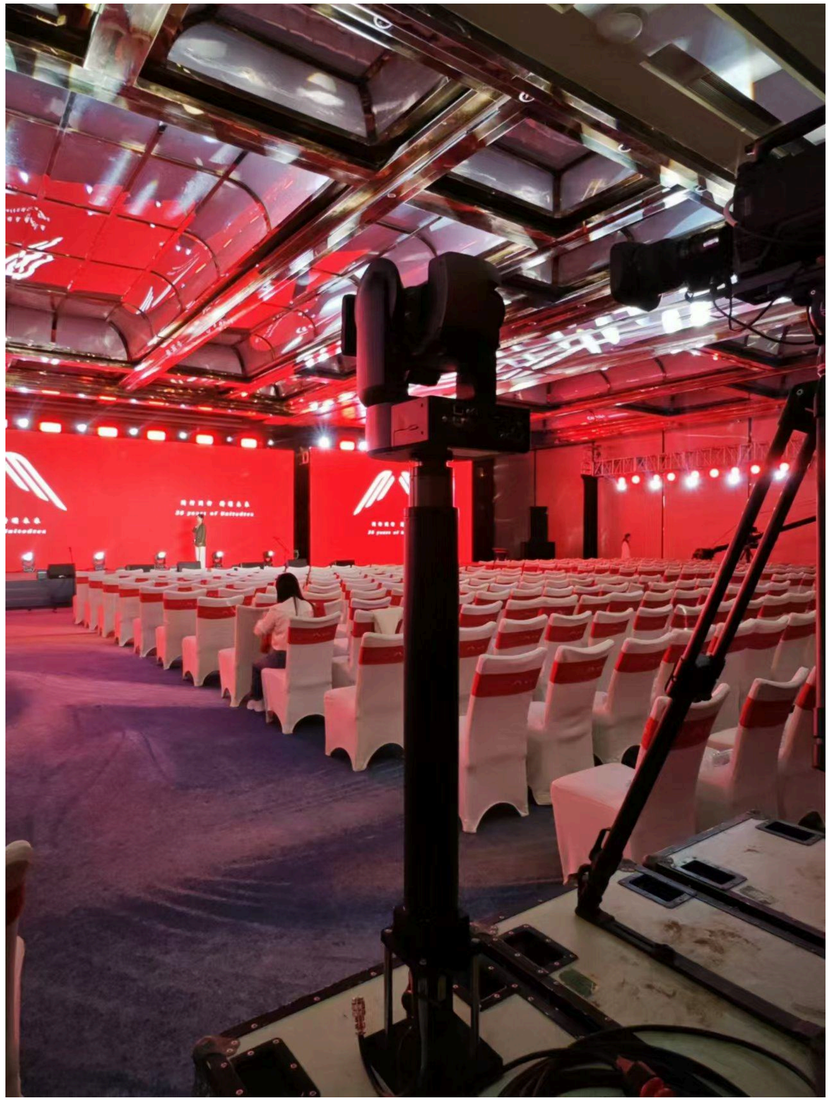
Camera Stand Stand device for stage performance

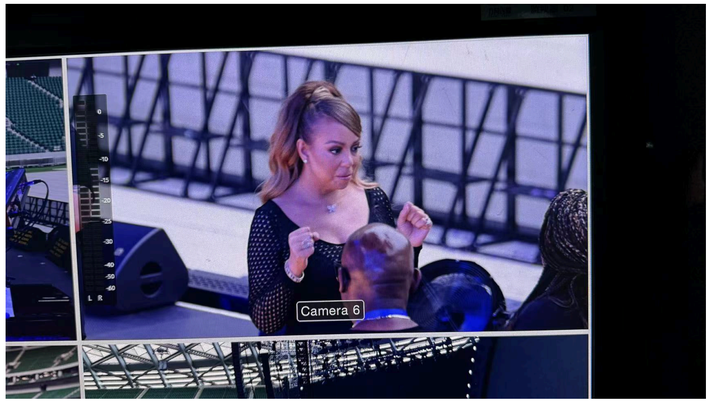
Camera Stand Stand device for stage performance
Jan. 2024 - Sept. 2024
Product Design Team Project

