

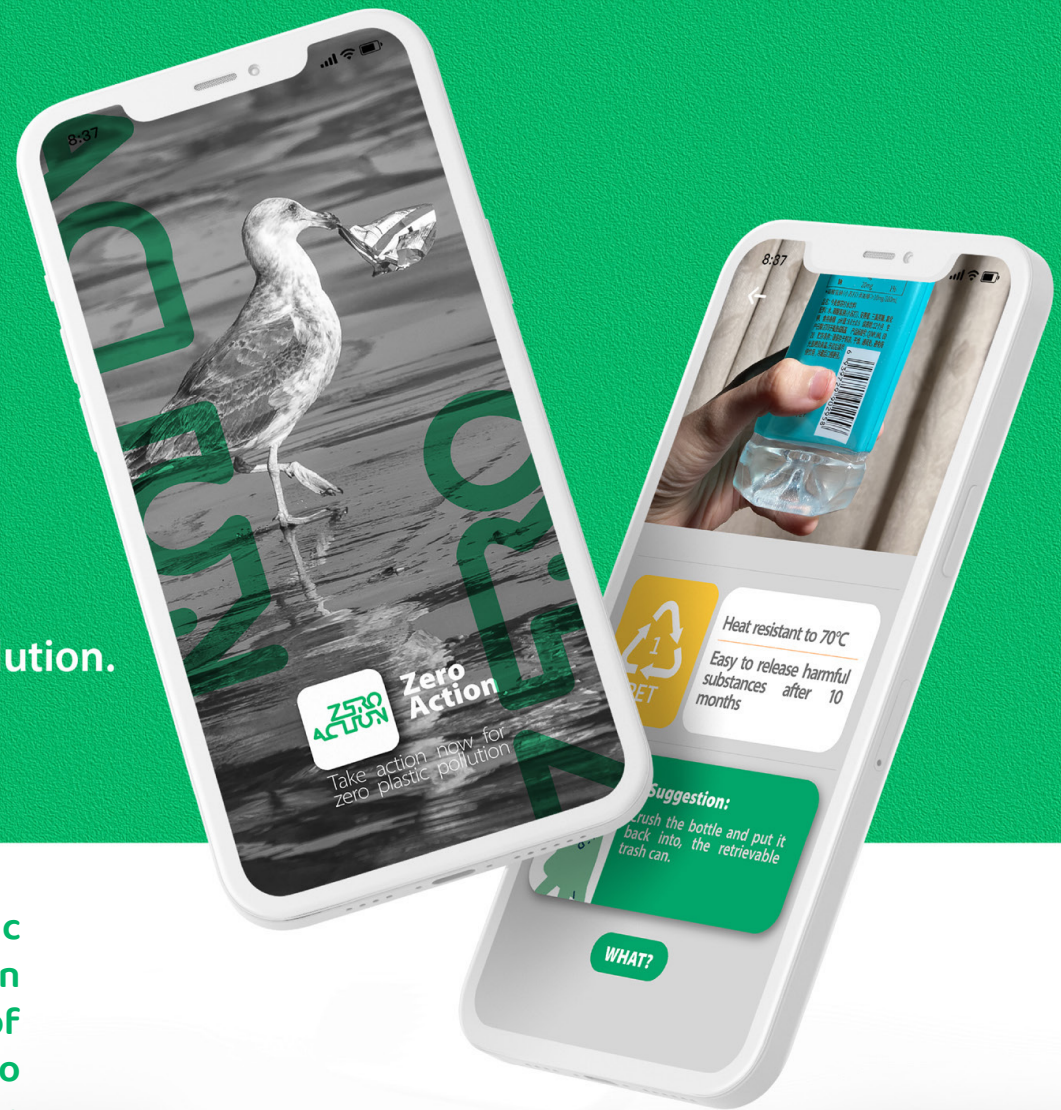
Including:

- 1.A promotional brochure
- 2.An application



Take **ACTION** now for ocean plastic pollution.
Participate in a **ZERO PLASTIC** life.

How might we raise awareness of marine plastic pollution among young people(18-28) living in China's major cities and change their habits of using plastic packaging in their daily lives to reduce the pollution of the oceans from plastic packaging waste?



Web link: Xu.macd.work

Brief

WHAT? Title, Question

How might we raise awareness of marine plastic pollution among young people(18-28) living in China's major cities and change their habits of using plastic packaging in their daily lives to reduce the pollution of the oceans from plastic packaging waste?

WHY? Intro / Context / Rotational

With the rapid development of urban economy, industrialization and urbanization, the production and use of plastics is also increasing. Waste and household garbage are also increasing. People are enjoying the convenience that plastics bring to human life, but at the same time, the oceans are suffering the consequences of reckless human behavior. It is estimated that about 8 million tons of plastic enter the ocean every year, and of this plastic, 270,000 tons float on the water surface. That's the equivalent of one plastic-filled garbage truck dumping into the ocean every minute. Plastic accounts for 60 to 90 percent of the trash that accumulates along coastlines, on the ocean's surface and on the seabed, most of which comes from food and beverage packaging. (Anna (Anya) Phelan, Katie Meissner, Jacquelyn Humphrey, Helen Ross,). The amount of plastic litter is also severely damaging our once pristine marine biodiversity, with some 700 species in danger of extinction. Marine life pollution is also affecting human diets. So we need to tackle plastic pollution from all sides, not only for the animals, the oceans, the planet, but most importantly for our human living environment.

WHO? Axis / Focus / Target

My target group is 18-28 year old students and workers living in big cities in China. This is the group that uses the most plastic. They are characterized by the high frequency and

quantity of plastic packaging products they use. They are willing to contribute to the protection of the oceans, but they are not able to do it consistently, and their awareness of plastic marine pollution is not high enough. Through this project, I hope to raise people's awareness about plastic ocean pollution, and then let them know the impact of plastic waste on the ocean as well as animals and humans, so that they can change their habits of using plastic products and change the way they dispose of plastic products, spreading the correct way and method of plastic disposal.

HOW? Approach

First, I hope to use the survey to understand how people use plastic and why they choose plastic products as their first choice. Then, I wanted to gather information about how people dispose of plastic waste and why they do so, in order to find the root cause of personal plastic waste pollution. After that, I want to find out why people still choose to use plastic even after the plastic restriction is enacted, and why they still ignore the problem of plastic ocean pollution. I wanted to organize them into data and then visualize them in the form of data. After finding the answers to these questions, I hope to change people's habits and reduce the frequency of using plastic products after drawing their attention to the pollution caused by plastic waste.

Finally, I plan to visualize the process of plastic entering the sea and then entering the human food chain, and make it into a brochure, which can be placed in any place where consumers consume to publicize, so as to attract people to pay enough attention to plastic Marine pollution and join the action of zero plastic life. After that, I will help people establish plans to reduce plastic use in an interactive way, so as to achieve the goal of making people accustomed to a plastic-free life, and tell people how to reduce the damage

to the ocean by changing the way they deal with plastic waste.

Refernce

Anna (Anya) Phelan, Katie Meissner, Jacquelyn Humphrey, Helen Ross, Plastic pollution and packaging: Corporate commitments and actions from the food and beverage sector, *Journal of Cleaner Production*.

Context

With the rapid development of urban economy, industrialization and urbanization, the production and use of plastics has increased. Waste materials and household garbage are also increasing day by day. People are enjoying the convenience that plastic brings to human life, but at the same time the ocean is suffering the consequences of human recklessness. It is estimated that about 8 million tons of plastic enter the oceans every year, which is equivalent to one plastic-filled garbage truck dumping into the ocean every minute. Plastic accounts for 60-90% of the trash that accumulates along the coastline, on the ocean surface, and on the seabed.

Background

Plastic waste enters the ocean over a long period of time and is broken down into microplastics less than 5 mm in diameter. This form of plastic can spread through the ocean destroying habitats and ecological chains, and is virtually impossible to recycle. Marine plastics are swallowed by marine organisms and the toxins they contain are absorbed. So when people eat seafood, they also absorb these toxins. Some of these plastic toxins can affect research production and growth and development. By reducing the use of single-use plastic products, reusing existing plastic products, and recycling and disposing of plastic waste, we can reduce plastic marine pollution at the source.



The result

To the ocean



Microorganisms and algae grow on the surface of the floating plastic. **Marine animals** can become **ill** and even **die** when they **eat** it.



The amount of plastic will exceed the total amount of fish. The animals are either **entangled** in the plastic, **swallowing** it or having their **habitats destroyed** by it.

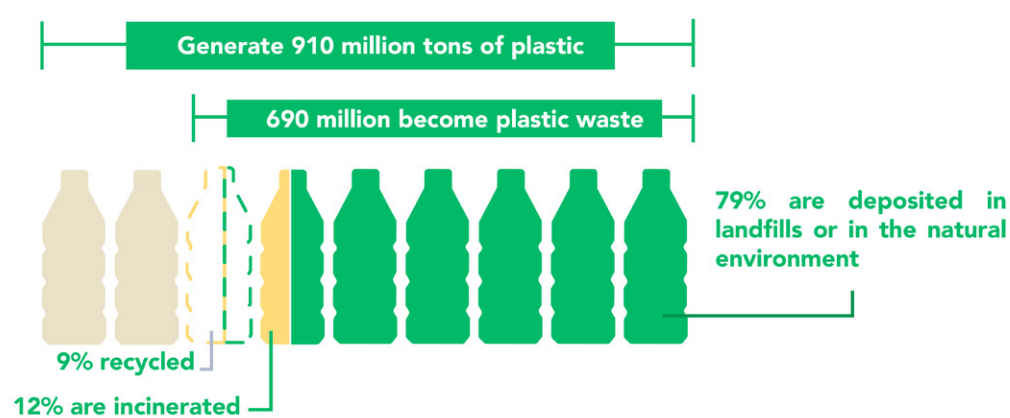
To human



When people eat seafood, they also **ingest** these **toxins** at the same time. Some of these plastic toxins can affect **hormone production** and **growth**.

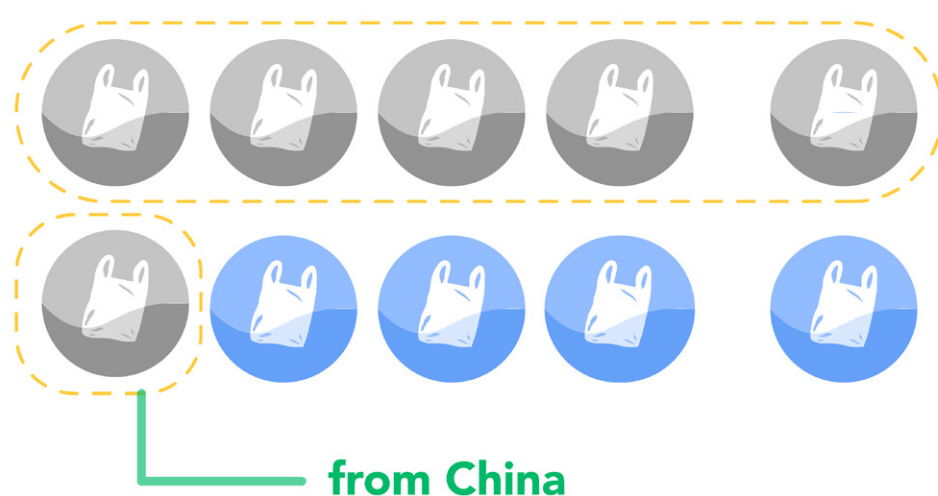
Research

Current Situation



According to the New York Times, the rise of plastic packaging is the main reason for the increase. Plastic packaging products accounted for 42% of the total packaging products in 2015. In the same year, 54% of plastic packaging was thrown away after use.

