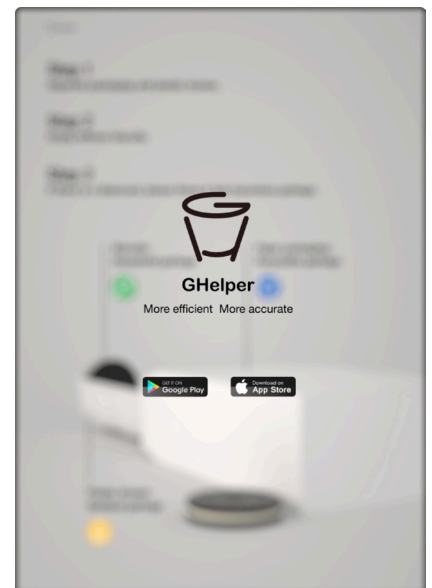
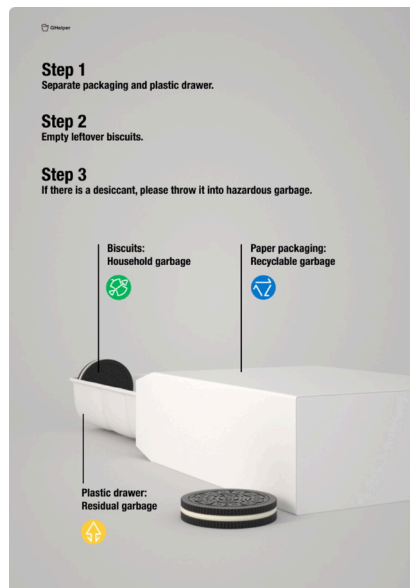
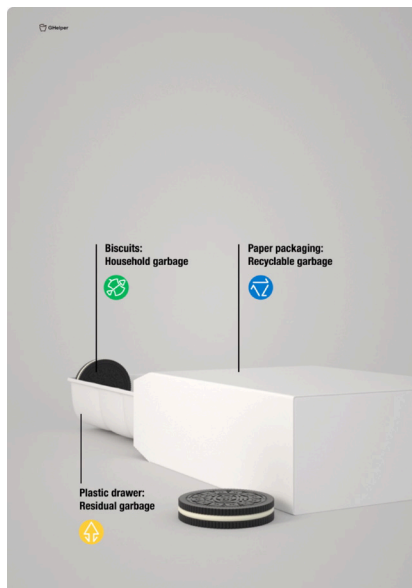
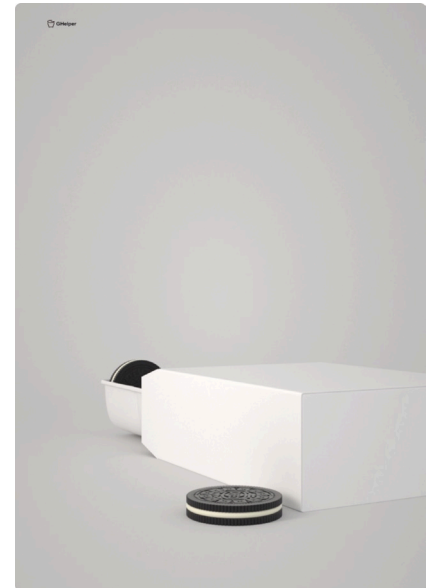
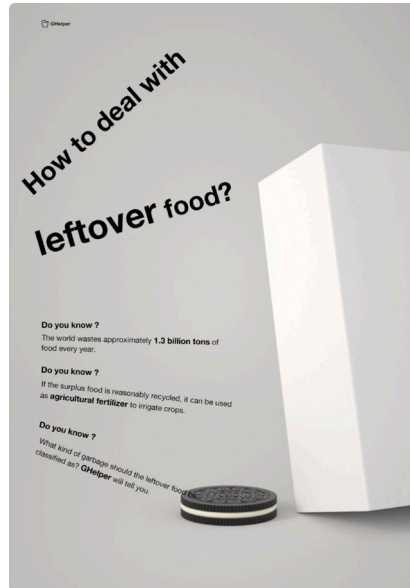
Brochure & Guide Page

The guide page will be included in the brochure. The brochure will be used as the way to publicize garbage classification and APP offline. App can cooperate with airlines and train companies. When the flight or train enters Hangzhou, the passengers will be given brochures. The brochure introduces the benefits of garbage classification and the results of non-classification. In the form of graph, the final destination of garbage is introduced. Indirectly passed the consciousness of garbage classification.

The guide page introduced the functions of the APP quickly and clearly. In the brochure and the guide page, foreign tourists will be encouraged to download the APP and abide by the garbage classification rules of Hangzhou, so as to facilitate tourists to correctly and conveniently classify garbage in Hangzhou.

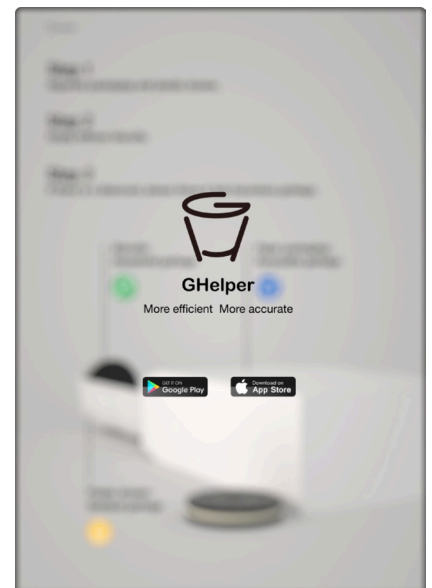
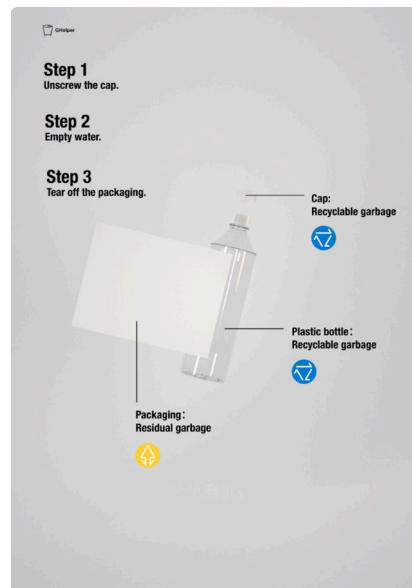
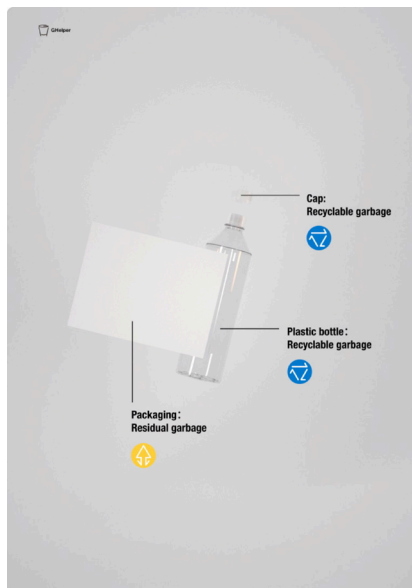
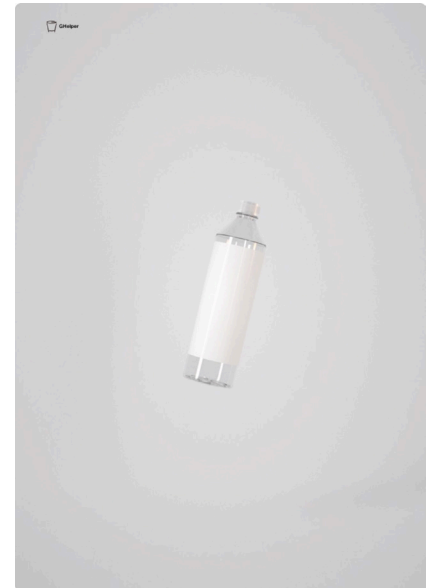
05 DESIGN