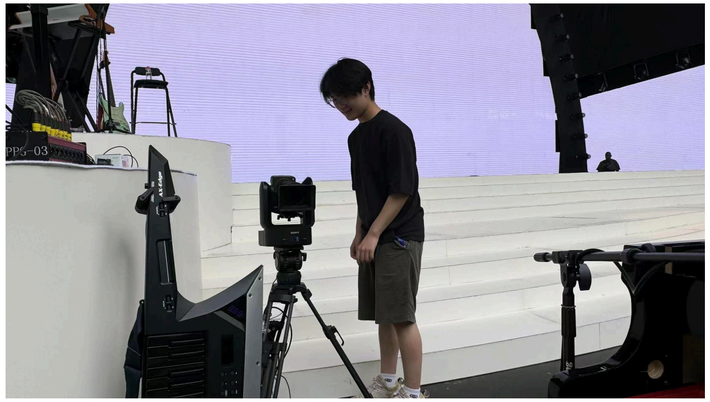
I participated in various concerts. In 2024, during Mariah Carey's concert in Beijing, I was assigned to assist a foreign photographer. While observing the rehearsals, I noticed the photographer sweating profusely and standing silently beside me. My curiosity led me to examine the pyramid-shaped tripod next to him. It dawned on me that the tripod's design, although stable, posed significant usability challenges due to its shape and structure. Determined to find a solution that maintained stability while enhancing portability, I was inspired by the design of SpaceX rocket stands, which automatically deploy upon landing. I built a small model using Lego, but it still needed improvements in space efficiency and stability. A few days later, while using an air conditioner, I was struck by the design of a pedestal fan, whose base includes a reinforced plate that perfectly met my needs. After drafting multiple sketches, I finalized a detailed design and presented it to my father. He approved my work and supported me in selecting a manufacturer. Two weeks later, the product was delivered.



2024.10.26 ShuiMuNianHua's concert

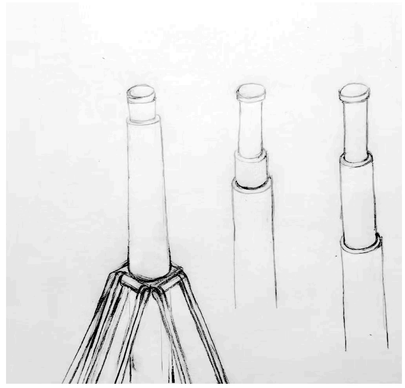
Inspiration

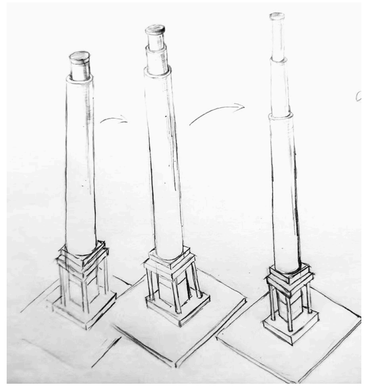




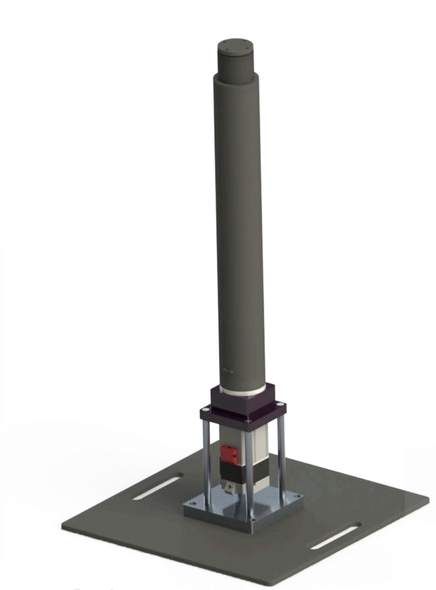
2024.09.17, Mariah Carey's concert，as a Photography Assistant