In China



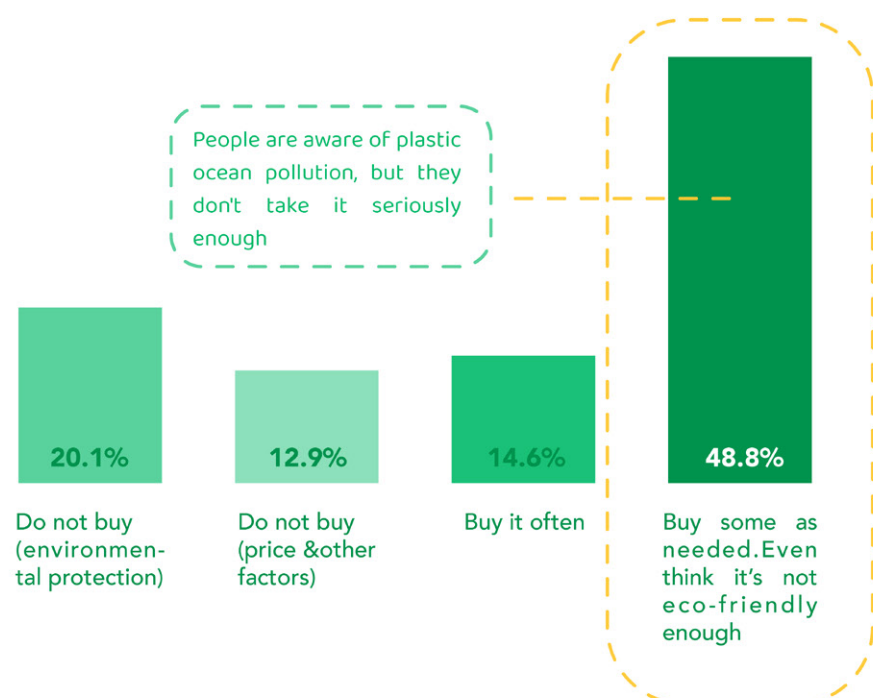
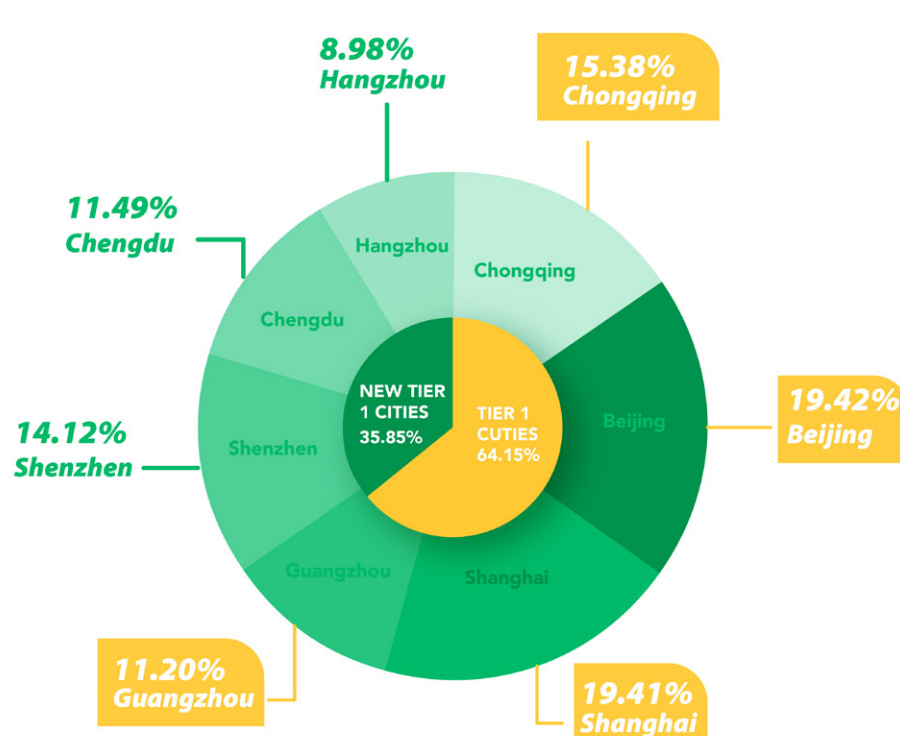
According to study, about 90% of single-use plastic that is polluting our oceans comes from 10 rivers, 6 of which are in China.

China has the most serious problem of plastic Marine pollution, so I set my research direction in China

People use plastic

Top 8 Cities on single-used plastic waste (in million tons)

Almost tier 1 cities, including new tier 1 cities. The most economically developed cities waste more disposable plastic packaging

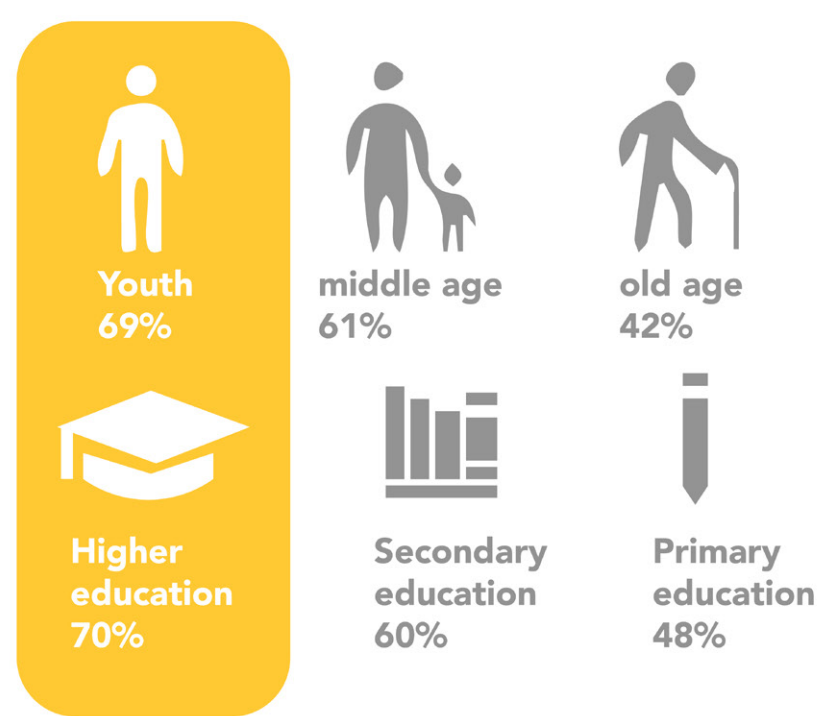


Excessive packaging products purchased by residents

Most people will choose plastic packaging products according to their preferences and habits, and very few people will give up buying plastic packaging because it is not environmentally friendly.

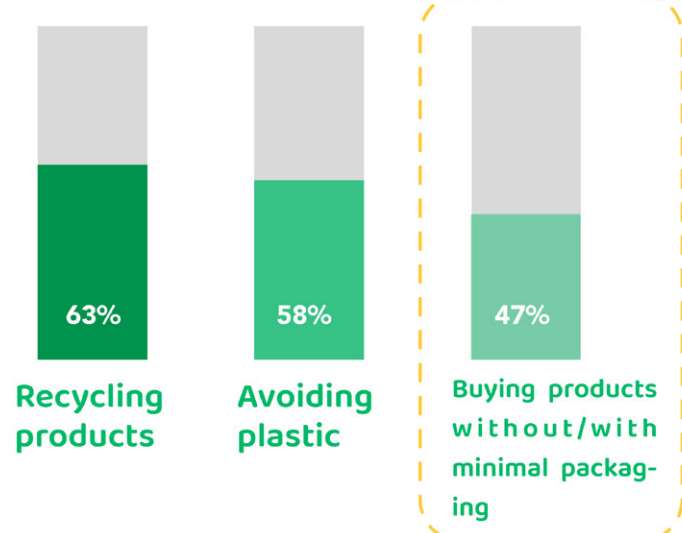
Distribution of people who buy plastic packaging products

According to the survey results, young people are the main force to buy plastic packaging products. And people with higher education and income will buy more products packaged in plastic.



It can be seen that young people living in economically developed cities are the main force to buy plastic packaging products. They are aware of the phenomenon of plastic pollution, but do not pay enough attention to it, so they still choose to buy disposable plastic packaging products in many cases.

Attitude towards solutions



When people realize that plastic packaging will cause environmental pollution, the majority of people do not take action. So "Why do they have low rates of action?" It's something I need to find

Target group

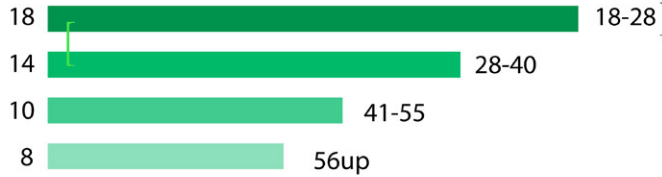
My initial target group is 18-28 year olds living in China's big cities. This group will be analyzed in detail later

Observation

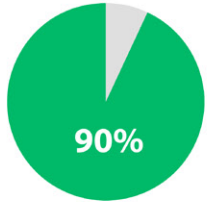


I have observed people who buy plastic packaging products and I found that the most common plastic packaging products they consume are plastic drink cups, plastic straws, plastic bags, and plastic tableware. People do not hesitate to buy these products, and there is an opportunity to reduce the use of plastic packaging by using alternatives to it, but few people do so. **In order to address this issue in a more focused way, I conducted a survey.**

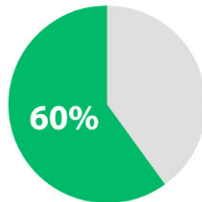
Questionnaire



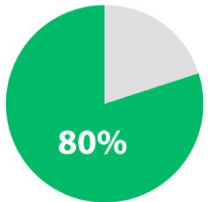
Young people between 18-28 account for the majority of those who use single-use plastic packaging



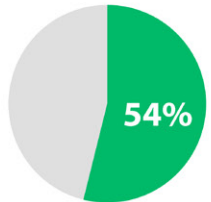
90% of people know that pollution from plastic packaging is harmful



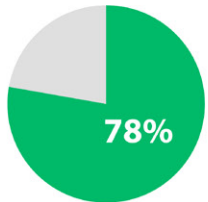
60% are currently taking no steps to reduce their use.



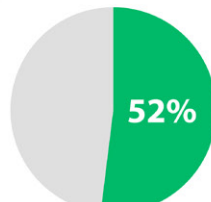
80% of people are willing to live with less or even zero plastic



54% have not mastered the practice of reducing usage



78% regularly use plastic packaging products

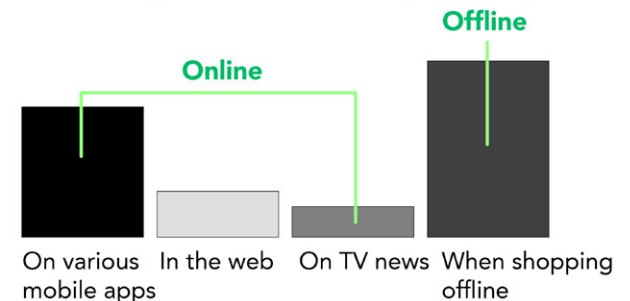


52% know in detail about the pollution of the ocean from plastic

What's the reason you're not taking action to reduce plastic ocean pollution?

- Forgetting. I just pick it up and use it
- Just don't want to do it
- Think it's none of their business and doesn't affect them
- Can't find alternatives
- Don't know what changes it will make
- Seeing everyone else using it

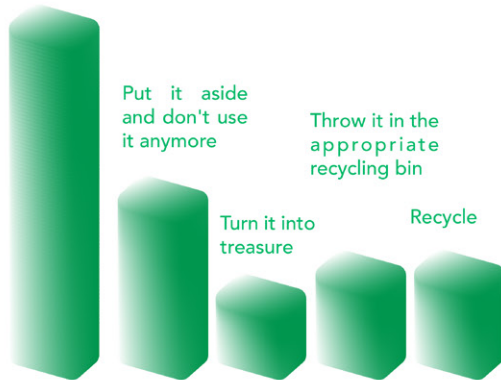
Where do you usually get reminders about using less disposable plastic packaging products and being environmentally friendly?



People learn about the problem of plastic pollution through **online media** and **offline alerts**

What do you do with the plastic packaging or products after you use it?

Throw it away directly



Put it aside and don't use it anymore

Throw it in the appropriate recycling bin

Turn it into treasure

Recycle

Most people would just throw away plastic packaging, with the non-degradable plastic ending up in the ocean and causing pollution

Do you know which plastic packaging is recyclable and which is not?

Understand

Don't know

Key Sentences

🧐 What troubles you? 🤔

Plastic **alternatives** are not easy to find, although i know the method, but not used to

I don't know the way to reduce the use

In fact, I'm not quite sure of the necessity

I feel like if I'm the *only one* who does it like this, it won't make any difference

In fact, I had no idea that plastic packaging could be such a serious hazard to the ocean.

I don't know how to dispose of plastic packaging waste

Interview

How do you think about achieving a zero plastic life?



