

PORTFOLIO



Zhiyuan Ji

A fun and effective application designed for children to manage their pocket money.

Role: Independent Project
Duration: June 2022 - July 2022
Tools: Figma; p5.js



Flowney

Financial Education App for Children

Project Link: <https://www.jerryji123.com/flowney>

Context

With the development of China's market economy, children in China are frequently exposed to money in their daily lives. Influenced by traditional Chinese culture, many Chinese parents believe that financial education should wait until their children are adults.

If you study hard, you will be able to find a job and make money in the future.

An illustration of a man and a woman sitting at a table, looking thoughtful with their hands clasped.

But if I don't know anything about money, how can I make money in the future?

An illustration of two children, a boy and a girl, sitting at a table, looking thoughtful with their hands on their chins.

According to a survey by China Youth and Children's Daily,



Getting kids started with money management and ensuring a positive financial future for them has become a major challenge.

Research From Social Media

Little Red Book - a social media and e-commerce platform described as "China's Instagram".

Introduction

In one of the posts about children's pocket money from Little Red Book, parents responded differently to their children's money habits and the allocation of pocket money.

Stories



I've given my son pocket money before, and he ended up **charging every dollar into the game**. He also **tied my credit card** to the game and charged 3000 CNY to it.



My kid is 6 years old and I transfer 10 CNY to his watch phone for breakfast. But recently **his friends urged him** to buy snacks and toys secretly.



My son is 7 years old and **spends too much money on toys** and he has no concept of saving money. Is there a good way to teach him?



My son is 9 years old and I give him 20 CNY in the beginning of the week. My son usually **spends all of them on Monday**.

Problem

- Children have no control over their desire.
- Children without parental discipline.
- Children secretly spend their parents' money.
- Children are easily influenced by their peers.
- Children have no concept of saving money.
- Children don't know how to set goals to allocate their pocket money wisely.

Family Interview

To understand more about the children's money habits and what they think about their pocket money, I interviewed twenty families and selected three of them with different representations.

Family A



Alice
11 years old

- Alice usually gets her pocket money on weekends.
- Alice's money is kept by her parents when she goes out to play.



Parents:
Dad - 40 years old
Mom - 38 years old

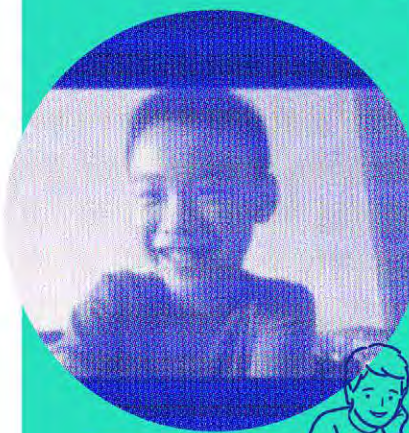
- Alice's dad gives Alice 20-30 CNY pocket money on weekends.
- Alice's mom wouldn't give Alice more than 100 CNY at once.

Family B



Lucas
9 years old

- Jacob can collect a star when he completes a task at home.
- When Jacob has 30 stars, he can get a toy under 20 CNY.



Jacob
7 years old

- 5 CNY per week.
- Earn an extra 1 CNY per night based on his overall performance.
- Gets at least 40 CNY for a month according to his performance.



Parents:
Dad - 38 years old
Mom - 35 years old

- Cash
- Not restrict what they buy.
- Feel that giving cash to children gives them a
- sense of control over their money.

Family C



Ivy
10 years old

- No pocket money.
- Has a watch phone linked to her mom's debit card.



Parents:
Dad - 42 years old
Mom - 33 years old

- Will give her money whenever she asks for it.

Interview about pocket money use habits

Family A

Family B

Family C



Children

What do you think the pocket money is? What can pocket money help you with?

The pocket money can be bought for snacks or saved in a small purse.

Lucas - the pocket money means a lot of toys and snacks.

Jacob - I just know that the stars I get can be exchanged for gifts.

The pocket money is comic books.

Do you remember how much you spend on your snacks? Or have you ever compared the prices between different snacks?

When I see some expensive snacks, I don't compare the prices of other items first, I count how much pocket money I have. If I don't have enough money, I won't buy it. I would buy other snacks instead.

Lucas - I will look at the price of the snack. If the snack is expensive, I will ask my mom to buy for me.

Jacob - My parents will buy snacks for me because it's my reward.

I don't remember the price of the snack. But when I see some very expensive snacks, I will ask my mom to buy for me.

Do you keep track of every pocket money you spend? And in what ways do you keep track of where your pocket money goes?

I keep track of what I buy in my notebook, but I don't show it to my parents. Because I would secretly buy snacks that my parents wouldn't allow. My parents sometimes ask me to keep track of the money, but only verbally tell them what I bought.

Lucas - I would listen to my parents to keep track of my money, but only verbally tell them what I had bought.

Jacob - Never keep track of the money because my parents thought I would be too young to do that.

My parents never told me to keep track of the money.

How do you teach your children about money and when do you give them pocket money?

I don't teach her much about money. We also don't give them a fixed amount of money because I don't think she needs it that much.

I don't know how to teach my kids about money, but I give my brother 5 CNY per week. Instead of giving my brother pocket money, I would give him stars as a reward.

I usually teach her how to allocate her pocket money by setting goals. I will tell her which items are necessary and which are not. When she needs money, I will give it to her.

Do you ask your children to keep track of the money? What did you and your children do?

I don't let my child keep track of the money. She will tell me when she needs to buy something so I know where the money is being spent.

We will have them keep track of where they spend their pocket money in 4th grade.

All I need is for my child to tell me verbally. No need to write it down, it's not necessary.

Do you know what your child spends her/his pocket money on?

Toys

Snacks

Gifts

Comic Books

Game Cards

Online games

Go out with friends

Digital devices or downloads

Savings



Parents

Analysis

- Children's purpose with money is different from adults.

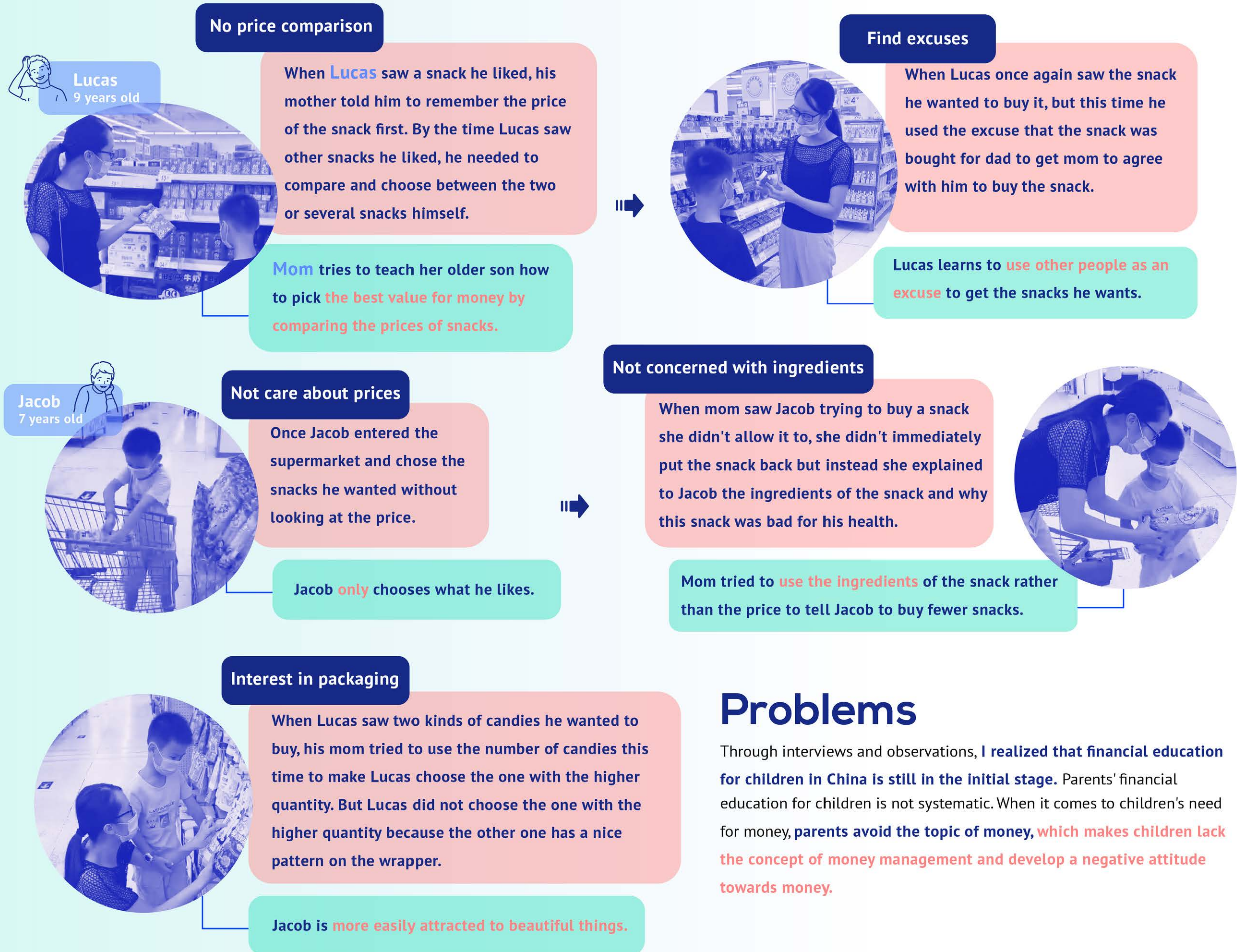
- Parents from all three families did not think it was necessary for children to keep track of money.

- These three families only taught them verbally about using money without teaching them how to do it.



Shadowing

This is a scene of two children from family B going out with their mom to buy snacks with their pocket money.



Problems

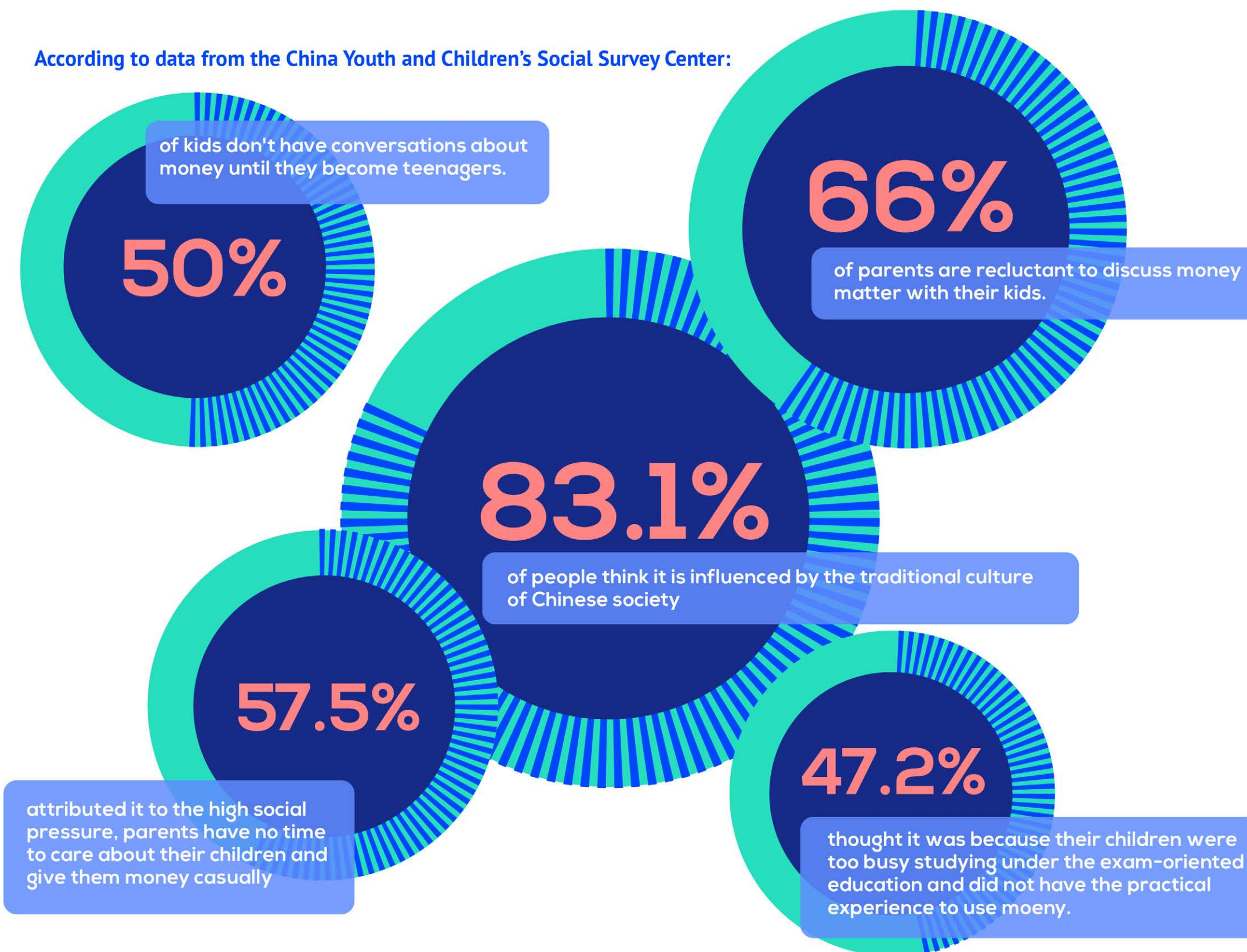
Through interviews and observations, I realized that financial education for children in China is still in the initial stage. Parents' financial education for children is not systematic. When it comes to children's need for money, parents avoid the topic of money, which makes children lack the concept of money management and develop a negative attitude towards money.

Continue Research

The Current Situation Of Children's Financial Quotient In China

According to the report of the China Youth and Children's Social Survey Center in 2021, only 23.6% of Chinese parents pay attention to the education of their children's financial quotient. Chinese parents are more concerned about cultivating their children's IQ and EQ. Some parents believe the financial education is only necessary when the children become adults.

According to data from the China Youth and Children's Social Survey Center:



Piaget's Theory Of Cognitive Development - Concrete Operational Stage

- Become more mature and "adult-like."
- Understand exchanges
- Solve problems in a more logical manner.
- Understand a series of unseen financial transactions involving other parties.

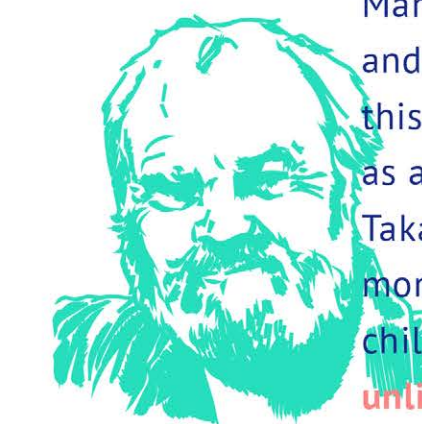


7 to 11 yrs

"Habit Formation and Learning in Young Children" By Dr. David Whitebread and Dr. Sue Bingham



According to Dr. David Whitebread and Dr. Sue Bingham's study, many of the habits we enter adulthood with, especially around money, are formed by age 7. Things like planning ahead, budgeting, delaying gratification and returning borrowed items are all habits we develop in childhood.



Many children receive a regular "income" in the form of 'pocket money' and thereby, many children's understanding of income is shaped by this cultural practice. For young children, pocket money is often seen as a sign of parental approval, or a way of being kind; Yamamoto and Takahashi (2008) found that the financial significance of 'pocket money' (i.e. a grant of money) does not become understood until children reach early adolescence. Younger children especially are unlikely to understand an pocket money as a form of wage, although they become aware that adults work for payment (a 'wage').

Children's Digital Native Lifestyles

A survey by China Youth Daily Social Survey Center 2022 shows which technology products kids like, which ones help them learn, and which ones parents will pay for. 73.8% of children aged 7-11 would choose a smart device.

Children like to do things on their smart device such as,

- Play games and get achievements
- Watch videos and cartoon
- Take pictures and film videos
- Chat with friends

The average daily screen time is up to 2 hours a day for 7-11 year-olds, not including the use of screens at school or the rapidly growing use of computers for homework.

Time spent with devices in their hands is entertainment for children. It's also a better understand their experience with mobile apps and patterns they are familiar with.

Insights!

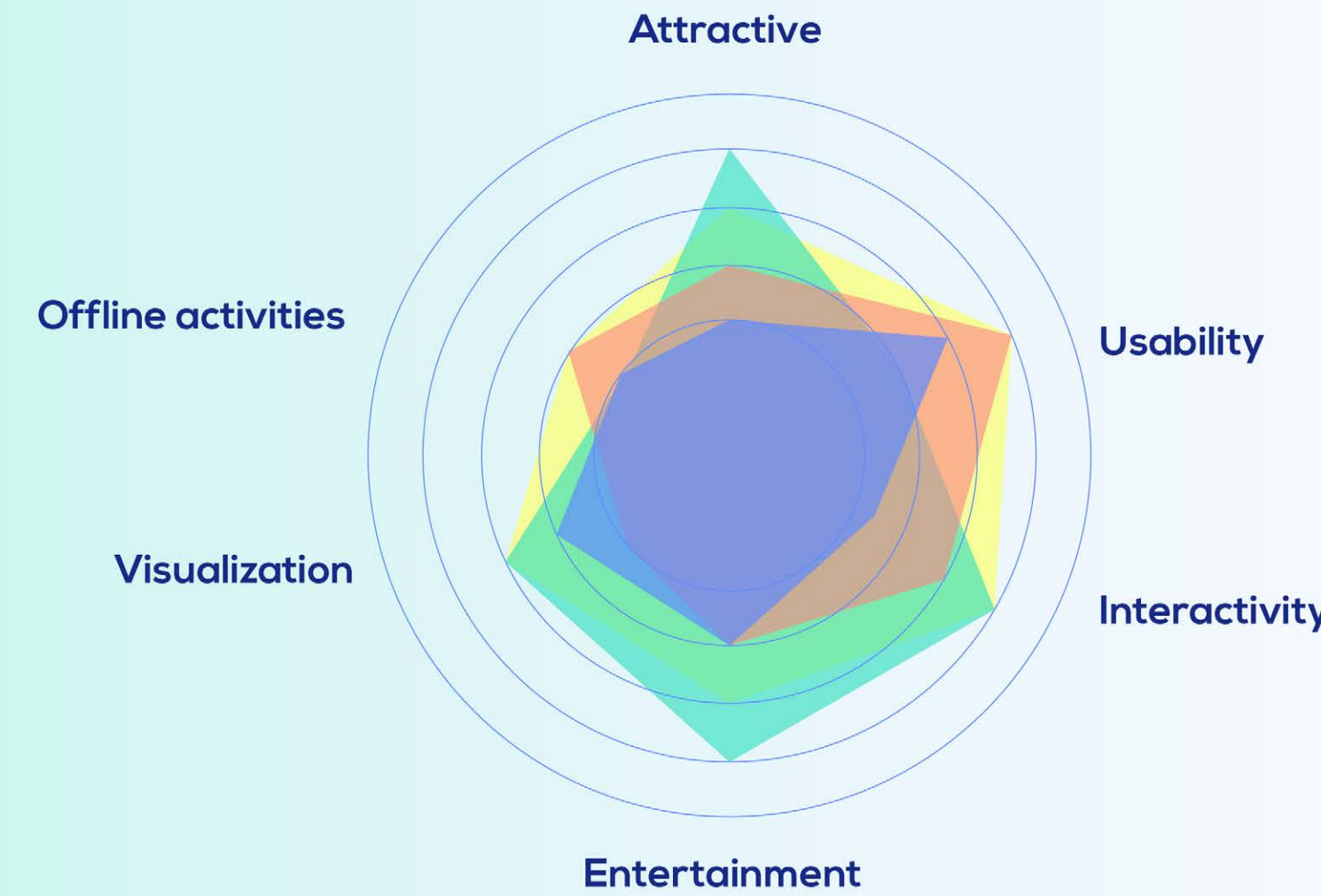
Children

- + Because most children forget where the money is spent, and some children spent their pocket money too fast.
- + The difference between children and parents about needs and wants.
- + Some children don't know how to compare which items are better value for money.
- + Some children will be more money-oriented, which can develop into profit-oriented and irresponsible people later in life.

Parental

- + Most parents want to know how much money their children have left.
- + Parents want to monitor their children and see where they spend their pocket money.
- + Parents are concerned about their kids having enough money, so they can react immediately when it is needed.
- + Parents want to get an overview of the kids' savings.

Competitors



These apps are designed to enable children to save their pocket money. I analyzed these four apps using six dimensions: attractiveness, usability, interactivity, entertainment, visualization, and offline activities.

Piggy bank doesn't visually attract children to use this app. The main interface gives a sense of people don't know how to start using the app. There are no features to interact with children.

Loot visually uses the 3D money jar effect to attract children to use it. However, when it comes to viewing the bill details, the entire money flow can't be viewed, which can't give good interactivity to children.

iAllowance's process of saving money is too complicated and children don't have the patience to set the goal of saving money. And they don't show good usability for children, it's more like for parents to use.

Homey is good for establishing good communication between parents and children. However, sometimes it doesn't do a good job of giving offline tasks to children, and it doesn't inspire children to want to complete the tasks.



Piggy Bank

Pros:
It keeps track of your goal, how much you've saved and how much is left to save.

Cons:
Unable to delete goals that have been reached.



Loot

Pros:
Nice UI and the ability to see actual money in the jars and spin them around.

Cons:
Can't choose a target date and type the date.



iAllowance

Pros:
It's easy to use and customize different chore lists for kids.

Cons:
It was very time-consuming to set up and a major headache when the kids check off their completion. Things like talking back and poor behavior cannot be locked for parental control only.



Homey

Pros:
Allow parents to post relevant chores and transfer money to their children.

Cons:
Without a calendar feature where the user can see all the assigned chores visually.

Persona

Demographic

Age: 9 Years Old
Gender: Male
Family: With parents and a younger brother
Occupation: Student
Income: \$10 per week

Goals

- Want to get more pocket money from his mom
- Want to purchase every kind of snack.
- Being able to show off how much pocket money he has around his friends.

Favorite Things



Michael Lu



BIO & Money Habits

Michael is 9 years old. His income is the pocket money from his mom. He likes to buy snacks as soon as he gets the pocket money. He doesn't like to save money because He gets pocket money every week. However, he wants more pocket money because the pocket money he currently has is not enough to allow him to buy the things he wants.

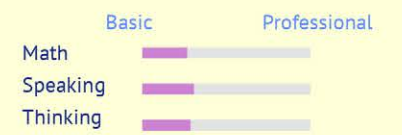


Frustration

- Receive less than the promised pocket money.
- Other children can have more pocket money to buy snacks.
- Feel not enough pocket money to spend.



Skills



Devices

- Watch phone
- iPad
- Mom's laptop

Demographic

Age: 35 Years Old
Gender: Female
Family: Husband and her son
Occupation: Bank employees
Income: \$500 per week

Goals

- Wants to teach her son about savings.
- Wants children to know how to choose and compare different goods and be able to choose the most value for money.
- Wants her children to allocate their pocket money wisely.

Favorite Things



Linda Zhou



BIO & Money Habits

Linda is a 35 year old mom who takes care of her son. She gives her son \$10 a week. Linda usually tells her son to save money and teaches her son about money management. Her goal is for her son to become a financially conscious person.

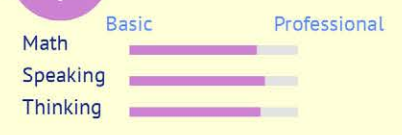


Frustration

- Unable to track what her children bought with their pocket money.
- When it comes to pocket money, her children don't listen to her to buy the junk food.
- Her son's pocket money was spent too quickly.
- Her son is unable to understand how hard it is for parents to make money.



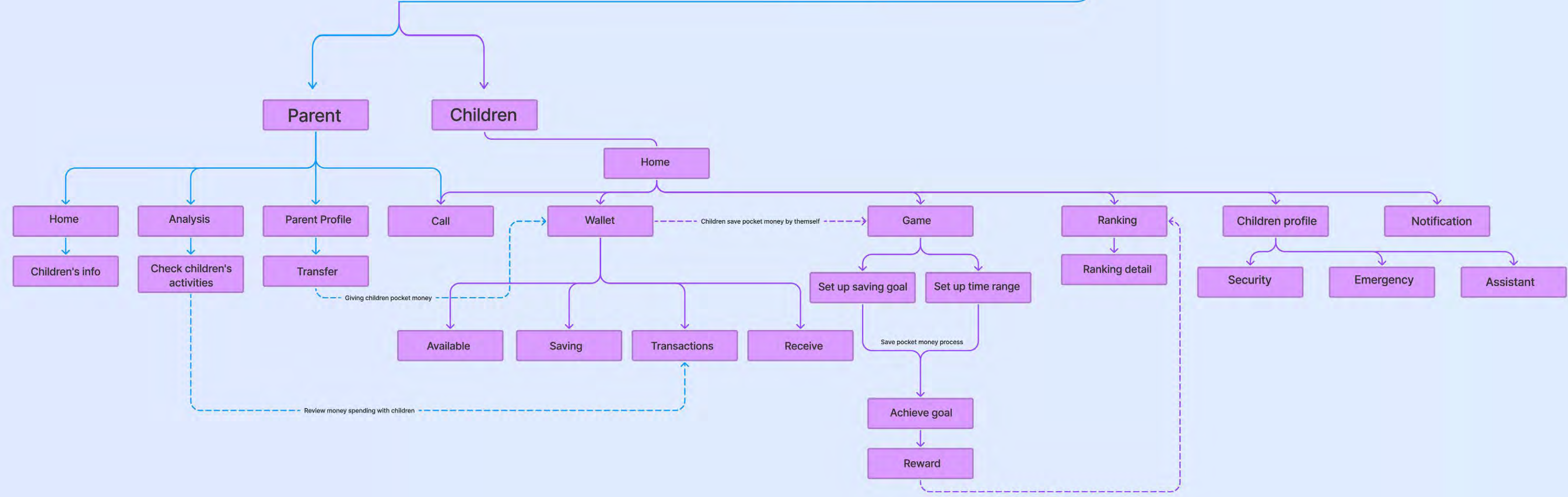
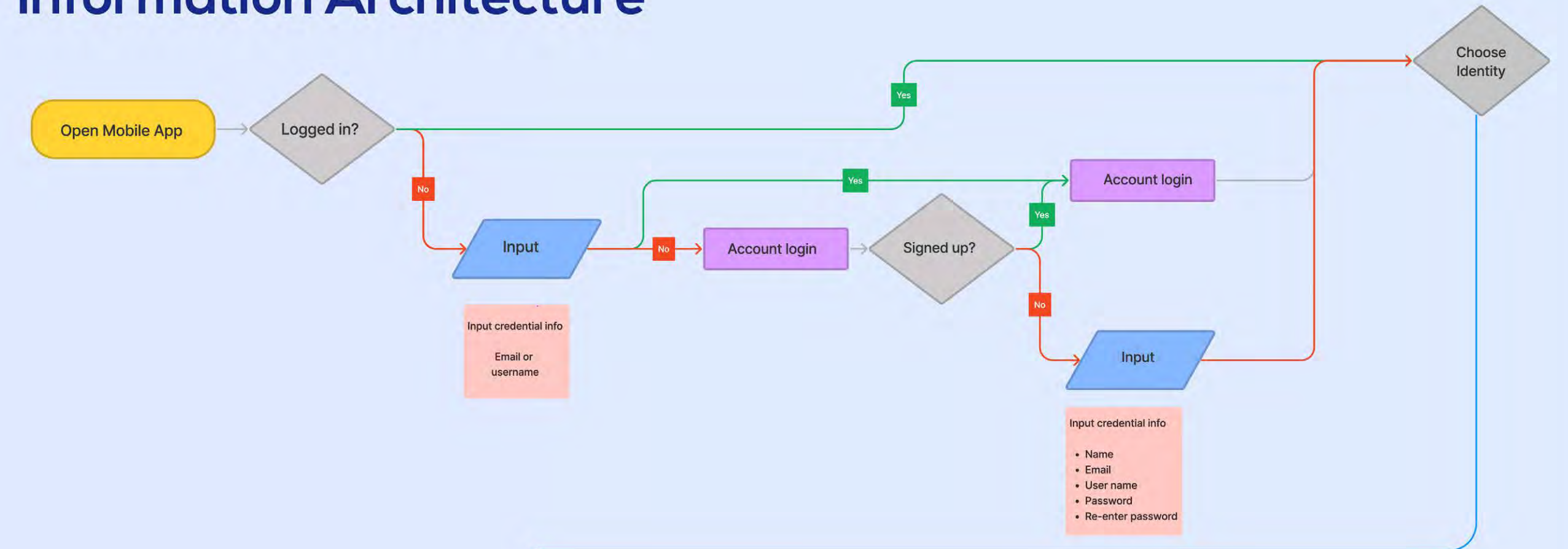
Skills