Development



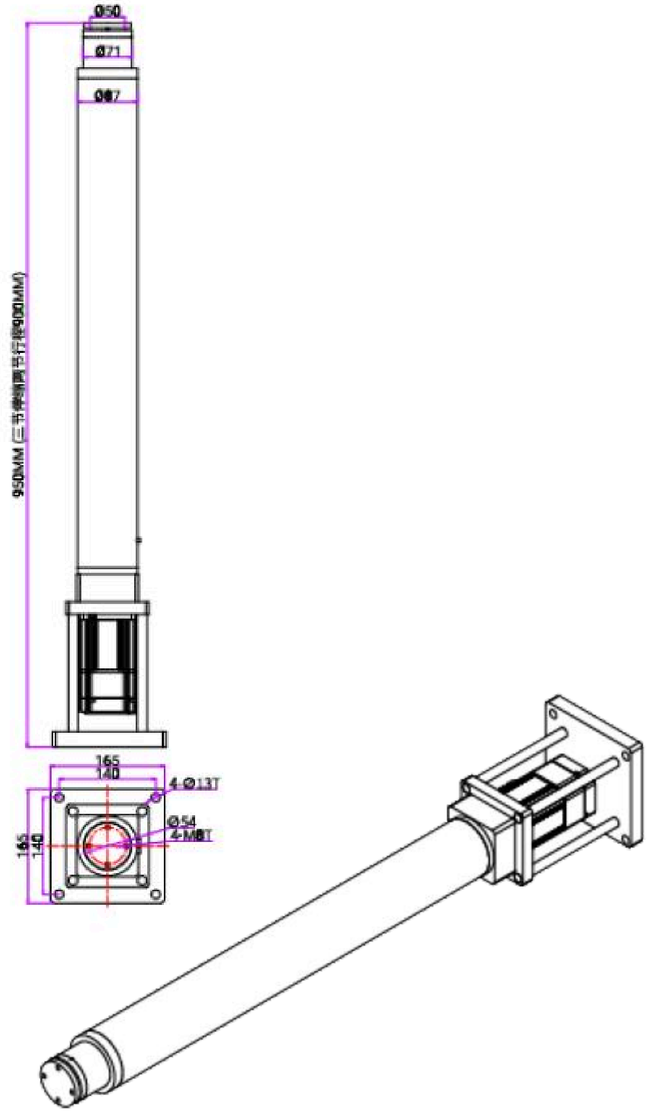


drafts



Render

Product



Tag Chat

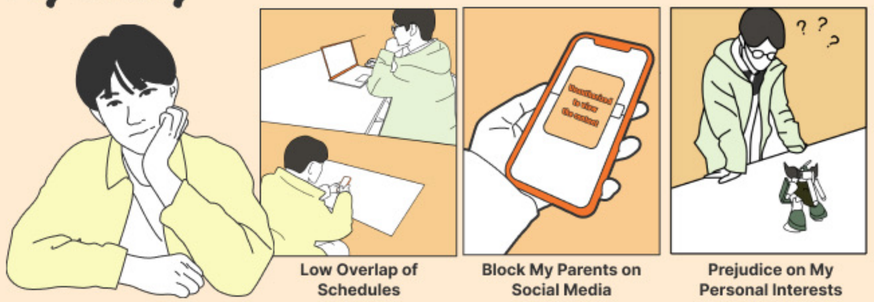
Family Social Platform with Tag Promotion

Dec. 2023 - Mar. 2024
UI/UX Design
Individual Project

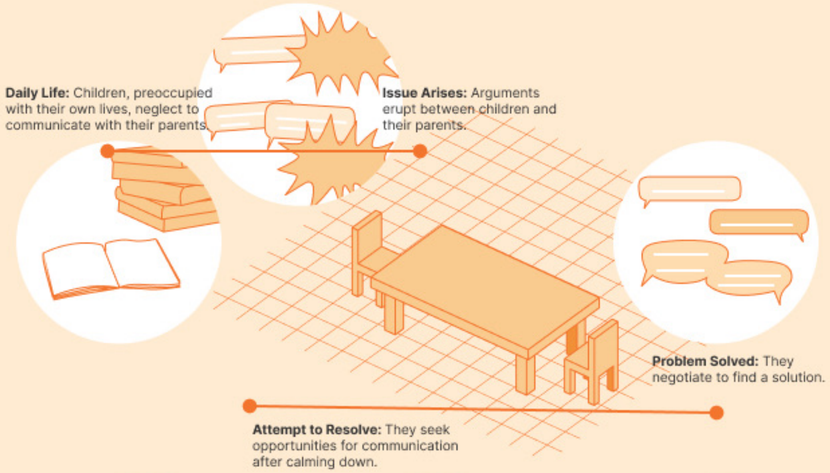
In this project I designed a family communication app, in order to improve family interactions. In the early stage of the research, I found that teenagers, including myself, rarely communicate with their parents, and the communication methods are limited, and the communication results are not pleasant. In this project, I came up with the signature feature, “tag swapping”, in this project. It facilitates a deeper understanding between family members by identifying each individual's interests and preferences. Users' profiles are defined by these 'Topic Tags' which represent their individual interests and hobbies. Through smart phone interface, these topic tags are systematically cross-promoted amongst family members. This feature opens doors for stimulating conversations and mutual learning.

Generation Conflict, which is the contradiction and opposition between two generations, is an inevitable social phenomenon in the process of social development. In modern society, a generation that grows up in a different cultural background has completely different lifestyle from their parents. Young people are more active to defend their own positions and deny some of their parents' views. When the authority and status of parents are partly impacted, intergenerational conflict becomes more obvious than in the past.

My Story



Low Overlap of Schedules | Block My Parents on Social Media | Prejudice on My Personal Interests



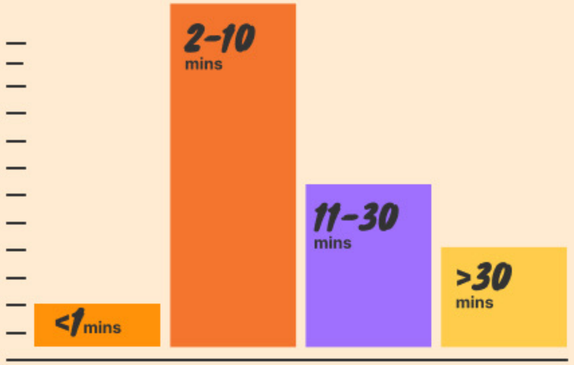
Differences in social media
Differences in usage time, frequency, and habits between parents and children lead to misunderstandings and mismatched expectations.