Dynamic posters



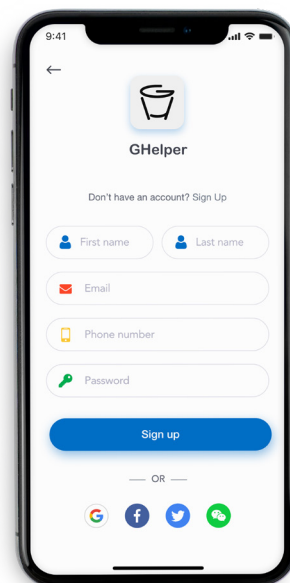
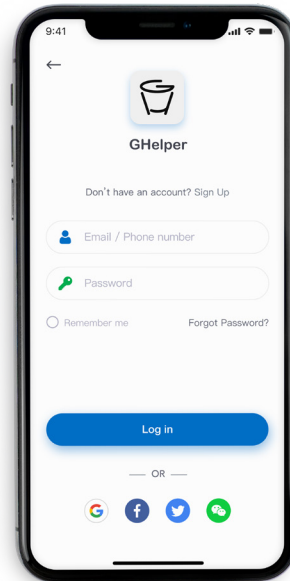
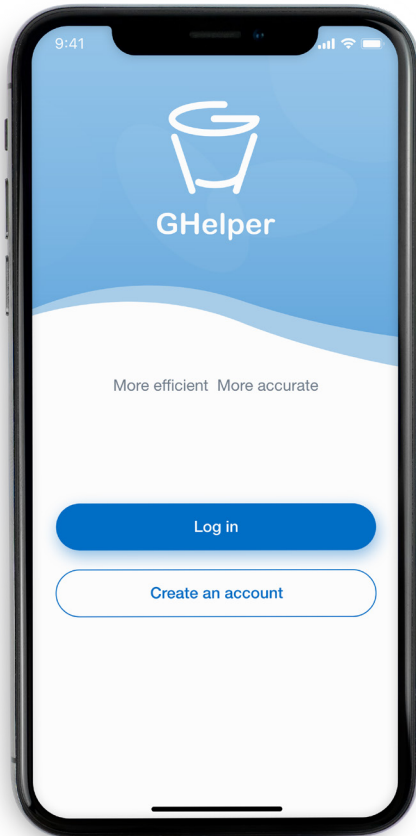
05 DESIGN

Dynamic posters



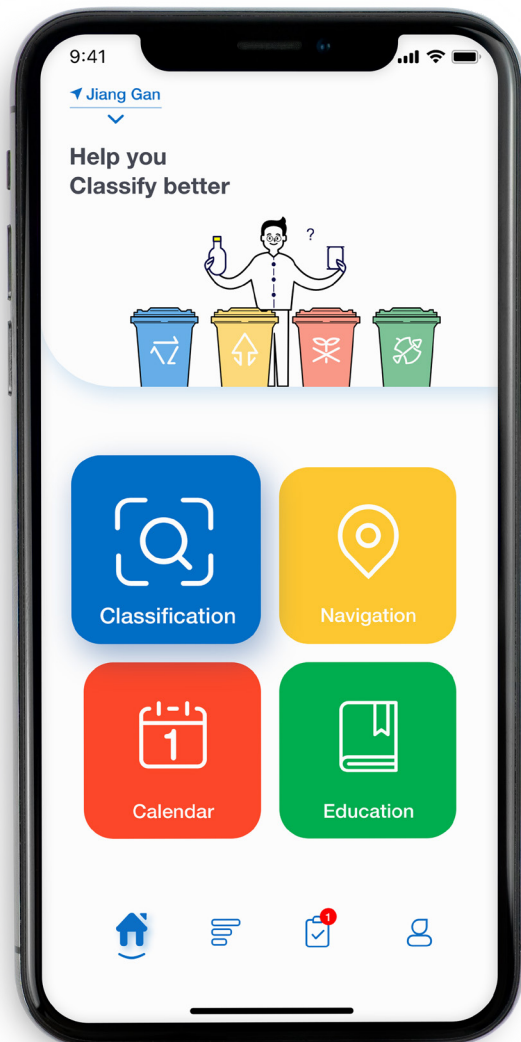
06 FINAL DESIGN

Hi-Fi Wireframes – Sign in & Log in Page



06 FINAL DESIGN

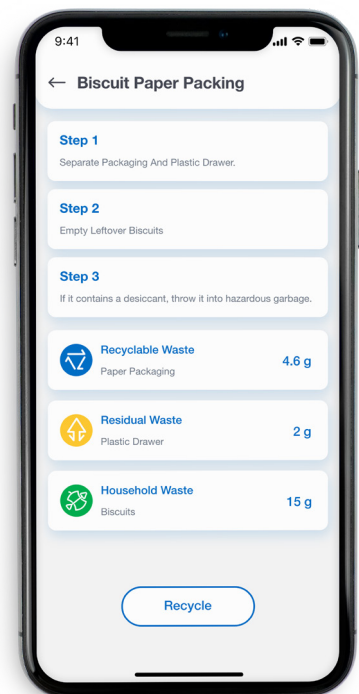
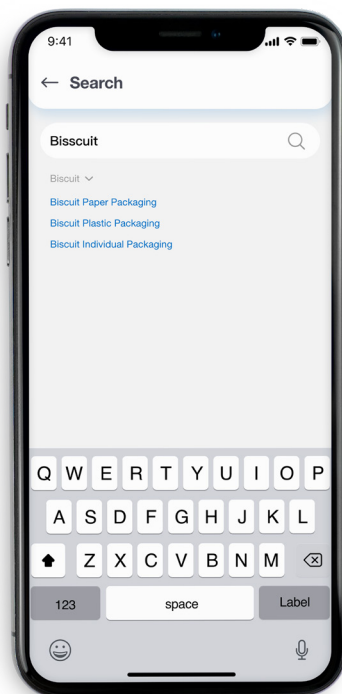
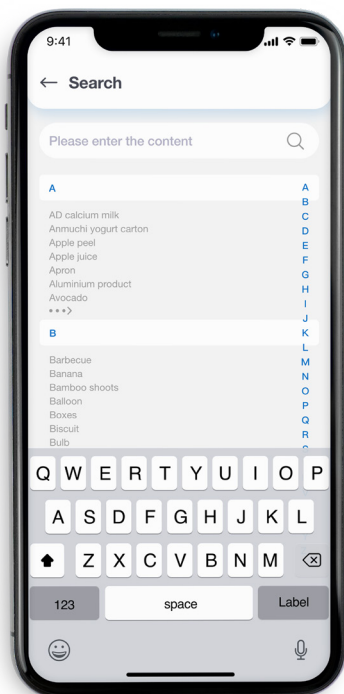
Hi-Fi Wireframes – *Classification Function*



06 FINAL DESIGN

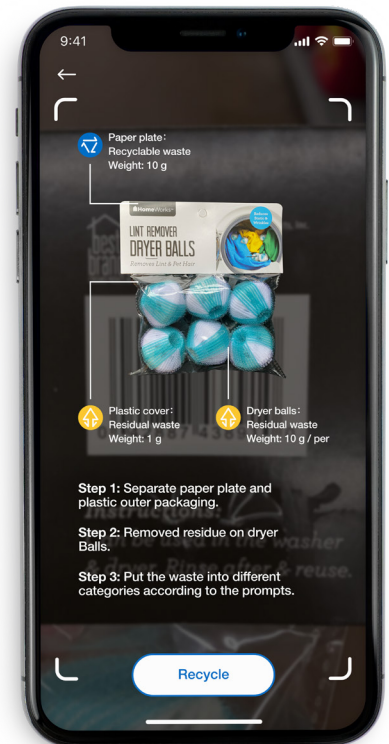
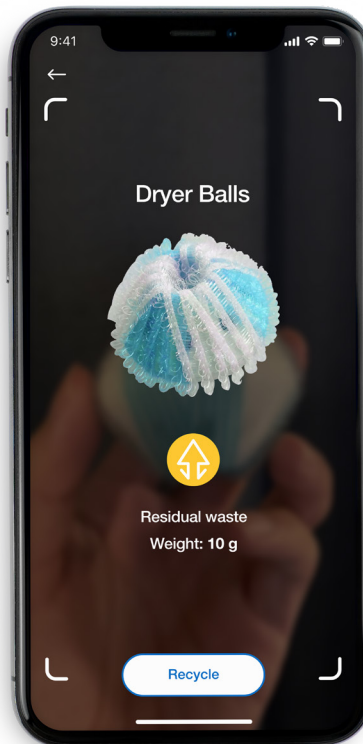
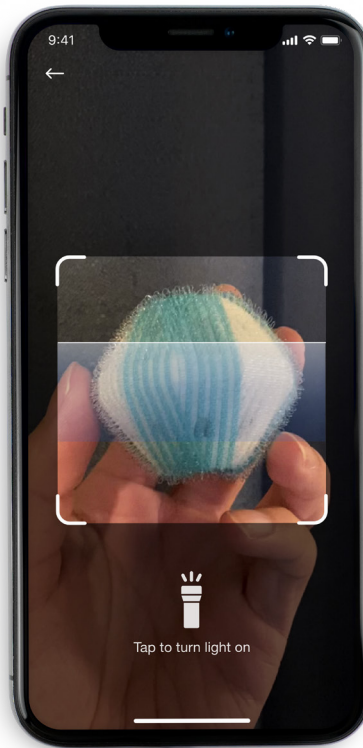
Hi-Fi Wireframes – Search Garbage

For items without special packaging or familiar names products, the text search function can quickly tell users the steps and types of garbage.