Jun

keywords

I think I am aware of the problem of plastic ocean pollution and have taken action.

I don't think it makes sense to reduce the use of single-use plastics if we don't **keep participating**. That's why I bring my own mug and reuse shopping bag when I go out.

No planning

But because of my busy schedule, I sometimes forget what I thought I was going to do.

But will it have a positive effect if I occasionally do this **alone**?

How to deal with

I don't actually know much about which plastic packaging is recyclable and which is not. I think **disposing of used plastic packaging** is also a form of zero plastic life



Yuxing

keywords

I knew that plastic is bad for the environment when it is burned, but I didn't know that most of the plastic we throw away will go into the sea and eventually pollute the ocean. I don't understand how they can flow into the sea. If I **knew more** about this I would definitely make a change

Lack of detailed understanding

When I was shopping I saw that everyone was using plastic packaging and I thought it was okay for me to have one more. Will I get any reward for doing this? I have no motivation.

Herd mentality

I think the monetary **rewards** are definitely attractive for continued participation in a zero-plastic lifestyle, but also the sense of accomplishment that comes with **doing something good** can make me want to **continue to participate**.

My contribution

Insight

Most people buy plastic packaging products because of the **herd mentality**. People rarely actively look for alternatives

+

Because people don't really feel directly affected by plastic ocean pollution, it's easy to ignore the problem and thus **pay less attention** to it.

People have trouble sustaining a zero-plastic lifestyle because they **don't have a goal or a specific plan**. However, without a plan, it is difficult to do anything by force of will. People need the motivation and opportunity to do it.

External factor

+

People have difficulty sustaining their participation in zero plastic living because they **don't know** the specific **contribution** they are making to improving the marine environment by reducing plastic

Because of the **herd mentality**, when people **find people** who are **doing** the **same thing** as they are, the more people are involved, the more they believe in what they are doing.

Internal factor of use

Final result

My first insight is that people feel that the problem of plastic ocean pollution never affects them, so it's none of their business, and then they continue to buy single-use plastic packaging products.

My second insight is that people find it hard to live a plastic-reducing or zero-plastic lifestyle because they don't have a goal or a concrete plan. However, it's actually hard to do anything by force of will without a plan. People need to have the motivation and opportunity to do it.

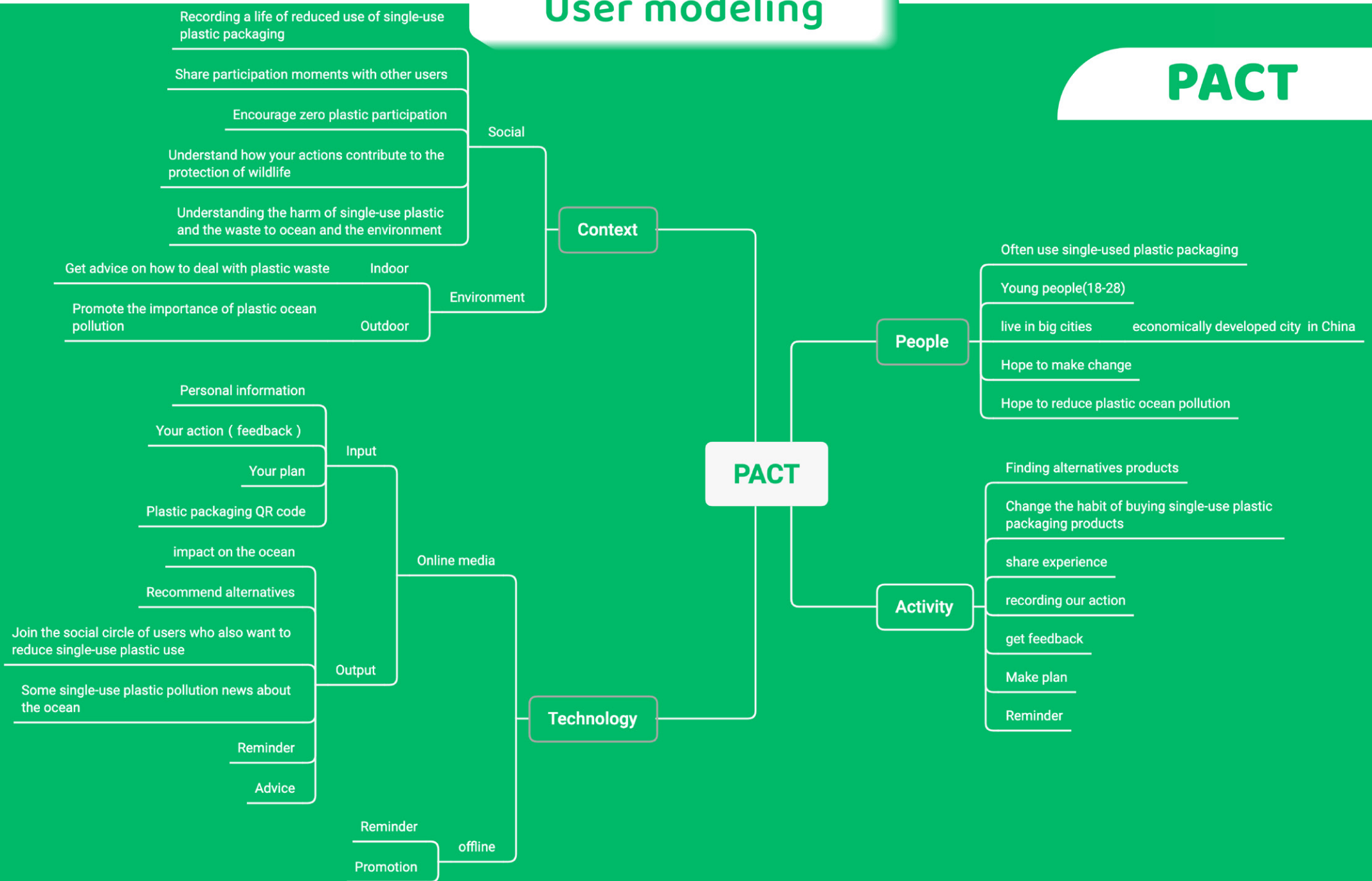
My third insight is that people slowly lose their enthusiasm for contributing to plastic ocean pollution because they don't see the changes that come from taking action to reduce it.

The reason for ocean pollution is that people don't know which plastic packaging is recyclable and which is not, so they don't dispose of it as required after using it in large quantities, causing it to end up in the ocean.

My fourth insight is that people are following the herd mentality, buying plastic packaging products and rarely looking for alternatives to plastic packaging products, which leads to a staggering amount of plastic waste. People do not know how to sort the plastic waste, so they do not dispose of the waste in a reasonable and compliant way, so the plastic packaging waste ends up in the sea and causes pollution.

User modeling

PACT



PERSONA

Name :

Shiyao

Gender : Female

Age: 22 years old

Occupation: Student

Character:

Used to use disposable plastic packaging products

Hoping to make change

Lack of understanding of the plastic ocean pollution

Frequency of using:



Action Rate:



Wants:

- Change the habit of buying single-use plastic packaging products
- Reduce plastic ocean pollution
- Finding the right way to dispose of used plastic packaging and alternatives
- Get plastic ocean pollution information
- Know how my actions contribute to the protection of wildlife

Frustrations:

- There is no point that attracts me to do this
- No knowledge of alternatives products



//

I am usually used to using disposable plastic packaging. I know that using disposable packaging can be harmful to the environment, but didn't take this matter to heart and I used it when I saw others using it. . Knowing that the plastic packaging I dispose of ends up in the ocean and eventually affects human health, I feel guilty and want to change my daily habits and find suitable disposal methods and alternatives.

//

PERSONA



Name :

Jiaming

Gender : Male

Age: 29 years old

Occupation: Company Employee

“

I sometimes make a conscious effort not to use disposable plastic packaged products, but I don't make a habit of it. I would like a way to be reminded of this, keep me participate in zero-plastic living, and to feel like I'm not alone in this. It would be great if we could participate and record it together. I'd also like some environmental news and advice on how to deal with plastic waste.

”

Character:

Consciously not using disposable plastic packaging

Didn't keep participating

Busy and unplanned

Frequency of using:



Action Rate:



Wants:

- See more people are participating in Zero Plastic Life rather than only himself to reduce the ocean plastic pollution
- Keep participating, make it a habit
- Involvement
 - Get a detailed plan for a plastic free life
- Get advice
 - Share my experience

Frustrations:

- I'm the only one doing this
- Busy, easy to forget, feels hard to make a habit
- Lack of motivation to do it

Journey map

Stage of journey

Behavior

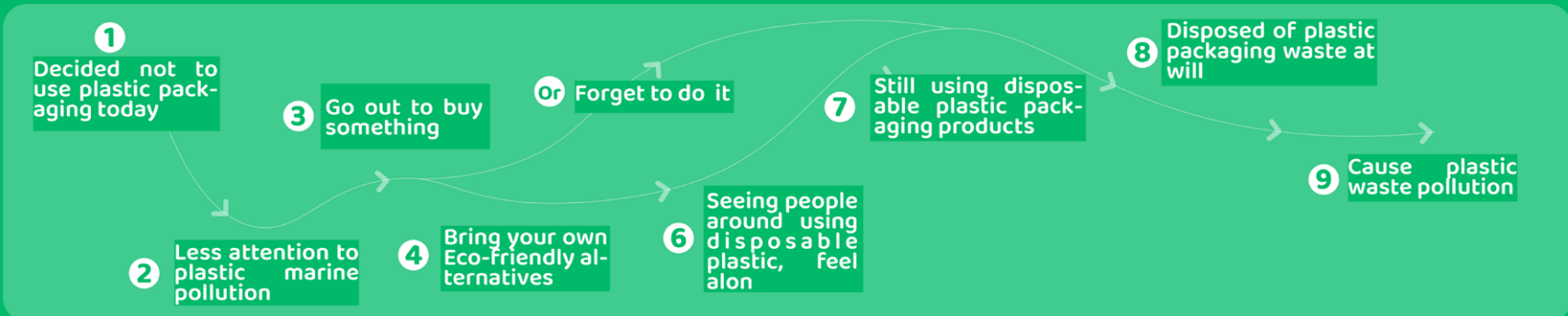
Thinking & mode

Painpoint & opportunities

Before going out

You are outside

Come back



- People care, but they often forget because they are busy
- Make a clear plan for it
- Understanding the meaning of their actions
- Less attention
- Raise awareness, get more people involved

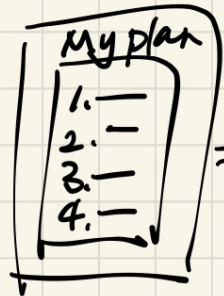
- Make users feel like they are working together to do this
- Helps to set a daily plan for zero plastic
- Remind people when they forget
- Allow people to share experiences of living with zero plastic

- Lack of motivation and lack of awareness of the seriousness of the problem
- Let people know more about plastic pollution news
- If you use it anyway, then dispose of the waste

Sketch

ideation

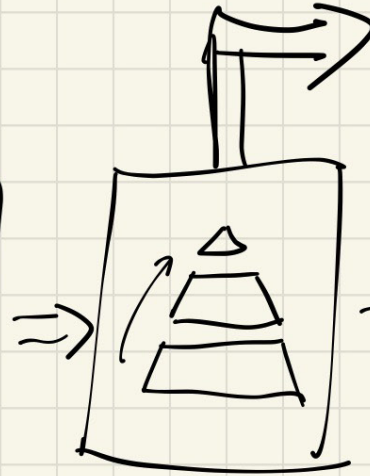
① One platform



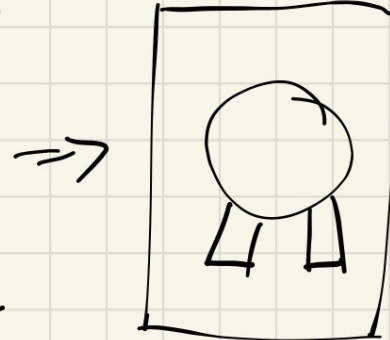
set plan



remind



How many



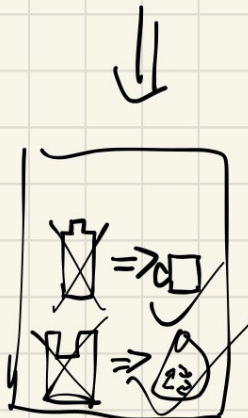
Renard!