Unequal Roles in the Family
Parents often dominate conversations, limiting children's input and disrupting effective communication.

Lack of Intention to Communicate
Both sides rarely engage in regular emotional exchanges, only communicating during specific incidents.

Survey Examination

49.16%



49.16%of people communicated with their parents lower than 11 minutes.

I carried out a survey combining secondary research. The results revealed that under the intersection of different family communication modes, the effectiveness of communication varied and all showed varying degrees of missing elements or breakdowns.

Family Communication Quality (Ave.)

Protective Medium (3.0)	Pluralistic Medium (3.0)
Laissez Faire Low (2.0)	Consensual High (4.0)

Issue Targeted Value (Ave.)

Protective High (4.0)	Consensual High (4.0)
Laissez Faire Low (2.0)	Pluralistic Low (2.0)

Relationship Targeted Value (Ave.)

Protective Low (1.75)	Pluralistic High (4.0)
Consensual High (4.0)	Laissez Faire Low (2.0)

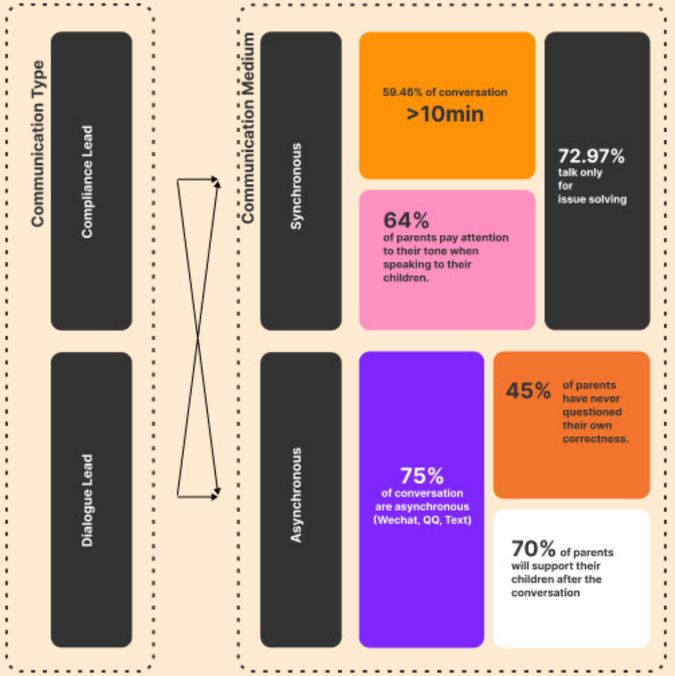
Family Type

Protective:	HIGH compliance, LOW dialogue
Consensual:	HIGH compliance, LOW dialogue
Laissez Faire:	LOW compliance, LOW dialogue
Pluralistic:	LOW compliance, HIGH dialogue

51.35%

Communication Frequency

Barely	8.11%
Occasionally	27.03%
Every few weeks	16.22%
Once or twice per week	21.62%
Once per day	
Multiple times per day	21.62%
	27.03%

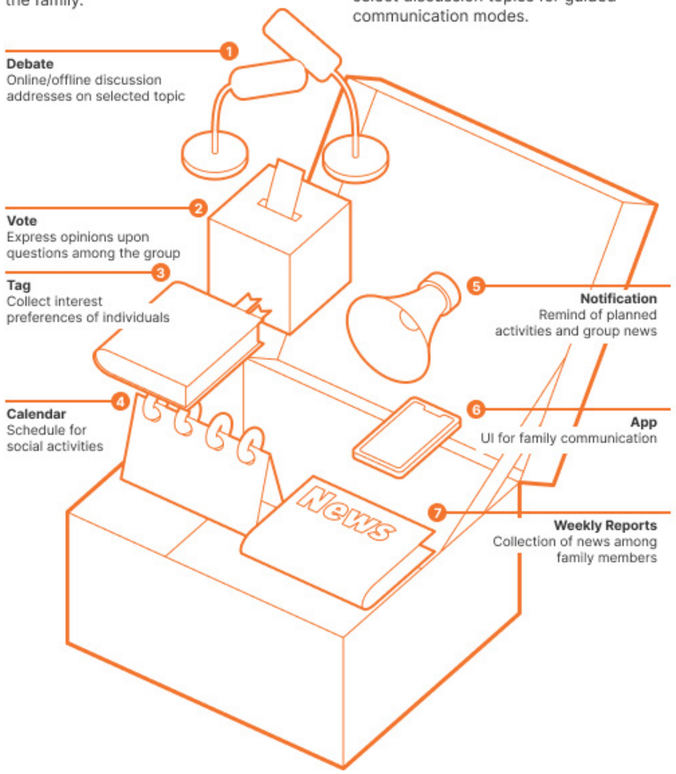


Further Research: family gap on topics & hashtag members trapped in

Modern individuals are influenced by ***Echo Chamber***, also known as ***Information Cocoon***, through selective exposure to media and algorithms, which narrow their worldview and reduce exposure to diverse perspectives, leading to polarization.