06 FINAL DESIGN

Hi-Fi Wireframes – Scan garbage



05 DESIGN

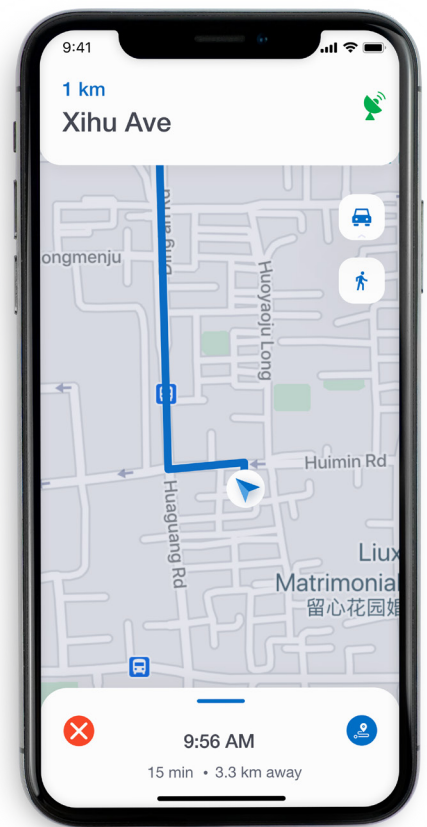
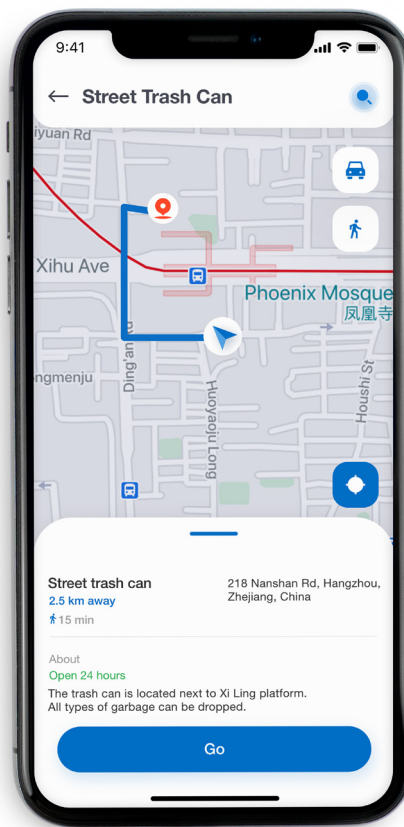
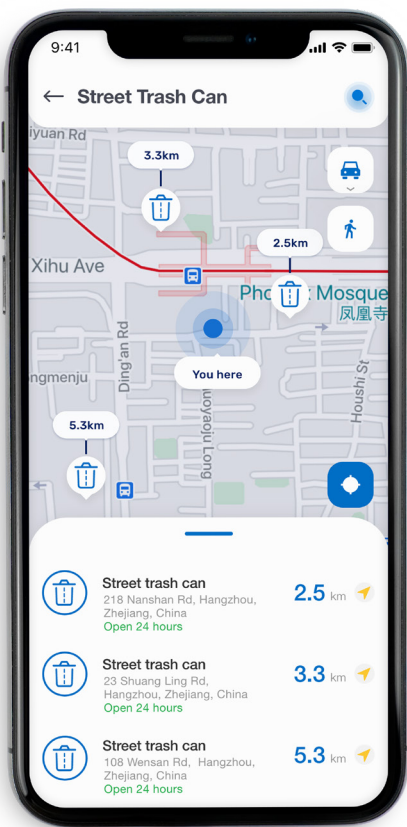
Hi-Fi Wireframes – Navigation



05 DESIGN

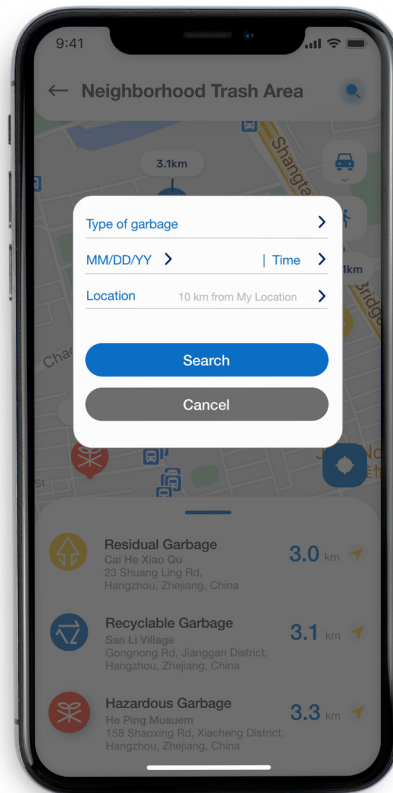
Hi-Fi Wireframes – Street Trash Can

When users have garbage they want to throw in the street and don't know where the trash can is nearby, they can quickly see where the nearest trash can is by using street trash can navigation. It's very convenient for tourists.



05 DESIGN

Hi-Fi Wireframes – Neighborhood Trash Area

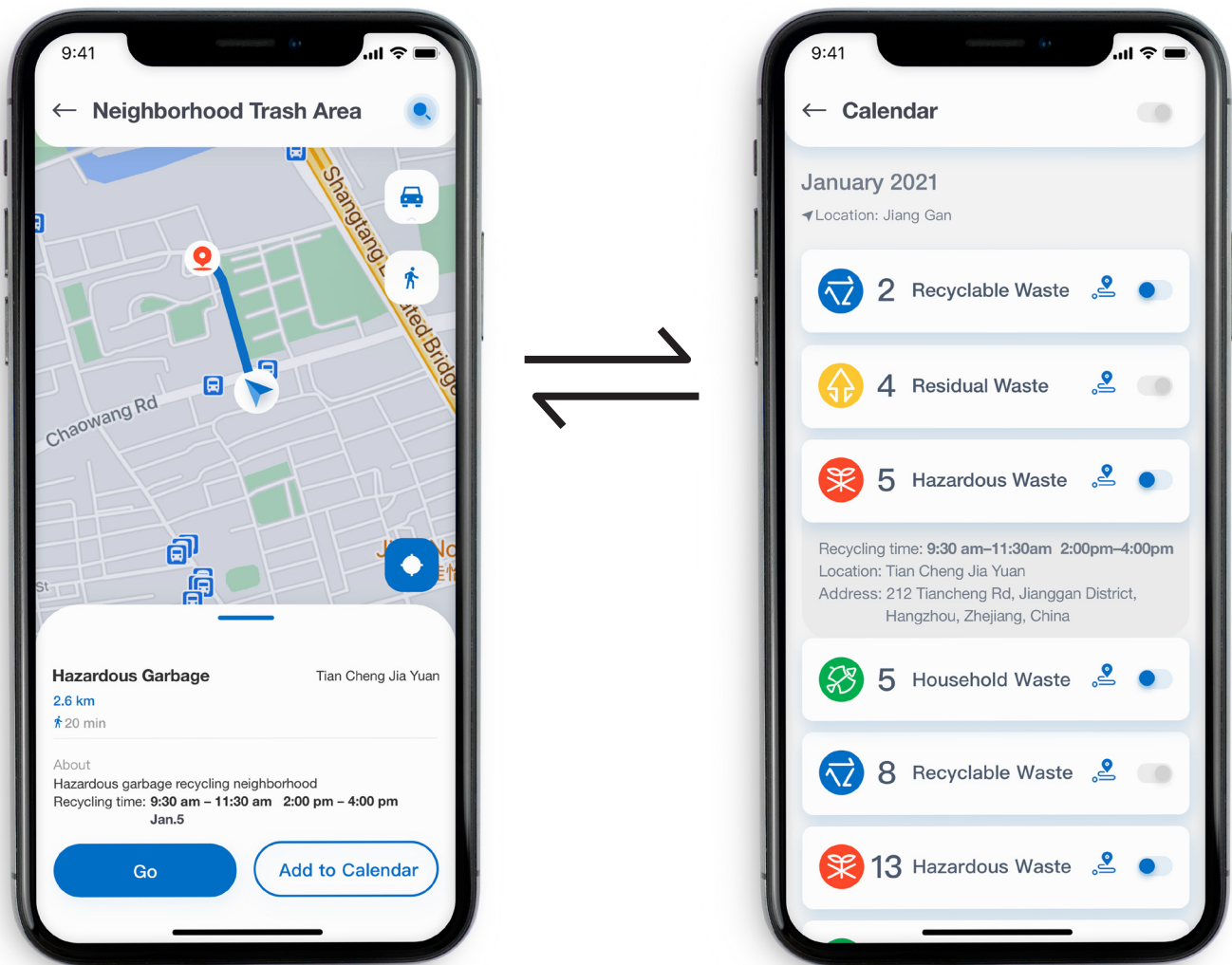


In this function, the user can see what garbage can be dropped in other neighborhood today. Users can also search for the type of garbage they want to throw, the date and the distance. Then users can check the results that meet the requirements on the map.