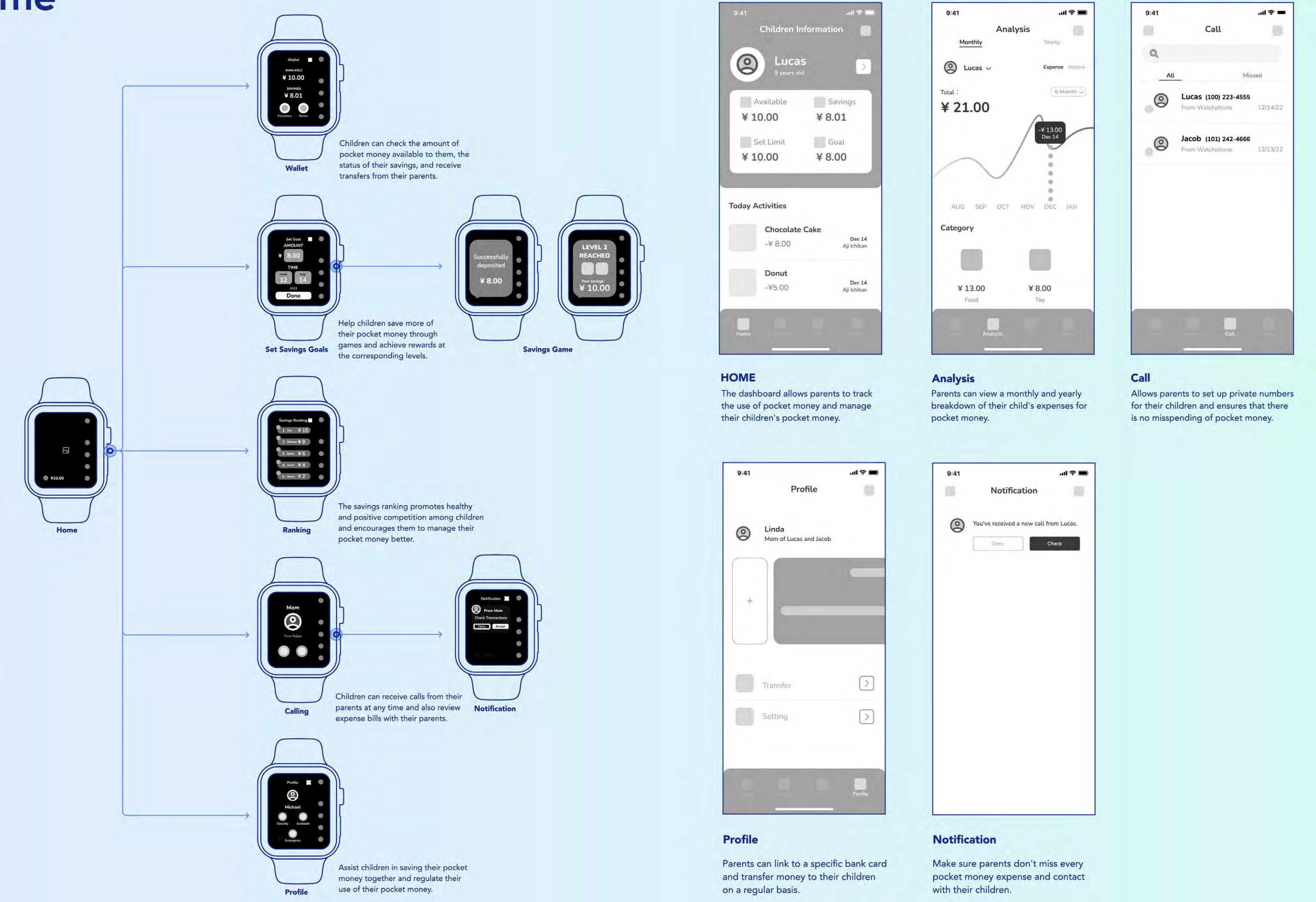
Devices

- Self-phone
- iPad
- Laptop

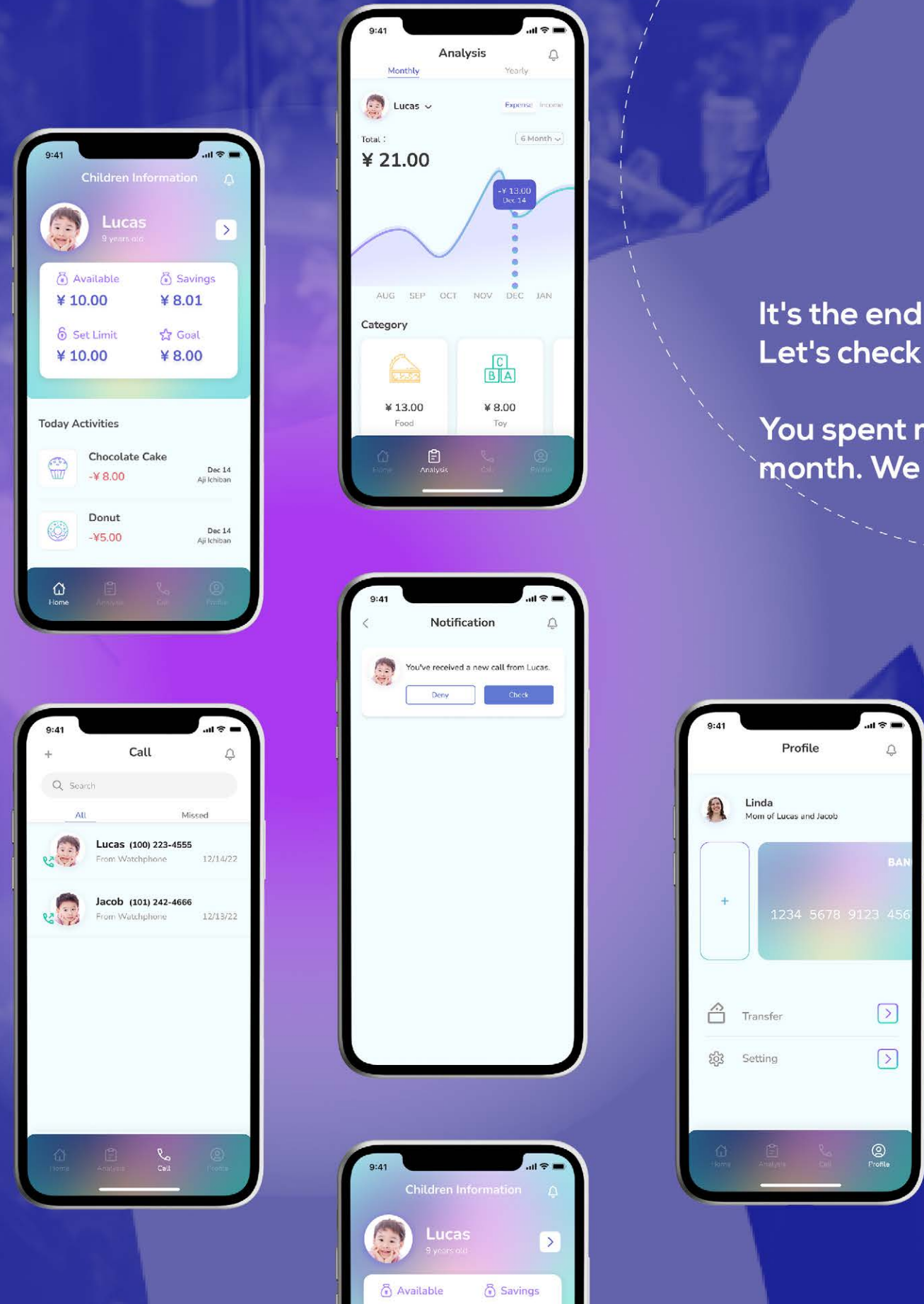
Information Architecture



Wireframe



User Interface



Mom

It's the end of the month. Let's check the bills first.

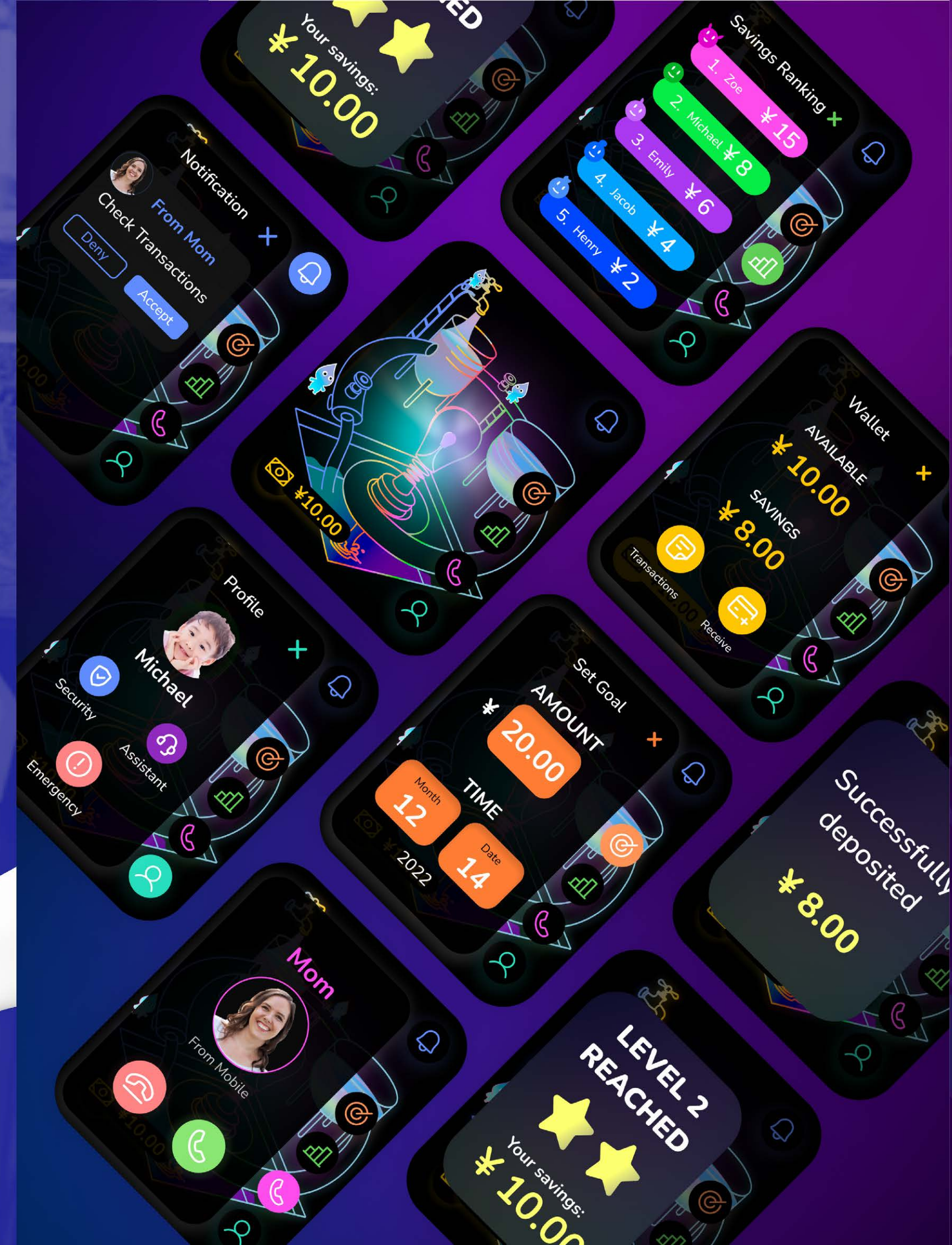
You spent more than you can afford this month. We can't buy this toy.

Child

This toy is so interesting! Can I use my pocket money to buy it?

But I still want to buy this toy.

Parents can check the bills with their children through their watch and phone.