Family members find themselves trapped in separate ***Echo Chambers***, leading to differences in interests and opinions, which results in a lack of common topics for conversation and creates a social predicament. This divergence makes it challenging for them to connect on a personal level, hindering meaningful communication and deepening the gap in understanding and engagement within the family.

I would like to offer an experience that allows users to communicate with their families based on interest preferences. The experience will feature various guided communication modes, such as debates, messaging, and voting, to cater to different communication needs and scales. Additionally, users can manage and execute family communication plans through the app, generating weekly reports for timely situation awareness and adjustments. By linking social media accounts and gathering interest preference data, each family member will create an interest tag profile in the app. Members can view each other's profiles to understand preferred topics. The app will also integrate participants' preferences to select discussion topics for guided communication modes.



Technology Skills:
Music editing software
Digital music production
Social networks
Mobile Apps

Social Media Usage:

Age: 17
· High school junior living in a mid-sized city
· Love pop music
· Member of a band

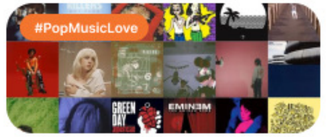
Lily

Wants&Needs:
· Longs for her parents to understand and appreciate her passion for music
· Desires more open and effective communication with her parents, where they can discuss their expectations and understandings without conflict.

Frustrations:
· Feels frustrated when her parents dismiss her passion for music as a hobby rather than a potential career path
· Believes her parents don't understand her dedication to her craft and her aspirations to make it more than just a pastime
· Lack of effective communication and their seeming indifference to her musical pursuits often leads to arguments

Hashtags on social medias:

#BandLife #BandPractice #LiveMusic #RockYourWorld #MusicGear #OOTD #PopMusicLove #PopCulture #StudyWithMe #SelfLove



Technology Skills:
Financial analysis software
Office software
Social networks
Mobile Apps

Social Media Usage:

Age: 42
· Financial company consultant
· Values education and a stable career
· Likes to stay informed about local and global news

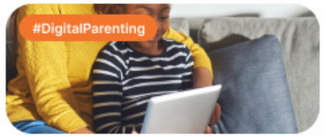
Max

Wants&Needs:
· Wants his daughter to have a secure future with a stable job
· Needs to feel that his advice and life experience are respected and considered
· May desire a better understanding of modern career paths, including those in creative fields

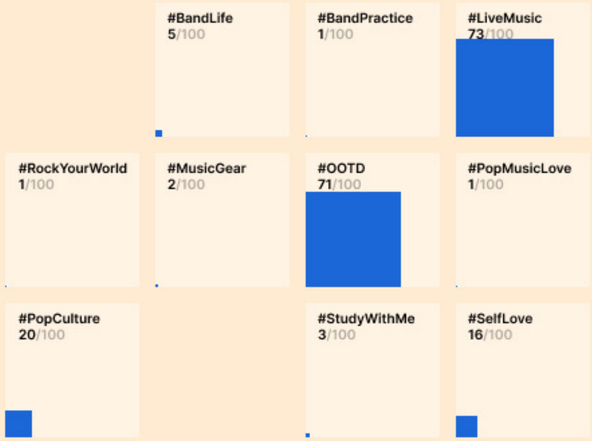
Frustrations:
· Feels out of touch with Lily's passion for music and the current digital landscape
· Worries about the viability of a music career for his daughter
· Struggles with communicating his concerns without causing conflict

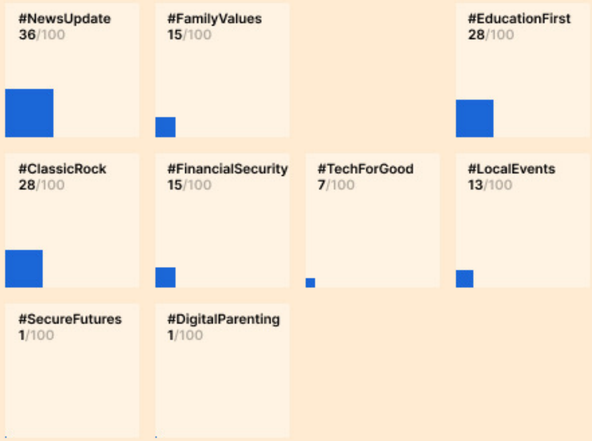
Hashtags on social medias:

#NewsUpdate #FamilyValues #EducationFirst #ClassicRock #FinancialSecurity #TechForGood #LocalEvents #SecureFutures #DigitalParenting



Keywords Average Trend Index* on Google Trend
*2023-2024
The study analyzed Google Trends data to compare the popularity of keywords related to the "filter bubble" concept, revealing shifts in user awareness and concerns about personalized content and information echo chambers.