Provide a platform to help people set a clear plan for zero plastic living and record users' footprint in reducing their use of plastic packaging. At the same time, they can share their zero plastic lives on this platform.

Then create a completion ranking to take advantage of users' comparison mentality and keep them engaged.



=> clean animal
=> clean
CO₂ ↓



Sketch

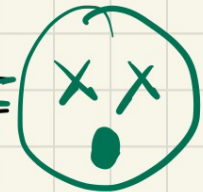
ideaation

ocean plastic pollution is related to human

not just marin life is affected !!

raise attention

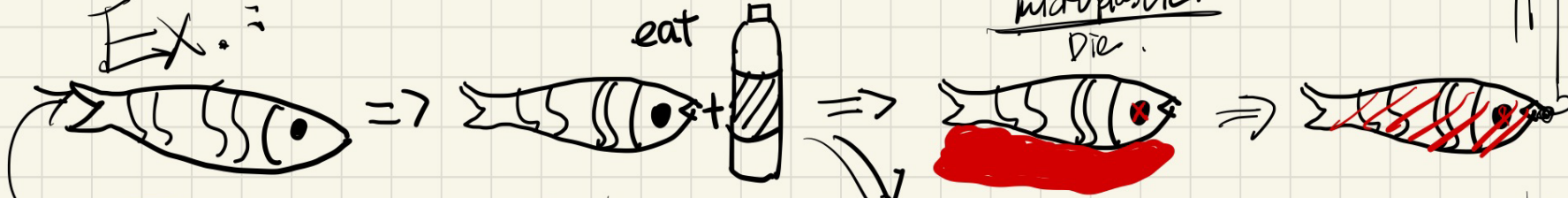
Human was affected by the Foodchain



people with microplastic. Die.



Ex.:



fish

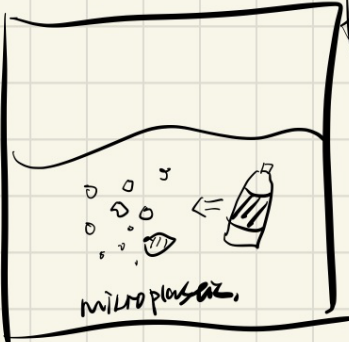
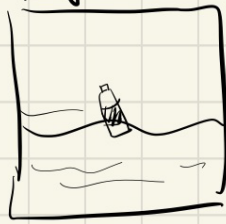
Fish eat plastic

fish die



bottle

into to sea. being discharg get discharg



My IDEA is to visualize the process of the bad cycle of plastic packaging in the ocean life chain, to express the concept that the plastic we use will eventually return to our bodies. In this way, I want to attract people to participate in the zero plastic life

I think the final output vehicle for this would be a small brochure that could be placed in stores and shopping malls to promote this.

Competitor Analysis



MLFP

My Little Plastic Footprint is an app that helps you reduce your plastic consumption by going on a plastic diet. Reduce your plastic usage and choose sustainable alternatives. Download it today!

Pros: You can record your usage to reduce consumption

Cons: People can't visually feel the contribution of their actions

Stand-alone software, cannot be used with friends



Recycle Academy

Recycle Academy App is an educational project, that helps you with recycling the waste. Learn to recycle better.

Pros: You can scan the barcode, know the grade of the plastic packaging and get disposal advice

Cons: Single function. Hard to attract users to use it all the time

People don't know the contribution of their actions

Ideation



Provide a platform to help people set a clear plan for zero plastic living and record users' footprint in reducing their use of plastic packaging.



Visualize the process of the bad cycle of plastic packaging in the ocean life chain to express the concept that the plastic we use will eventually return to our bodies. I want to attract people to participate in

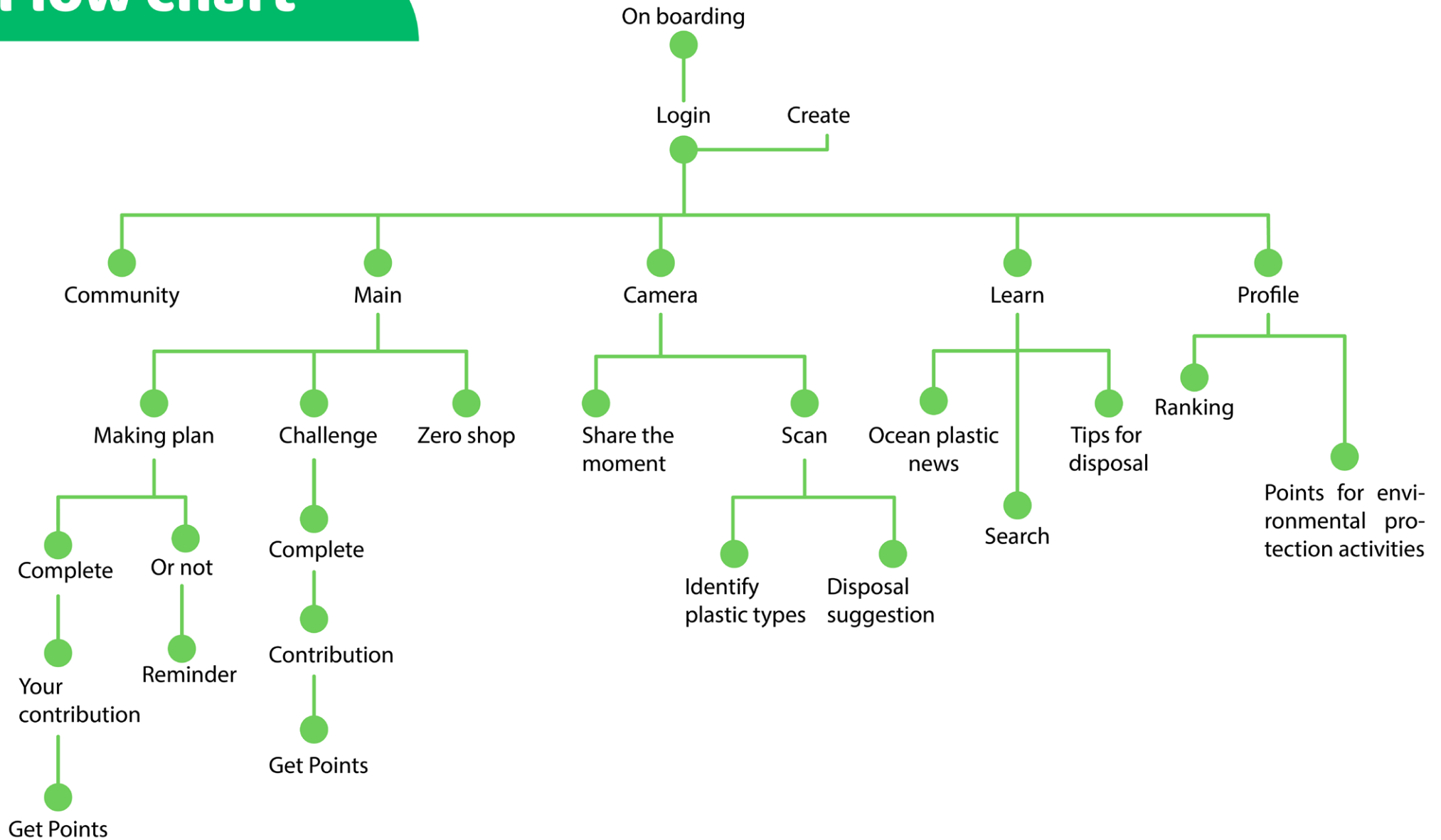


Scan the QR code through rear camera to get information on plastic grades and advice on how to deal with plastic waste.

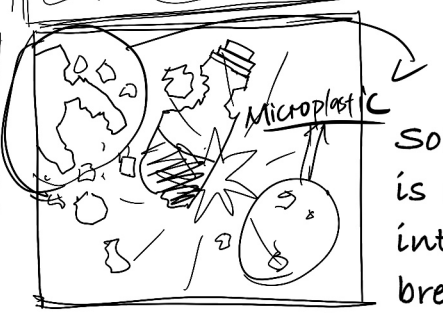
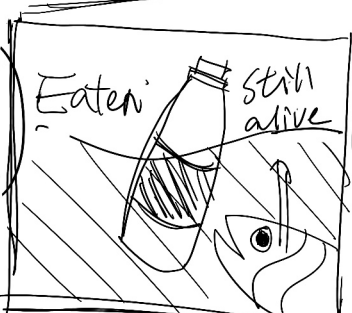
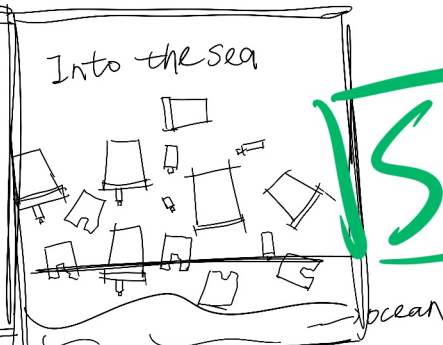
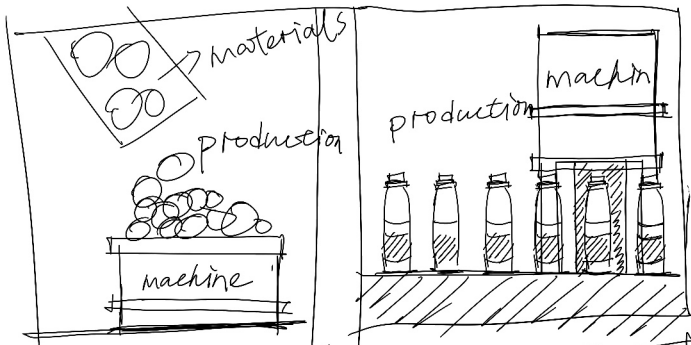


Create a completion ranking to take advantage of users' comparison mentality and keep them engaged.

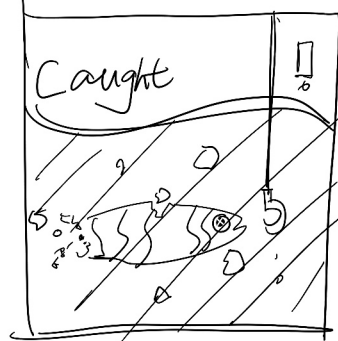
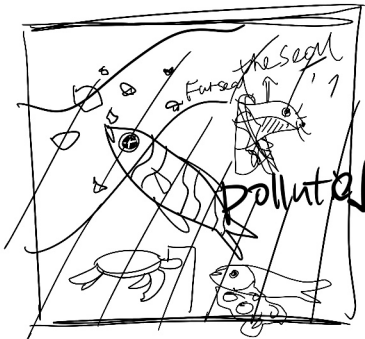
Flow chart



Sketch



Some of the plastic we throw away is recycled, but some of it it goes into the sea. The plastic slowly breaks down into pieces that are eaten by small fish, which are then caught and landed by humans and eventually eaten by people. Those plastics are not broken down in this cycle, but become smaller and smaller micro-plastics that remain in our bodies, and the pollution may eventually return to us



Preliminary wireframe

Home
progress

What's the total contribution of our actions 0X X

My plan

My challenges

Plan

plastic bags + number

plastic straw + number

plastic bottle + number

plastic bowl + number

Reminder time

Your plan today

setting

Home (reminder)

What's the total contribution of our actions 0X X

Task in process

challenges

Alternatives

Brand name product detail XXXXXXXX

XXX paints redemption (c got)

All product

Challenge

challenges. IN PROCESS

X XXXX

XXXXXX

X XXXX

Back

Your plan today

plastic bread bag - 0+

plastic shopping bag - 0+

plastic tableware - 0+

plastic bottle - 0+

Daily necessities products - 0+

Contribution

Your plan today

plastic shopping bag 5 ✓

plastic bottle 3 ✓

plastic straw 4 !

edit

Your plan today

You saved 4

From being stung by straws 4

Completed!