05 DESIGN

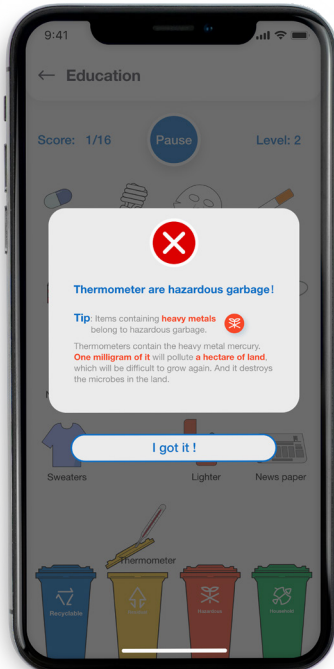
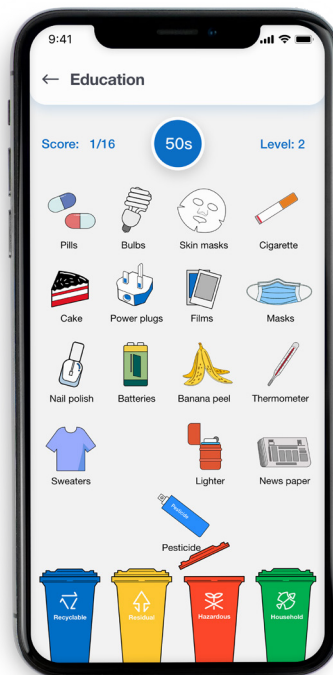
Hi-Fi Wireframes – Neighborhood Trash Area



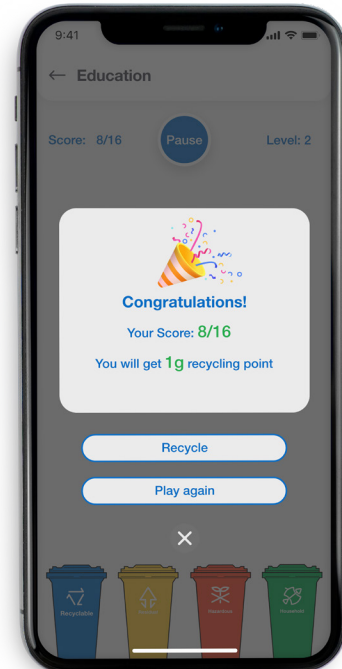
In the calendar function, according to the user's different zone, it will automatically load the time of the community. Users can open the notification function according to their own needs, or can directly navigate to the location of the garbage area according to their needs. Users can quickly switch between the two pages, making it easier for them to throw away their trash and avoid missing their delivery time. Even if you miss it, you can quickly use the neighborhood trash area navigation function to find the area where you can drop garbage.

05 DESIGN

Hi-Fi Wireframes – Education



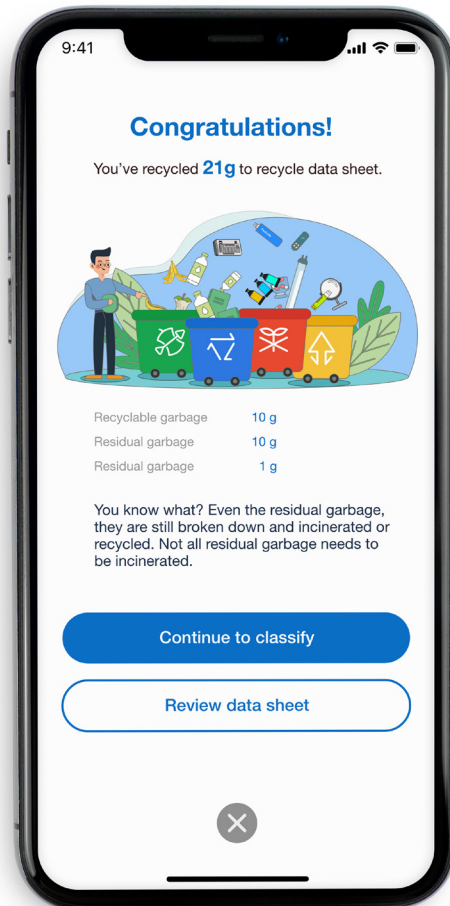
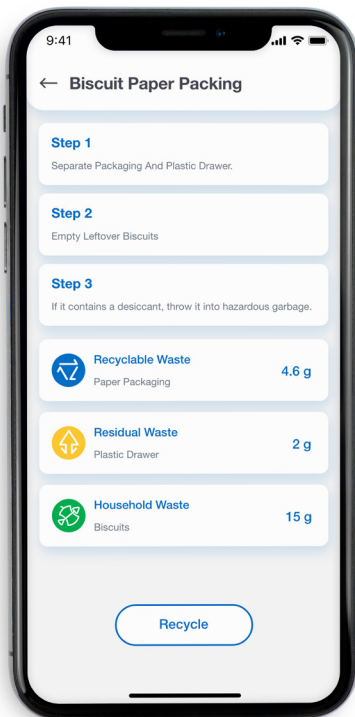
When responding. The user will be prompted about this type of garbage.



If user win more than half of your categories, you'll get a bonus of 1point, which you can check out on the Data Sheet page.

05 DESIGN

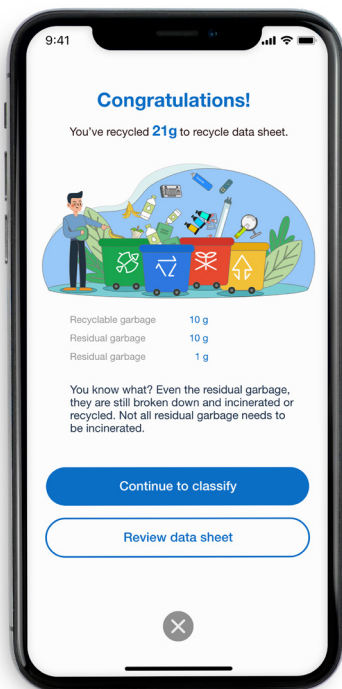
Hi-Fi Wireframes – *Recycle Point*



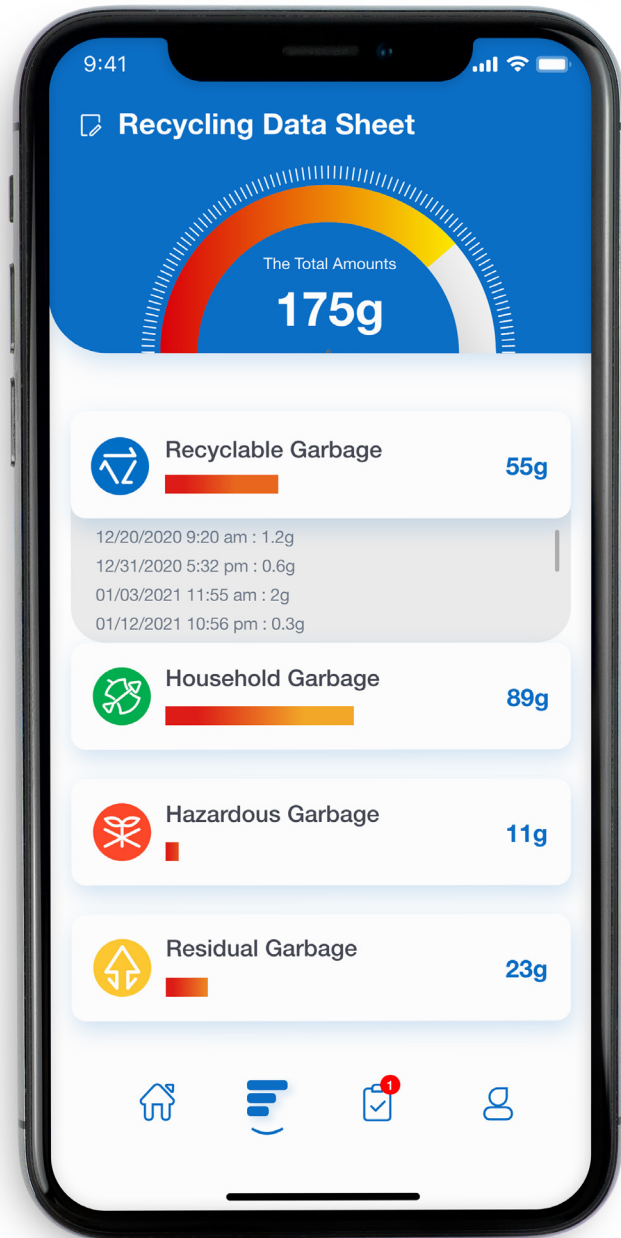
When a user has finished sorting garbage, click Recycle to enter the sorting success page. It tells the user how many grams of garbage were recycled, and also provides a tidbit about the garbage.

05 DESIGN

Hi-Fi Wireframes – Data Sheet Page



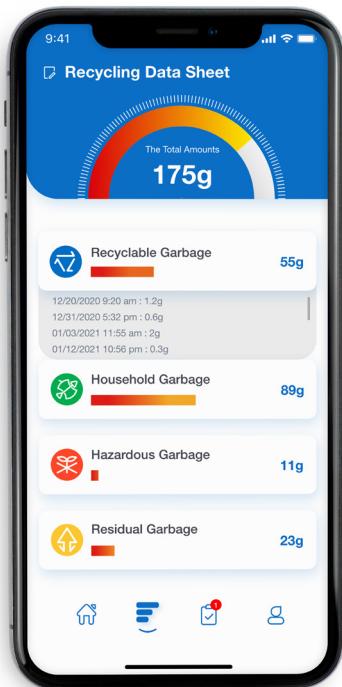
After the recycle successfully, the user can see how much garbage they have collected in the **data sheet page**. Click on the garbage type to see the recycling history.