Discussion Workshop

In our everyday life, we often encounter scenarios, where different viewpoints emerge within a family, particularly among parents and their children. One such experimental conversation revolved around a single topic. In this case, my parents and I had divergent views, possibly due to the difference in the type of information each party was exposed to.

My hashtags on social medias:

#Gaming #ToyCollection #ModelMaking #AiTakeOver #Cyberpunk

Mom's hashtags on social medias:

#Yoga #CityEvents #TheOutdoors #FamilyTopics #ASMR

Related Topic:

Topic Distribution Depending on Total Length:

#Science and Technology Development #Risk Prevention

8:31

Discussion Participation:

Selected Opinion:

Me

"I think humanity is going to be destroyed by technology...a lot of **related movies**...there are still loopholes in some regulations, which will lead to these things happening, I think. **Bugs can't be fixed and solved perfectly**...Humans make mistakes all the time, and because of mistakes like **Chernobyl**, it leads to the end of humanity."

Mom

"Since human beings can create it, they must be able to control themselves well...If there is a possibility, people must have made a **preventive measure**, a **solution** or something...Everything has an irreversible consequence, but as long as it is in accordance with **the laws of nature**, it must be pushed forward."

Designed User Experience

1

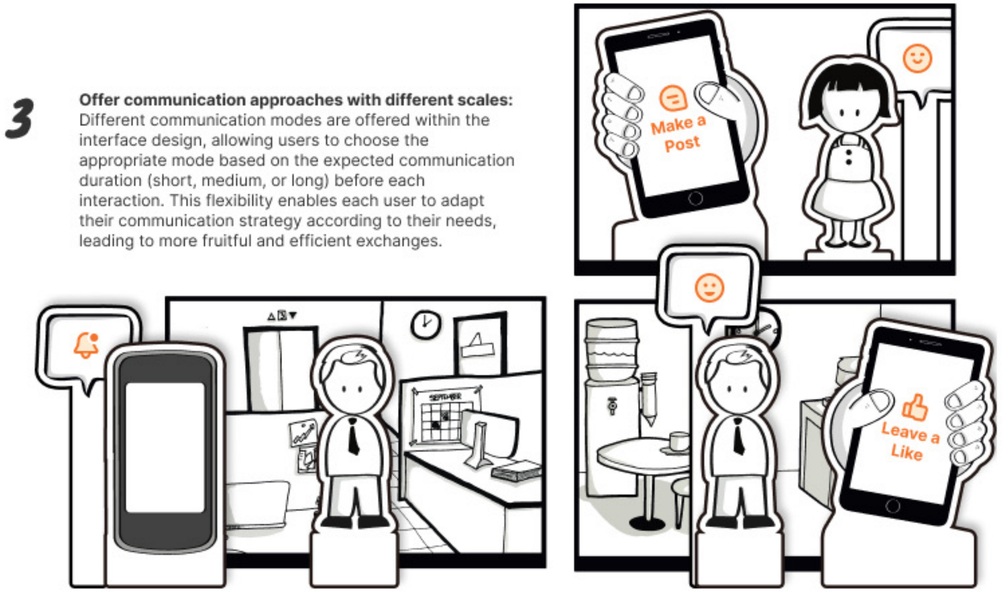
Develop active communication habits:
Designing the establishment of communication habits within the family involves creating plans and providing weekly feedback. This mechanism encourages members to regularly share updates and reflections on their experiences. It lays a foundation for openness and transparency, fostering a culture of dialogue and proactive engagement.

2

Set up family member profile for individual preferences:
We design the creation of profiles capturing each family member's preferences. By recognizing the topic tags of preferred content, we encourage cross-promotion of other members' preferred topics within the user interface. This design fosters mutual understanding and interest alignment amongst family members, enriching shared experiences and conversations.