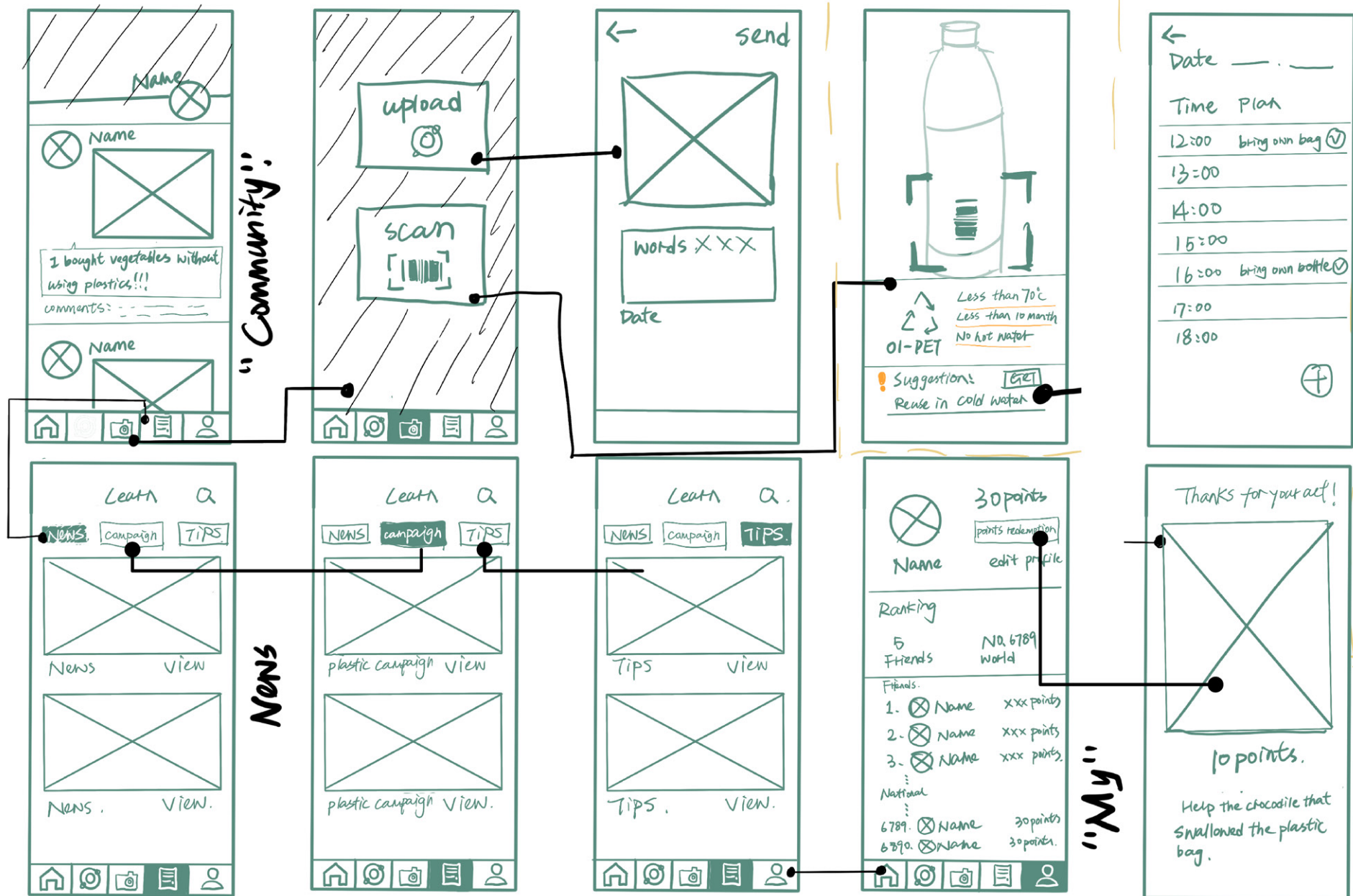
30 points

You prevented 10g

CO2 ↑

Completed!

Preliminary wireframe



Test

Feedback 1:

The cards in the top half of the front page are too crowded to navigate

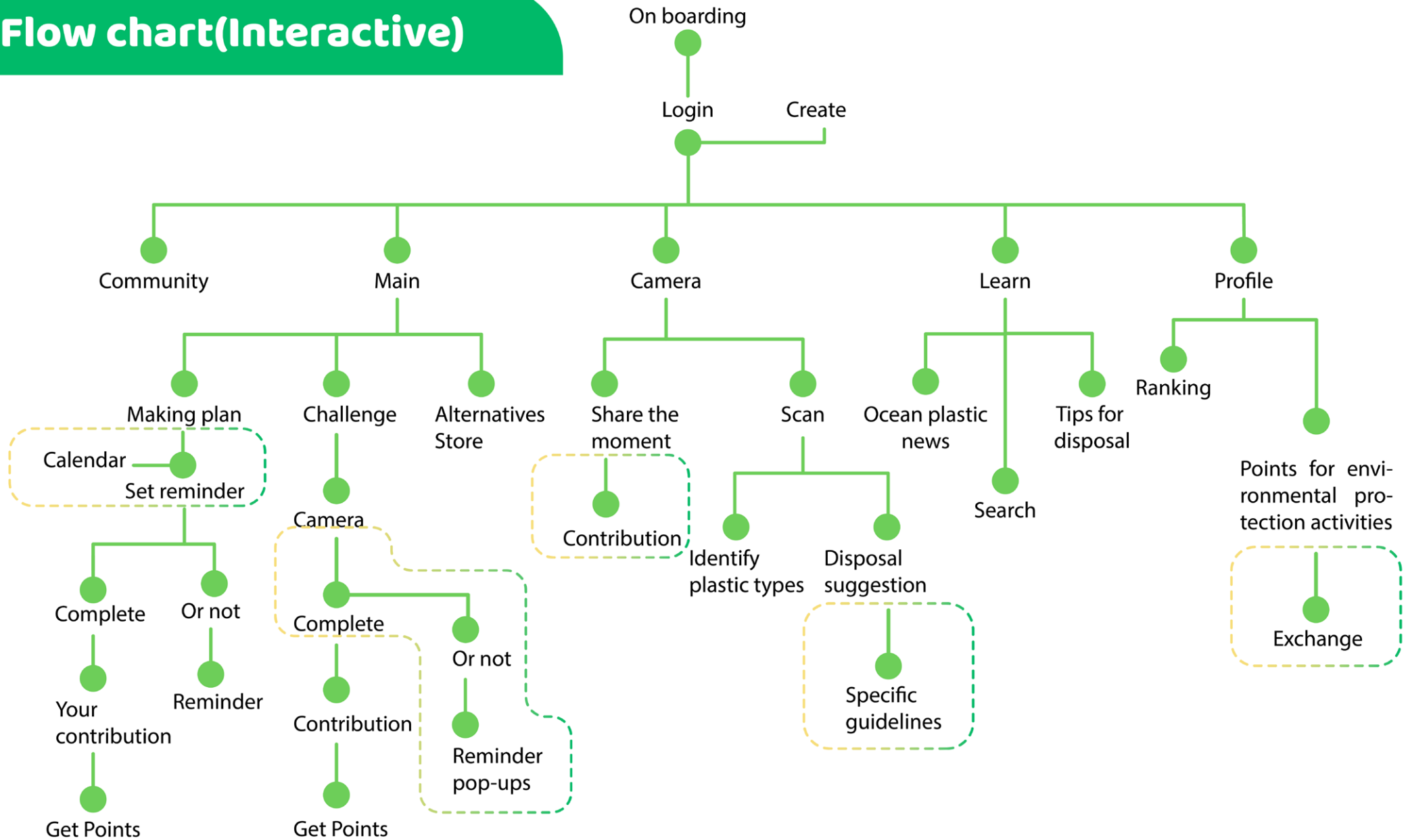
Feedback 1:

While I know what I did today, I also want to know what I did in the past. I couldn't find a single screen to record my footprint on reducing plastic use

Feedback 1:

After scanning the barcode, I got brief suggestions, but I would like to know more, such as this can be recycled, so where can I recycle this?

Flow chart(Interactive)





Final outcome

Logo design

Its name is **ZERO ACTION**, and its meaning is to encourage people to take immediate **ACTION** to reduce plastic pollution in the oceans and to participate in a **ZERO PLASTIC** life. The logo is based on the shape of words. The letters are connected like a thread, which means that to reduce plastic pollution in the oceans, we need to do it continuously and persistently like a thread. The color used is green, and its meaning is environmental protection.

Zero Action

ZERO
ACTION

ZERO
ACTION

ZERO
ACTION

Plastic pollution
One line
Always do
continuous
insist to do
Heart beat
Use one line.
Name

ZERO
ACTION

ZERO
ACTION

ZERO
ACTION

ZERO
ACTION

ZERO
ACTION

ZERO
ACTION

ZERO
ACTION

ZERO
ACTION

Main color



#02A56A

#7BBB96

#FDC93A

#668DFF

#FF7B61

#474747

#9B9B9B

#D6D6D6

#D8D8D8

#E3D6BD

Fonts

Myriad Arabic

Plastic

light

Plastic

Regular

Plastic

Semibold

Plastic

Bold

Plastic

Black

ICON



Home



Community



Camera



News



My Profile



Check



Add plan



view more



Scan



Upload



Reduce



Add



Left



Right

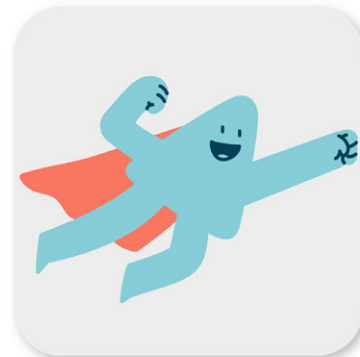
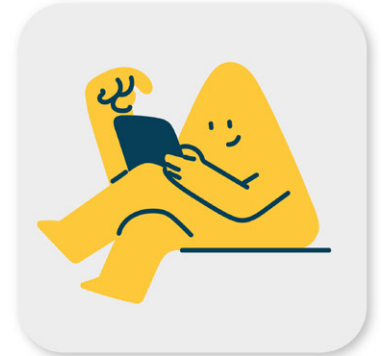
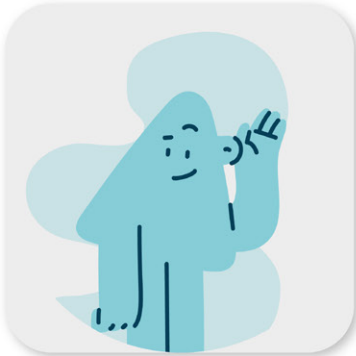