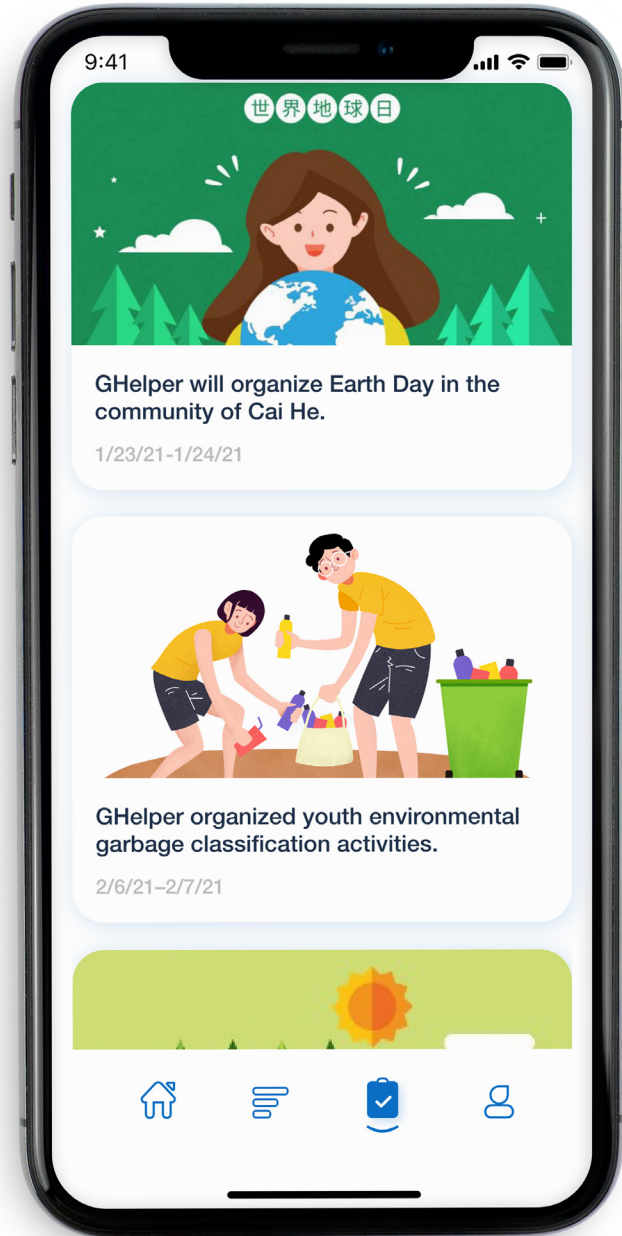
Data Sheet Page

05 DESIGN

Hi-Fi Wireframes – Event Page



When the top bar of the user's data sheet is full, user will get a QR code, and the user can go to the offline environmental protection activities to exchange for environmental gifts. In the Event Page, the user can view the time and content of environmental protection activities. Through this mechanism, on the one hand, users are encouraged to use the classification function to properly classify garbage, and on the other hand, users are indirectly encouraged to participate in environmental protection activities.



Event Page

06 FINAL DESIGN

Hi-Fi Wireframes – Work Flow



06 FINAL DESIGN

Brochure



Double sides four folding

06 FINAL DESIGN

Brochure



06 FINAL DESIGN

Brochure

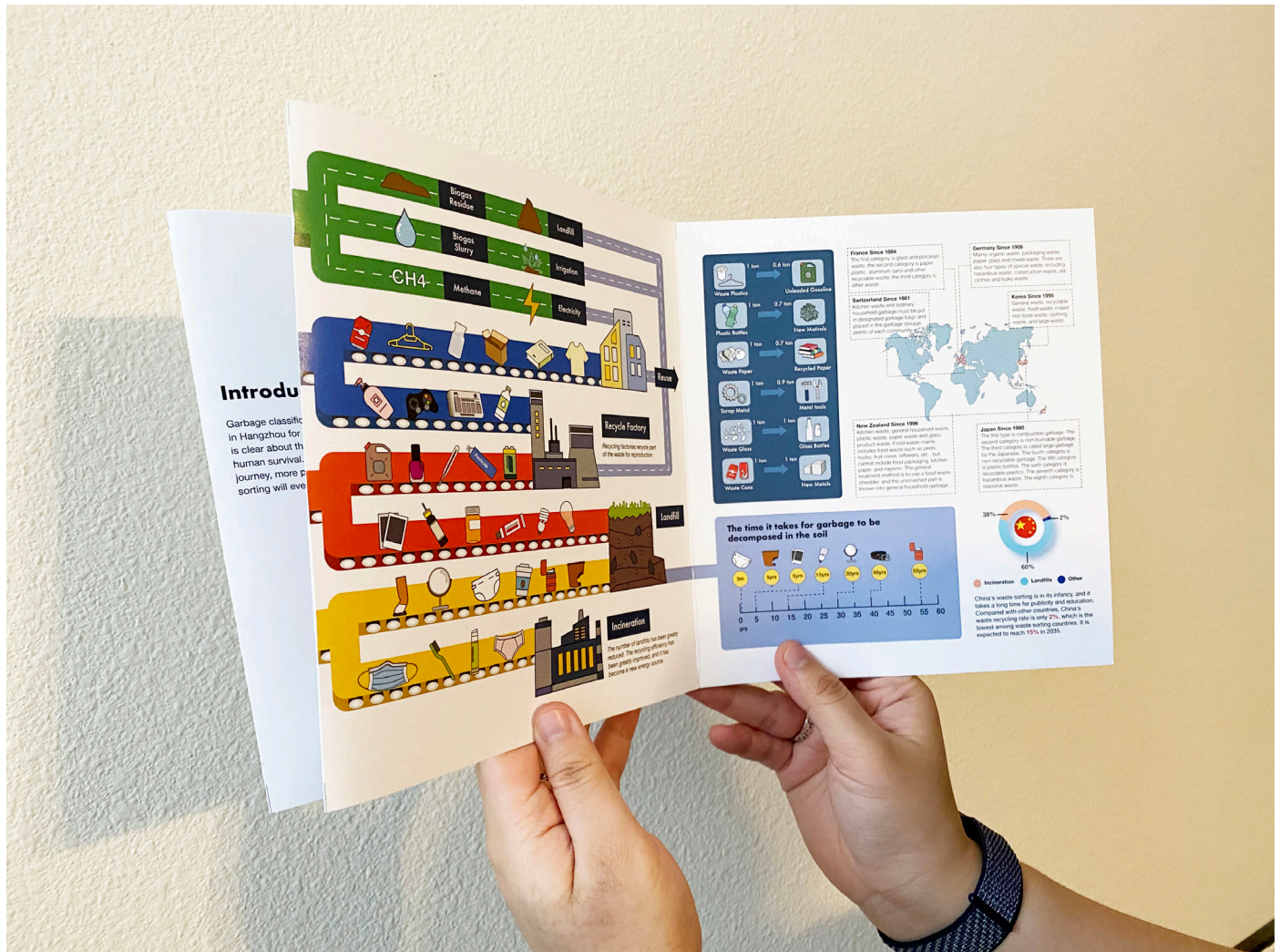
Introduction

Garbage classification has been implemented in Hangzhou for a year. However, not everyone is clear about the benefits of waste sorting to human survival. It is hoped that through this journey, more people will know where waste sorting will eventually flow.