3

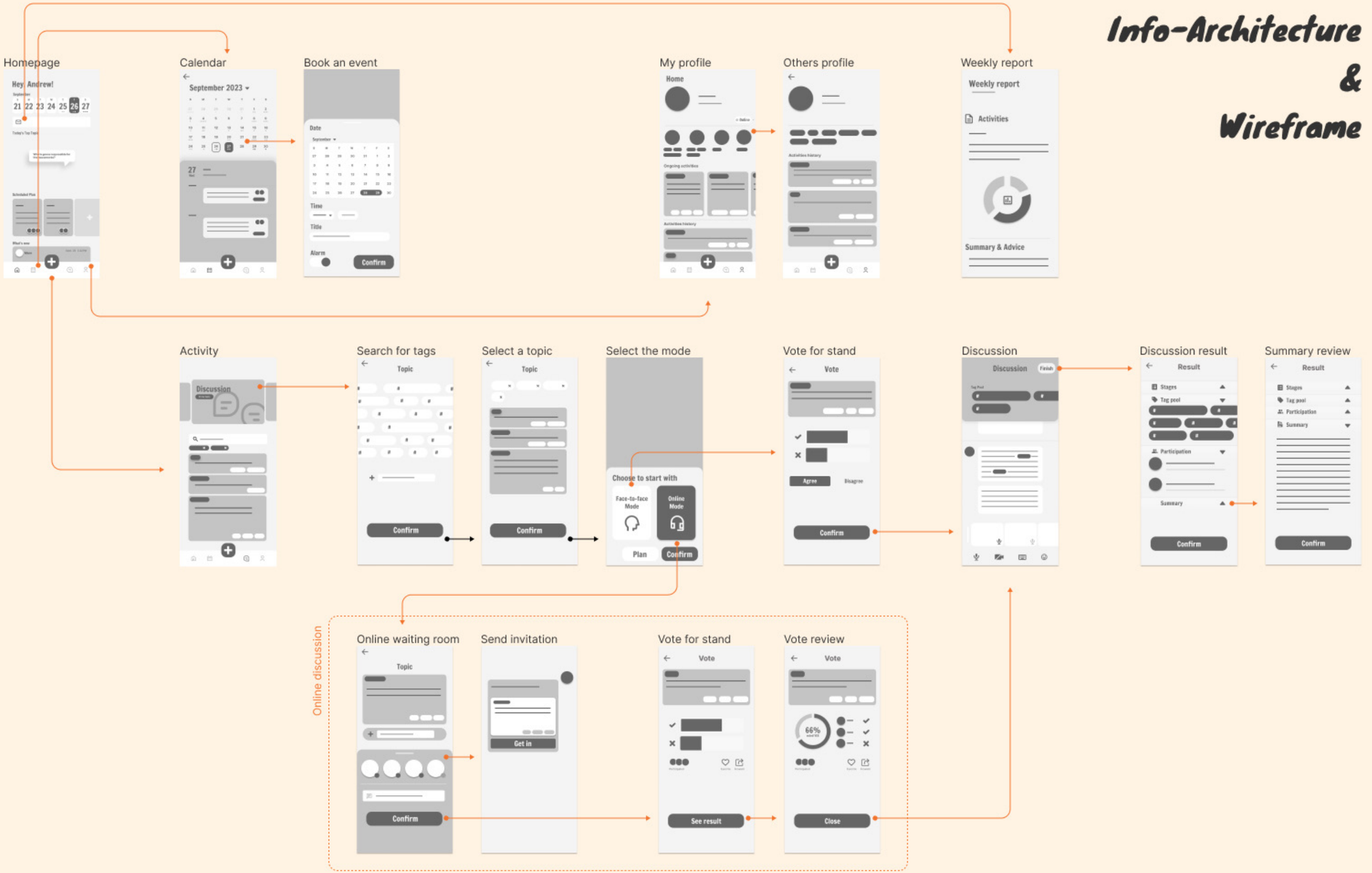
Offer communication approaches with different scales:
Different communication modes are offered within the interface design, allowing users to choose the appropriate mode based on the expected communication duration (short, medium, or long) before each interaction. This flexibility enables each user to adapt their communication strategy according to their needs, leading to more fruitful and efficient exchanges.

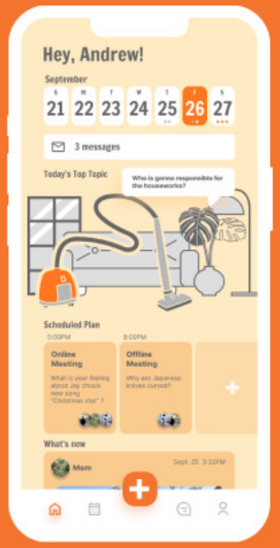


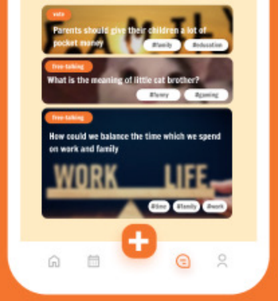
*Storyboards are made in *Scenes* designed by SAP SE