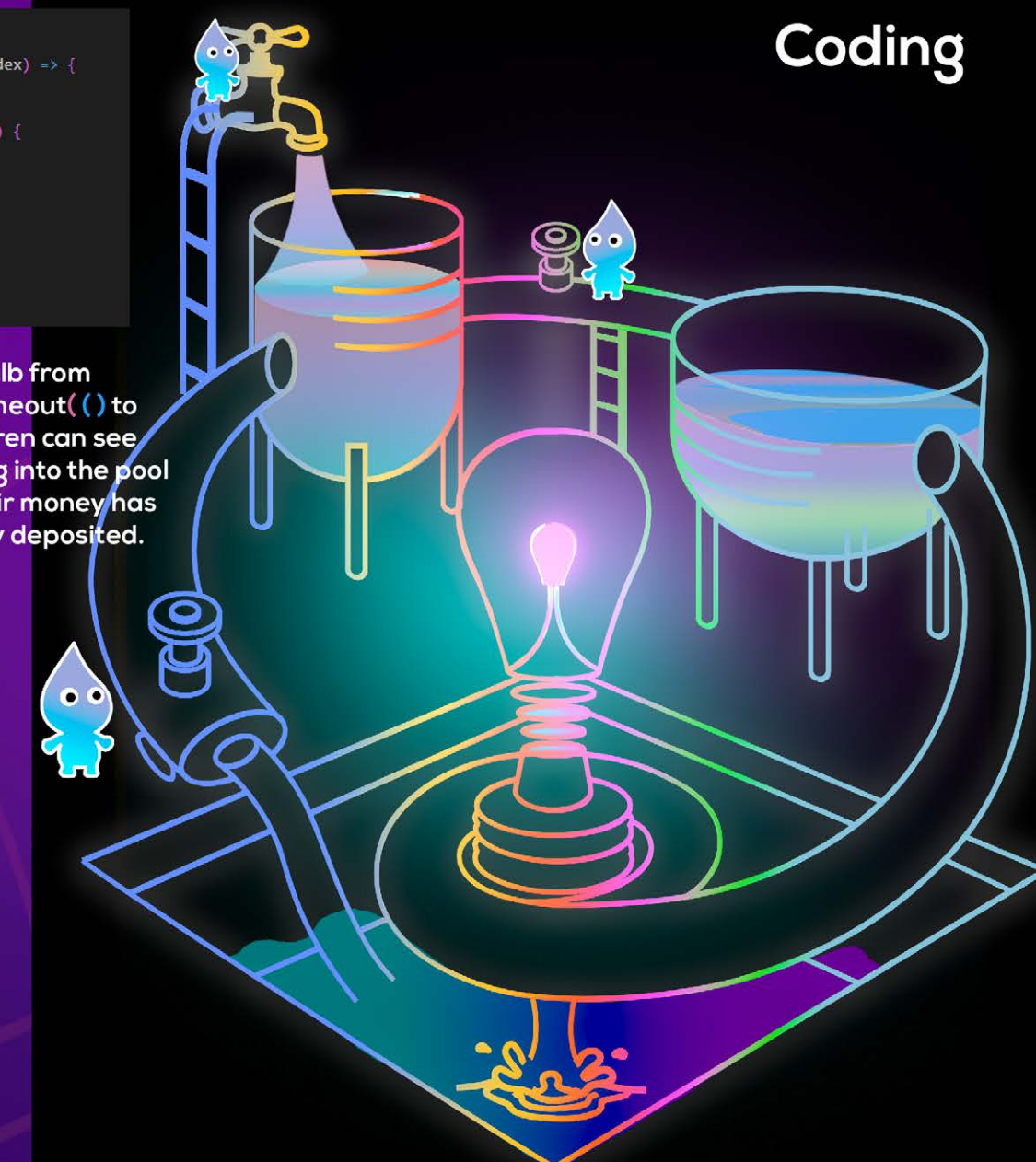


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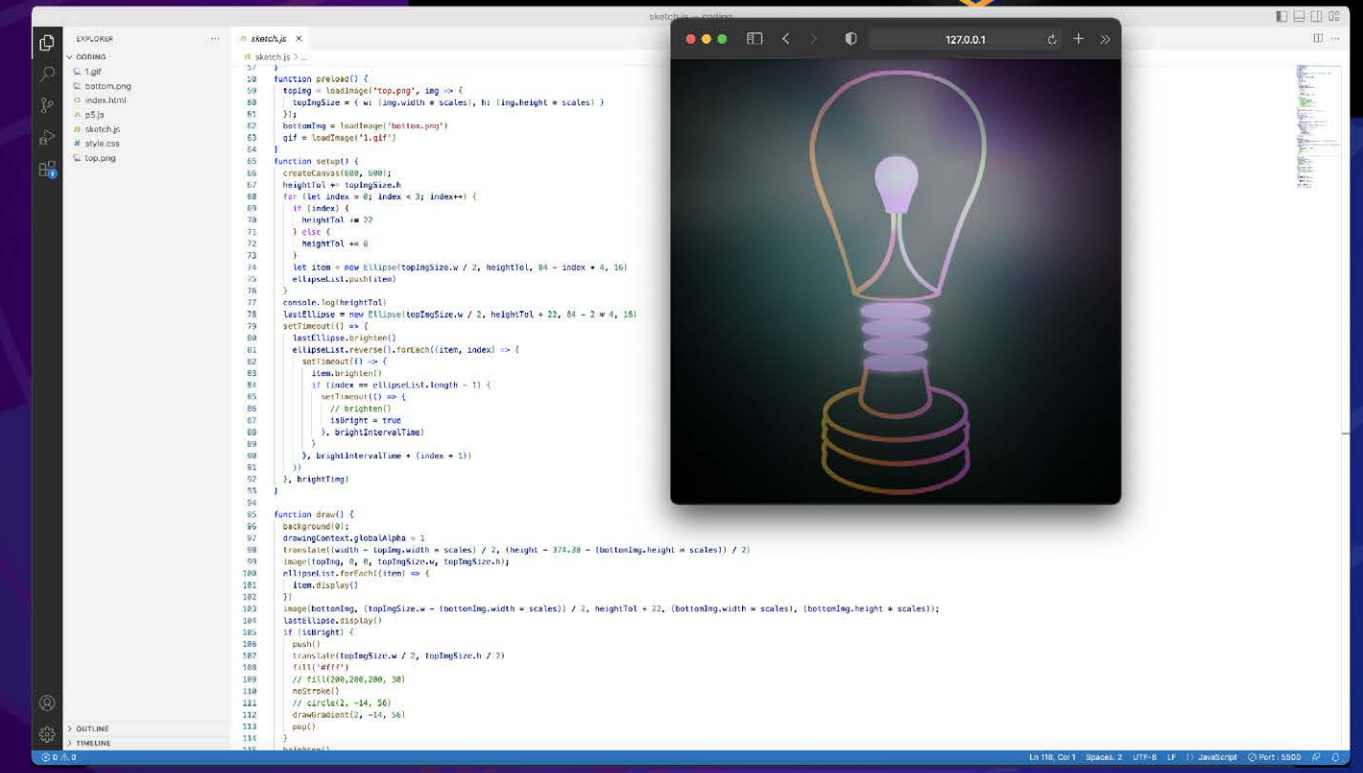
setTimeout(() => {
  lastEllipse.brightness(
    ellipseList.reverse().forEach((item, index) => {
      setTimeout(() => {
        item.brightness(
          if (index == ellipseList.length - 1) {
            setTimeout(() => {
              // brightness()
              isBright = true
            }, brightIntervalTime)
          }, brightIntervalTime * (index + 1)
        ), brightTime)
      }, brightTime)
    })
  }, brightTime)
}

```

Delay the light bulb from glowing by setTimeout() to ensure that children can see the water flowing into the pool so they know their money has been successfully deposited.



Coding



Role: Independent Project

Duration: January 2023 - February 2023

Tools: Autodesk Maya; Figma

Camp to Light

Assistance App and Equipment for Female Solo Campers

Camp to Light is an interactive device that combines a mobile app and a camping light to help female solo campers connect with other nearby female campers in case of danger or special circumstances while camping.



Background

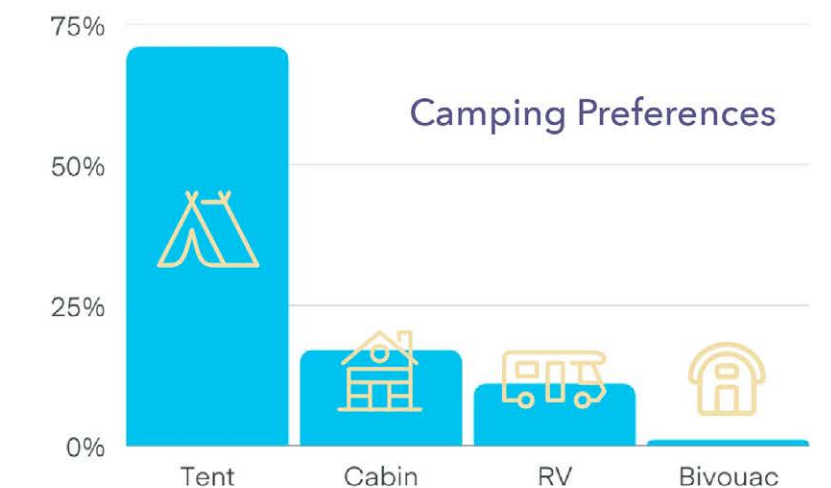
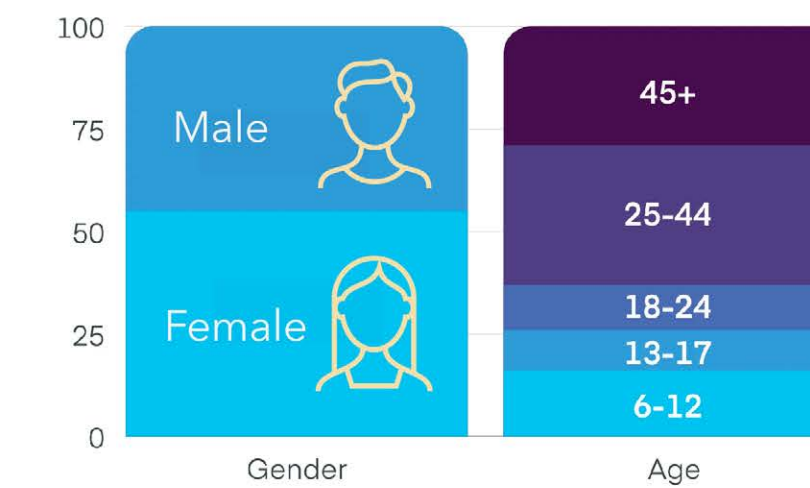
Solo Women Travel Trends

A global survey provided by British Airways of 9,000 women found that more than 50 percent had taken a solo vacation, with 75 percent of the women surveyed planning solo trips in the next few years. Another ad hoc sign of women's growing interest in hitting the road alone: Web searches for "Solo travel for women" have also risen drastically in the past five years, according to Google Trends.

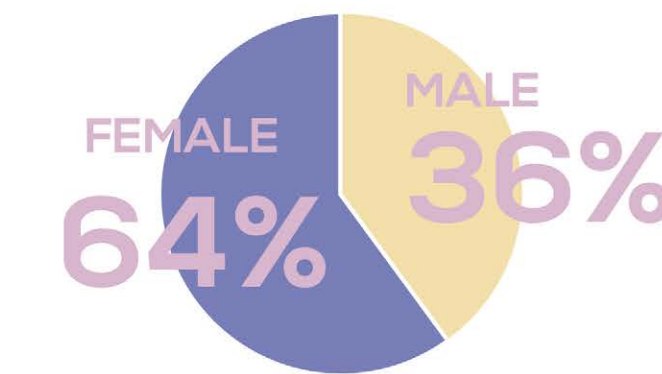
Camping statistics

In the U.S.

In the 2022 LuggageHero data, more than 40 million Americans chose to camp. Of those campers, 55% are women and 45% are men. The majority of campers choose traditional tent camping.



In China



According to the China Camping Market 2022 thematic insights in the China Econ Analytics, male campers accounted for only 36%, while female campers accounted for 64%, and female campers are the main decision makers in camping.

From these data, we can see that there is a growing demand for camping among women. More and more women are joining in solo camping. But what kind of problems will women face in solo camping?

Gender Concerns

In general, women report much higher levels of fear of violent crime than men do—a phenomenon sociologists call **the fear-gender paradox**.

"It's very natural for women to feel afraid because that has been **ingrained in our minds from a very young age**," says Jennifer K. Wesely, Ph.D., professor of criminology and criminal justice at the University of North Florida. **In reality, women's minds feel more likely to be assaulted or raped by a strange man lurking behind a boulder.** "

Accidents in women solo camping

- According to an article in *The New York Times* - "Adventurous. Alone. Attacked."

On June 4, 2017, a woman named Vasilisa Komarov was camping in northern Bolivia, in an area people had told her was safe, three men with machetes dragged her out of her tent. They beat her, dislocating her arm in three places. While two held her down, one raped her. Then they broke her motorcycle, stole her belongings, urinated on her tent, and left her for dead.

- In a murder case on the Appalachian Trail, a murderer stabbed and tried to kill a woman after murdering her partner. - *Daily Beast*, Oct. 20, 2020

- Regarding a *New York Post* article, Meredith Emerson, a 24-year-old hiker and camper, was kidnapped in Georgia after climbing Blood Mountain in 2008.

- According to an article on *CBC News* - "Women share their experiences camping solo"

On July 13, 2017, a woman called Melody Corvid, who has four years of camping experience, shared her experience of camping alone as a woman. She recounted a time when she was squatting in a community of campers in the United States and a man got comfortable in her campsite and started asking to touch her feet because the man saw that no one else was with her.

Mentally

Women's anxiety while solo camping

- **Past Experiences & Stories**
Getting lost at night, unfamiliar with the area, worrying about sleep at night, and also the insect bites.
- **Fear of the Unknown**
Being unsure of the types of animals you may encounter, how you will use the bathroom outside, and worrying about not packing the right stuff can prevent you from even trying to spend a night in the dark.
- **Bad Imagination**
Thinking that bad things will happen in the middle of the night and worse things will keep coming.

Physiologically

Menstruation

As anyone who has dealt with menstrual issues while camping will attest, there are many reasons why difficulties can arise. It could be that women don't expect their period to arrive and forget to bring essentials, such as tampons or sanitary towels.

When menstruation occurs at night, it can bring a whole host of other problems. These problems include finding flashlights, sanitary supplies, and toilet paper in the dark, and getting around tents and ropes to reach facilities.

Interview



Cynthia

Camping enthusiasts
36 years old

Cynthia has been a solo camping enthusiast for 10 years and enjoys the experience of being in touch with nature and coming to explore her life's purpose in the midst of it.

What do you think is the biggest problem for girls in solo camping?

I think how to go to the toilet and wash your hair in camping is the biggest problem for girls. Because it is hard to find a place like a home toilet in the wild. And the privacy problem about going to the toilet is extra important for girls to pay attention to when they are doing solo camping. Because you don't know who's around.

What is the most dangerous thing while solo camping?

I think vagrants are the most dangerous. I remember once I was sleeping in the middle of the night and I heard a noise. I was scared and opened a corner of the tent to look outside and I saw a vagrant eating my food. I didn't dare to make a sound until he left.



Shirley

Yoga Teacher
28 years old

Shirley is a yoga teacher who has recently started experimenting with solo camping. Because she feels that being alone in nature gives her a deeper understanding of yoga.

What do you think was the biggest problem with your first solo camping?

I think it's safety because I didn't know when strangers would appear near my camp. I was worried that these strangers would come near me and cause me harm, which led me to stay completely awake for the first night.

Then there was the issue of going to the toilet. When I went to the toilet in the wild, I always felt like someone was spying on me from far away.

What is the most dangerous thing you've met while camping alone?

I was on the toilet when the woods behind me made a noise. I quickly got up and returned to my tent and spotted two figures walking towards my camp. I grabbed my defensive tools to prepare myself in case these two men did me any harm. But luckily these two people were girls out camping.

Conclusion

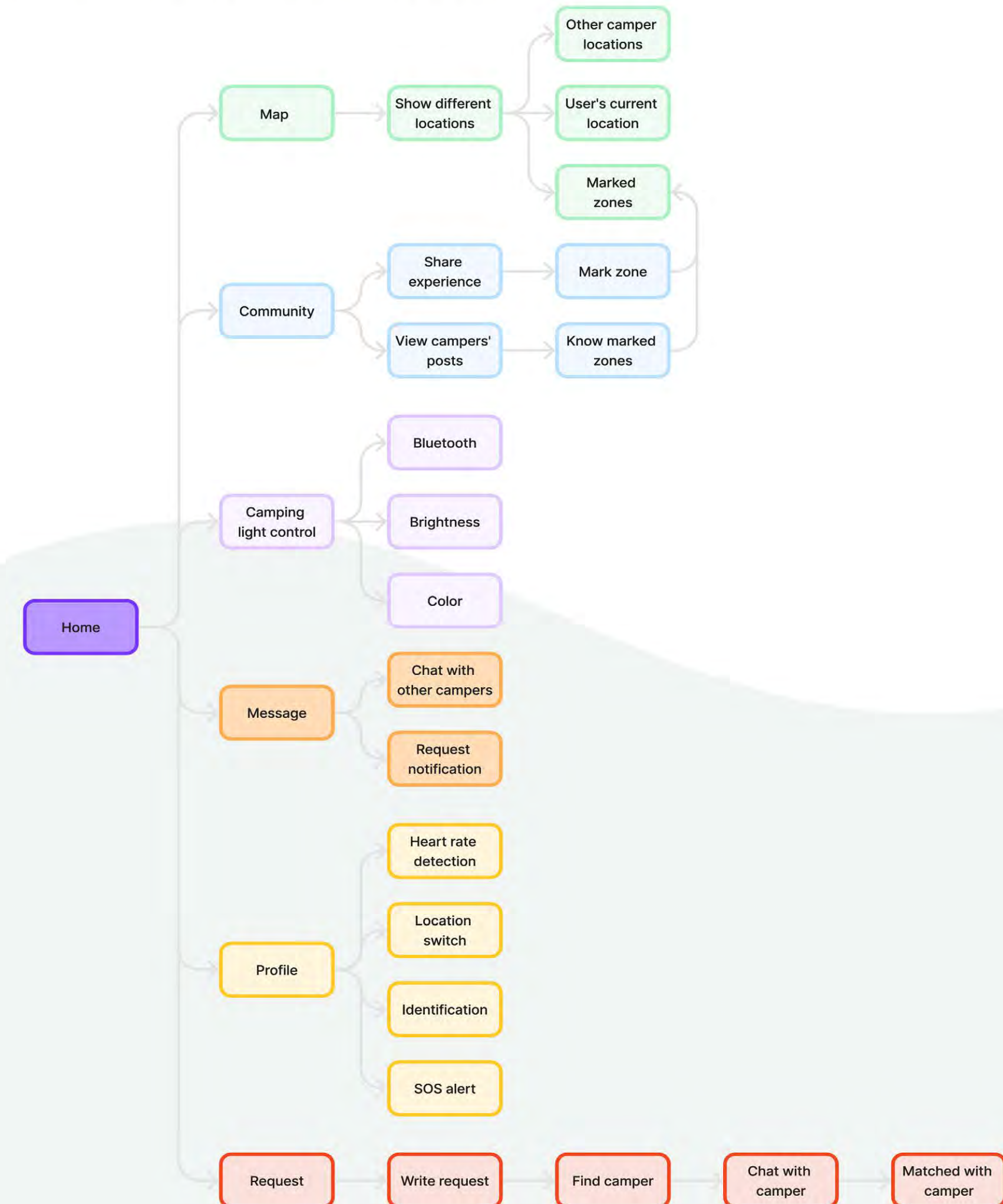
After conducting interviews, I found that **camping alone can sometimes present more challenges and concerns for women** than for men, such as **physically and mentally**.

The most dangerous factor among women camping alone is **the human factor**. They are terrified of being harassed and harmed by strangers. And women are influenced by their imagination, and they will imagine nightmare scenarios, such as being found in the middle of the night by a crazy person or someone with malicious intent.

So I decided to design a combination of **a mobile app and a camping equipment** where a female solo camper could seek help from a nearby female camper in special situations.



App Information Architecture



APP Interface

- Map**
 Users are able to view their current location. Also, users can see warnings and danger zones near the campsite, as well as other campers nearby who turn on their real-time location.
- Marked Zones**
 Users can tap on relevant zones and see the details marked by other campers.

- Community**
 Campers can share their solo camping experiences through the community and mark zones for others where they have stayed.

- Camping Light Control**
 Users use the controller to turn on the Bluetooth connection as well as adjust the brightness and color of the camping light.

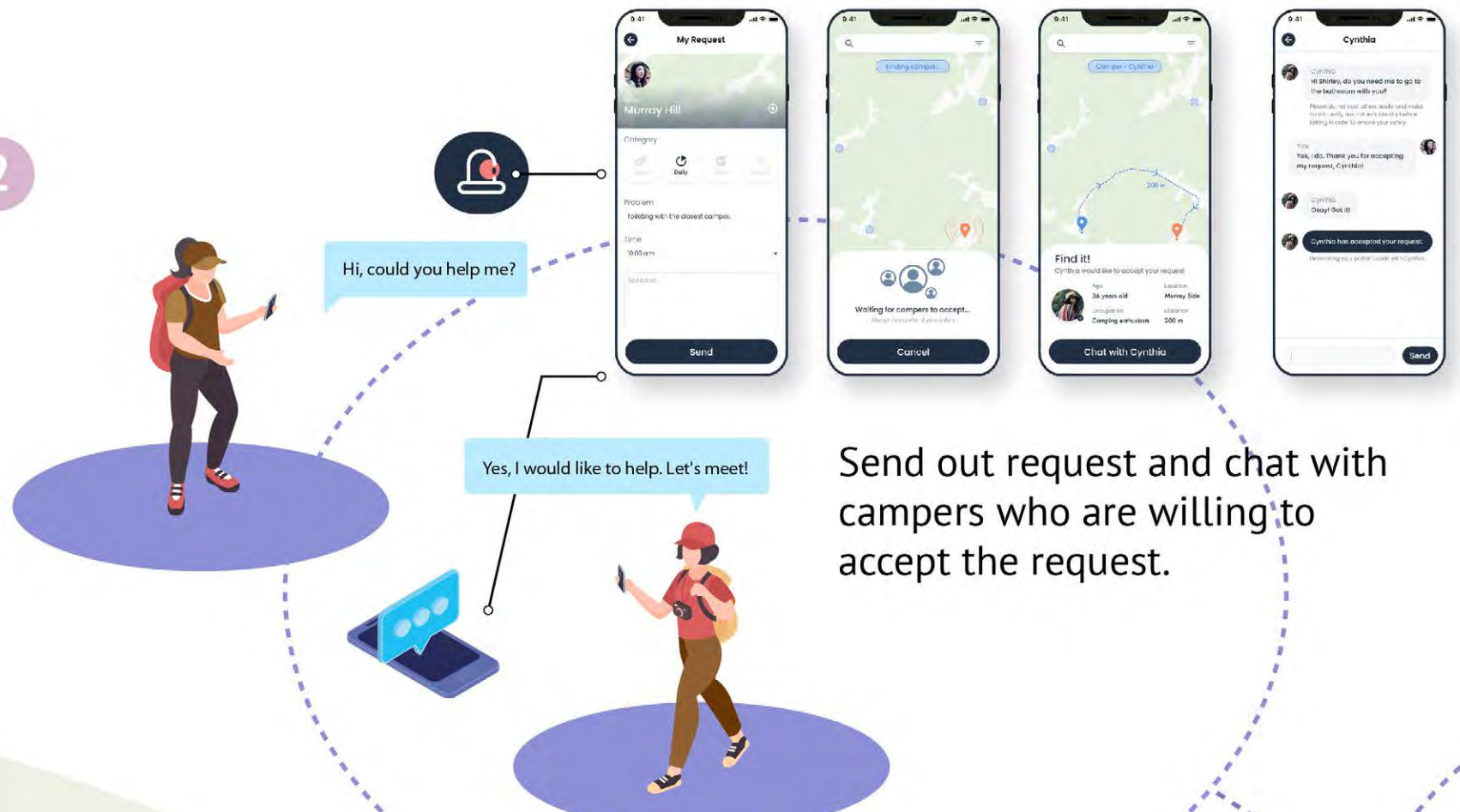
- Message**
 This is where the user chats with past campers who have helped her or campers she has helped. Also, she will get reminders of nearby requests here.

- Profile**
 Users are able to turn on their live location according to their preferences and check their health at any time. In case of danger, the user can press the SOS button and send a distress signal by the camping light.

- Send Request**
 When users need help, they are able to send their requests to nearby campers.
- After finding the right camper nearby, the user can chat with the camper and make inquiries. Once the person agrees to the request and both parties confirm the meeting location, the system will automatically generate a unique code and pattern between them to confirm their identity when they meet.

User Process

2



1



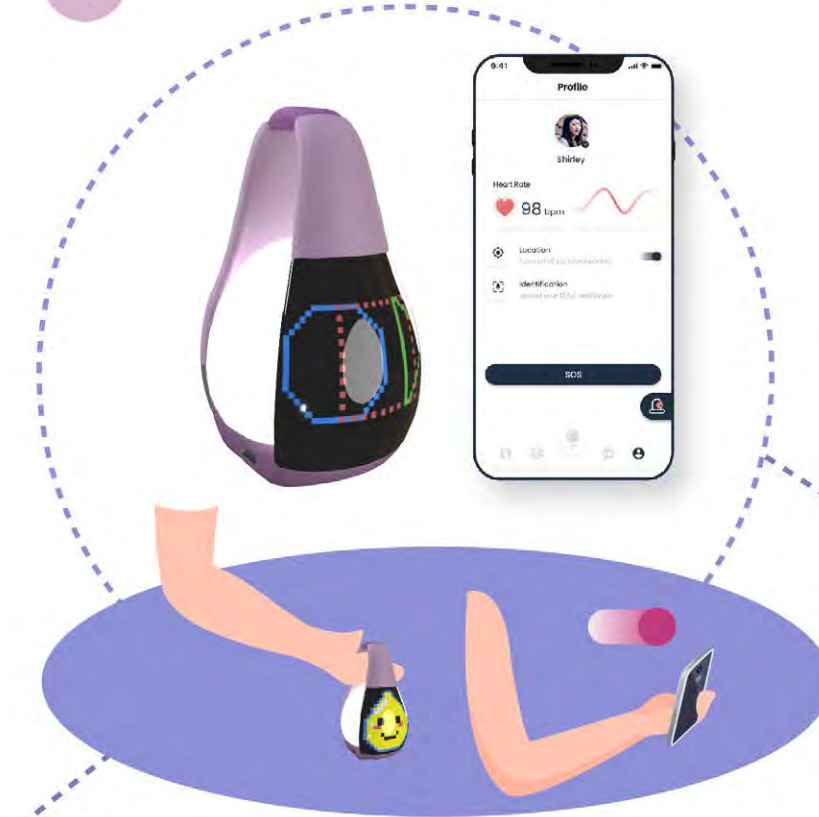
Open the App and find a nearby female camper for help.

3



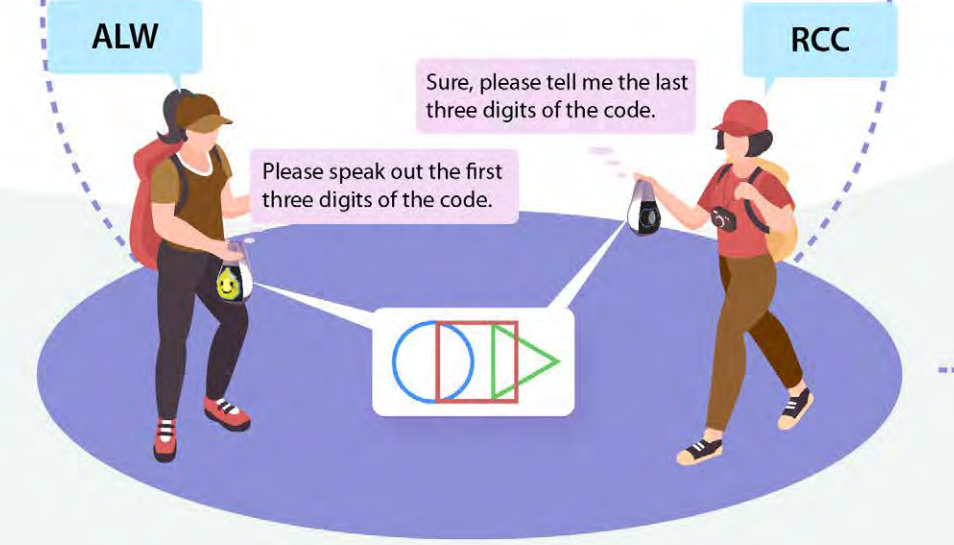
After both parties confirm, the App will generate a secret code and a pattern for them.

4



Turn on live location and bring the camping light so that both parties can confirm each other's identity when they meet.

5



When two campers meet, the smart robot in the camping light will greet each other and the smart robot will ask both parties to say the code. After both parties have confirmed the code, the digital screen on both camping lights will display the pattern.

The request can be about **safety, privacy, daily life and many other aspects.**



Get the tent fixed with the camper and be able to make friends through the gathering.



Have a camper watching while you go to the toilet to prevent others from peeking in.



To walk in pairs for a certain distance on the trail.

Camping Light

Features

The camping light has a compact and lightweight design with Bluetooth function and a rechargeable battery, making it easy to transport and store. The camping light is durable to adapt to different outdoor conditions such as rain, wind, and dust. In addition, the camping light also has adjustable lights, a screen that displays patterns, and a smart robot with voice capabilities.

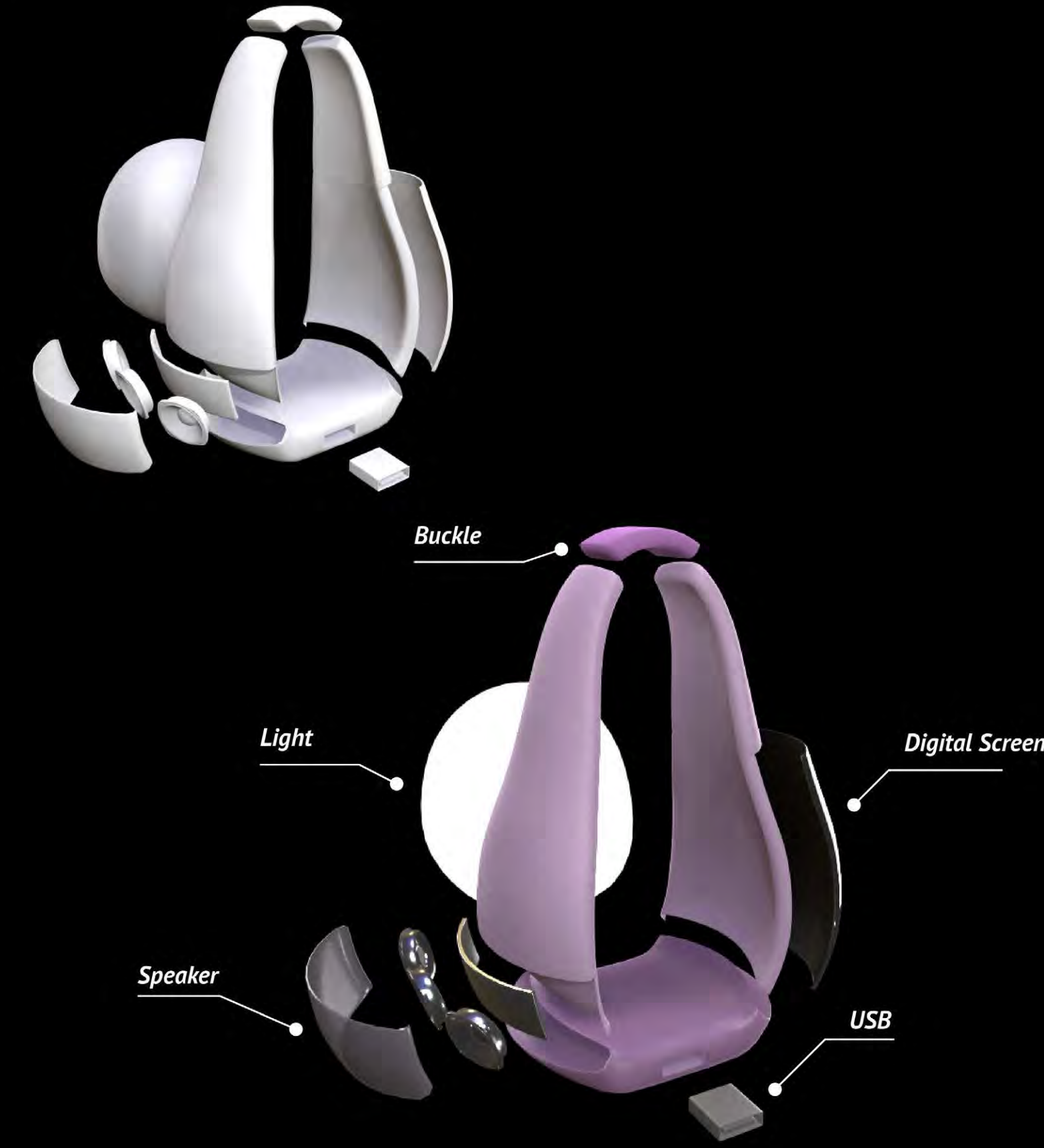
In order to keep it safe, the camping light also has an SOS alarm feature that emits a loud and distinct sound to signal for help in emergency situations.

-  Sustainable Materials
-  Bluetooth
-  Rechargeable Battery
-  Outdoor Conditions
-  Adjustable Light
-  Digital Screen
-  Smart Robot
-  SOS Alarm

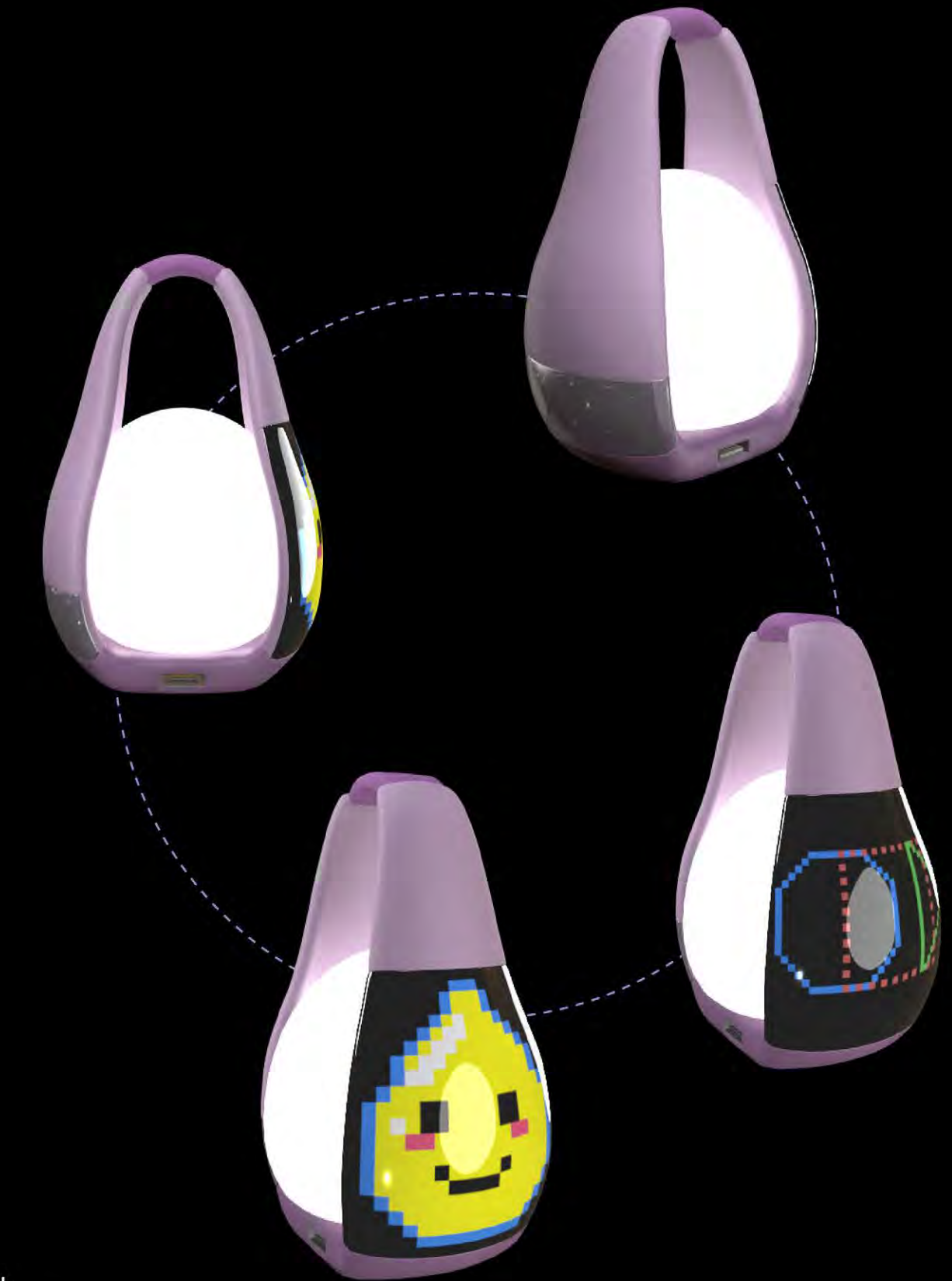
Sketches



Explosion View



Product Rendering



After settling on the idea of the camping light, I spent some time researching and experimenting with the LED light effect, determining the light transmission of the renewable plastic rPETG material, and the size of the internal electronic components stack. After verifying the structure and material of the light were feasible, I determined the final product modeling.

Usage Scenario



SNOW GOAT

Climbing Safety Smart Device

Role: Independent Project
 Duration: October 2021 - December 2021
 Tools: Autodesk Maya; Figma

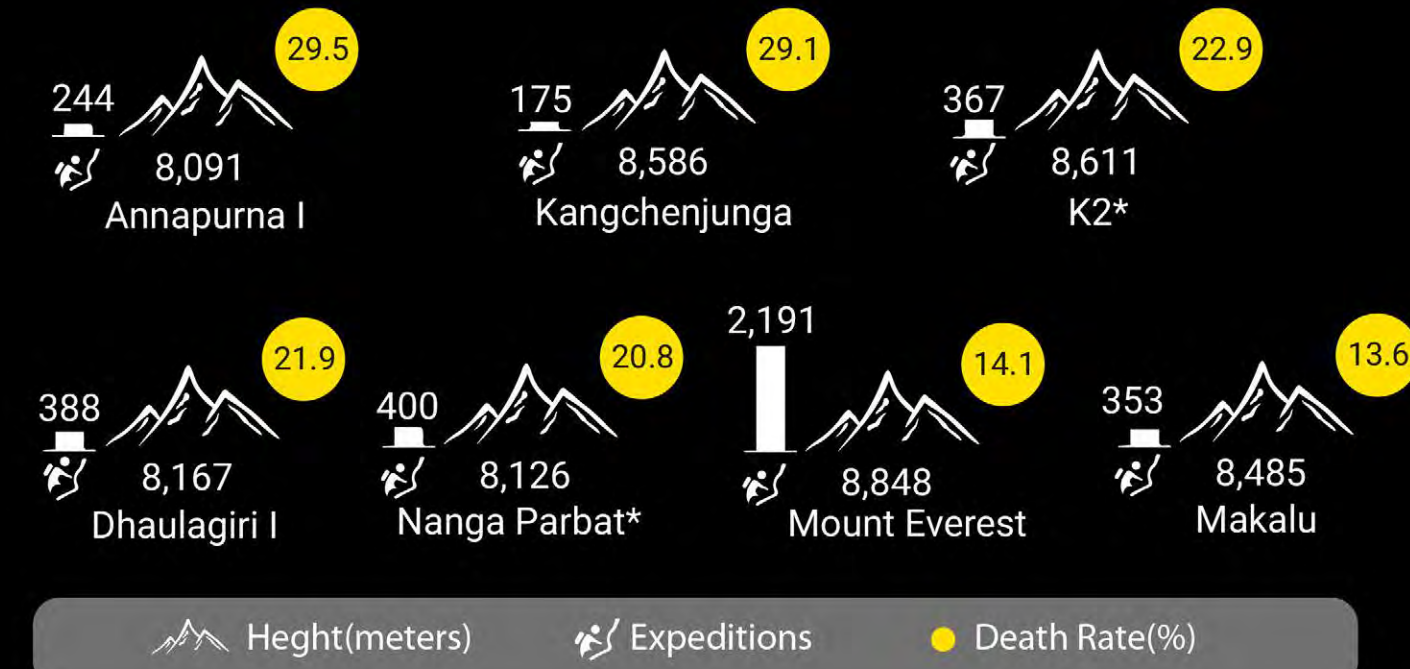
Snow Goat helps snow climbers detect dangers under the snow. Combined with the app, snow climbers can see their location, weather, temperature, and details of detection on the snow mountain. By connecting to the climber's health, Snow Goat will also send a distress signal when the snow climber is in danger.

BACKGROUND

According to data from the Himalayan Database and Mountainiq.com, the 8,091-meter main peak of the Annapurna massif is the most dangerous of all mountains.

Since 1900, an estimated 244 expeditions have resulted in 72 deaths - that is, in nearly one in three ascents, one participant did not return. Not infrequently Sherpa, who earn their living with mountain tourism, are also affected.

Numbers of deaths as a share of all expeditions on mountains over 8000 meters



When climbing snow-covered slopes, wearing slopes, it is easy to step on the cracked snow layer and induce avalanches. Most mountain disasters occur on the way down after a climber has reached the summit.

ACCIDENTS



INTERVIEW

The most important equipment during the climbing process.



"I think the most important equipment for me is **the climbing boots**. Because climbing boots and crampons can increase friction and prevent me from slipping on the snow."



"**Crampons** will be the best equipment for me. I need the crampon to enhance the safety and efficiency when I cross the snow mountain."



"In order to make sure every step is safe, I think **the alpenstock** will be my first pick because it can help me to identify the thickness of snow that is in front of me."

Ways to know the thickness of the snow and the way to make sure the step on the snow is safe.



"Doing research before you leave for the trip and choosing **the correct route** will almost always help avoid the snow that can collapse while walking on."

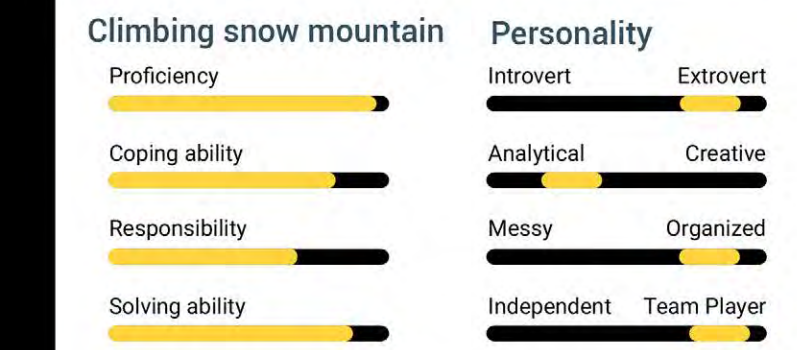


"There is an equipment to help measure this, such as **an avalanche probe**. This helps determine the depth of the snow beneath you."

PERSONA



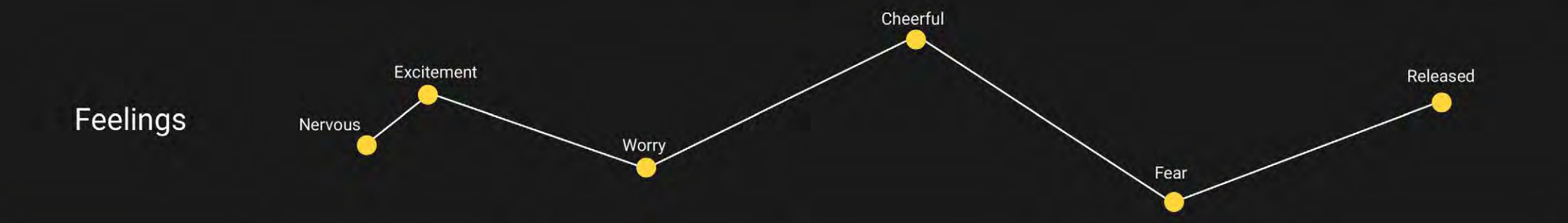
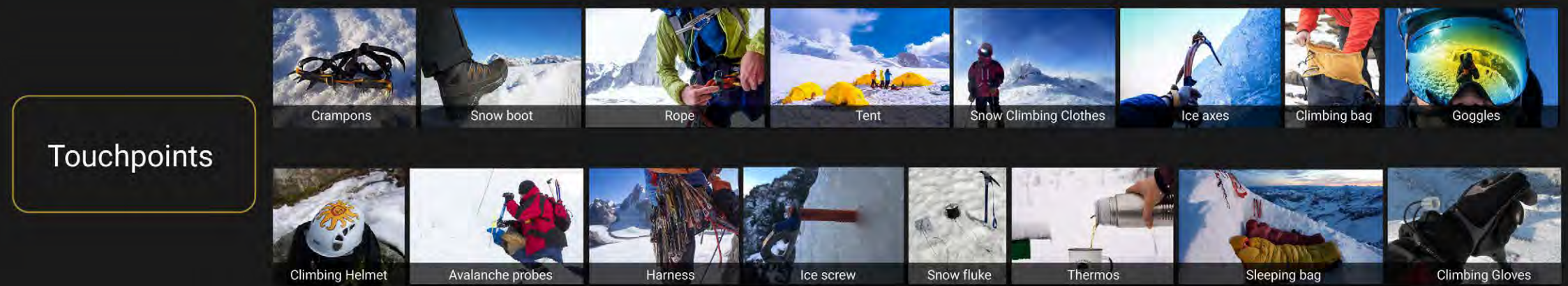
Experience
 "I saw that the people ahead of me was fine, as they passed the ice road. But when I passed the ice road, my right leg sank into a crevice under the snowpack due to a weight shift. My teammates told me to brace myself with the ice axe to see if I could get up. Turns out, I fell deeper throughout."



Experience
 "I remember facing challenges while climbing Mount St. Helens. I lost my balance and slipped off the snow. My teammates didn't hear me for help. Fortunately, I learned "self-rescue" techniques that prevented me from falling off the mountain."

USER JOURNEY

Stage	Preparation	Uphill	Summit	Downhill	Feedback
Action	<ul style="list-style-type: none"> - Prepare the equipments. - Find the corresponding strategy of climbing the snow mountain. - Query and estimate the amount of snow on the day of climbing. 	<ul style="list-style-type: none"> - Climbing up to the snow mountain. 	<ul style="list-style-type: none"> - Get rest at the summit 	<ul style="list-style-type: none"> - Getting down from the snow mountain. 	<ul style="list-style-type: none"> - Summary the experience of climbing the snow mountain. - Maintain mountaineering equipment for next use.