Back



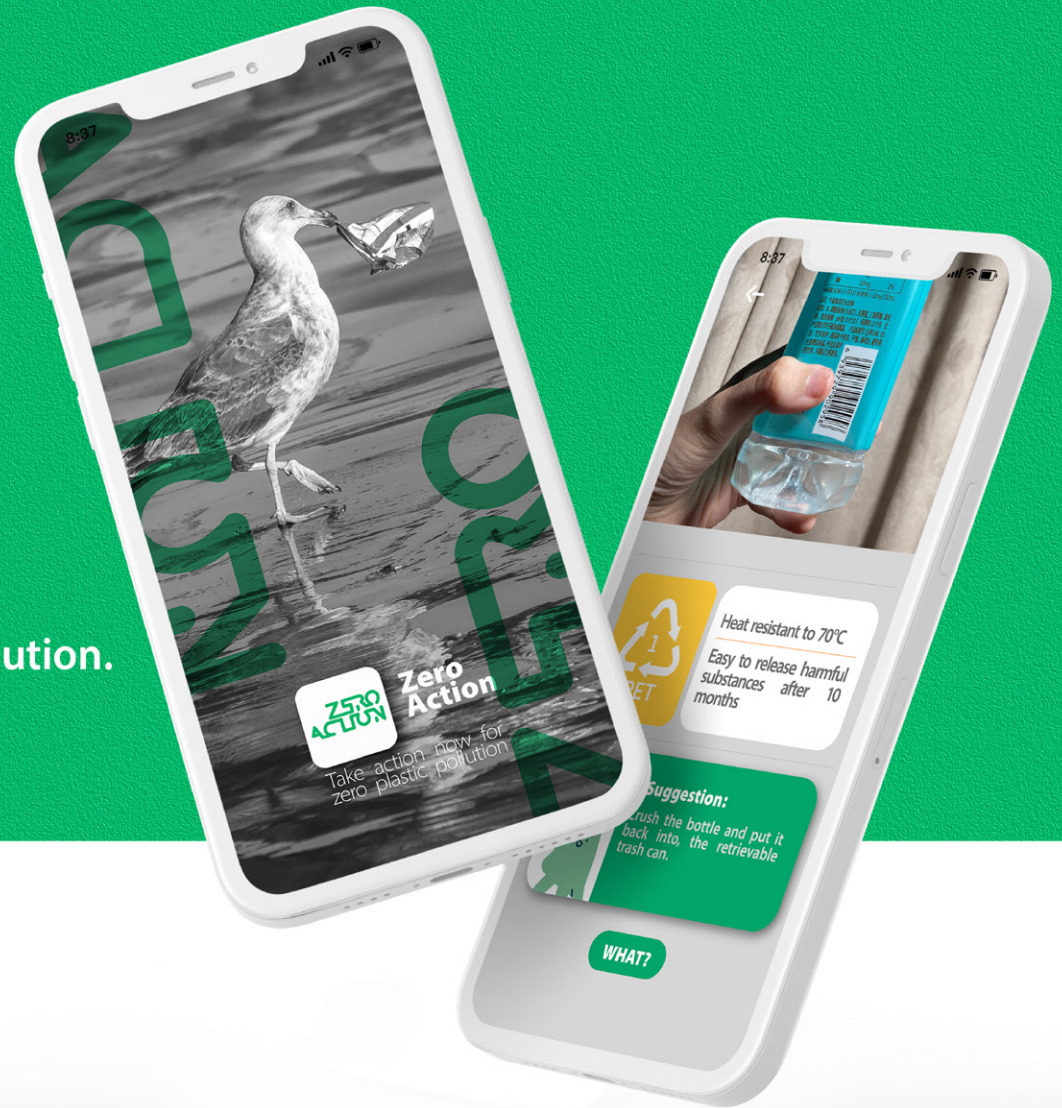
Confirm

Some illustrations





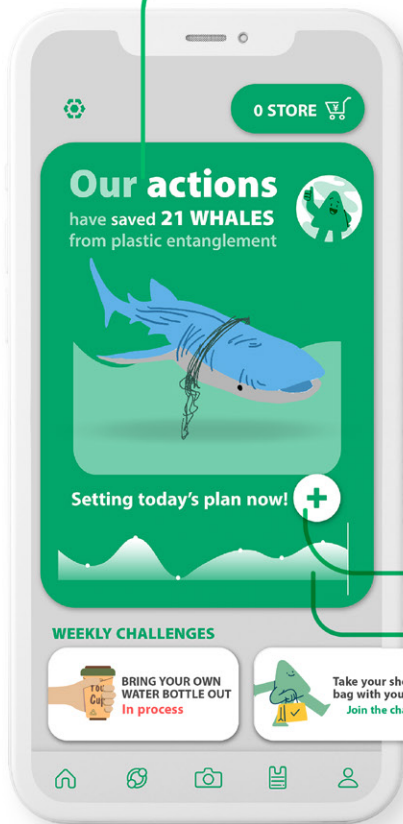
Take **ACTION** now for ocean plastic pollution.
Participate in a **ZERO PLASTIC** life.



Home page

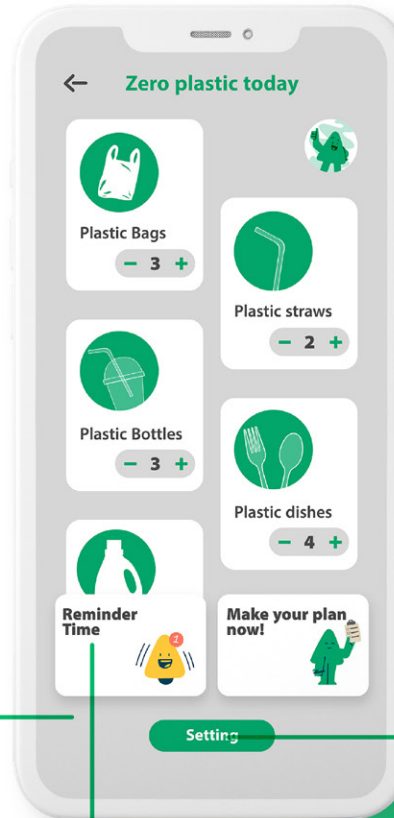
In the home page, user directly set up their own detailed plan or participate in plastic-free challenges to practice zero-plastic living.

The cumulative contribution from all users to let them know that "many hands make light work" and that our actions are making a difference in the marine plastic pollution problem.

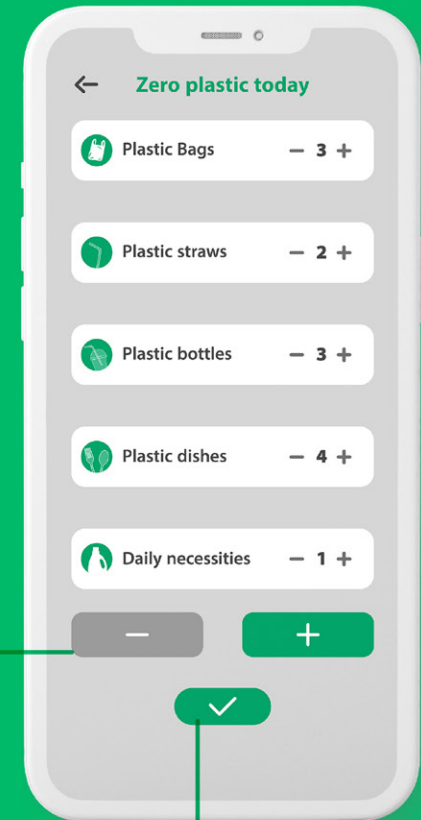


See what you're working on

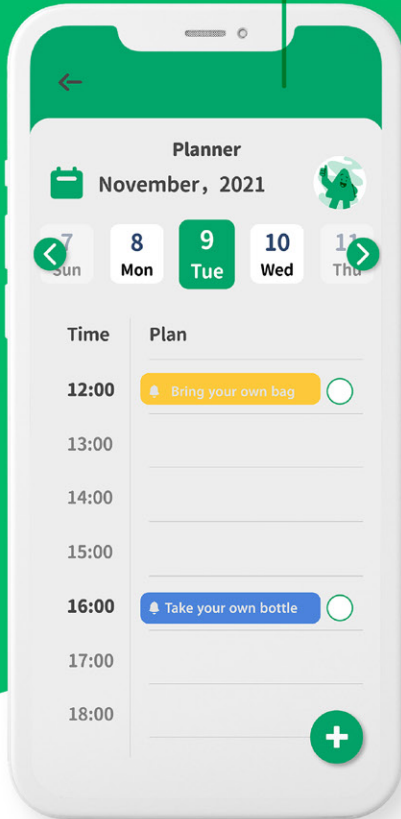
Check out your plastic reduction footprint



This is where users set their daily plastic reduction plans.



Make your plan now!



Users set their plastic reduction event alarms here. It will remind you on time to complete the plastic reduction plan you have set.

Ongoing Plastic Reduction Tasks

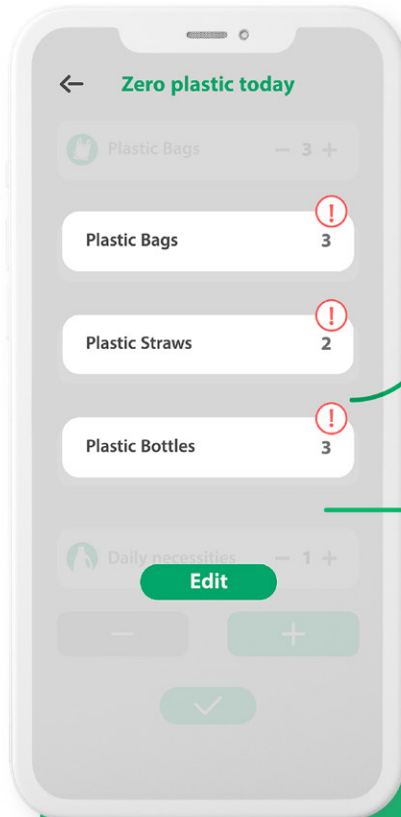
You saved 4



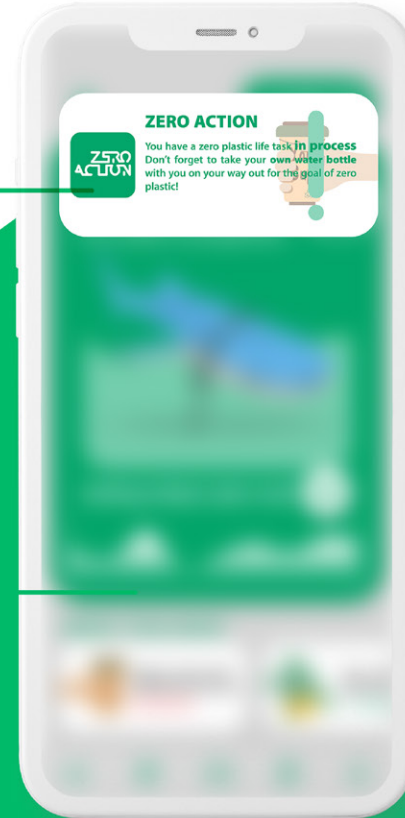
From eating plastic garbage

Completed!

30 points



When you have completed your goals for the day, you will know exactly what you have done to help protect the plastic oceans. You will also earn points.




When you switch to another app on your phone, a pop-up will appear to remind you of your unfinished tasks.






BRING YOUR OWN WATER BOTTLE OUT
In process




Take your shopping bag with you
Join the challenge



SPEAK UP FOR OVER-PACKAGING
Join the challenge

← Zero plastic challenges



How about taking your own water cups out instead of disposable plastic cups?

BACK PARTICIPATE

You saved
1




From eating plastic garbage

Completed!
30 points

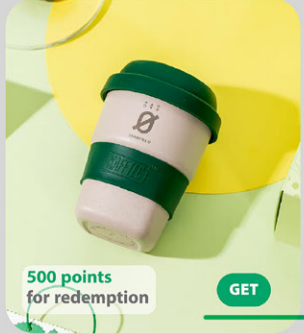
← Zero plastic today

Your action record




← kafftec View more >>

Coffee grounds cup
Recyclable and eco-friendly coffee cups made from recycled coffee grounds



500 points for redemption GET

ALL PRODUCTS View more >>



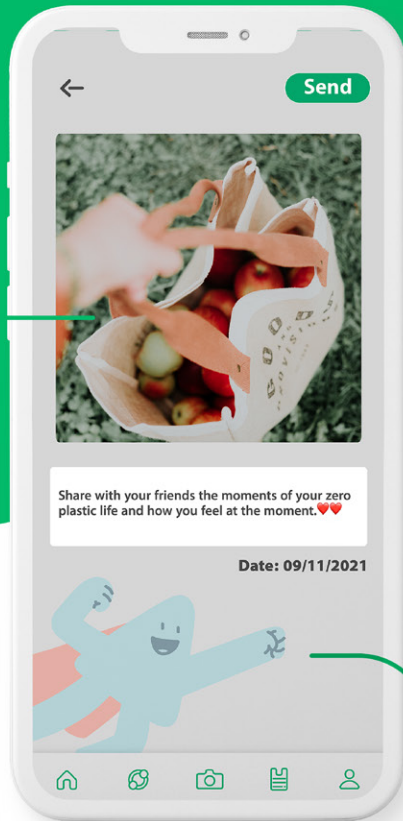
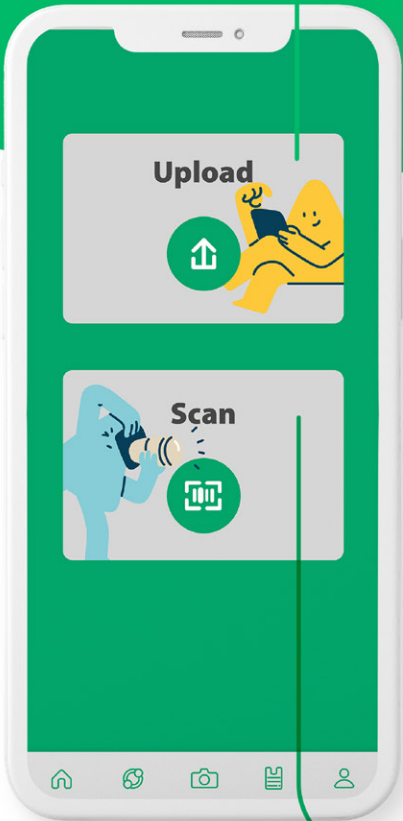
0 STORE

Our actions
We saved 21 WHALES from plastic entanglement

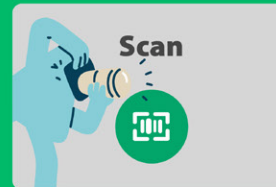
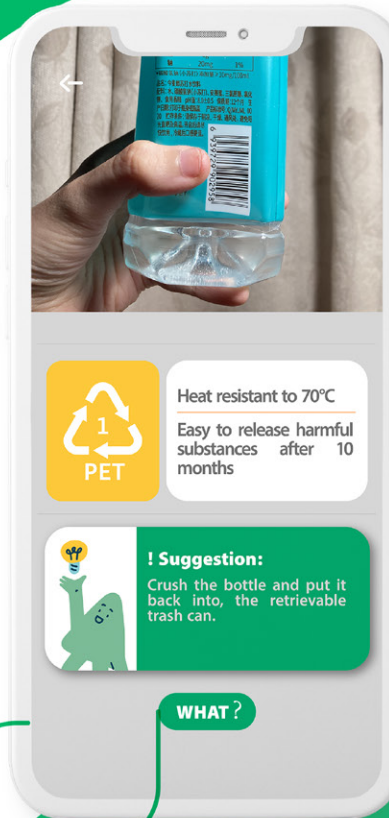
Users can participate in the challenges they are interested in, and when participating in the challenges, you need to take pictures to record your plastic reduction behavior. You will be awarded points for successful challenges

Users can participate in the challenges they are interested in, and when participating in the challenges, you need to take pictures to record your plastic reduction behavior. You will be awarded points for successful challenges

Camera page



On the camera page, users can choose to take a photo and upload their plastic reduction behavior and feelings to their friends to share with their friends.