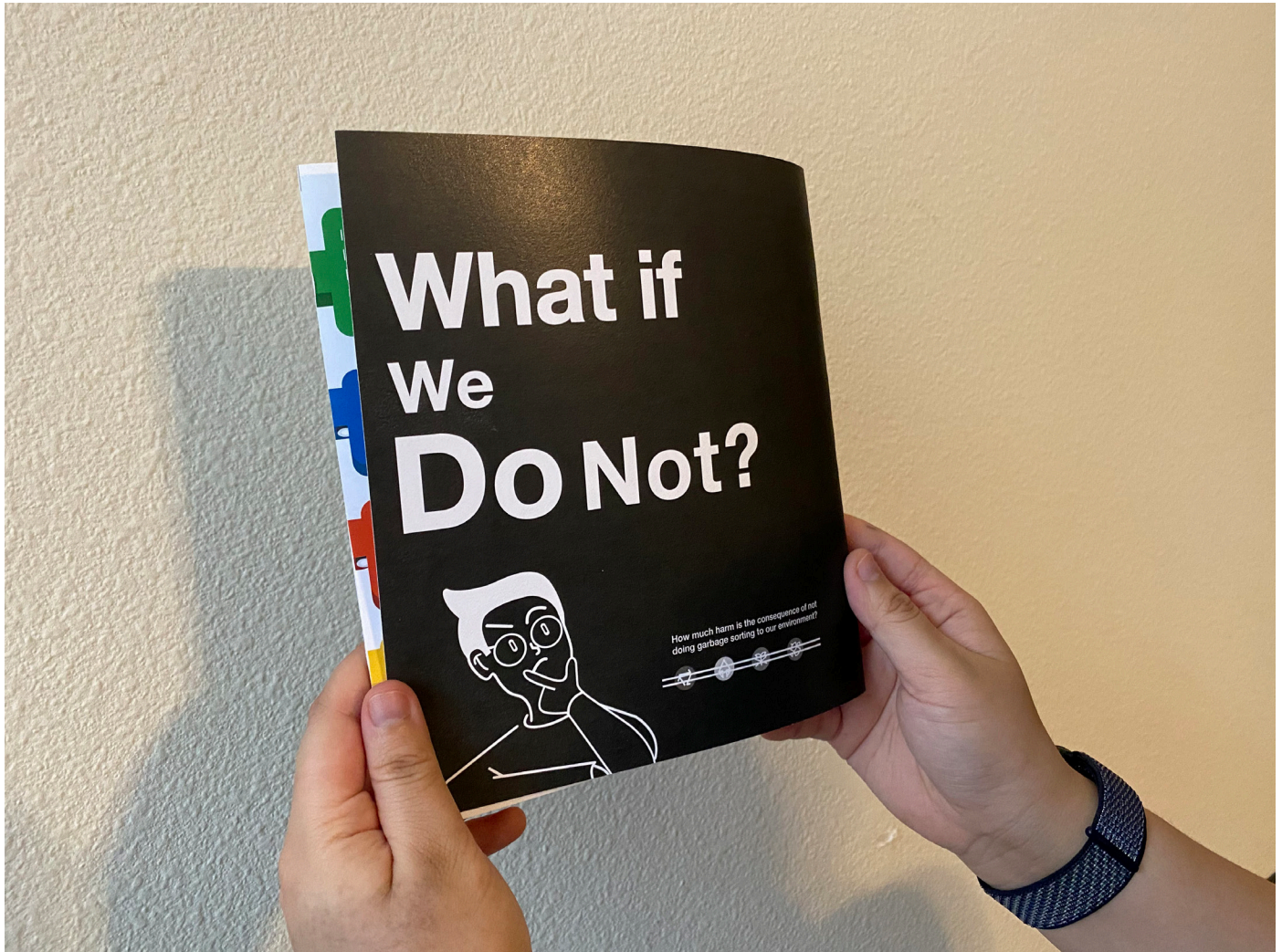
06 FINAL DESIGN

Brochure



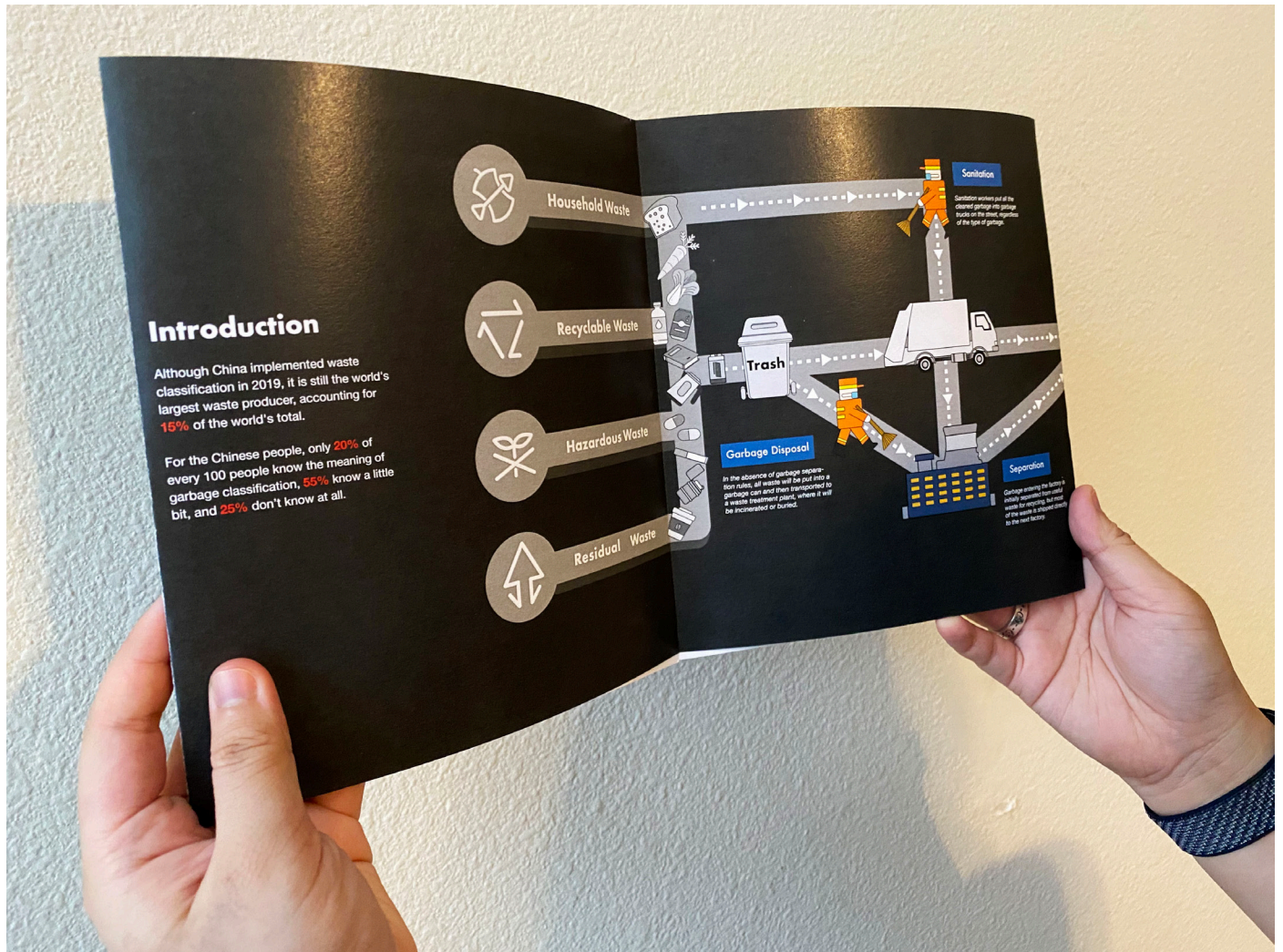
06 FINAL DESIGN

Brochure