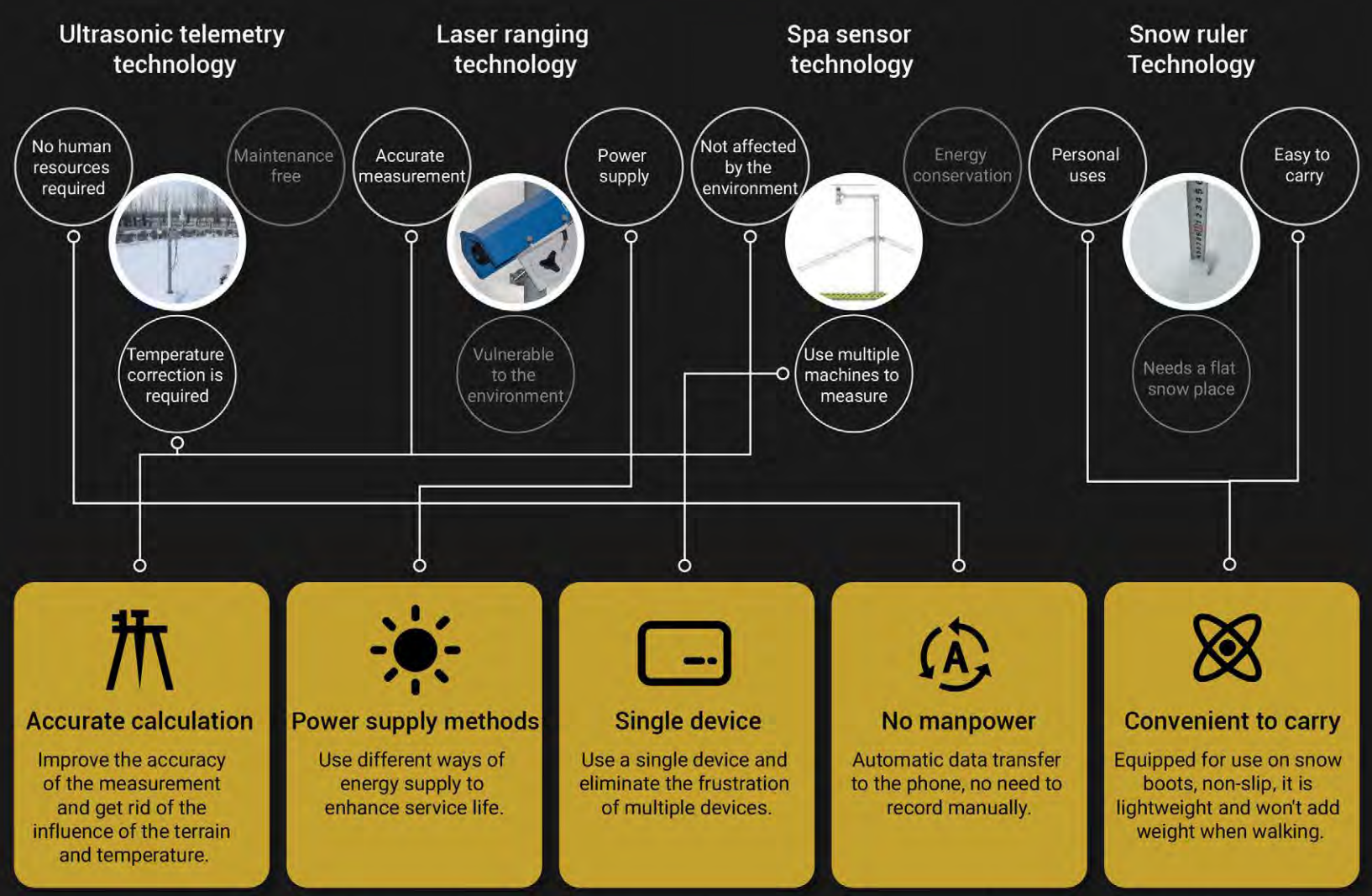
Painpoints	Preparation	Uphill	Summit	Downhill	Feedback
	<ul style="list-style-type: none"> - Can't carry oversized machines. - Can't predict the weather. 	<ul style="list-style-type: none"> - Can't predict what will happens during the climbing process. 	<ul style="list-style-type: none"> - Get some rest at the summit and facing the downhill is much dangerous than uphill. 	<ul style="list-style-type: none"> - It's easily get accidents and dangerous when they are facing downhill. 	<ul style="list-style-type: none"> - The equipments might damaged after the climbing.

Opportunities	Preparation	Uphill	Summit	Downhill	Feedback
	Light-weighted equipments.	Provides equipment that can predict the conditions of the snow.	Offer the most safety plan of downhill.	Warn the climbers to care about the safety downhill.	Maintain the equipment for long-term uses or reduce the cost.

SUMMARY

In order to **reduce the weight** of snow mountain climbers' carrying items and to **know in advance** whether the road ahead is dangerous during their climbing process, I want to create an **easy-to-carry safety device** that could help snow mountain climbers **predict the situation under the snow**. Combining it with the iWatch, it would allow snow climbers to **know their physical condition** at all times and **collect relevant data** about the snowy road.

TECHNIQUES ANALYSIS



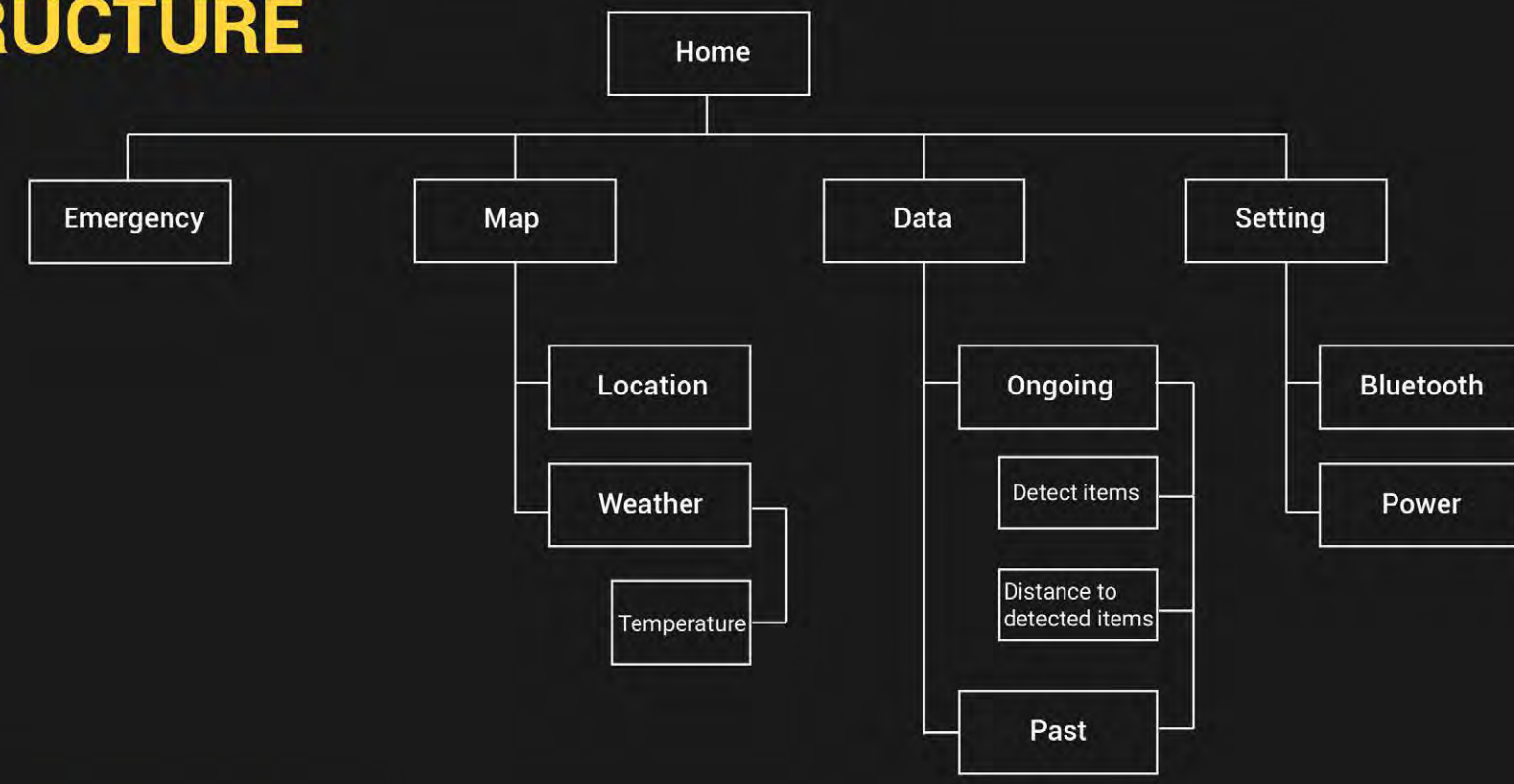
After analyzing different techniques for measuring snow depth, I selected some of them and applied them to the device.

MINDMAP

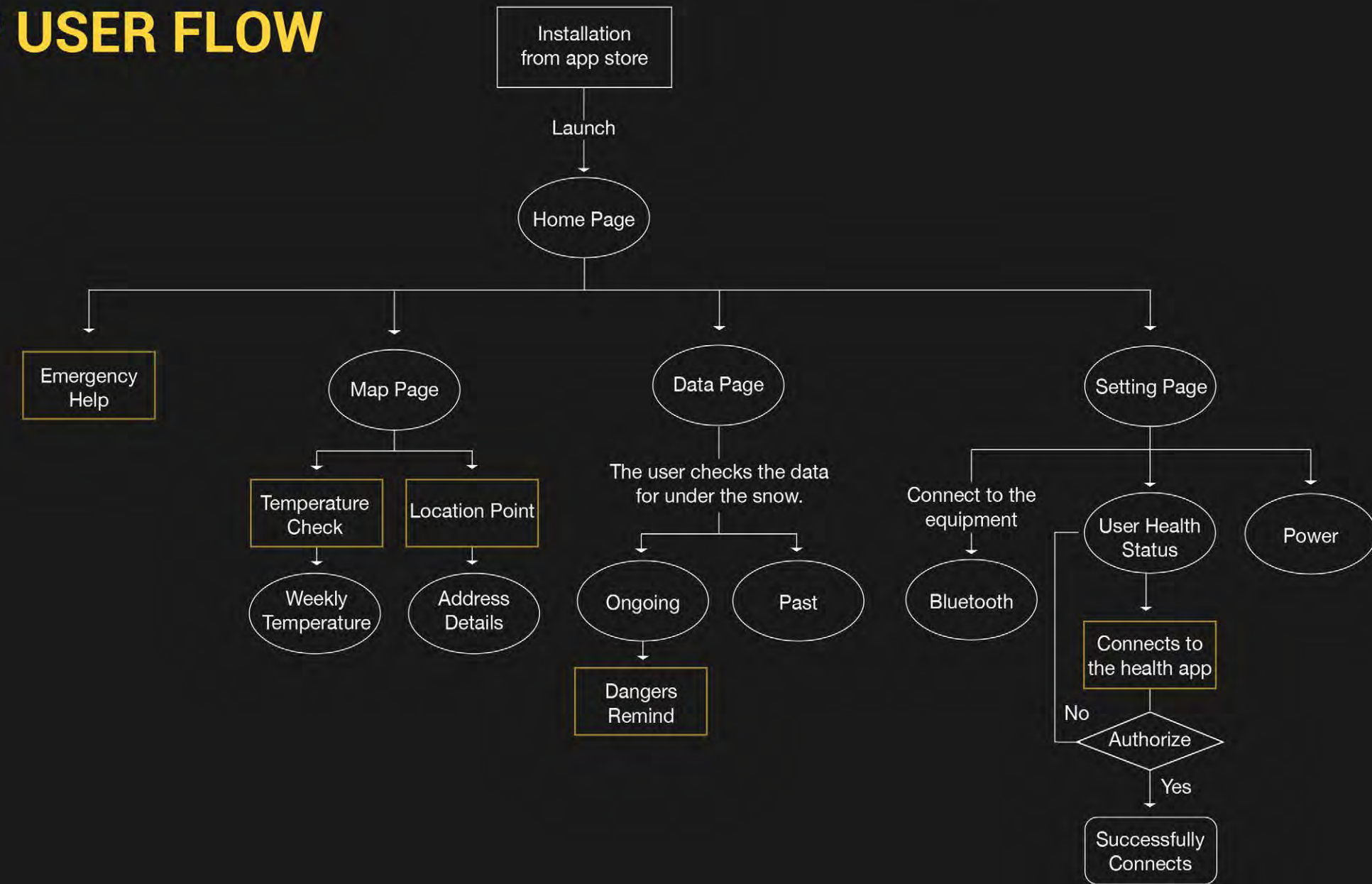
After technical analysis and dissection of the user journey map, I listed the problems experienced during the snow climb and provided the corresponding functional solutions on the device.



WATCH APP STRUCTURE



WATCH APP USER FLOW

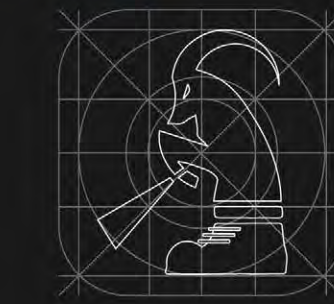


WATCH APP INTERFACE DESIGN



APP DESIGN ELEMENTS

Logo



Snow Goat



Icon



Typography

Roboto

Regular

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz0123456789

Medium

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz0123456789

Bold

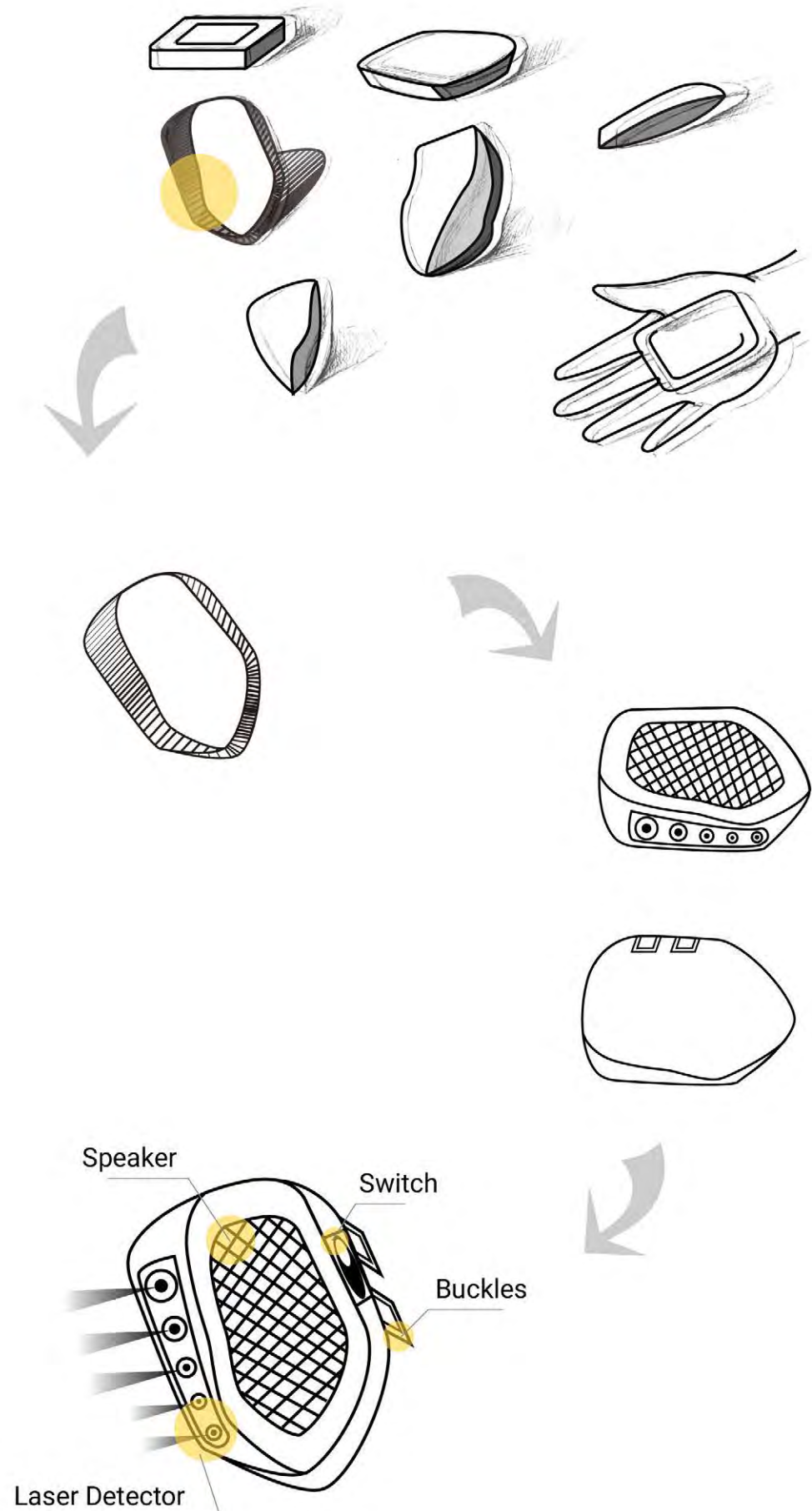
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz0123456789

Colors

#F6F4EB #665C3E #59574F #32302C #FFD63E

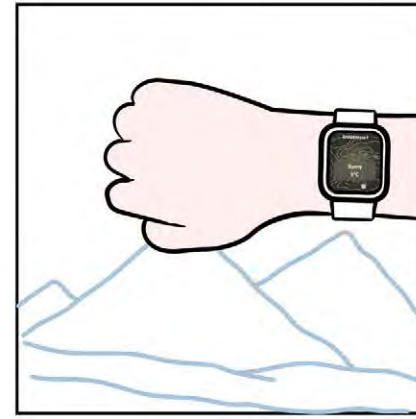


IDEA SKETCH



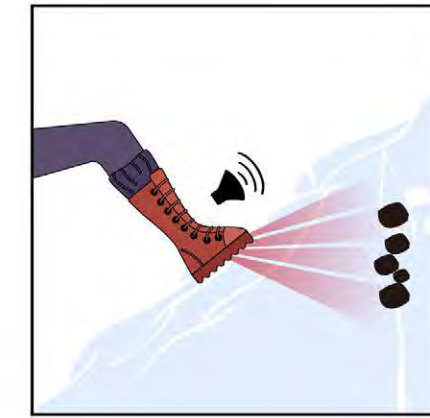
STORYBOARD

● Check the sports bracelet to know the weather and temperature before climbing a snow mountain.



●● Installation the device on the snow boots.

●●● Connect the device to the Bluetooth.



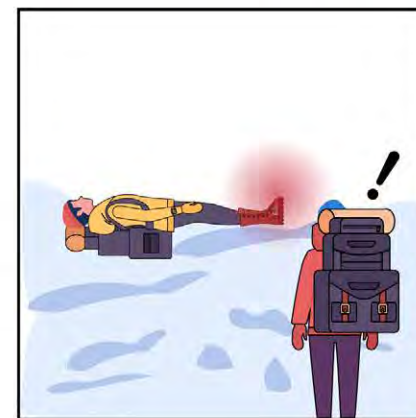
●●●● The device will issue a voice alert when a danger is detected.

●●●●● Matching the user's health status.



●●●●● The sports bracelet and device will automatically send a distress signal.

●●●●● The rescue team will receive the distress signal and the equipment will emit a light to show the location of the victim.



●●●●● It will send a low battery alert of device.

PROTOTYPING

Model making process



I used iron wire and cardboard to make the basic structure of this device.

By using glue, I connected all pieces together to form a hand-made model of the device.



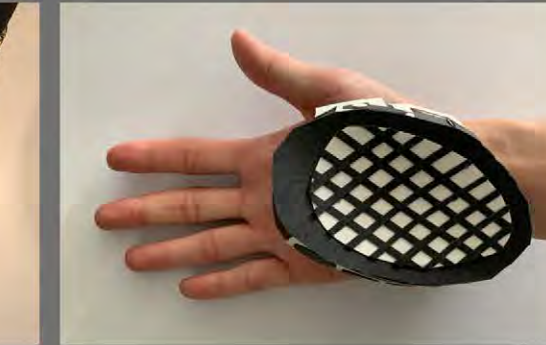
Model testing



Whether the thickness of the device is appropriate on the shoes.



Whether the device is stable on the shoes.



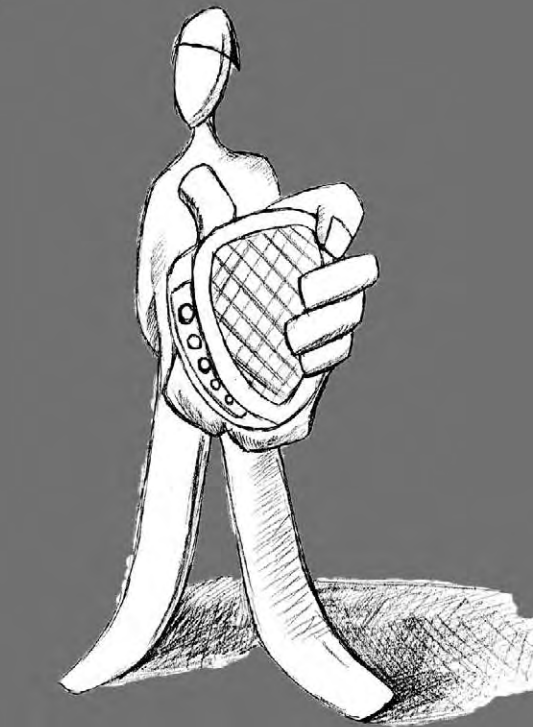
Whether the device meets the palm size.



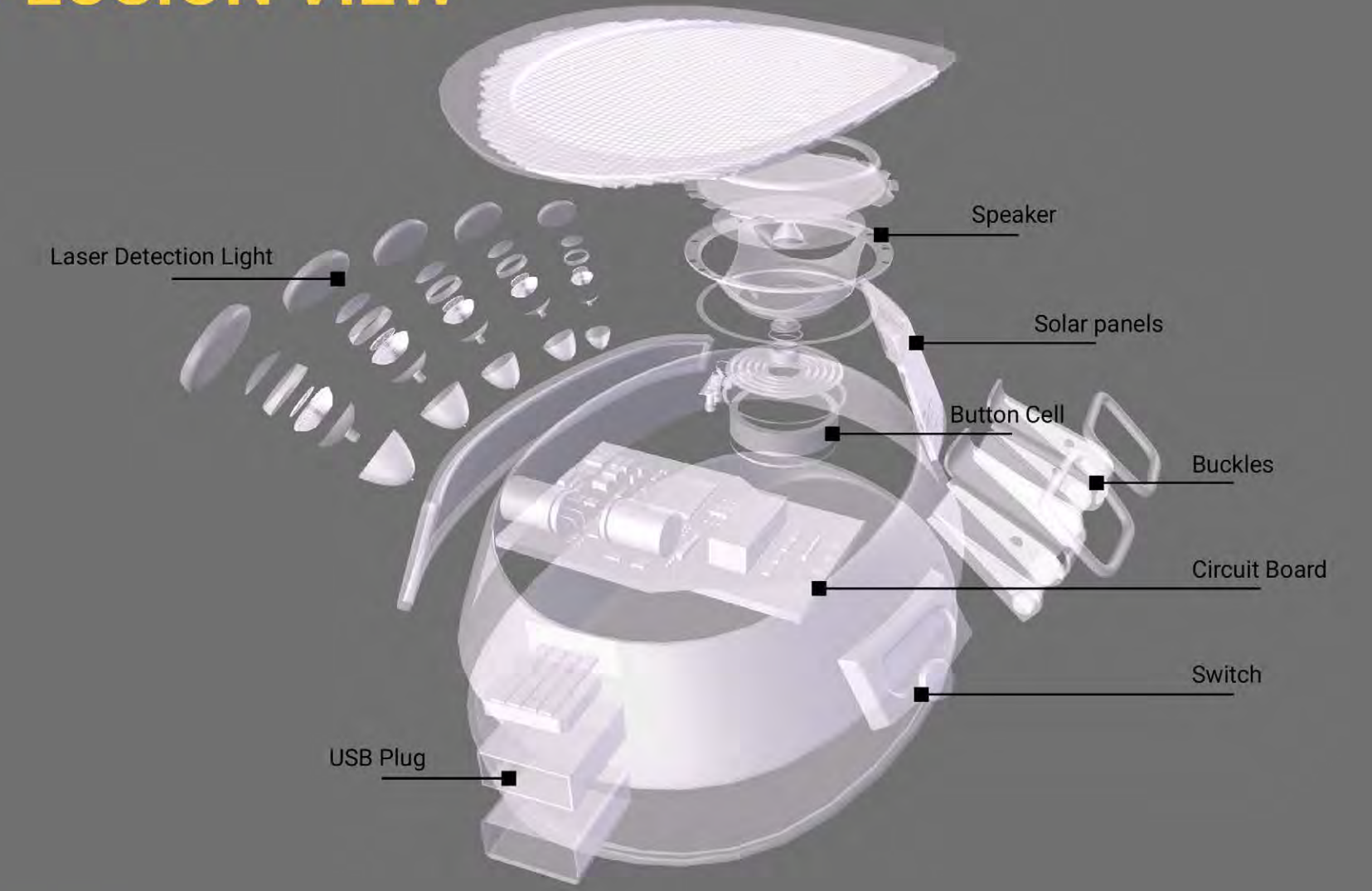
Whether the detection light meet the tilt angle.



Whether the comfort level of the switch is suitable.



EXPLOSION VIEW



SIZE DETERMINE



RENDERING



The snow depth detector is a portable device that is **stabilized on snow boots** by buckles and laces. The detector uses laser measurement technology to **measure the depth of snow and detect the presence of rocks** under the snow. With solar charging and USB charging, the detector can avoid power supply shortages. The detector also uses materials resistant to low temperatures.

SCENARIO 1



Application Interface Operation



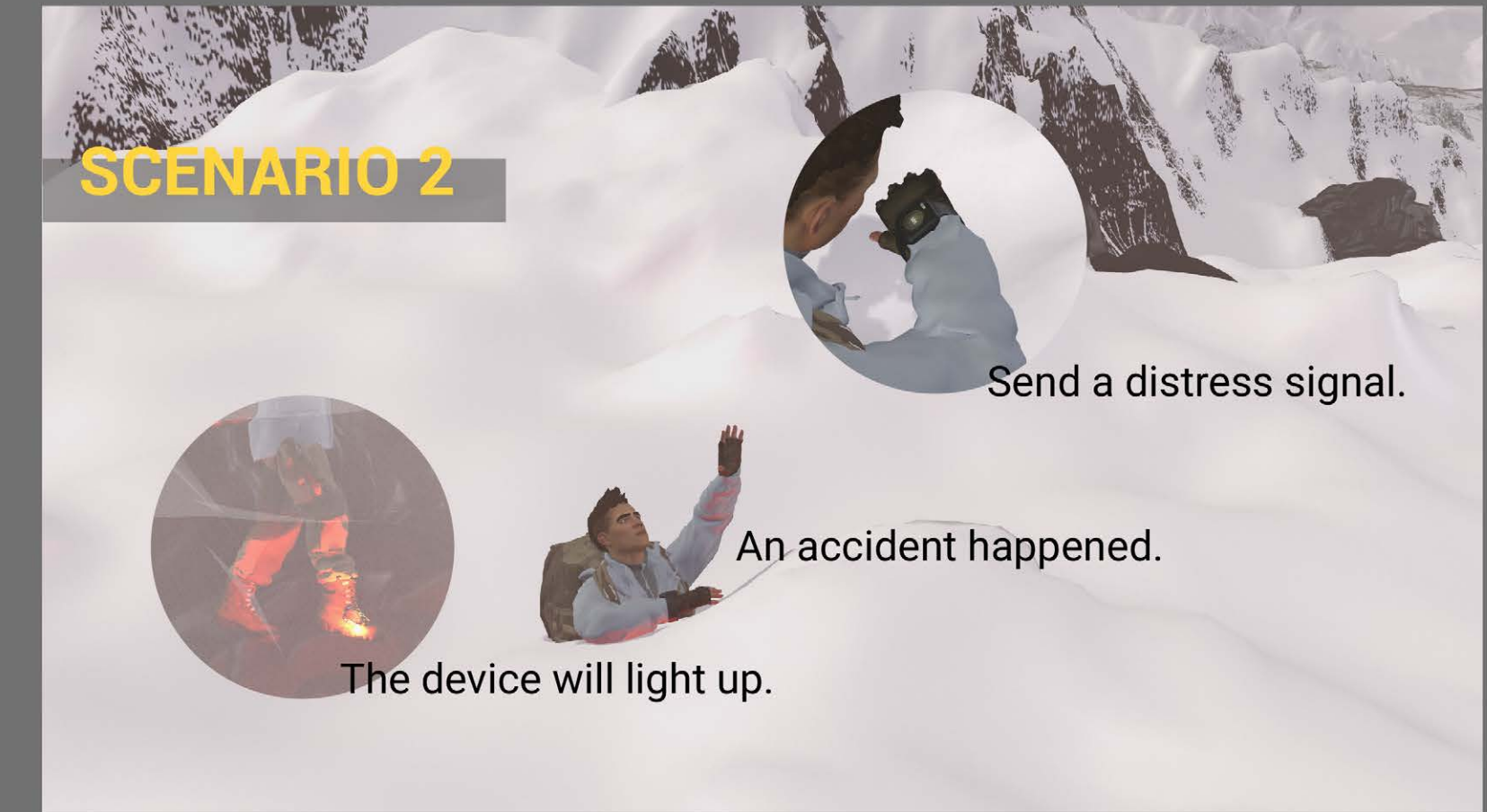
1. Snow climbers will use the device and app to detect hazards under the snow.
2. Use the application to know what the current location is.

Application Interface Operation



3. The application will connect the health of snow mountain climbers.
4. When a snow mountain climber is buried in the snow, the device and application will send a distress signal.

SCENARIO 2



Role: Independent Project
Duration: April 2022 - June 2022
Tools: Unity; C#; Autodesk Maya



As more and more Chinese families send their children to study abroad, Chinese students not only have to adapt to a different culture and learning environment, but also have to deal with the mental health issues that come with it. Due to pressures from various sources, Chinese international students are at increased risk of developing psychological distress and undesirable behaviors. How to help and reduce the mental health problems of Chinese students has become an important issue.

Healanda

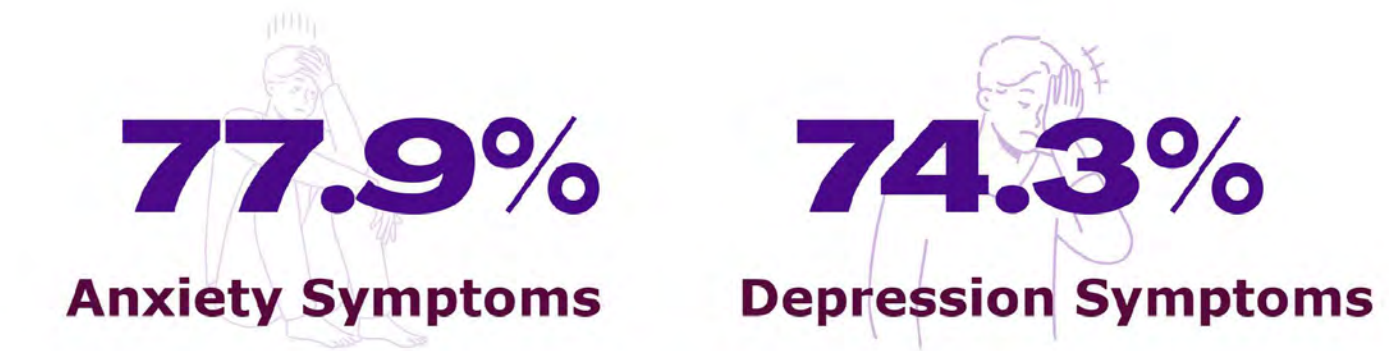
Mandala VR Healing Experience

Project Link: <https://www.jerryji1123.com/healanda>

Research

As a special group of American college students, Chinese students studying in the U.S. have to deal with more stress than their peers on campus. These students face a variety of challenges, including **cultural differences, language acquisition, and adjustment to a new physical and social environment.**

According to a survey of *Journal of American College Health* about "Prevalence of past-year mental disorders and its correlates among Chinese international students in the U.S. higher education," **A total of 222 Chinese international students participated in this survey.**



These results suggest that mental health is a **pressing issue** facing Chinese international students and correlated with **other psychosocial factors.** All these potential factors may lead to **suicide** among Chinese international students.

The Risk For Suicide

In a case study, "Combined effects of depression and anxiety on suicide: a case-control psychological autopsy study in rural China," it has been shown, people with **high depression and high anxiety** was **54.77 times** more risk for suicide, much higher the suicide risk of people with either high anxiety or high depression.

Overseas Suicide Cases of Chinese International Students

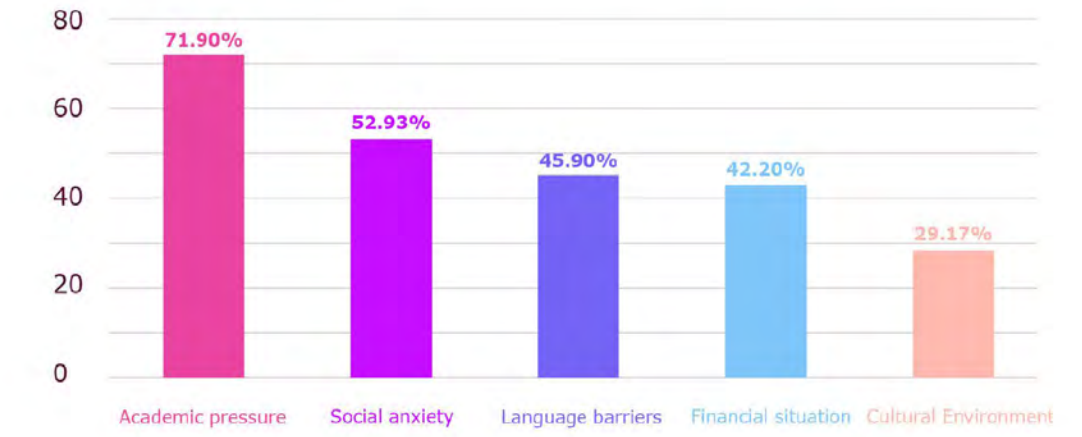


On June 13, 2019, PhD student Huixiang Chen killed himself in his campus office.
On December 13, 2017, the body of Xiaotian, a senior international student from Chengdu, China, was found in her apartment in the afternoon.
In October 2017, Tang Xiaolin, who was pursuing a PhD in biology, chose to end her young life by taking a leap at the Golden Gate Bridge.
On February 12, 2017, Chinese international student Weiwei Liu, 20, committed suicide in her dormitory.

Survey

A Chinese psychology education platform called "Know Yourself" conducted a survey on the mental health status of **10,707** Chinese international students.

Causes of Negative Emotions and Psychological Distress



Personal Experiences of Chinese International Students

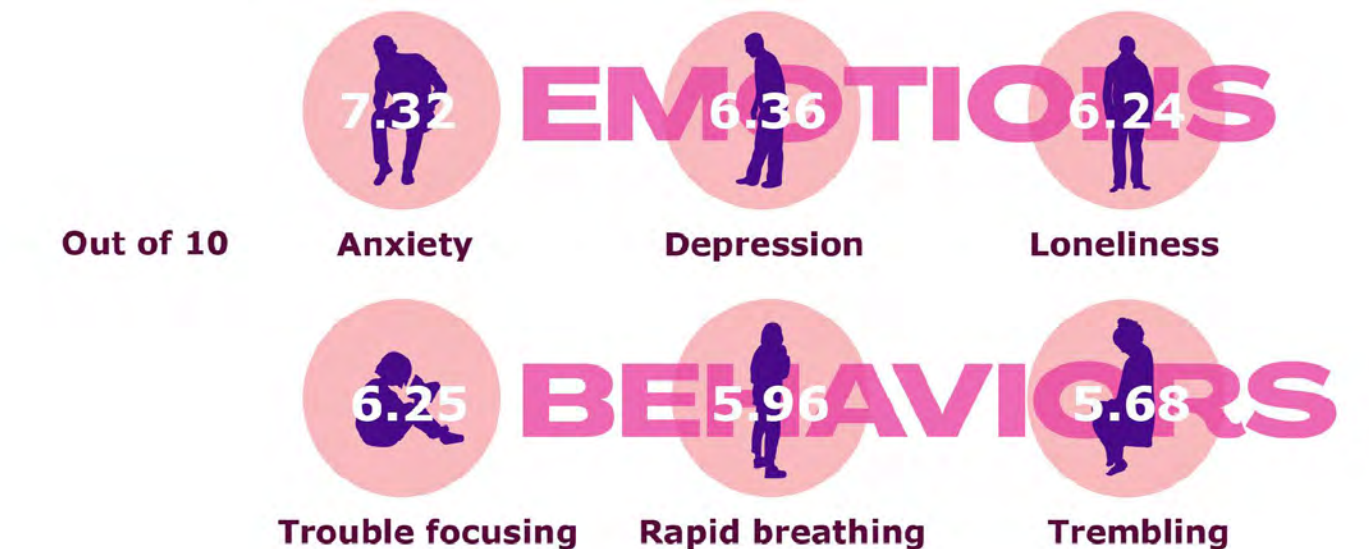
Li
23 years old
Study in the U.S. for 3 years

In addition to **school**, there are a lot of things related to **job** hunting, learning about the market, networking, preparing resumes, interviewing, and so on. Every day I was exhausted and felt like **I didn't have enough time.**

Qi
19 years old
Study in the U.S. for 2 years

I wanted to improve my **grades and socialize** at the same time. But then I realized that once I spent time socializing, my grades would more or less be affected, resulting in an inability to balance studying and socializing.

The Score of Emotions and Behaviors under Pressure



Interview

With Chinese International Students

What factors contributed to the psychological stress of your study abroad experience?



Henry 23

Student at Parsons School of Design
Study in the U.S. for 8 years

I think **the cultural factor** is more the main reason for my psychological stress. I was **discriminated** against when I was studying in the United States. Sometimes when I was waiting for the subway, I would be abused by some strange people for no reason, saying, "Go back to your country."



Emily 22

Student at New York University
Study in the U.S. for 4 years

I think it's the **study aspect**. When one person in the class **raises the standard** of a simple assignment to a high level, I have to bring my quality to the same level as him to keep my score from being different. This made me tired and anxious.



Ryan 21

Student at University of Delaware
Study in the U.S. for 4 years

I am a person who is not good at making friends. But during study abroad **if you don't socialize, you become very lonely**. I remember one time my friend asked me to do something I didn't like but **I didn't know how to politely say no**, which made me mess up what my friend had asked me to do.

Henry's Emotional Journey Map

STAGES

Freshman

Sophomore

Junior

Senior

SUMMARY

When Henry first came to the United States to study, he was afraid to communicate with others because he was not proficient in English. He had to cope with his studies and find an apartment at the same time.

In his sophomore year of college, Henry started to get into his major classes, and the pressure to study came up. While coping with his studies, he also started to attend social events, which was a bit overwhelming for him.

Henry was under increasing academic pressure at school and also encountered peer pressure. At the same time, he had to make preparations for an internship, which kept Henry very busy.

It has been a very stressful year for Henry. Not only does he need to finish his thesis, but he also needs to think about finding a job. As an international student, Henry also needs to consider his status in the U.S. after he completes his college studies.



THINKING

What are you worried about?

- New environment
- Language barrier
- Culture shock

- Grades
- Socialize

- Grades
- Internship
- Health

- Thesis
- Job
- International student status

FEELING

What were the emotions like at the time?

- Curious
- Fear
- Helpless

- Excited
- Flustered
- Embarrassed

- Anxiety
- Nervous

- Anxiety
- Stress
- Lost

DOING

What behaviors can alleviate these emotions?

- Watch funny video
- Video call with family
- play video games

- Talk to friends
- Eat something good

- Watch movies
- Play video games

- Meditation
- Exercise
- Talk to parents

Problems

1. Henry doesn't want his family to know about the anxiety he is facing.

2. Excessive anxiety can develop into a more serious mental illness.

3. Henry doesn't know of any additional ways to deal with the anxiety.

Ideas

1. Provide a folder to save emotional memories of the past.

2. A recording room that talks about anxiety.

3. Create a private space for people.

Therapeutic Art-making

The main goal involving therapeutic art-making is **to either experiment or learn something**. Art as a therapeutic approach is the latter is generally **self-prescribed and self-directed**.

Art as Healing focuses on **spiritual self-discovery**.

Some of the therapeutic benefits of artistic endeavors can be through meditative practice. Through practice and training, **participants may achieve "flow," a state of concentration so focused that it amounts to absolute absorption in an activity**. Also called "being in the zone," by **focusing only on the task at hand**, this state may help an individual reduce self-consciousness and anxiety.

Coloring Therapy

The present study examined a method of decreasing anxiety called "**coloring therapy**" (Belchamber, 1997) that combines elements of art therapy and meditation. The basic idea of coloring therapy is that when individuals color complex geometric forms, they are provided an opportunity **to suspend their "inner dialogue"** and to deeply engage in an activity that **removes them from the flow of negative thoughts and emotions** that can sometimes dominate their lives.

Mandala Art Therapy

Art Making and Cortisol

According to "Hair cortisol, stress exposure, and mental health in humans: a systematic review" by Staufenbiel, Penninx, Spijker, Elzinga, & van Rossum, **Cortisol is a glucocorticoid hormone and one of the most widely studied markers of stress**.

The results of Girija Kaimal, Kendra Ray, and Juan Muniz's case study, "Reduction of Cortisol Levels and Participants' Responses Following Art Making," demonstrated **that the reduction in cortisol levels** after a brief art-making session was **similar in structure to the art therapy situation**.

Mandala Art Therapy

Mandala art therapy is used to treat depression, post-traumatic stress disorder, grief, anger management, improve self-esteem, manage addictions, relieve stress, improve anxiety symptoms and cope with any kind of physical illness or disability.

Mandala drawing was first practiced by Tibetan buddhists then developed by Carl Jung. **Psychologist Carl Jung** reasoned **the mandala represented the whole self**, and the circular shape provided for endless purposes in the treatment scenario.

Art therapy for mandala drawing in the general population has found that it can identify psychological disorders (Kim et al., 2014), **reduce depression and anxiety in female college students** (Flett et al., 2017), and **reduce anxiety in college students** (Hass-Cohen et al., 2018).



Carl Jung

Mandala and Positive Psychology

Mindfulness



The purposeful and conscious awareness of what is happening at the present without any judgment, analysis, or reaction.

Spirituality

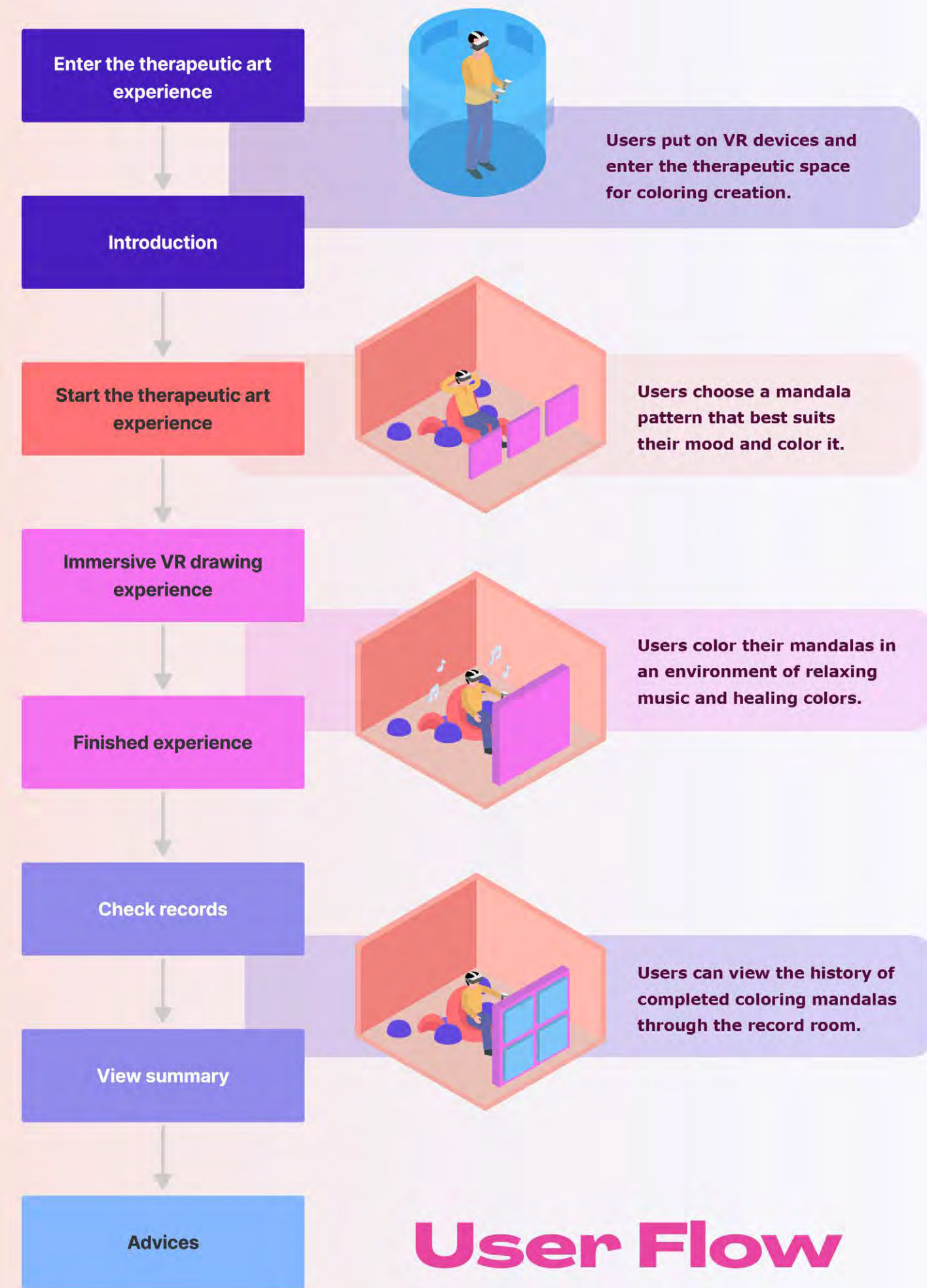


People's pursuit and experience of the connection with the essence of life.

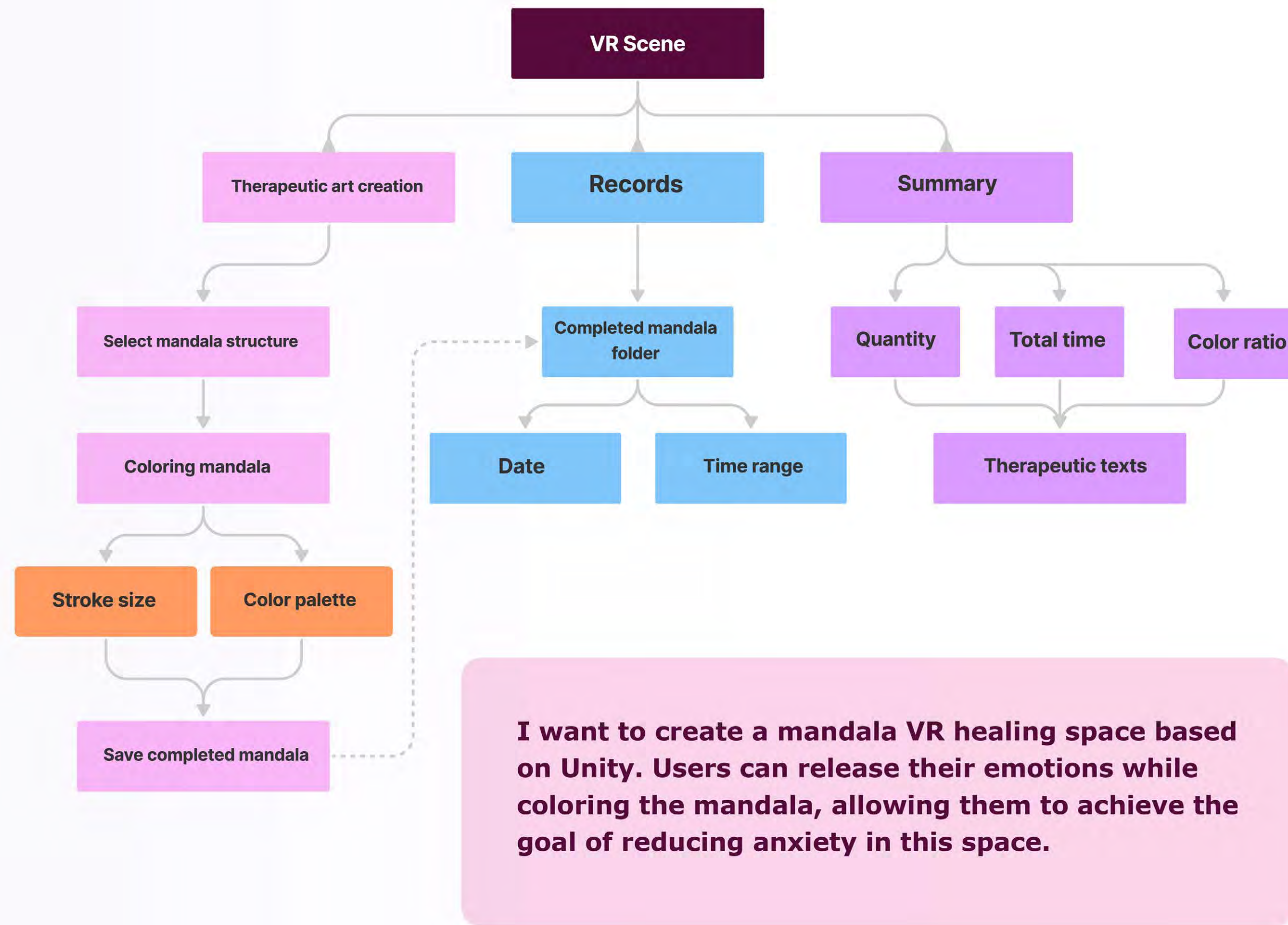
Subjective Well-Being

People's overall emotional and cognitive evaluation of their quality of life.

Also, mandala art therapy can raise happiness and to comprehend the mechanism of happiness from positive psychology's viewpoint. **Mindfulness and spirituality are both correlated with subjective well-being** (Csikszentmihalyi, 2013).

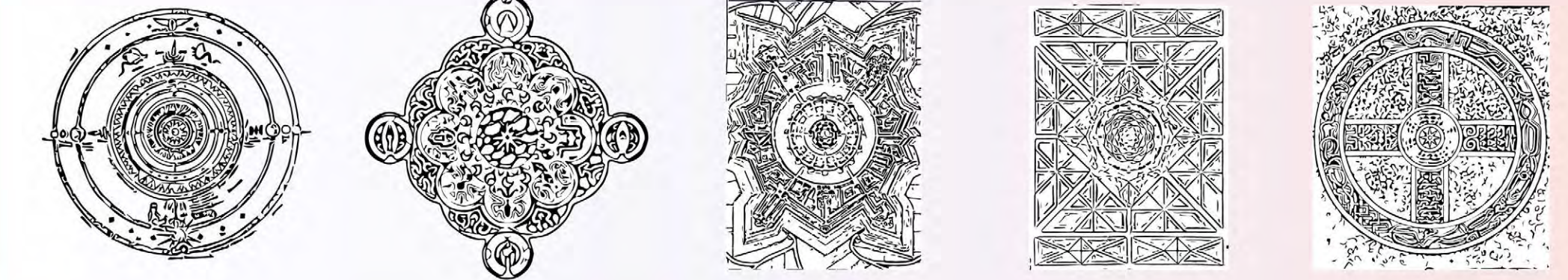


Information Architecture

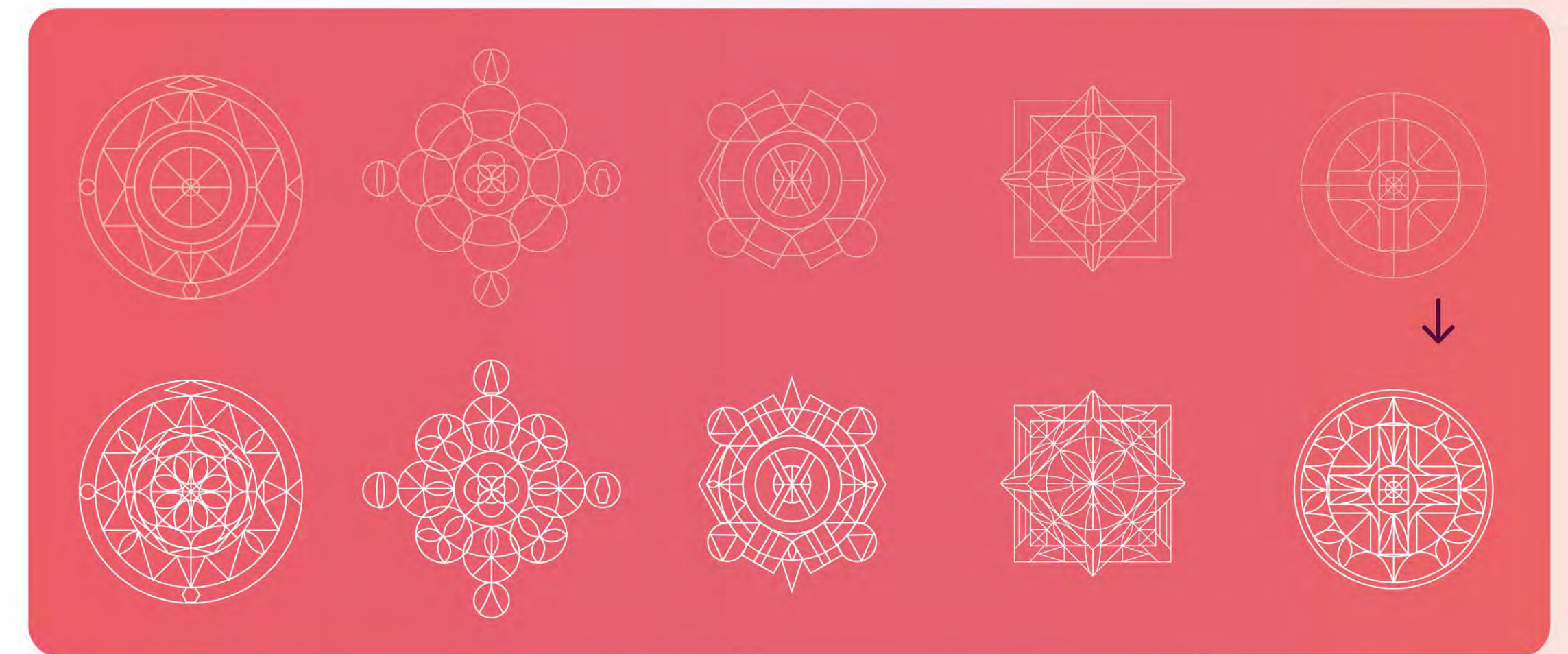


Mandala Art Pattern Design

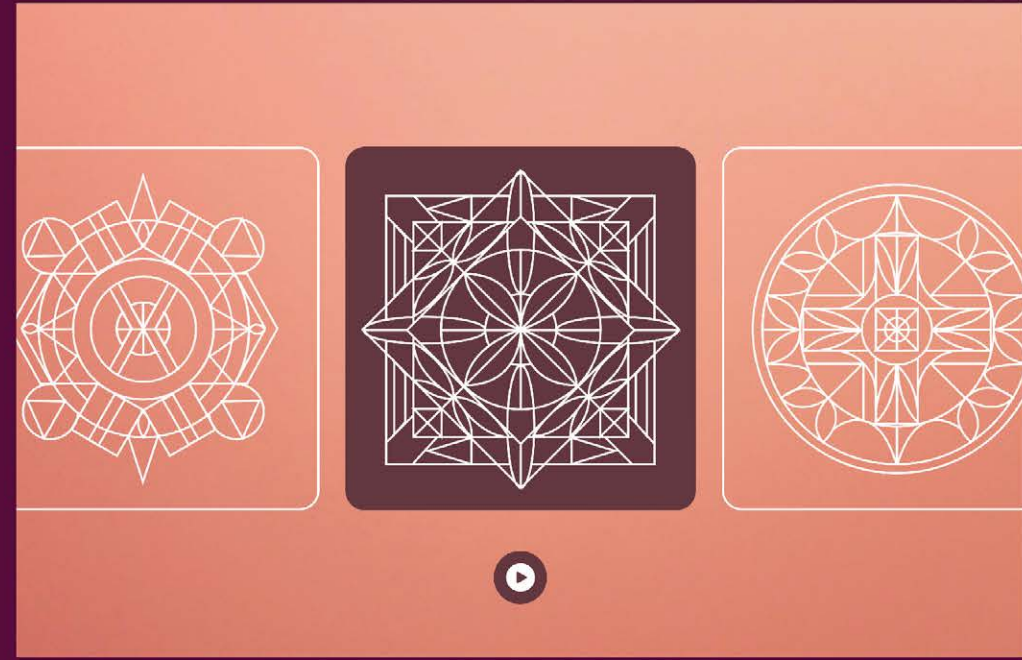
Jung's Five Stages of Mandala



These are five mandalas I created based on Jung's mandalas.



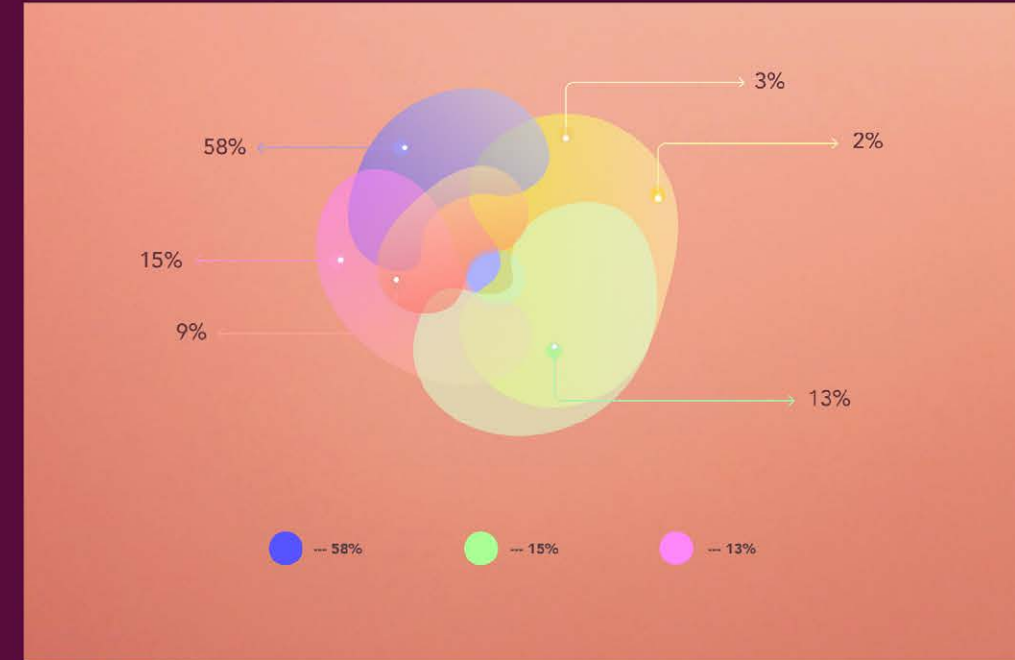
VR Interface



Mandala Structure

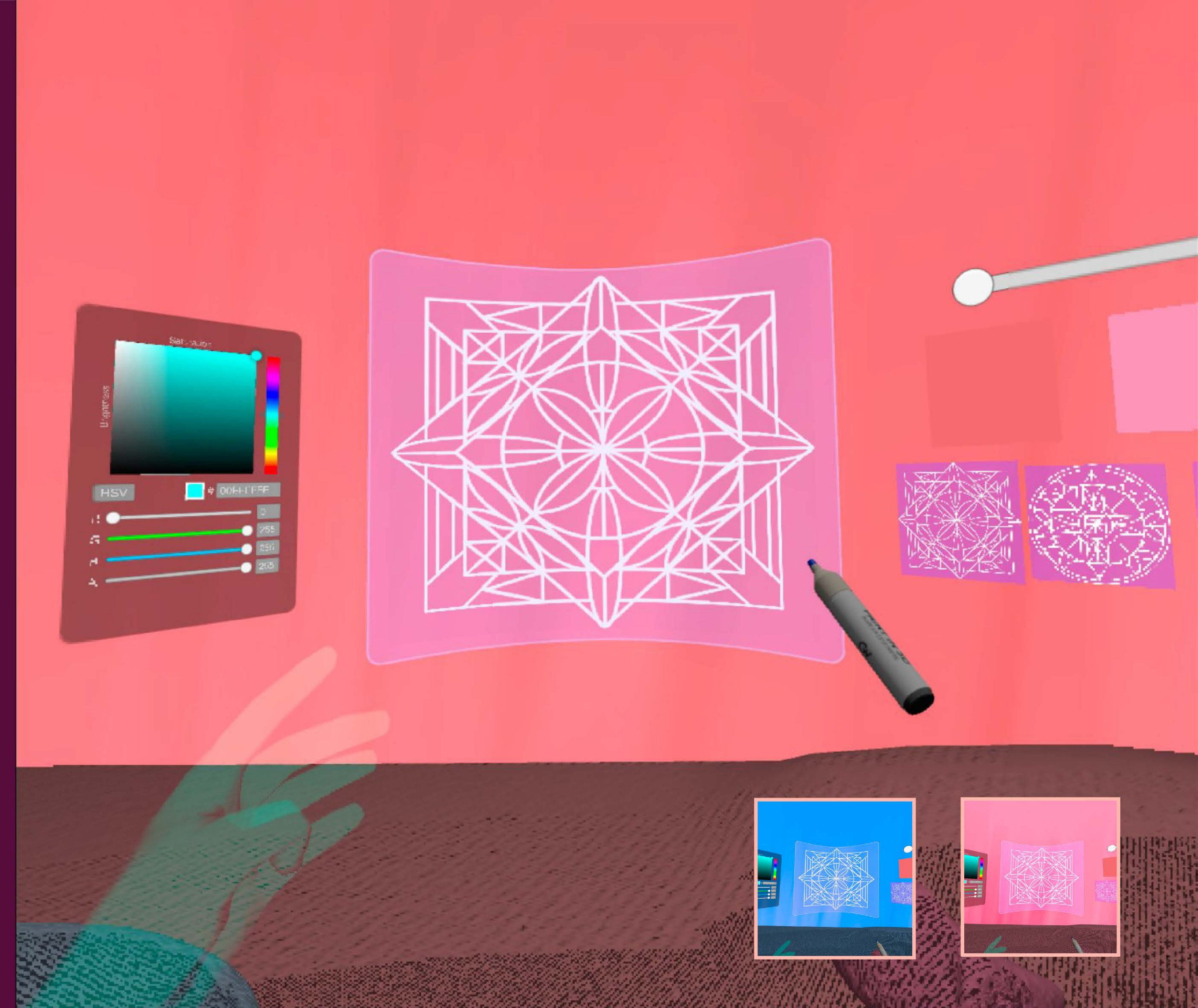
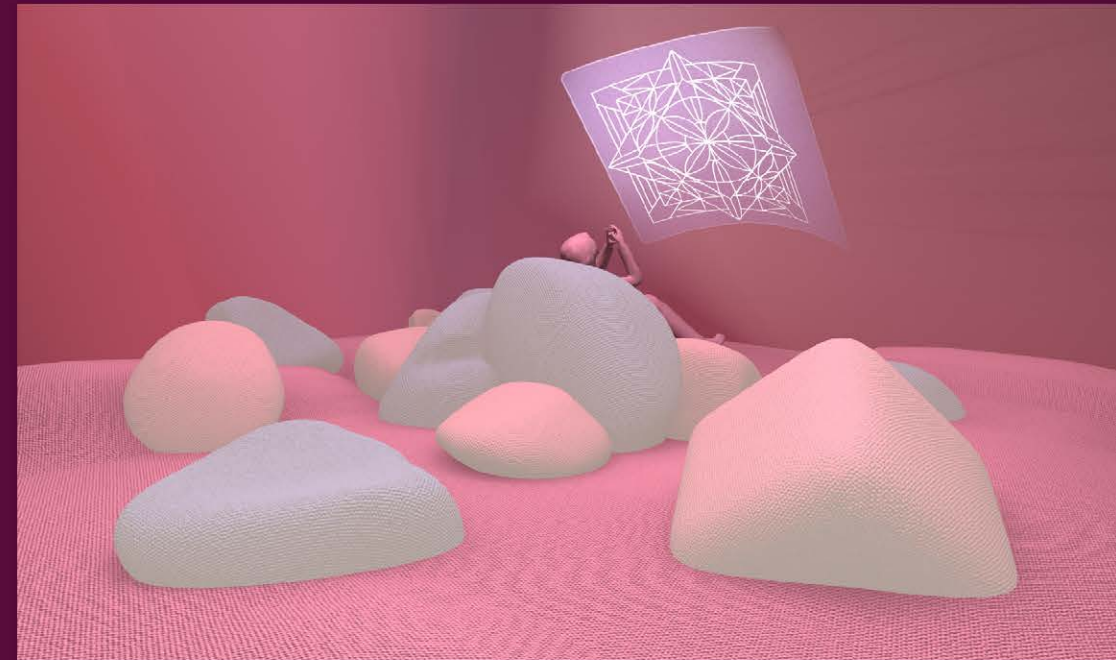
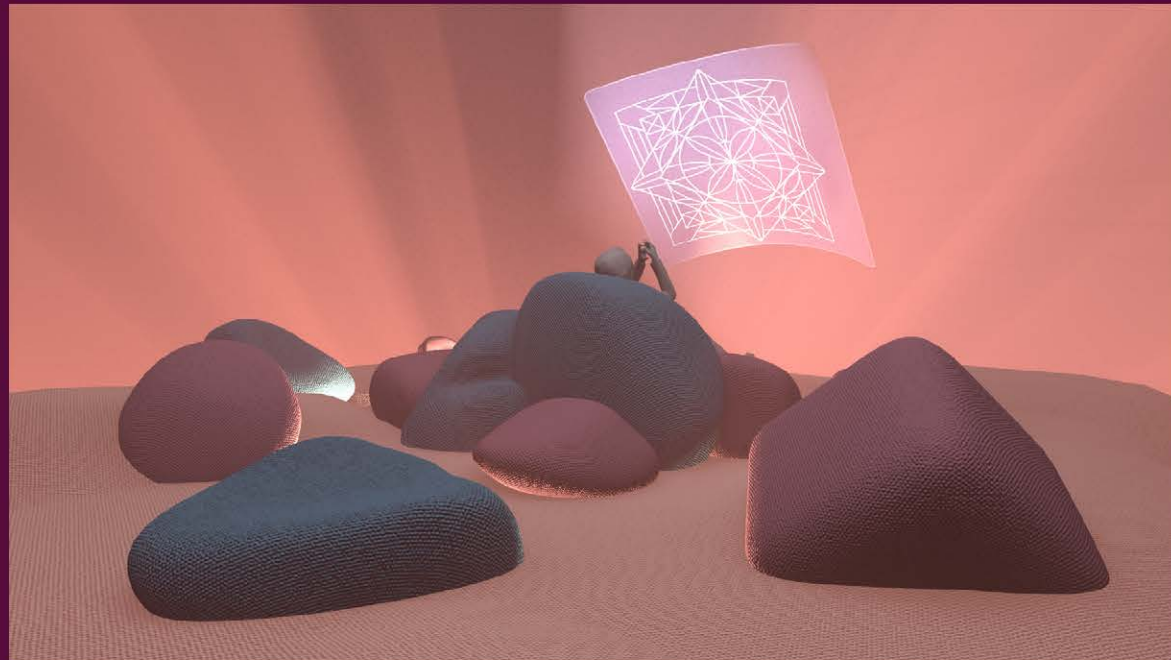


Completed Mandala Folder



Summary

VR Space Colour Modes



Coding

Background Color

Brush Stroke Size