Scan page where users can scan the barcode to get information about the plastic grade of the plastic packaging and give advice on how to dispose of the plastic



Heat resistant to 70°C
Easy to release harmful substances after 10 months



! Suggestion:
Crush the bottle and put it back into the retrievable trash can.



Can withstand temperatures up to 130°C
Reusable after cleaning.



! Suggestion:
Reusable. Throw in a recyclable plastic bin



Do not use it as a water bottle again
Do not recycle.



! Suggestion:
Separate recycling is required.



Release of chemicals due to high temperature!!
Avoid packing hot food in fast food containers



! Suggestion:
For such disposable items, do not use.



Only heat resistant to 81°C
Easy to have bad substances, difficult to clean and easy to residue, do not recycle.



! Suggestion:
Basically, it cannot be recycled



Do not heat when using
Toxic substances are easily released under high temperature conditions



! Suggestion:
Reusable. Throw in a recyclable plastic bin



Harmful substances are produced at high temperatures



! Suggestion:
Do not reuse. This type of product is not always recycled

News page

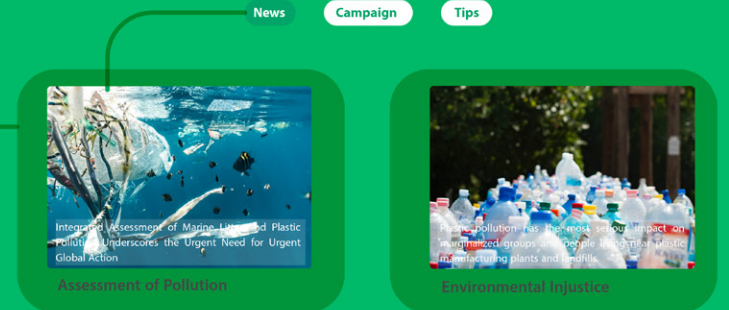
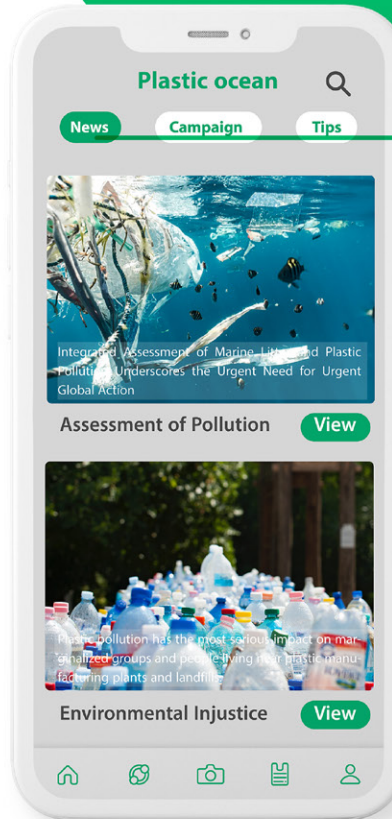


! Suggestion:

Crush the bottle and put it back into the retrievable trash can.

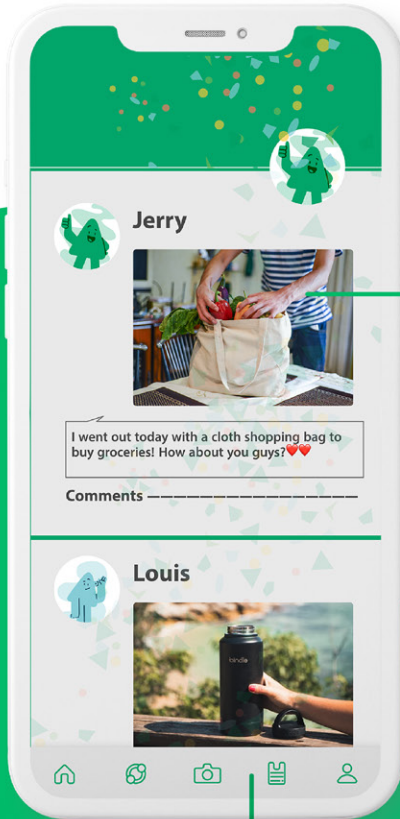
WHAT?

By continuing to click on the "What?" button, the user will be given the address of the correct plastic recycler, such as one of the automated sorting machines.



Then the learning page, where the user is sent news about ocean pollution, recent ocean conservation campaigns and tips on plastic waste disposal. This page is intended to expand knowledge about the impact of plastic waste on the ocean.

Community page

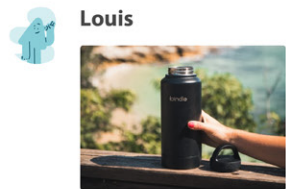


The community page where people can share their experiences with their peers. It gives users a sense that everyone is working together to contribute to ocean protection.



I went out today with a cloth shopping bag to buy groceries! How about you guys? ❤️❤️

Comments

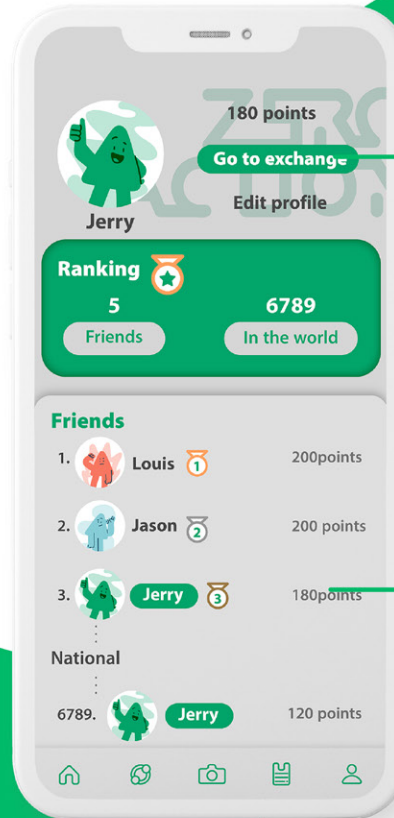


Today I went out and brought my own water bottle to drink. I was able to get the clerk to put the milk tea directly into the bottle I brought with me! Everyone go try it! ❤️❤️

Comments

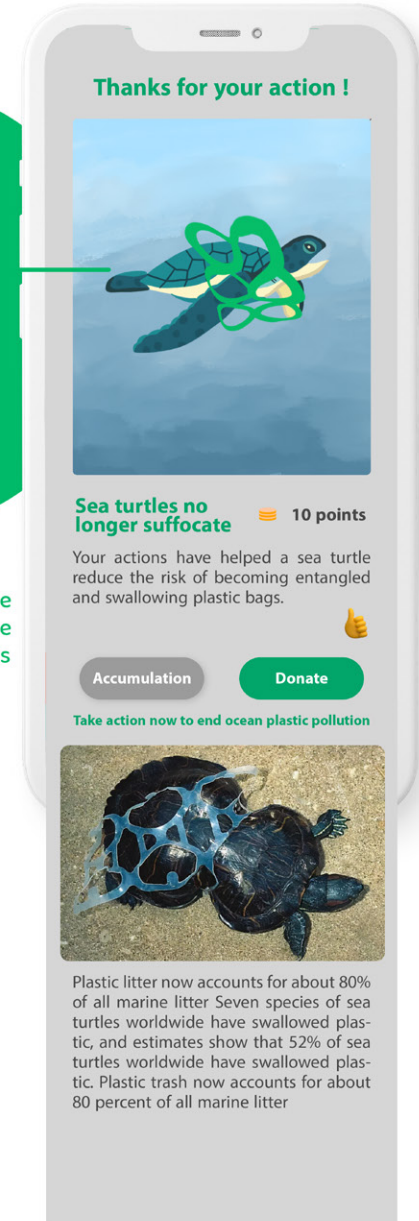
In my page, users check their own point ranking to gain healthy competition and compare their own and their friends' motivation to live a zero-plastic lifestyle, so they can continue to participate. This page also allows users to redeem points to support the ocean conservation campaign and help protect the oceans.

My page



Rankings are based on the number of points

On the "My" page, users can redeem their points for products that replace plastic packaging. People can also donate their points to environmental projects. At the same time, people will get knowledge about plastic ocean pollution.



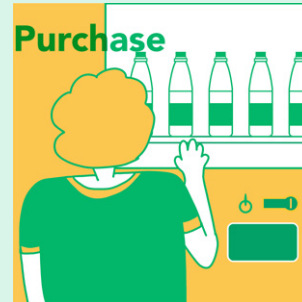
The brochure&poster



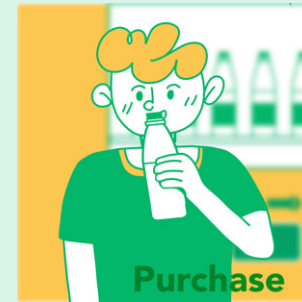
Plastic materials are being processed



Plastic products are produced



Plastic packaging products are purchased by humans



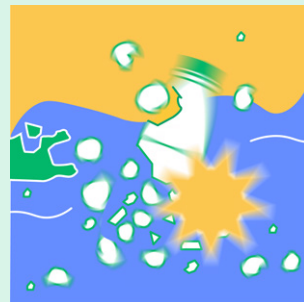
People enjoy the convenience of plastic with impunity



Plastic packaging is discarded



Plastic waste is discharged into the sea



Decomposed into microplastics over time



Marine life treats them as food



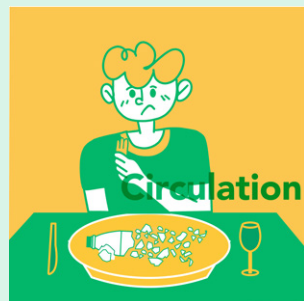
Undecomposed plastic products may also entangle marine life



Fish consume the plastic, polluting the marine food chain.