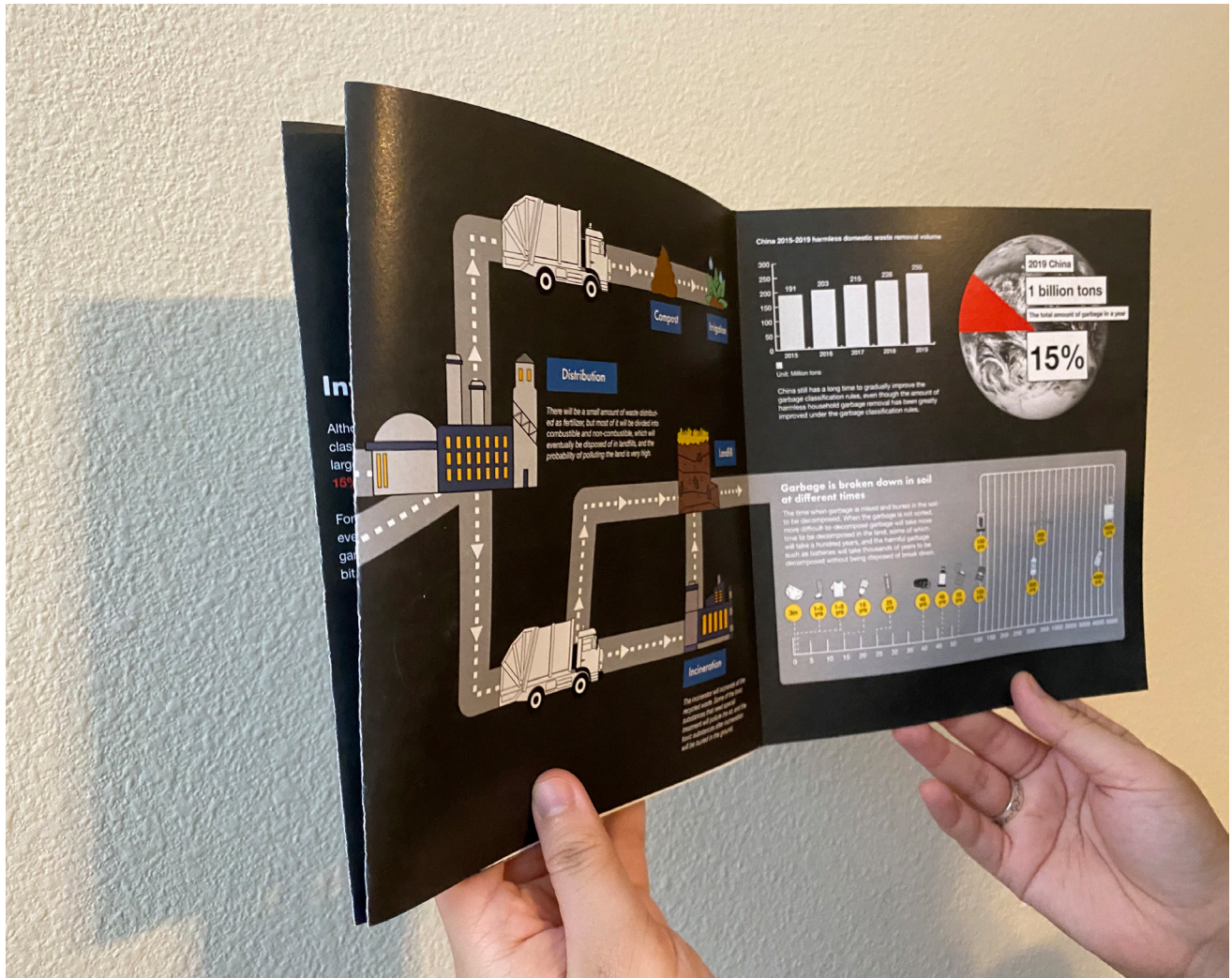
06 FINAL DESIGN

Brochure



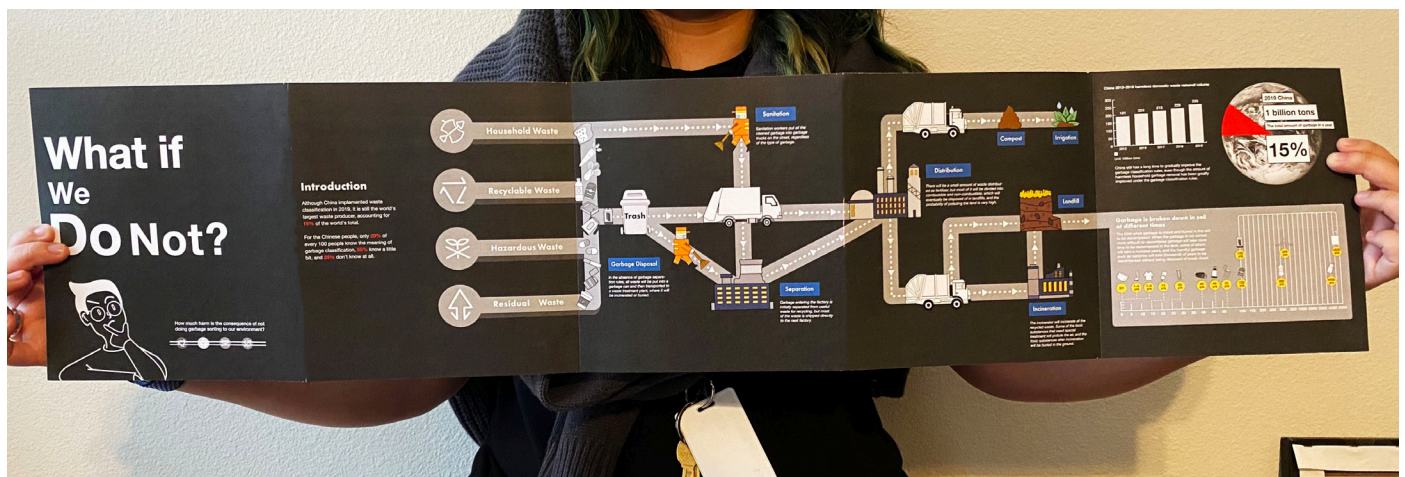
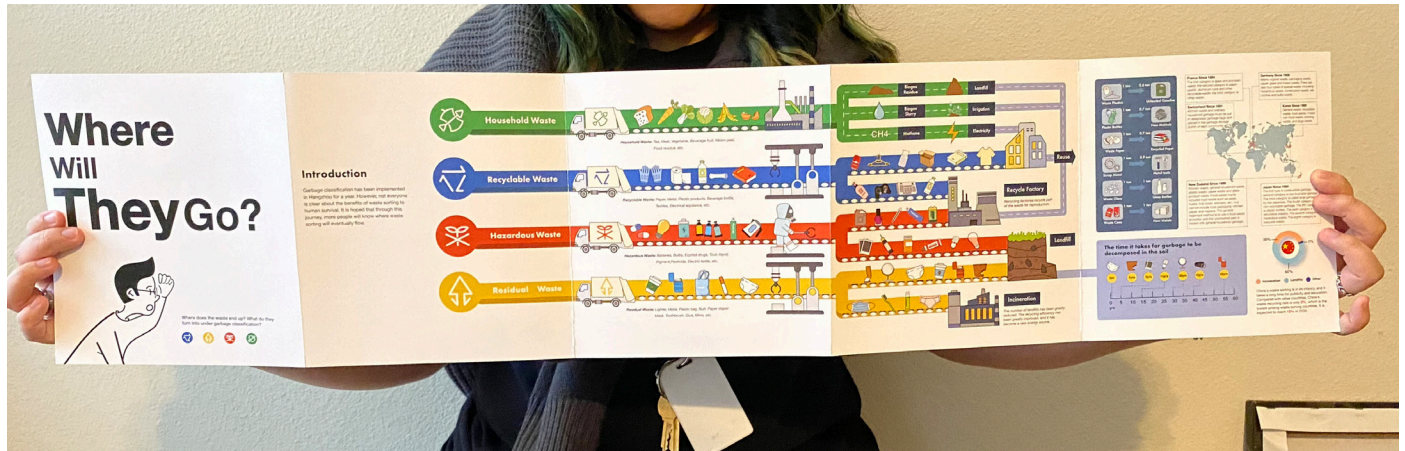
06 FINAL DESIGN