```

25 // Start is called before the first frame update
26 void Start()
27 {
28     camera.backgroundColor = new Color(0.819f, 0.486f, 0.45f);
29     material.SetColor("_EmissionColor", new Color(1f, 0.654f, 0.654f));
30     material2.color = new Color(237f / 255, 173f / 255f, 167f / 255);
31     startScale = images[0].transform.localScale * 2;
32     penPaint2 = penPaint_gameObject.GetComponent<P3DPaintableSphere>();
33     StartCoroutine(wait());
34     images[0].transform.localScale = new Vector3(images[0].transform.
35     images[0].transform.localScale * new Vector3(images[0].transform.
36     IEnumerator wait()
37     {
38         yield return new WaitForSeconds(0.1f);
39         rightHand.SetActive(true);
40     }
41     // Update is called once per frame
42     void Update()
43     {
44         radius = 0.003f * radiusSlider.value * 0.01f;
45         penPaint.radius = radius;
46         penPaint2.radius = radius;
47         SetColor();
48         if (Input.GetKeyDown(KeyCode.T) || InputBridge.Instance.AButtonDown
49         {
50             ClearAll();
51             if (Input.GetKeyDown(KeyCode.U) || InputBridge.Instance.BButtonD
52             UndoAll();
53         }
54         public void SetColor()
55         {
56             penPaint.Color = colorPicker.Color;
57             //penPaint2.Color = colorPicker.Color;
58         }
59         public void PlaneButton(int index)
60         {
61             for (int i = 0; i < planeCount; i++)
62             {
63                 plane[i].SetActive(false);
64             }
65             for (int i = 0; i < images.Count; i++)
66             {
67                 image[i].SetActive(true);
68             }
69         }
70         for (int i = 0; i < images.Count; i++)
71         {
72             image[i].SetActive(true);
73         }
74     }

```

UI Code