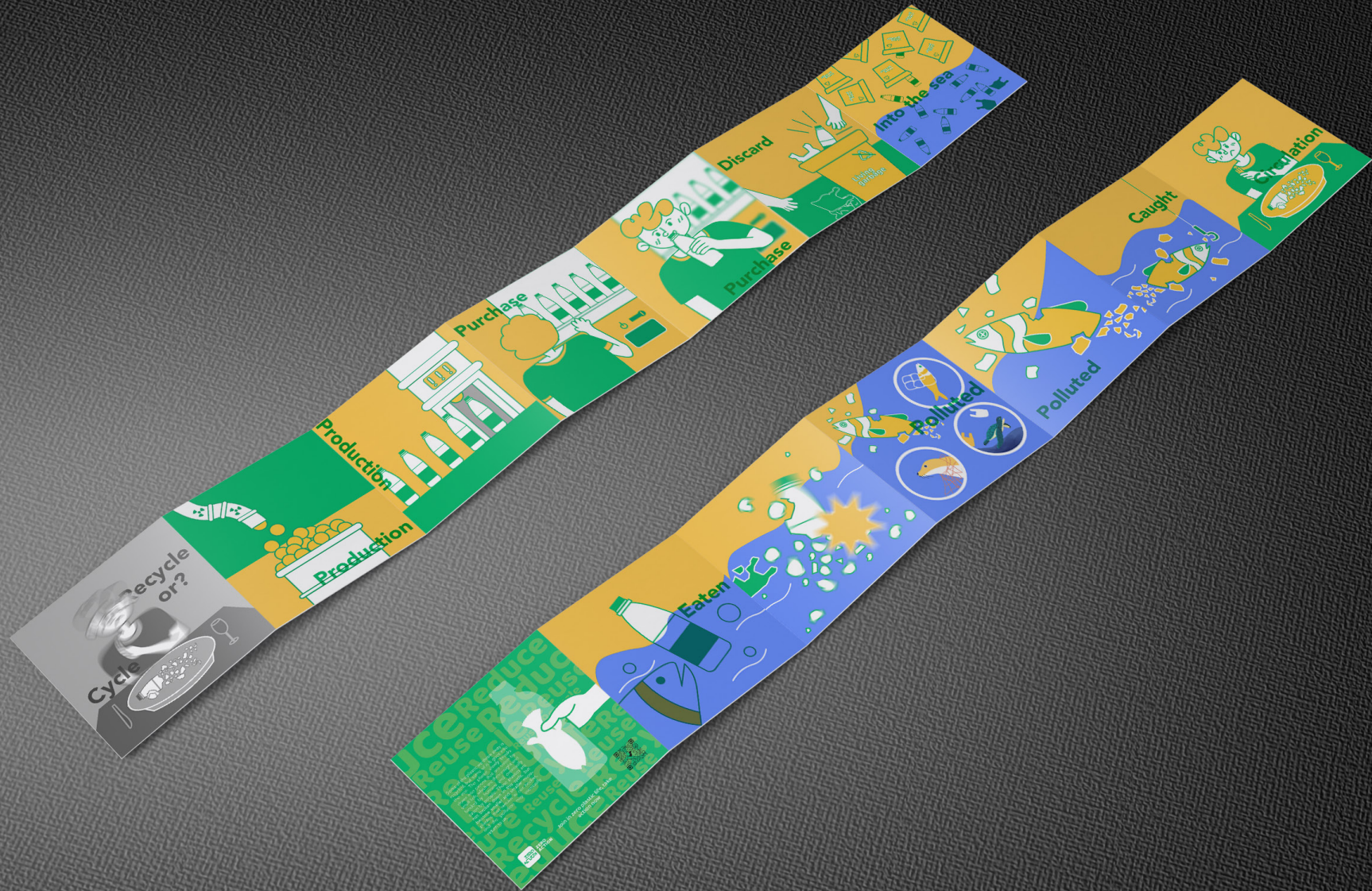
The polluted seafood is then caught and sold by humans



Finally, these microplastics enter the human table and return to the human body, affecting human health.



Outcome



-40%
BE ORIGINAL PRODUCE
E UNUSUALI PERE

CHILL OUT ZONE

Reduce
Reuse
Recycle

Some of the plastic we throw away is recycled, but some of it goes into the sea. The plastic slowly breaks down into pieces that are eaten by small fish, which are then caught and landed by humans and eventually eaten by people. Those plastics are not broken down in this cycle, but become smaller and smaller micro-plastics that remain in our bodies, and the pollution may eventually return to us.



Join in zero plastic life, take action now



ZERO ACTION ZERO ACTION

Recycle or?

Cycle



You saved 4 Plastic Bottles

From eating plastic garbage

Completed!

30 points

Nov 8 Mon

Plan

12:00 Bring your own bag

13:00

14:00

15:00

16:00 Take your own bottle

17:00

18:00

Heat resistant to 70°C

Easy to release harmful substances after 10 months

PET

Suggestion: Crush the bottle and back into the trash can.

Plastic straws - 3 +

Plastic bottles - 2 +

Plastic dishes - 3 +

Daily necessities - 4 +

1 +

- 1 +

Our actions

have saved 21 WHALES from plastic entanglement

Setting today's plan now!

WEEKLY CHALLENGES

BRING YOUR OWN WATER BOTTLE OUT in process

Take your bag with you! Join the

Zero plastic today

Plastic Bags - 3 +

Plastic straws - 2 +

Plastic Bottles - 3 +

Plastic dishes - 4 +

Reminder Time

Make your plan now!

Setting

Share the moments of your zero plastic life with your friends!

Date: 09/11/2021

Scan

Upload



Plastic Straws

Plastic Bottles

Daily necessities

Edit

+

-

✓

New

Assessment of Pollution

Integration of Assessment of Marine Pollution into the Urgent Need for Urgent Global Action

View

Environmental Injustice

View

pollution has the most serious impact on the poorest people in both rich and poor nations. Pollution also disproportionately affects communities of color and low-income communities.

You

From eating plastic garbage

Completed!

30 points

Sea turtles no longer suffocate

10 points

Your actions have helped a sea turtle reduce the risk of becoming entangled and swallowing plastic bags.

Accumulation

Donate

8:37

Zero plastic challenges

Tox Cup

How about taking your own water cups out instead of disposable plastic cups?

BACK

PARTICIPATE

8:37

180 points

Go to exchange

Edit profile

Jerry

Ranking 5

6789

In the world

Friends

1. Louis 200 points

2. Jason 200 points

3. Jerry 180 points

National

6789

Jerry

8:37

kafftec

Coffee grounds cup

Recyclable and eco-friendly coffee cups made from recycled coffee grounds

View more

GET

8:37

ZERO ACTION

You have a zero plastic life task in process

Don't forget to take your own reusable bottle with you on your way out for the goal of zero plastic!

Put today with a cloth shopping bag to avoid the question: how about you guys?

User test video link:
<https://youtu.be/OroV-Wav7MQ>

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Reflective report(FMP)

Describe

At the end of the second semester, I chose " waste" from the available options and extended from " waste" to " plastic waste", but after discussing with my tutor, I found that the scope of my topic was too big for the final project, so I decided to narrow it down in the final project. Today, 6.9 billion metric tons of plastic pollution have been produced by humans, and 79% of plastic waste products are deposited in landfills and the natural environment before sinking into the sea. The share of plastic in marine litter consistently varies between 60% and 80% of the total marine debris (Gregory and Ryan, 1997), most of which comes from food and beverage packaging. (Anna (Anya) Phelan, Katie Meissner, Jacquelyn Humphrey, Helen Ross,). So I have narrowed down plastic waste to plastic packaging waste

In 2010, China generated 1.32-3.53 million metric tons of ocean plastic waste and it was considered the largest contributor to such pollution (Jambeck et al., 2015). This explains the use of China as the research context for this project.

I researched the causes of this phenomenon. According to the New York Times, the rise of plastic packaging is the main reason for increased plastic products. The actual cause of today's serious ocean pollution problem is human error, dominated by excessive packaging, disposable products, and random waste disposal. This shows that we need to start from human consumption habits, behaviors and waste disposal methods to

improve this phenomenon.

According to the China Community Waste Management Forum data, the top cities in China regarding plastic waste products are also the most economically developed cities with the highest volume of express delivery. They are all first-tier cities, including the new first-tier cities, with a high percentage of 64.1%. In these cities, young people are the primary buyers of plastic packaging products, accounting for 69%. Also, the more educated and higher-income people will buy more plastic packaging products. So I targeted my target group at students and workers aged 18-28 living in China's first-tier cities.

After that, I did further research on the consumption habits of this group. According to the 2019 Urban Community Residents' Confidence Index on Household Waste Management and to be pleased with the study report shows that 48.8% of people will still buy plastic packaging even though they can realize that it is not environmentally friendly. Only a tiny percentage of people will give up buying plastic packaging because they are not environmentally friendly. This shows that people have a herd mentality but also shows that people do not pay enough attention to the problem of plastic pollution.

To solve this problem more focused, I made a questionnaire. The results show that 90% of people know that plastic packaging causes pollution. Still, only 52% of people have detailed knowledge of marine pollution, and 60% of people have not yet taken any measures to reduce plastic. The question "Why are you not taking action to reduce ocean pollution?" The results of the question "Why aren't you taking action to reduce

ocean pollution?" show that most people follow the herd when shopping for plastic packaging products. Some people believe that marine pollution does not affect them because they do not know that the microplastics produced by the decomposition of plastic waste in the ocean will eventually affect their health through the food chain. Others are losing their enthusiasm for action because they don't see how their actions will make a difference. I then checked the way these people dispose of their plastic packaging after use, and the results showed that most of them dispose of their plastic waste without separating it. They don't know how to separate their plastic waste.

Based on this, I interviewed the target group to understand people's consumption mentality. Because of the mix of things they do every day, I found that young people forget about decisions they have already made, especially those that do not affect their studies or work. This shows that they do not have a detailed plan in advance for their daily life. Based on the above preliminary survey, I have developed my own opinion.

Interpret

My first insight is that people feel that the problem of plastic ocean pollution never affects them, so it's none of their business, and then they continue to buy single-use plastic packaging products.

My second insight is that people find it hard to live a plastic-reducing or zero-plastic lifestyle because they don't have a goal or a concrete plan. However, it's actually hard to do anything by force of will without a plan. People need to have the motivation and

opportunity to do it.

My third insight is that people slowly lose their enthusiasm for contributing to plastic ocean pollution because they don't see the changes that come from taking action to reduce it.

My fourth insight is that people are following the herd mentality, buying plastic packaging products and rarely looking for alternatives to plastic packaging products, which leads to a staggering amount of plastic waste. People do not know how to sort the plastic waste, so they do not dispose of the waste in a reasonable and compliant way, so the plastic packaging waste ends up in the sea and causes pollution.

Evaluate

To further define the design direction of the project's final output, I compared existing products that reduce plastic pollution. The first one is "My little plastic foot print." It is an application that helps you reduce plastic consumption through plastic dieting. It records your plastic footprint to reduce your plastic usage and choose sustainable alternatives. The second is "Recycle academy" which is an application that educates users about plastic classification by presenting a hierarchy of plastic packaging and giving advice on how to dispose of them. Both of these apps were good ideas, but they were very little used. So I think when solving a problem, I have to look not only at the surface but also at finding the source of the problem. Eliminating the source is the most effective way to solve the problem. Without drawing enough attention to plastic marine pollution from users, all this is vain. So I decided that my design direction should be

cut from many aspects while drawing enough attention to the problem of marine plastic pollution and changing their habits of using plastic packaging. I divided my user group into two categories: those who didn't pay enough attention to plastic marine pollution and those who took action but didn't stick to it.

After that, I drew a user journey map and persona to analyze the user psychology further and used it in the next final design.

Plan

The understanding and selection of the above insights inspired my final output. First, I visualized the vicious cycle of plastic packaging in the marine life chain to convey the idea that the plastic we use will eventually return to our bodies as humans. In this way, I wanted to make people feel that plastic pollution in the ocean is not something that doesn't affect humans themselves so that people would pay enough attention to it and then get involved in a zero plastic lifestyle.

After that, I hope to help people develop a plan to live a zero-plastic life and help them get used to using plastic less often. In this era of cell phones, people can't live and travel without them, so I chose to develop a mobile app to use it wherever they go. The first is to help people make a plan to reduce plastic use in advance, or choose to participate in a one-week plastic reduction challenge, and receive a plastic reduction alarm when they do not complete the plan or challenge they have made. Second is the community function, users can share their zero-plastic life moments by taking photos and uploading them to communicate with like-minded people, making full use of the herd mentality to make users feel that everyone is contributing to the environmental protection cause.

The third is the mall function, where users can find alternatives to plastic packaging. The fourth is a barcode that allows users to scan plastic packaging waste to get information on the classification of plastic packaging and get advice on how to dispose of them, helping people to find the right way to dispose of plastic products even after they have been used. Finally, the ranking function, which gives users a ranking based on the number of points they have earned after completing plastic reduction behaviors, uses the healthy competition mentality of users to to participate in the zero plastic life continuously.

Through this final project, I became familiar with all the processes involved in completing a project. I tried to identify the root cause of the problem, understand the needs and ideas of my target group, and try to compile all the feedback from users and output the product promptly. I plan to put people and users at the center of my future projects and make better products to bring a better interactive experience to the public and solve more social problems.

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