Brochure



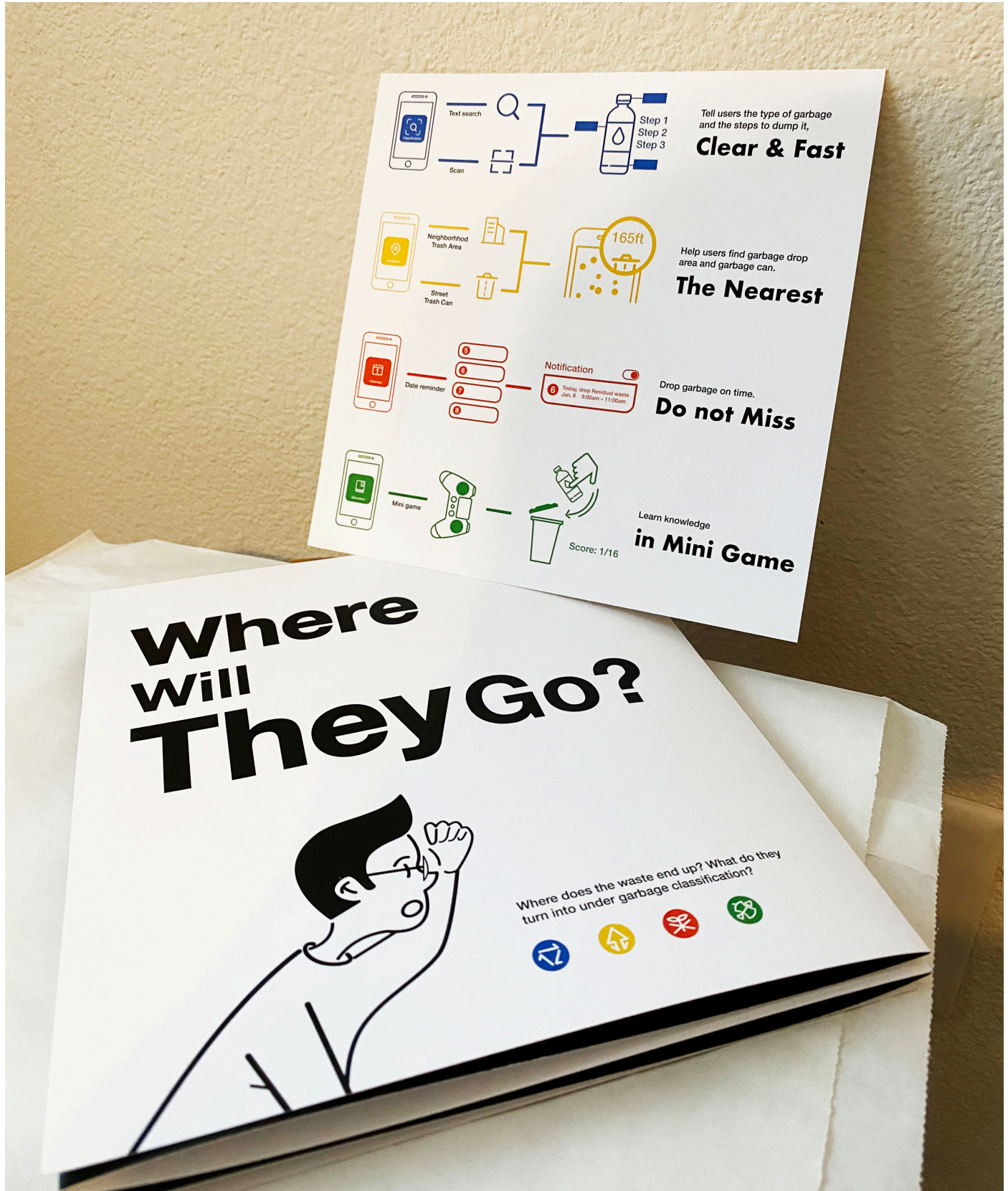
06 FINAL DESIGN

Brochure



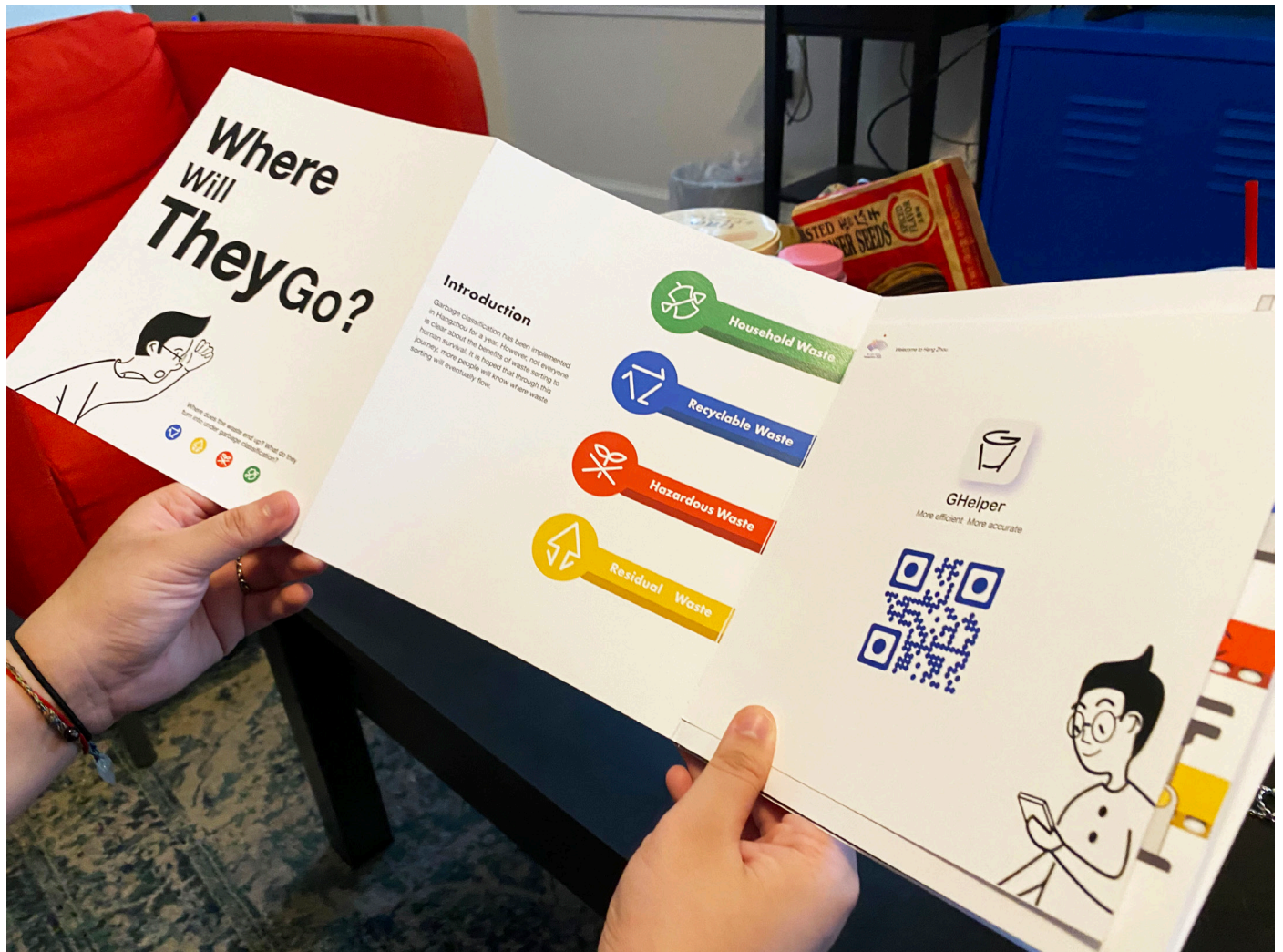
06 FINAL DESIGN

Guide Page



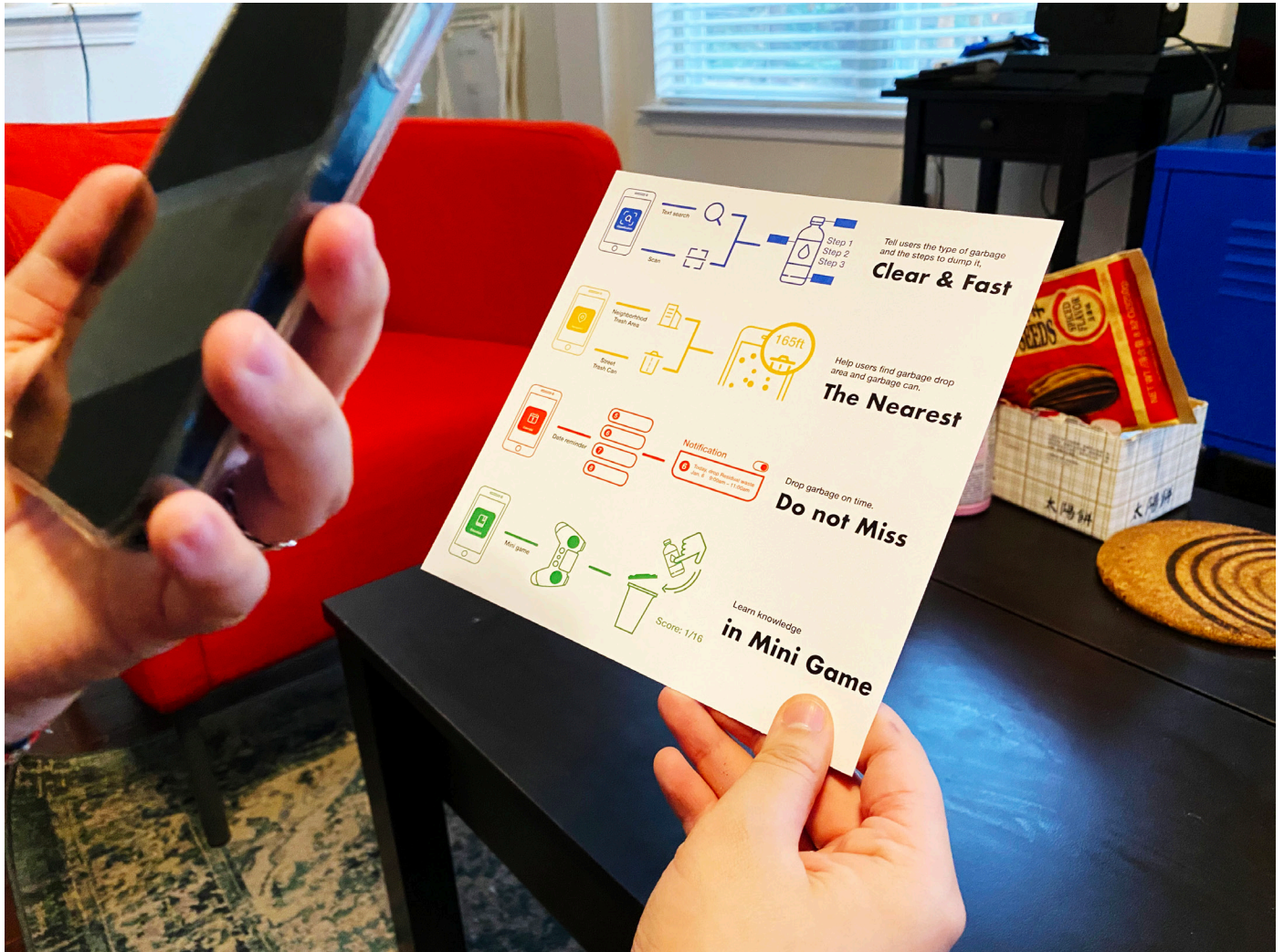
06 FINAL DESIGN

Guide Page



06 FINAL DESIGN

Guide Page



06 FINAL DESIGN

Guide Page



06 FINAL DESIGN

Dynamic Posters



06 FINAL DESIGN

Dynamic Posters



07 REFERENCES

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<https://wenku.baidu.com/view/9f54d7f15627a5e9856a561252d380eb629423b6.html>

End

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