```

43 audioSource = GetComponent<AudioSource>();
44 pid = GetComponent<P3DPaintableTexture>();
45 hand.SetActive(false);
46 colors.Add(new Color(255f, 142 / 255f, 131 / 255f, 1));
47 colors.Add(new Color(136 / 255f, 194 / 255f, 89 / 255f, 1));
48 colors.Add(new Color(188 / 255f, 192 / 255f, 235 / 255f, 1));
49 colors.Add(new Color(106 / 255f, 158 / 255f, 235 / 255f, 1));
50 colors.Add(new Color(188 / 255f, 158 / 255f, 28 / 255f, 1));
51 colors.Add(new Color(135 / 255f, 174 / 255f, 189 / 255f, 1));
52 colors.Add(new Color(187 / 255f, 216 / 255f, 197 / 255f, 1));
53 for (int i = 0; i < penPaint.Count; i++)
54 {
55     penPaint[i].Color = colors[i];
56 }
57 for (int i = 0; i < penTop.Count; i++)
58 {
59     penTop[i].GetComponent<MeshRenderer>().material.color = color
60     orgPosition = HB.Transform.position;
61     orgulerAngles = HB.Transform.eulerAngles;
62     //tool[2].transform.GetChild(0).GetComponent<MeshRenderer>().ma
63     // Update is called once per frame
64     void Update()
65     {
66         if (InputBridge.Instance.XButtonDown || Input.GetKeyDown(KeyCode
67         {
68             if (isShowUI)
69             {
70                 isShowUI = !isShowUI;
71             }
72             if (isShowUI)
73             {
74                 start[0].gameObject.SetActive(true);
75                 sqText[1].gameObject.SetActive(false);
76                 clear.gameObject.SetActive(false);
77                 HB.SetActive(false);
78                 aICreate.gameObject.SetActive(true);
79                 for (int i = 0; i < tools.Count; i++)
80                 {
81                     tool[i].SetActive(false);
82                     //Hand.SetActive(false);
83                     //ColorButtons.SetActive(true);
84                     // else
85                     // {
86                     sqText[0].gameObject.SetActive(false);
87                     sqText[1].gameObject.SetActive(true);
88                     clear.gameObject.SetActive(true);
89                     //ColorButtons.SetActive(true);
90                     // else
91                     {
92                         sqText[0].gameObject.SetActive(false);
93                         sqText[1].gameObject.SetActive(true);
94                         clear.gameObject.SetActive(true);
95                         //ColorButtons.SetActive(true);
96                     }
97                 }
98             }
99             IEnumerator waitAICreate()
100             {
101                 aiText[0].SetActive(true);
102                 yield return new WaitForSeconds(20);
103                 aiText[0].SetActive(false);
104                 aiText[1].SetActive(true);
105                 pg.SetActive(true);
106                 cj.SetActive(true);
107             }
108             public void KButton()
109             {
110                 aiText[0].SetActive(true);
111                 yield return new WaitForSeconds(20);
112                 aiText[0].SetActive(false);
113                 aiText[1].SetActive(true);
114                 pg.SetActive(true);
115                 cj.SetActive(true);
116                 cj.SetActive(true);
117             }
118             public void KButton()

```

Color Joystick

```

12 void Start()
13 {
14 }
15 // Update is called once per frame
16 void Update()
17 {
18     if (InputBridge.Instance.RightTrigger > 0.5f)
19     {
20         isRightTrigger = true;
21     }
22     else
23     {
24         isRightTrigger = false;
25     }
26     if (isRange)
27     {
28         joystick.DragMove();
29     }
30     //if (isRange)
31     // {
32     //     if (InputBridge.Instance.RightTriggerUp)
33     //     {
34     //         isRange = false;
35     //     }
36     // }
37     // }
38 }
39 public void PointerEnter()
40 {
41     isRange = true;
42 }
43 public void PointerExit()
44 {
45     isRange = false;
46 }
47 public void PointerClick()
48 {
49     joystick.DragMove();
50 }
51 }

```

Joystick

```

20 // Update is called once per frame
21 void Update()
22 {
23 }
24 public void DragMove()
25 {
26     var texture = ColorPicker.Texture;
27     Vector2 vector;
28     vector = this.transform.GetComponent<RectTransform>().anchore
29     if (vector.x > 0 && vector.y > 0)
30     {
31         x = vector.x + 150;
32         y = 150 + vector.y;
33     }
34     if (vector.x < 0 && vector.y < 0)
35     {
36         x = vector.x + 150;
37         y = 150 - (-vector.y);
38     }
39     if (vector.x < 0 && vector.y < 0)
40     {
41         x = 150 - (-vector.x);
42         y = 150 - (-vector.y);
43     }
44     if (vector.x < 0 && vector.y > 0)
45     {
46         x = 150 - (-vector.x);
47         y = 150 + vector.y;
48     }
49     //print(x + ", " + y);
50     x = x / RectTransform.rect.width * texture.width;
51     y = y / RectTransform.rect.height * texture.height;
52     float h, s, v;
53     color.RGBToHSV(ColorPicker.Color, out h, out s, out v);
54     var color = Color.HSVToRGB((colorPicker.H.Value, x / texture.wi
55     ColorPicker.SetColor(color, picker: false);
56 }

```

Pen

```

1 using System.Collections;
2 using System.Collections.Generic;
3 using UnityEngine;
4 using UnityEngine.Events;
5 using UnityEngine.EventSystems;
6 using UnityEngine.UI;
7
8 public class PenCode : MonoBehaviour
9 {
10     // Start is called before the first frame update
11     void Start()
12     {
13     }
14 }
15 // Update is called once per frame
16 void Update()
17 {
18 }
19 private void OnCollisionEnter(Collision collision)
20 {
21     if (collision.collider.name.Contains("笔布"))
22     {
23         InputBridge.Instance.VibrateController(0.5f, 0.5f, 0.5f, Contro
24     }
25 }
26 private void OnTriggerEnter(Collider other)
27 {
28     if (other.name.Contains("笔布"))
29     {
30         P3DStateManager.StateAllStatus();
31         InputBridge.Instance.VibrateController(0.5f, 0.5f, 0.5f, Cont
32     }
33 }
34 }

```


CrunchTea

AI-powered Recruitment Platform

Role: Product Designer

Duration: January 2022 - May 2022

Scope: User Research; UX/UI Design

Beryl Consulting Group is a hedge fund advisory firm that owns/operates a technology unit and a global alternative investment conference. As a Product Design intern at Beryl, I designed CrunchTea, an AI-based tech recruitment platform. The design started with online recruitment market research and attending multiple offline recruitment events, which enabled me to refine the online recruitment process and customize it to the employer's needs. By communicating with engineers and product managers, I designed the ideal strategies and then completed interface designs to provide users with a better recruitment experience.



Hidden Workers

People who are able and willing to work, but who remain excluded from work due to structural problems in the labor market.

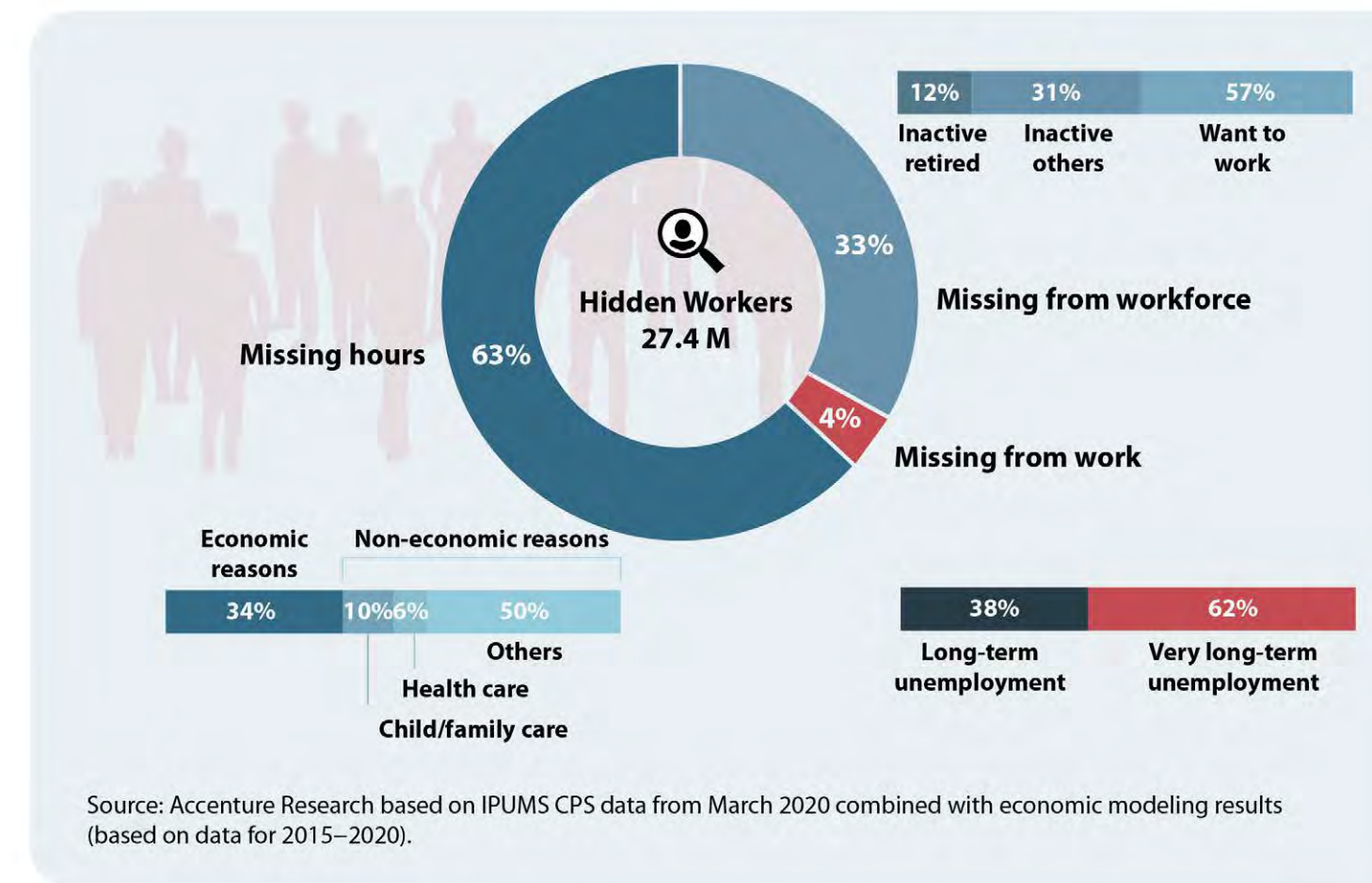
A Harvard Business School report, "Hidden Workers: Untapped Talent," mentions that companies have been **complaining that they can't find talent** and that **the demand for workers is growing more urgent**. However, millions of people remain **on the sidelines of the workforce**. This huge and growing group is **unemployed or underemployed** and **eager to get a job or increase their hours of work**.

This leads us to seek explanations. How could such a breakdown in the fundamental laws of **supply and demand occur**? Why do companies consistently overlook **large pools of talent**? What changes would companies have to make to **take advantage of that talent**?

In the research for this report, hidden workers fall into three broad categories:

- **"Missing Hours"** (working one or more part-time jobs but willing and able to work full-time)
- **"Missing From Work"** (unemployed for a long time but seeking employment)
- **"Missing From the Workforce"** (not working and not seeking employment but willing and able to work under the right circumstances).

There are **27 million hidden workers** in the U.S. workforce. 63% are "missing hours," 33% are "missing from the workforce," and 4% are "missing from work." The sheer magnitude of this population reveals **the potential impact** that their substantial re-absorption into the workforce would have.



Recruiting Challenges for Small and Mid-Sized Employers

A report from Harvard Business School identifies several factors holding people back from getting jobs but says **automated recruiting software** is one of the biggest. These softwares are **used by 75 percent of U.S. employers (rising to 99 percent of Fortune 500 companies)** and were adopted in response to the increase in digital job applications since the 1990s. Technology has made it easier for people to apply for jobs, but it has **also made it easier for companies to reject them**.



Fifty percent of small business owners said it was harder to hire in the third quarter of 2022 than it was a year ago, according to a recent CNBC/SurveyMonkey Small Business Survey, while 28% say they have open roles they haven't been able to fill for at least three months.



What Problems Do Small and Medium-Sized Companies Face When Hiring?

- 1. No widely know brand**
Big companies have brands, higher salaries, and incentives to attract good employees.
- 2. Not having a Good Hiring Process**
Owners or managers may wear different hats and do a lot of the work themselves. This results in them having little time and resources to select a qualified candidate.
- 3. No ideal candidates**
Not expanding the database of job seekers. Nearly 84% of SMBs are struggling to find enough candidates to interview. But increasing the visibility of job postings isn't easy.
- 4. Being unable to Maintain Valued Employees**
The main reason is not having effective management where valued employees may leave out of frustration, overwork, or lack of growth opportunities.

Recruiter Interview Report

I conducted **online and offline user interviews** with professionals in the financial services field to learn more about their recruiting process (including the softwares or websites they use) and the concerns that they have during the process. I asked the following questions and organized the answers into the following graphs:

HABITS (RECRUITING)

What is your recruiting process like?
 What is your main criteria when looking for ideal candidates for a particular role?
 Which applications do you use to search for potential candidates?

PAINPOINTS (RECRUITING)

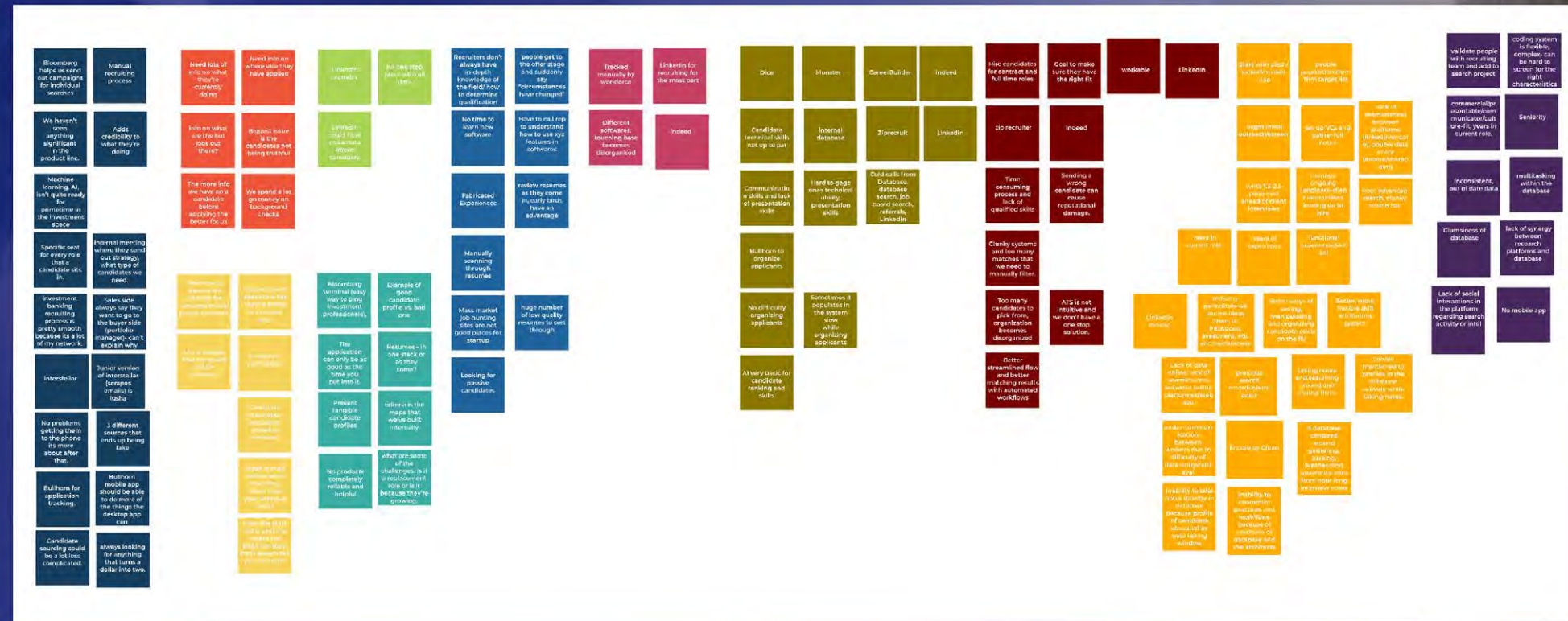
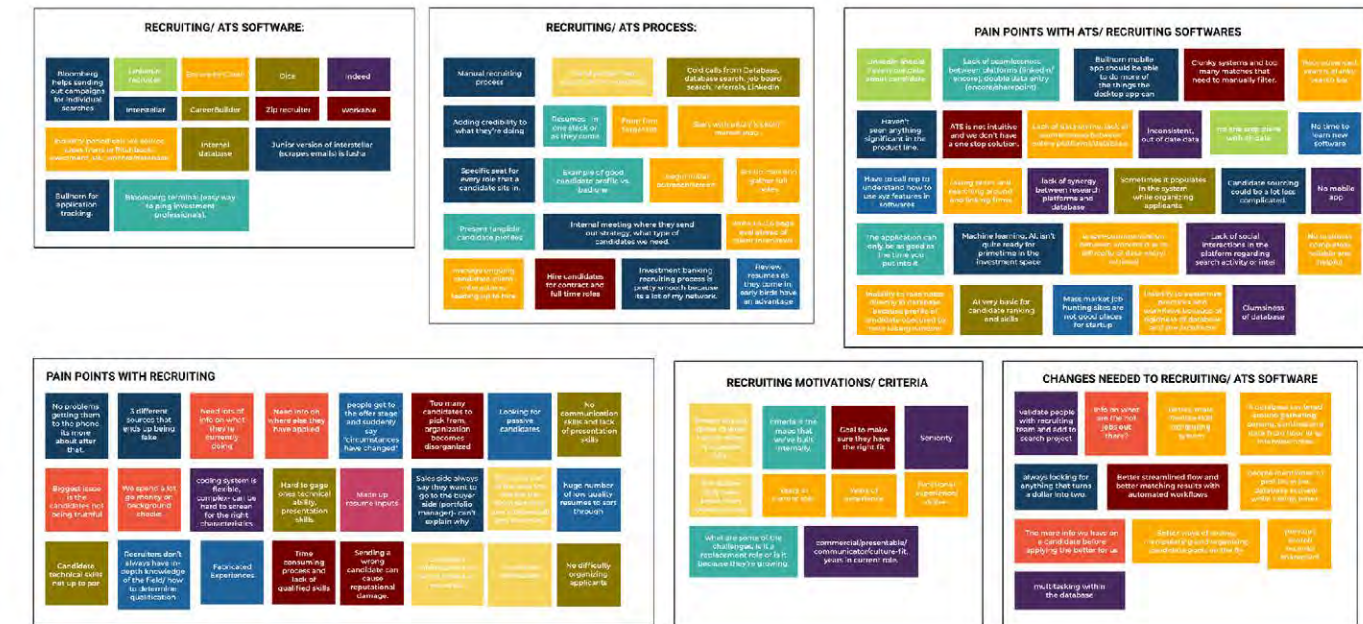
What are some problems you face when you look for potential candidates?
 What difficulties do you experience when using applications to look for potential candidates?

HABITS (APPLICATION TRACKING)

How do you track and organise applicants for a particular role?
 What are some difficulties you face in organising the applicants/ potential candidates for a particular role, if any?
 Do you use any applicant tracking software? If yes please name.

PAINPOINTS (APPLICATION TRACKING)

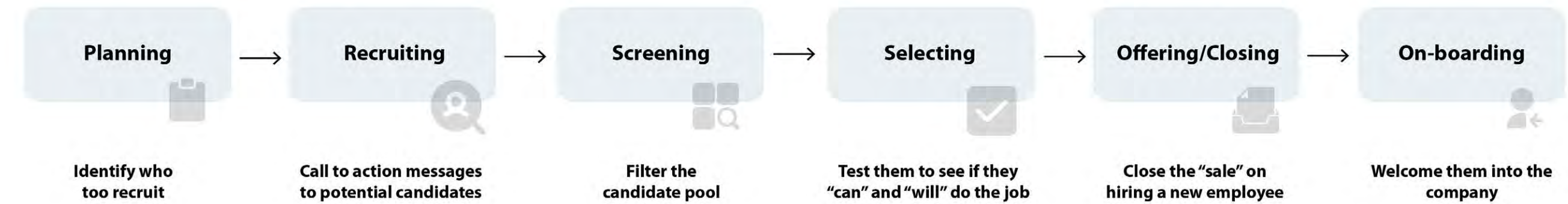
Is there anything that frustrates you about the software you use to track applications?
 Is there anything you would like to see added/ changed?



After the interviews, I found that many recruiters indicated that the talent search function on the recruitment site was too simple. The job boards do not provide a complete picture of the recruiting data to the recruiter, which makes it confusing for the recruiter to manage the recruiting process. Recruiters felt that these sites did not have an automated service to give the best solution for recruiting, and sometimes the shift in identity between recruiters and job seekers was a problem.

Online Talent Acquisition Process

Talent acquisition consists of six functional processes: **planning, recruiting, screening, selecting, offering/closing, and on-boarding**, which drive the goal of **finding, hiring, and retaining new employees**.

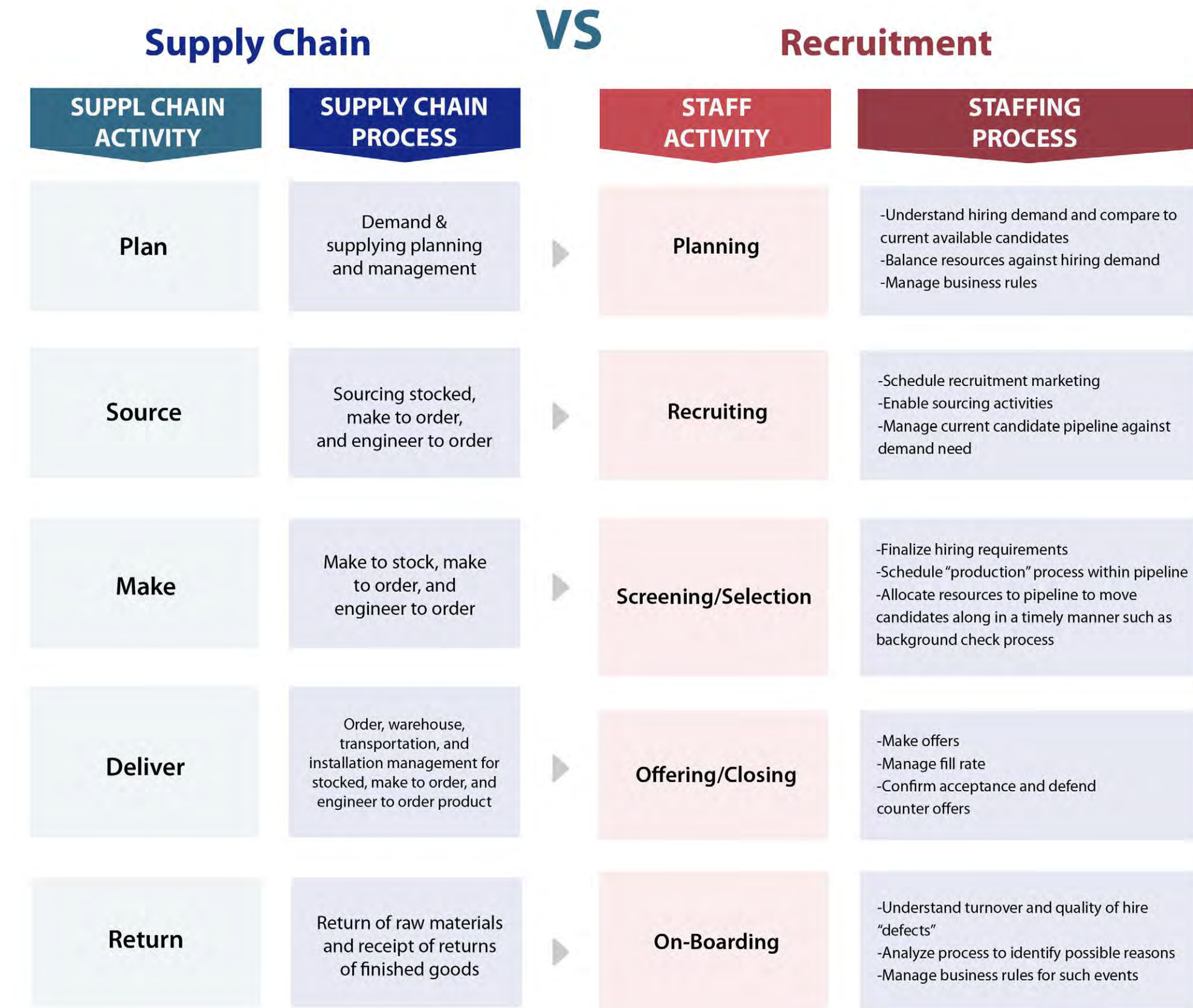


Each function creates the conditions for the next one. But when it comes to developing a talent acquisition strategy, many talent acquisition departments **don't have a scientific approach** to help drive better results by understanding the link between **recruitment and performance** improvement on the production floor. In order to achieve good recruiting results, the process needs to be **managed and executed by setting metrics** and then managing relentlessly toward those metrics to improve the quality of the company's talent acquisition.

Talent Acquisition & Supply Chain

Online Recruitment Strategy- Developing a Talent Acquisition Process Using the Supply Chain Model

Our business process analogy that can be used to develop a talent acquisition strategy is **supply chain management**. Supply chain management is about getting the **right materials and products** to the right point of **production and distribution** at the right time. The talent acquisition process is no different. To improve the talent acquisition process, make sure to organize the pre-hire model around **key processes, data and results**.



Developing a talent acquisition system by developing a talent acquisition strategy to help and improve the hiring process to uncover missed talent pools, close skill gaps, and increase diversity.

CrunchTea Mission

"When recruiters succeed, CrunchTea succeeds."



Our goal is to **deliver a cutting-edge platform** whose goal is to seamlessly match candidates with employers. We **provide end-to-end fully customizable solutions** designed to meet our Recruitment Partner's needs.

Crunch Tea's Lead Generation and Matchmaking Automation enable you to integrate and manage your workflow all in one place, **saving substantial time and costs**. Algorithmic solutions take care of mundane but essential tasks, making the overall process smoother and faster.



We help the employer to develop the ideal candidate profile.



We provide dedicated AI Recruiter. As candidates apply and submit their information to our ATS, our match making algorithms take over.



Our AI Recruiter shepherd the strongest candidates through the rest of the interview process.



We handle most correspondence so the employer can focus on presenting an offer to the strongest candidates.

Compared to other recruitment sites

	CrunchTea	Glassdoor	Indeed	ZipRecruiter
Internal hiring help	•	•	•	•
Skills assessment	•		•	
Applicants tracking	•		•	•
All job type posts	•	•	•	
Company page	•	•	•	
Background Screening	•	•		
24/7 Customer Service	•			•

CrunchTea Services

1. Vast employment / company database to increase the exposure of your company

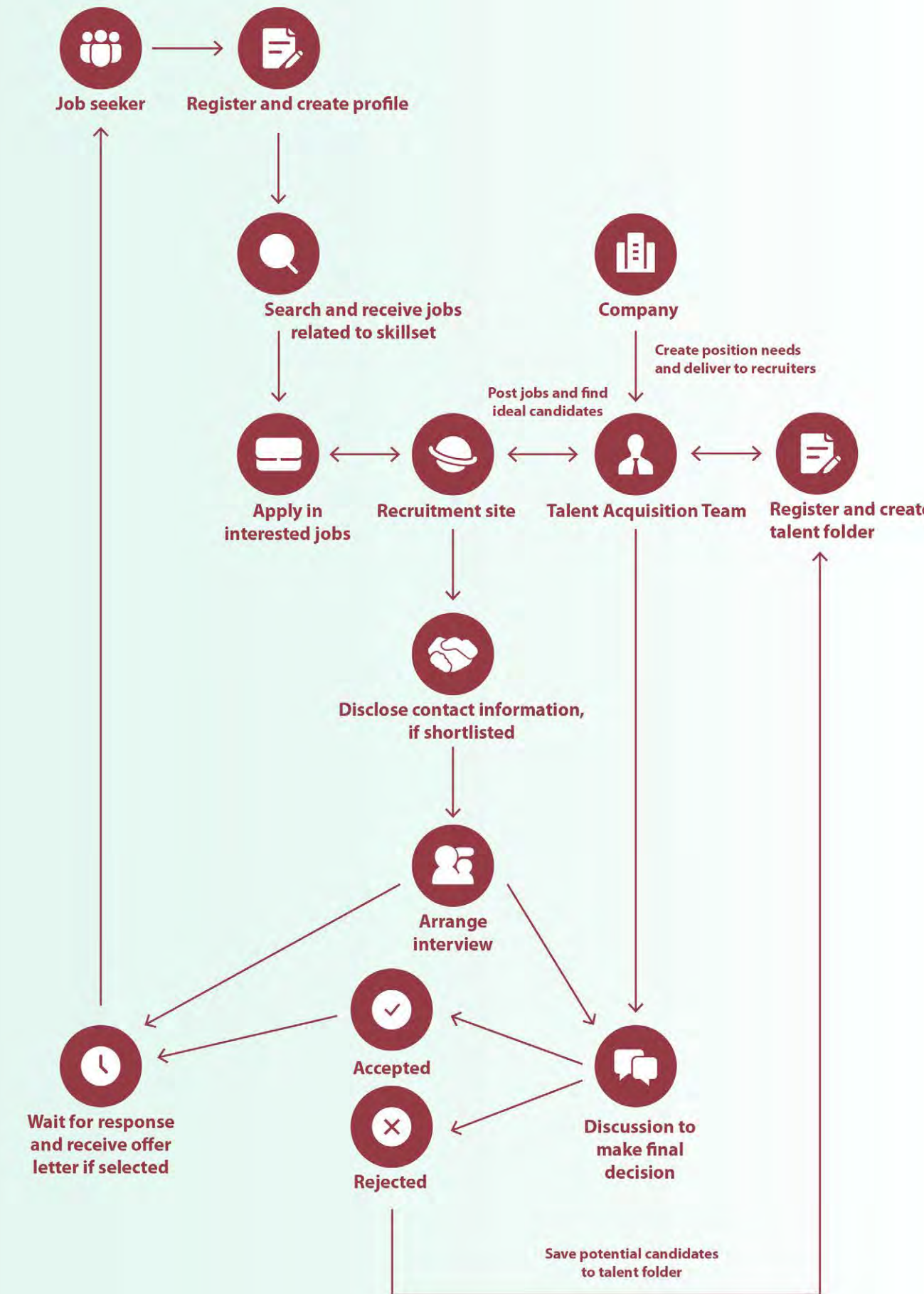
2. All the recruiting tools in one place, which provides you with a better place to manage the recruiting process.

3. Applicant Tracking System (ATS) and matching algorithms that help you find the ideal candidate.

4. Job leads from our Kubro AI recruiting partners to provide you with a better solution to improve the hiring process and company management.

Business Model and Process Flow

Online recruitment portal



Brand Visual

Logo

I redefined the logo based on the idea of a mother embracing her child as the company recruited diverse talent.

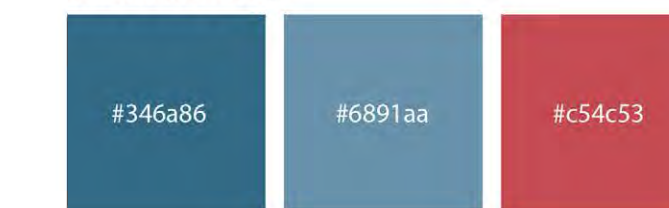
Before



After



The Brand Color



Typeface: Cabin

Regular: Lorem ipsum dolor sit amet, consectetur adipiscing elit.
 Medium: Lorem ipsum dolor sit amet, consectetur adipiscing elit.
 Semibold: Lorem ipsum dolor sit amet, consectetur adipiscing elit.
 Bold: Lorem ipsum dolor sit amet, consectetur adipiscing elit.
 Italic: Lorem ipsum dolor sit amet, consectetur adipiscing elit.

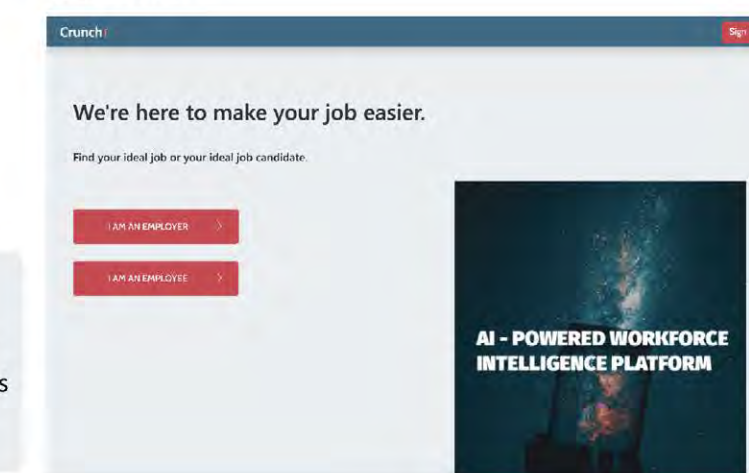
Design Decision

The previous interface was designed by the former designer. I redesigned the interface based on user feedback and collaboration with engineers.

Start Page

User Experience Goal
Allow users to more clearly and quickly select their registration status.

BEFORE



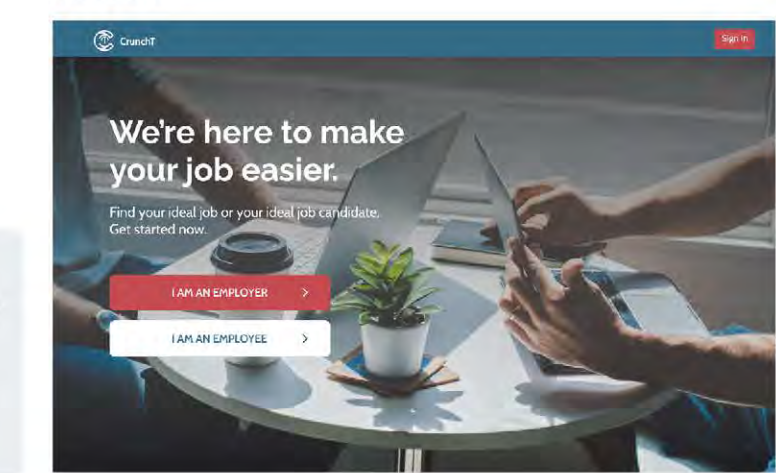
User Feedback

Two status registration is unclear and the two button styles are too similar.

Elaborations

Refine the employer and candidate buttons so users can understand the difference between two statuses.

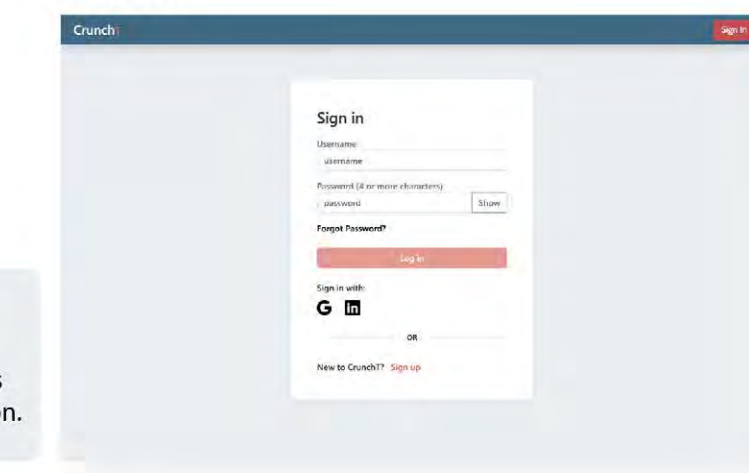
AFTER



Sign In/Up

User Experience Goal
Provide users with customized questions before sign in/up to best match with relevant areas.

BEFORE



User Feedback

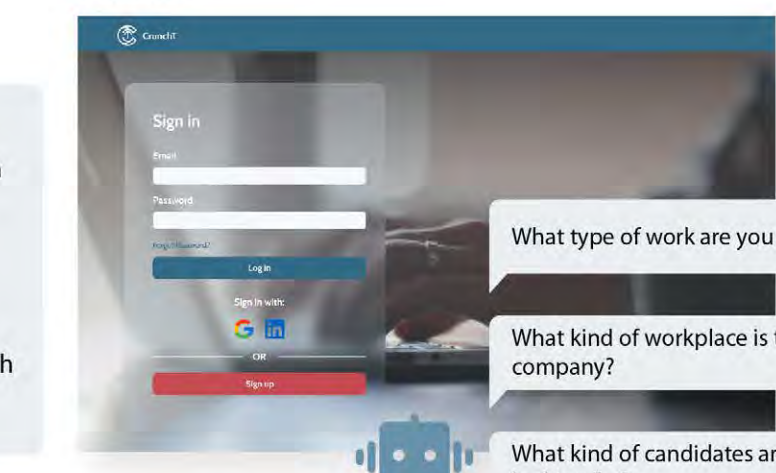
There are no guidelines or related questions before registration.

Elaborations

AI-generated questions that focus on recruitment to help users find the ideal candidate more accurately.

Refined visuals to match the brand identity.

AFTER



Hello, my name is Kubro, your AI recruitment partner.

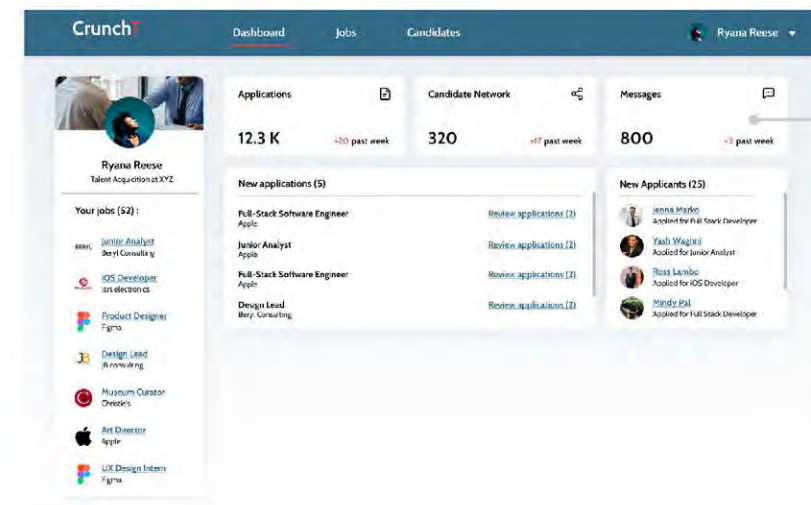
Dashboard

User Experience Goal
Helps users see key information more fully and clearly.

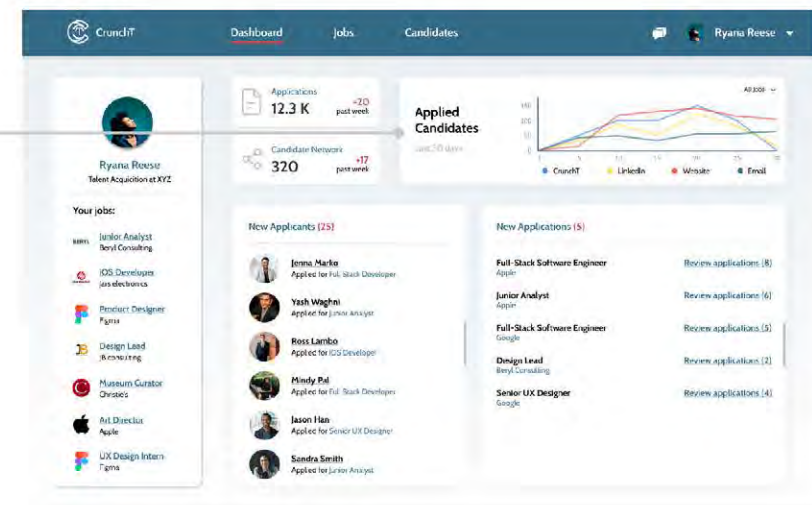
User Feedback

The information is not clear and the interface is mostly text descriptions.

BEFORE



AFTER



Elaborations

Create a **chart** to better help users analyzes the **data** of applications submitted by candidates.

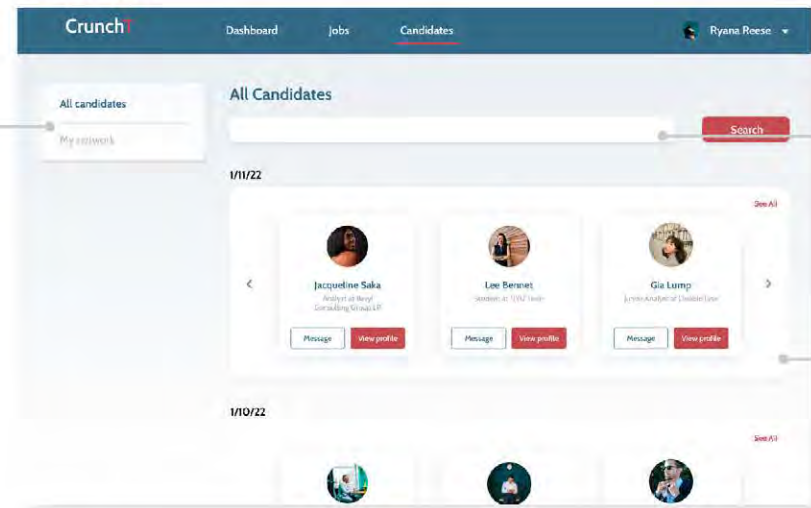
Candidate Tracking

User Experience Goal
Let users more easily manage and select the best candidates.

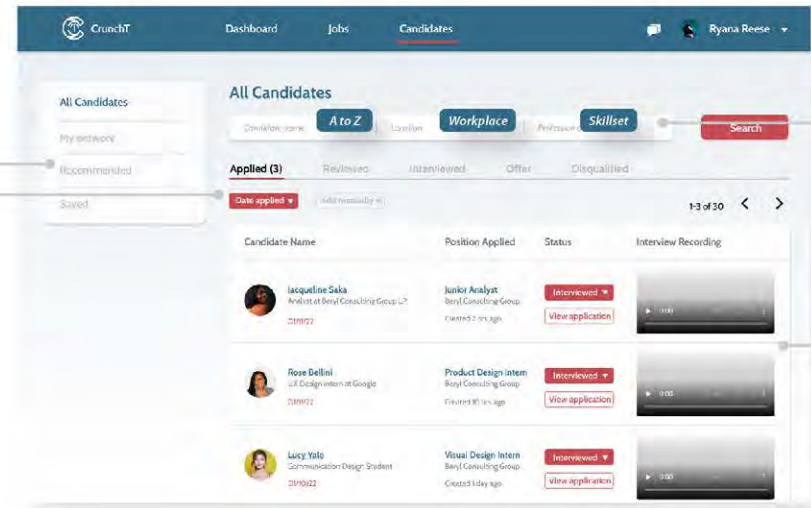
User Feedback

Candidate information is unorganized, and user manipulation of the interface is limited.

BEFORE



AFTER



Elaborations

Create more **personalized** filters to improve the efficiency of the candidate selection process for users.

Allow users to conduct customized searches for the best candidates by adding **keywords** and **categories**.

Allows users to easily access **candidate information**; helps users to better perform related **actions** in the recruitment process.

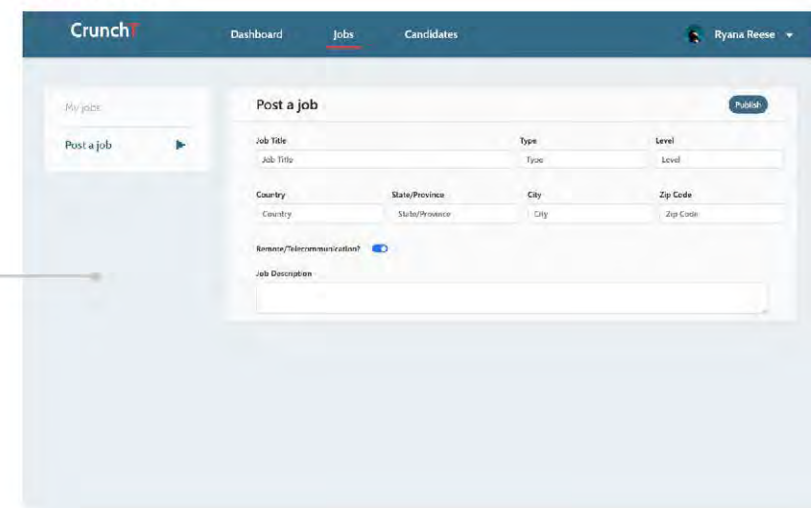
Job Posting

User Experience Goal
Allow users to provide more comprehensive job information and increase the connection with candidates.

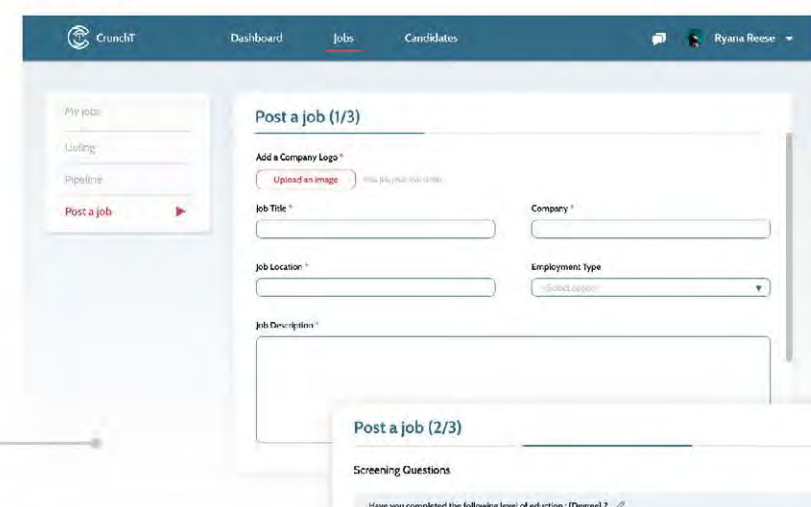
User Feedback

There is no place to upload company branding and no place to check for missing information in job posts.

BEFORE



AFTER



Elaborations

Add steps to build up **connection and empathy** with users. Users prefer to see more details in the job posting.

User Tests



More connections

The improved functionality of posting job content allows me to post in the categories I want to focus on, helping me target potential candidates.



Clearer layout

No need to click on each candidate's profile, the clear content allows me to choose the most qualified candidate among many candidates. And I like the interview video recording feature, which provides more clarity when making candidate decisions with companies.



Like the search function improvement

It is necessary for adding keywords and filters. Because I can filter and find the most suitable potential candidates, and also communicate directly with the candidates, reducing unnecessary waiting time.



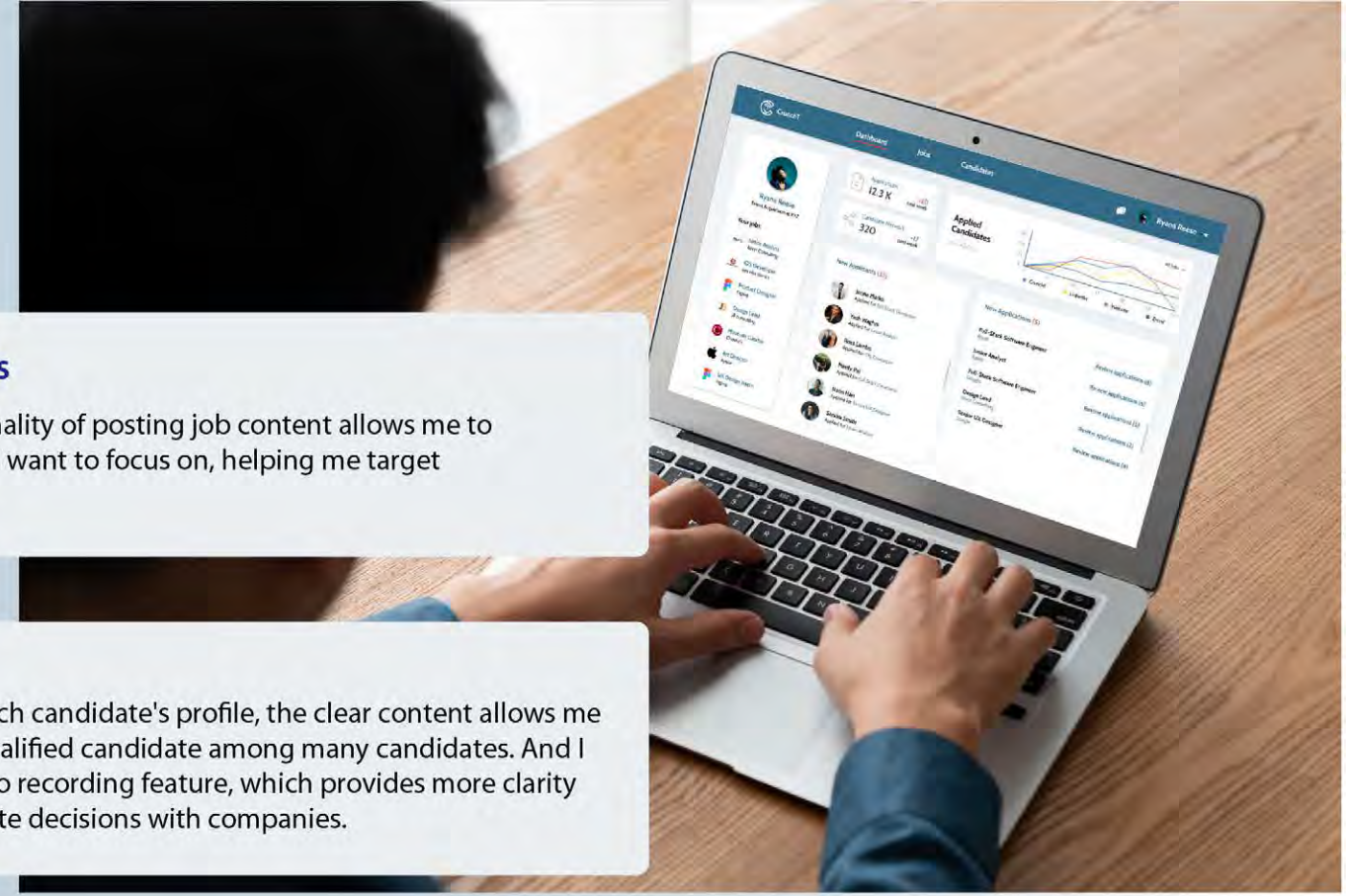
Graphs make more sense

The new graph on the dashboard allows me to see in more detail the number of candidates applying to companies. And it gives me an idea of how to make the recruitment areas more accurate.

Summary

By applying the supply chain model approach to the recruitment site to get the right talent to the right position at the right time, we can clearly see a closer connection between recruiters and candidates in the hiring process. The user experience magnifies this effect and plays an important role in uncovering hidden talent as well as meeting company needs.

Through a supply chain-centric mindset, I see the power of scientific business strategy as it opens up the window of the hidden talent market and increases the efficiency of the hiring process.



UNSTABLE SPACE

Unstable Space utilizes a combination of animation and interactive equipment to show the audience the mood transformation created by bipolar disorder, giving them an immersive experience and a deeper understanding of the bipolar disorder.

Role: Independent Project

Duration: November 2021 - December 2021

Tool: TouchDesigner

Research

Current Status

Bipolar disorder affects 45 million people worldwide.

Bipolar disorder is often difficult to identify, unclear to diagnose, and untreatable due to its clinical complexity. Recognition, diagnosis, and treatment rates for bipolar disorder are still very low.

People will think that bipolar disorder is not a problem because most people don't know what it is, and even if they do, they just think it's depression.



Symptom

Bipolar disorder causes extreme mood swings, including mania and depression.



Stages



Bipolar I

Episodes of mania lasts at least seven days and depressive episodes can last up to two weeks.



Bipolar II

The mania is not as intense as bipolar 1 but the depressive episodes are severe and may last longer.



Cyclothymic Disorder

More frequent shifts between mood swings. The highs are hypomania symptoms and the lows are depression.

Interview

I interviewed Sumi, who has bipolar disorder, to find out what she is like in real life, how people look at her in life, and how she arranges herself with others.



According to Sumi, it is easy to see that people with bipolar disorder can be ostracized by others. At the same time, they are unable to control their emotions in some things and are prone to mood shifts.

Inspiration

Yayoi Kusama



Infinity Mirror Room



Kalina Bertin



Manic

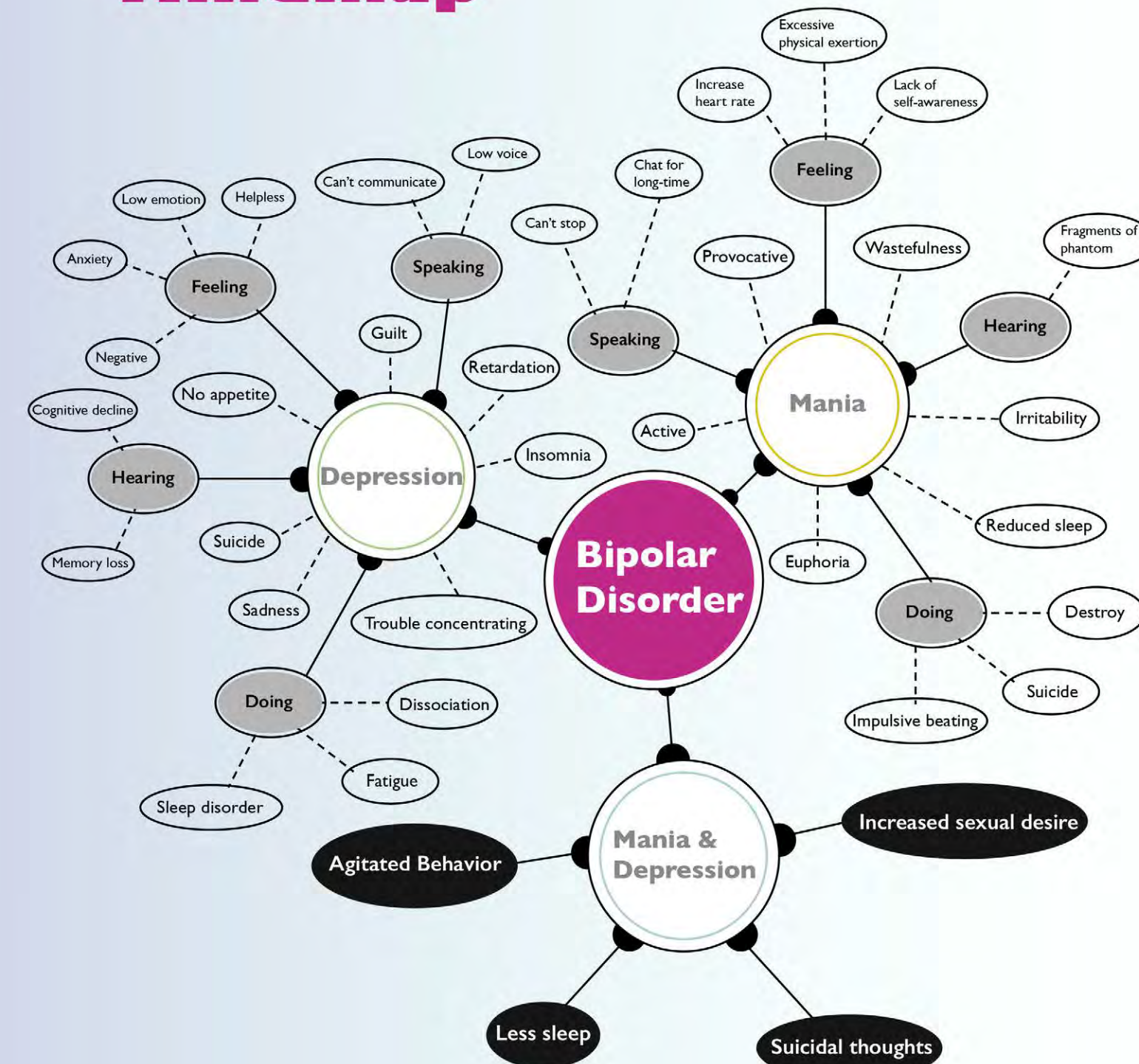
Mirrors
Lights
Spaces

VR
Two-way
Animation

Conclusion

Inspired from 'Infinity Mirror Room' and 'Manic', I find that I can use visual elements, animation effects, music visualization to create an immersive experience for the audience to experience the feeling and get into the inner world of bipolar disorder.

Mindmap



Design Insight

Based on the difference between the moods of mania and depression, I decided to create an interactive room with two separate sections. By using music, materials, and visual elements, gives the audience to experience the inner world of bipolar disorder.

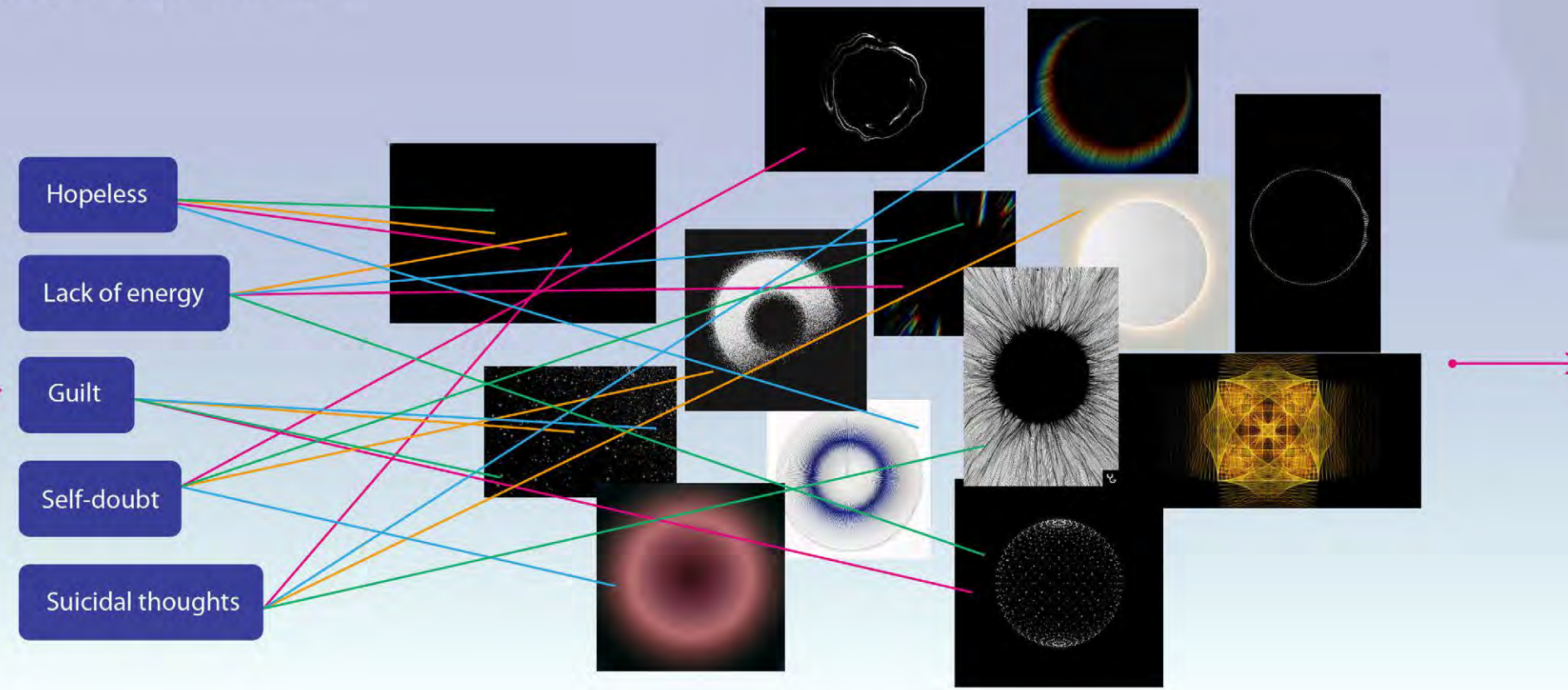
Visual Selection

I collected data from 20 people with bipolar disorder and asked four of them to choose pictures corresponding to the different emotions and feelings that occurred during the two phases. I drew sketches of the animation based on these pictures.



Depression

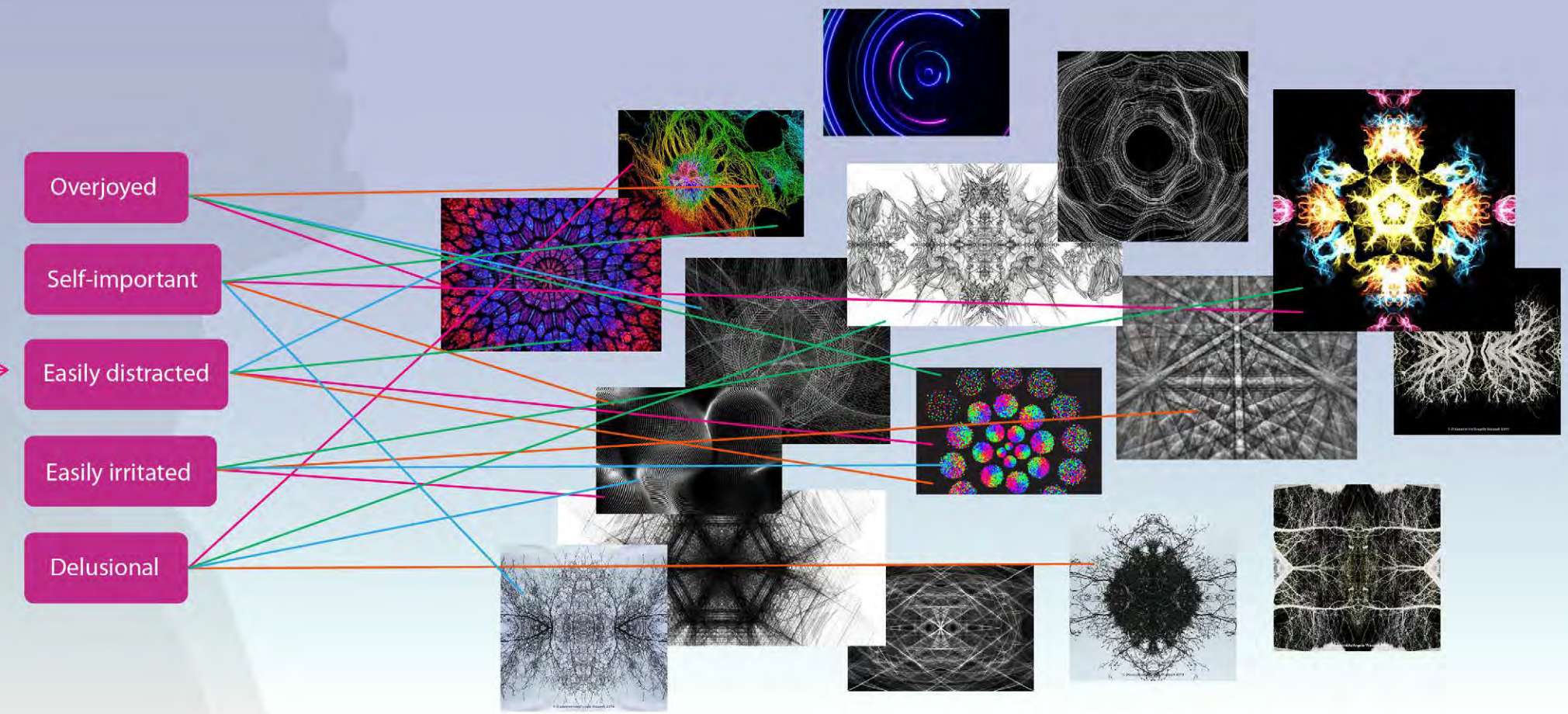
- Hopeless
- Lack of energy
- Guilt
- Self-doubt
- Suicidal thoughts



The most selected pictures

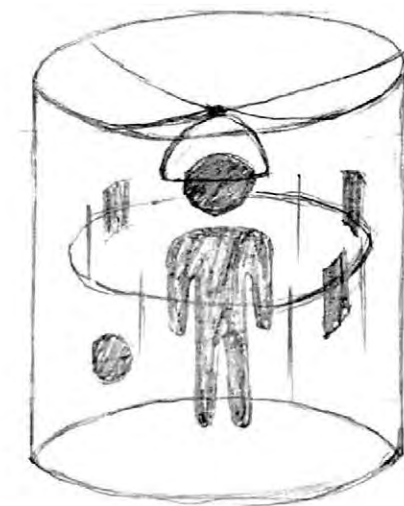
Mania

- Overjoyed
- Self-important
- Easily distracted
- Easily irritated
- Delusional

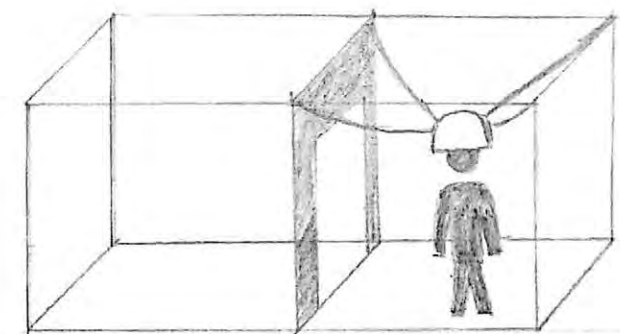
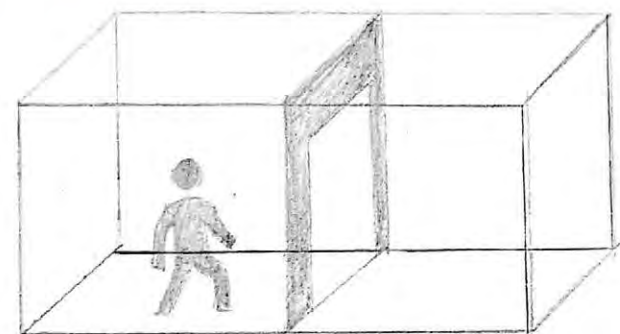


The most selected pictures

Concept Sketches



An immersive experience for the audience.

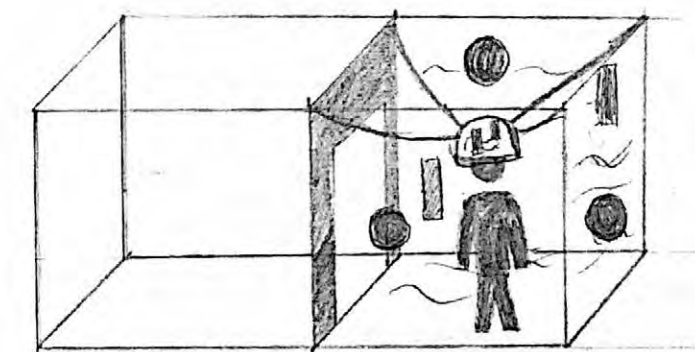
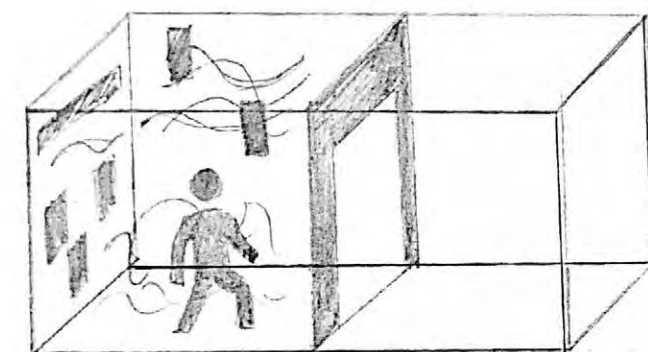


Mania Room and Depression Room

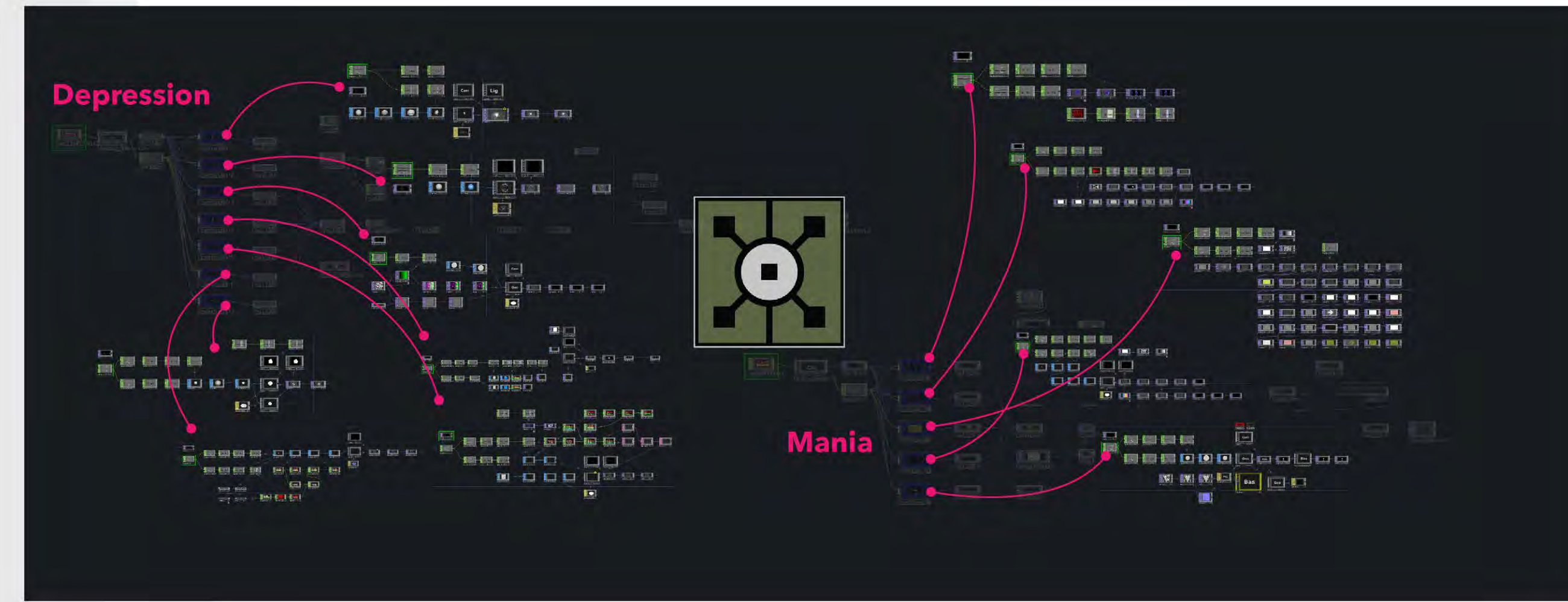
An enclosed space is divided into a mania room and a depression room. One allows the audience to experience the manic side of a bipolar disorder. The other one is for the audience to perceive the depression of the bipolar disorder by putting on an interactive helmet.

Music and Visual Effects

By showing the music preferences of people with bipolar disorder and graphics change at different stages in two rooms, the audience experience the transformation of their inner world.



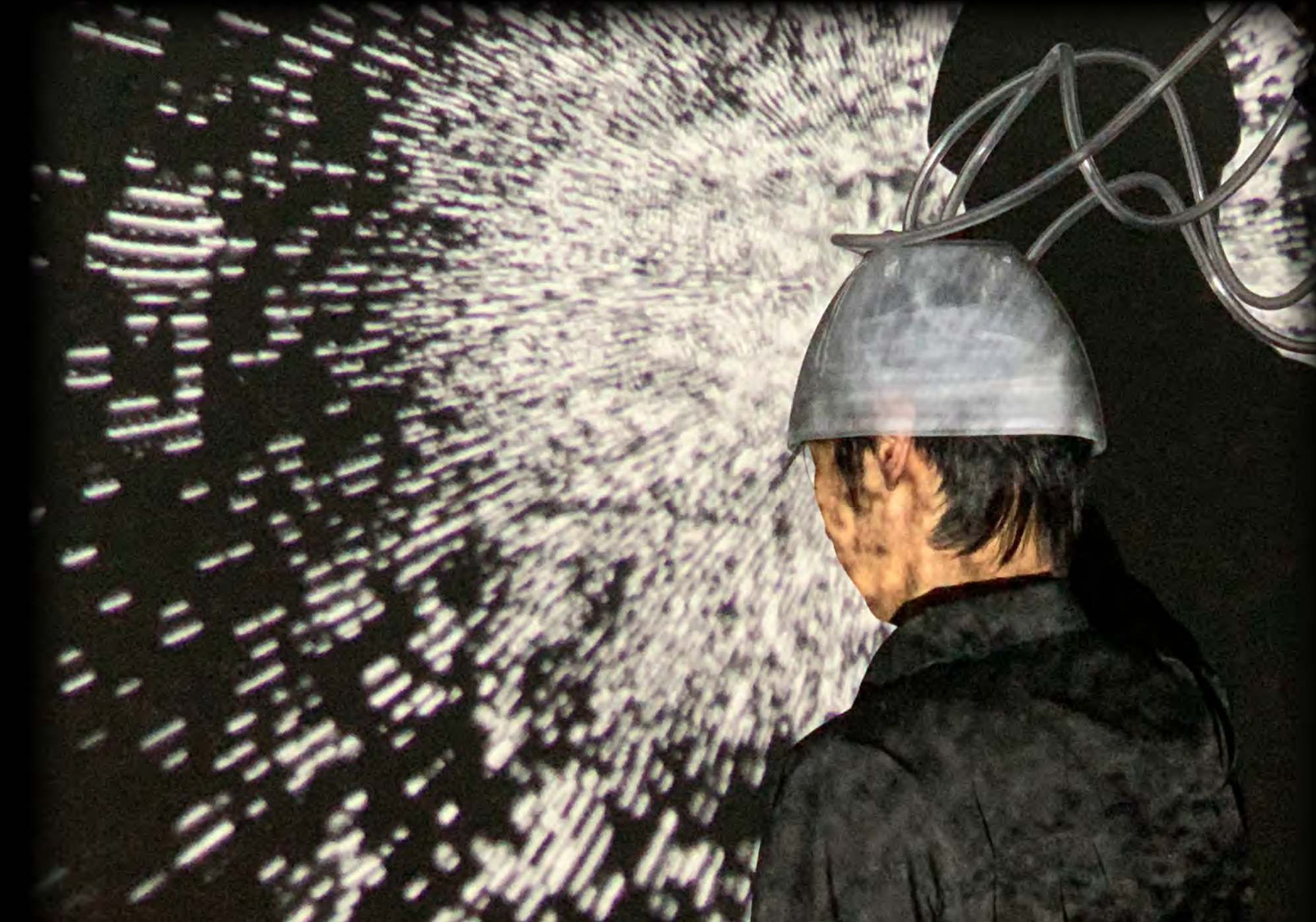
Component



Final Design

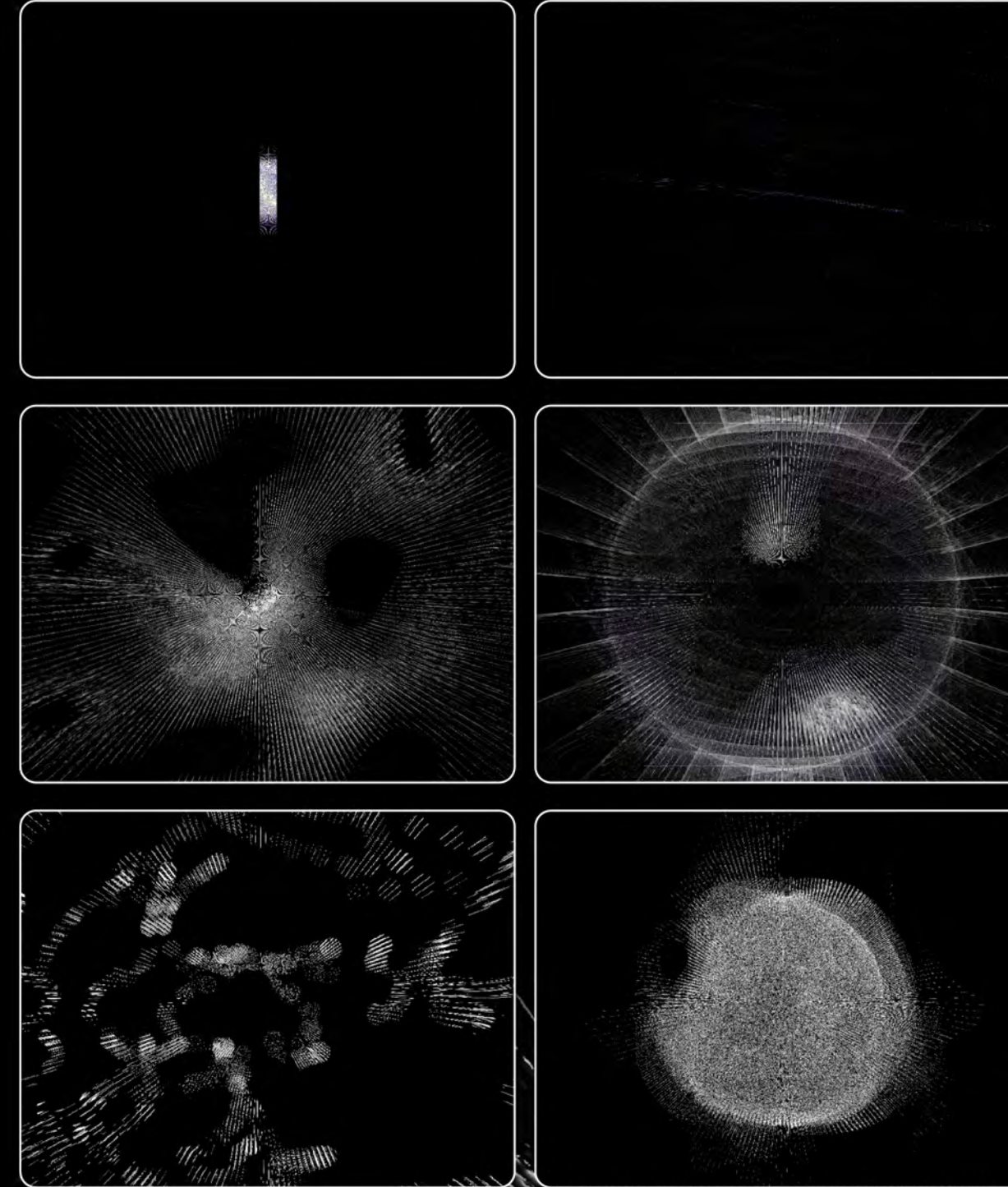
The highs and lows of the music will drive the various graphics in the animation and will switch randomly between depression and mania, which brings a different mood shift to the audience. Wearing the interactive helmet, the audience will be able to feel the emotional instability brought about by bipolar disorder and experience the emotional vibrations created in the animation.

Video link: <https://vimeo.com/650960286>



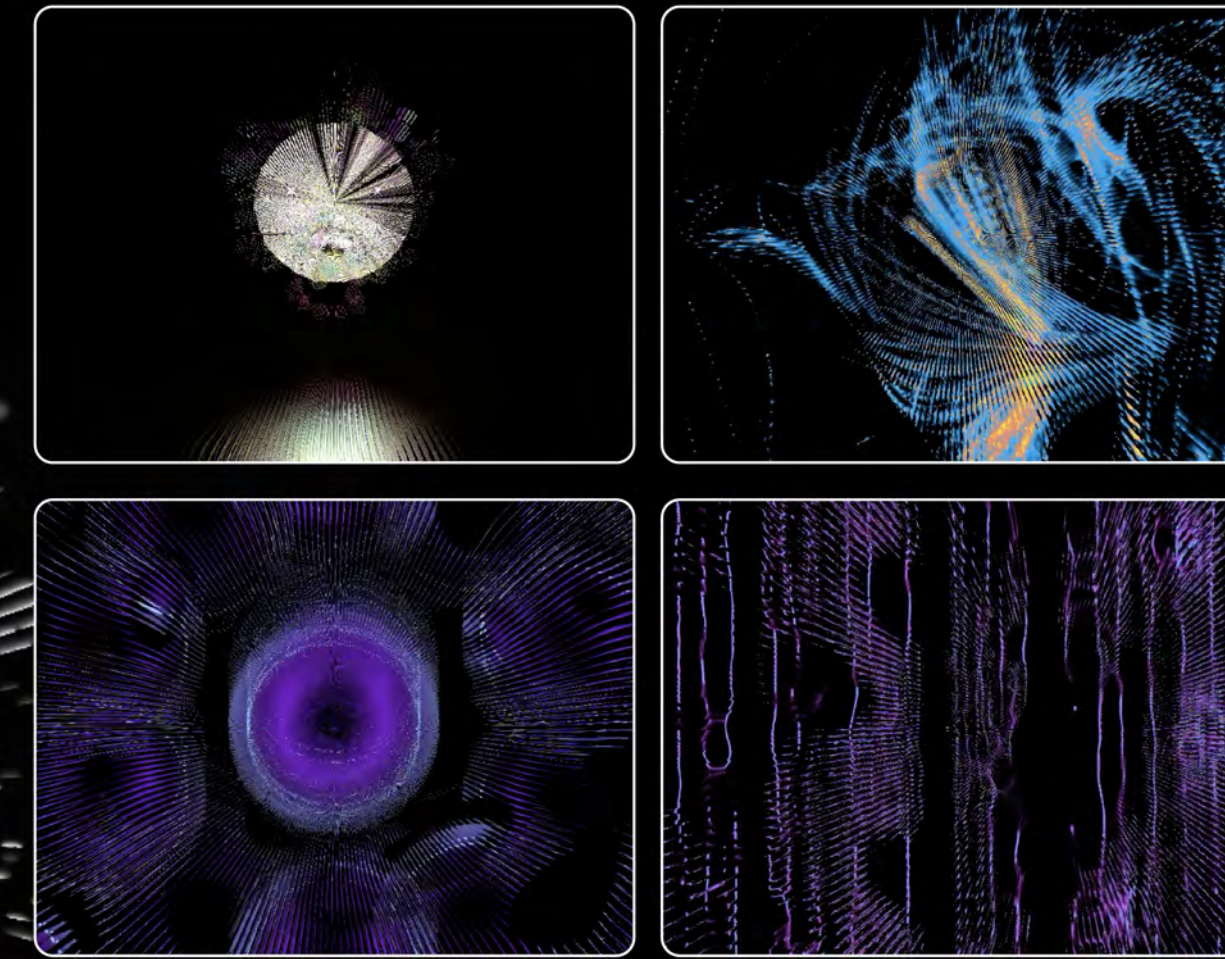
Depression Room

The visuals change with the rhythm of "Hoyt's Office."



Mania Room

The visuals change with the rhythm of "Painkiller."



I also do some brand identity and event planning.

LOOP MOBILE

Loop is the human-first marketplace for the most affordable, accessible, and rigorously tested refurbished tech.

I participated in the brand's logo design, website design, newsletter design, and Instagram feed.

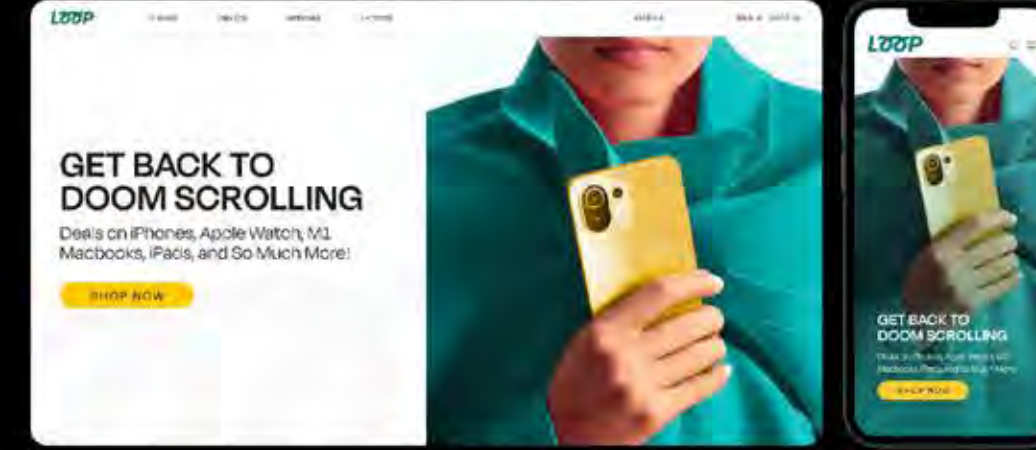
The investigation of people's favorite websites disclosed consumers' motivations and barriers to purchasing second-hand products. Based on user research, I redesigned the eye-catching points of the website and hotspots of customer clicks. The brand was redefined with a bright color. Optimizing the headline also contributed to increased clicks and average time on the page.

Logo Design

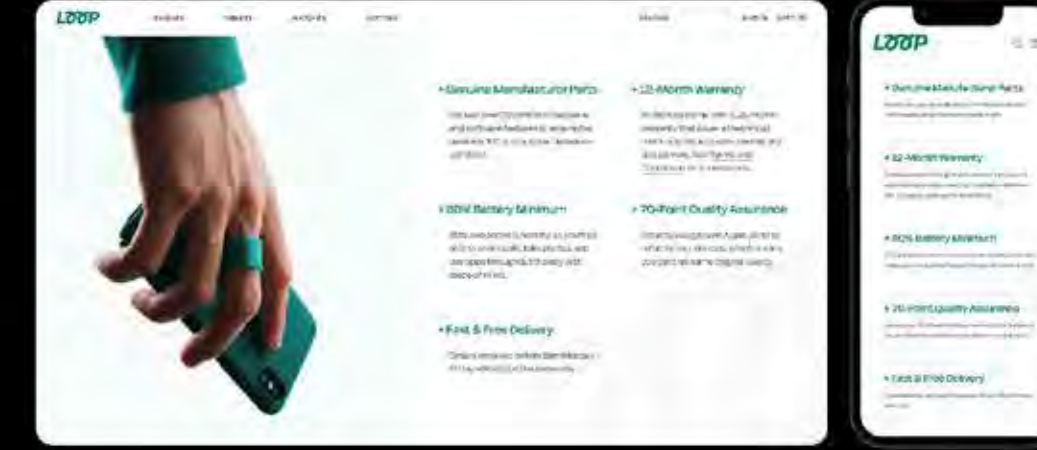


Website Design

Homepage Landing



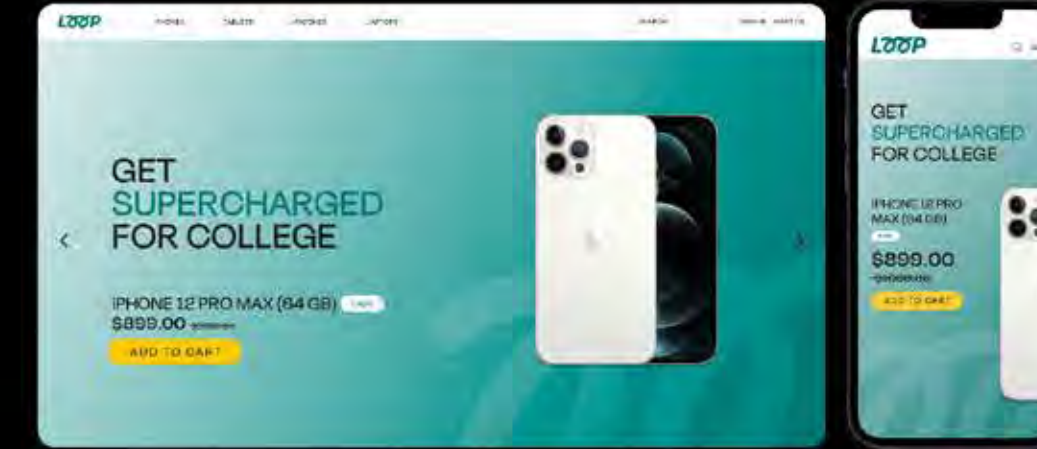
Testing Process



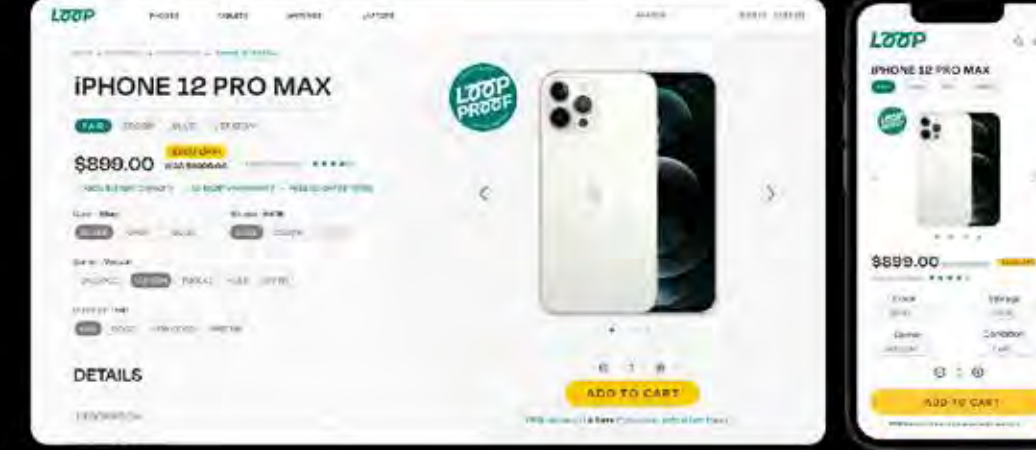
Product Gallery



Sale/Deal Banner



Product Page



Newsletter Design



Instagram Feed



Hublot x Shepard Fairey

I participated and designed the digital invitations, decorations, events, gifts for the launch of the new Hublot x Shepard Fairey watch.