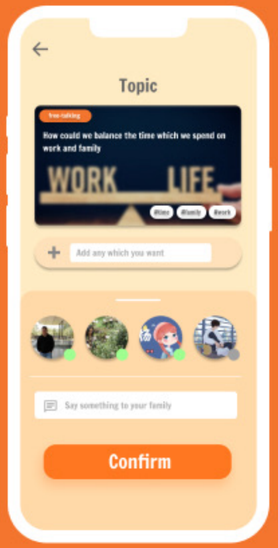
Info-Architecture & Wireframe

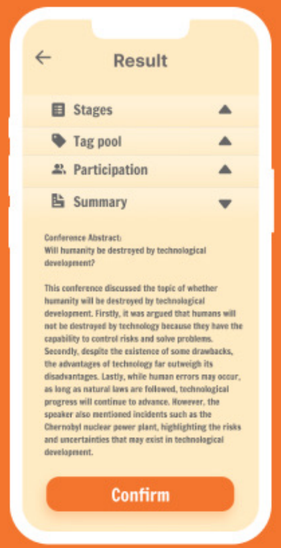
- Homepage
- Calendar
  - Scheduled activities
  - Book an event
- Activity
  - Followed tags
  - Vote
  - Discussion
- Chat
  - Notification
  - Chat history
- My profile
  - Family members
  - Tags preference
  - Ongoing activities
  - Activity history
- Weekly report
  - Social statics
  - Analysis & Suggestions
  - Set reminders
- Selected topics
  - Others' updates
  - Popular topics

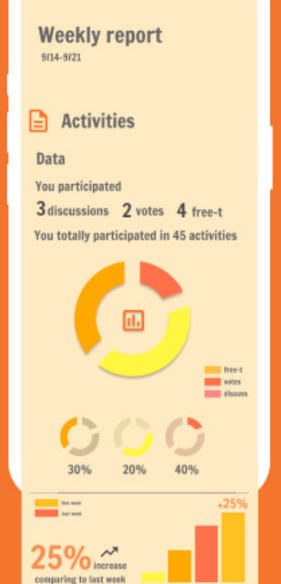


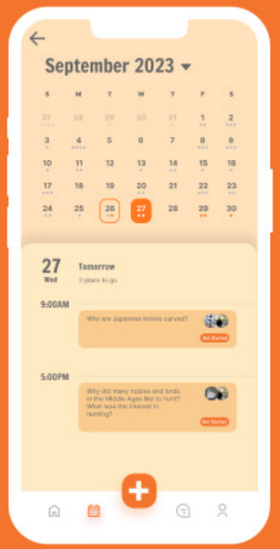


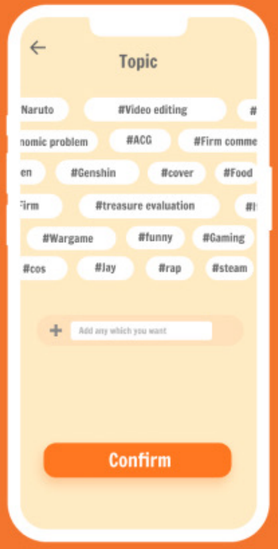


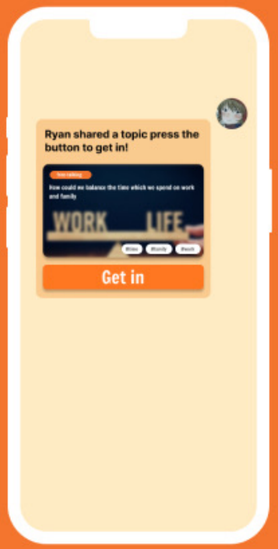


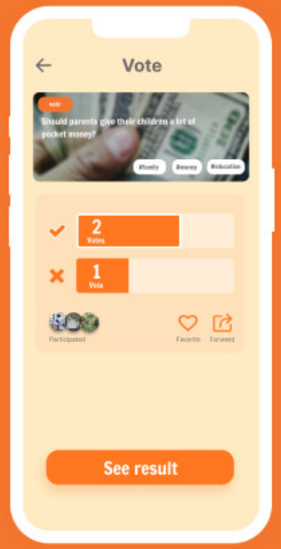


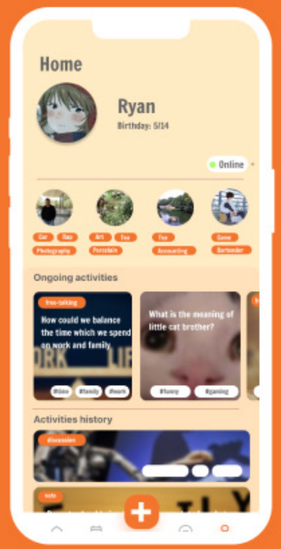


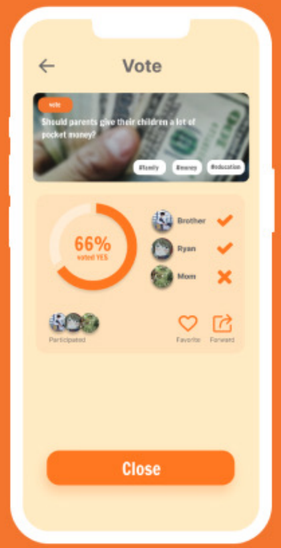


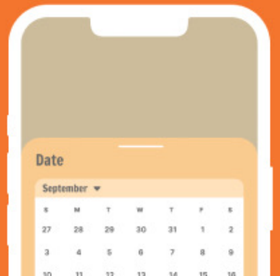


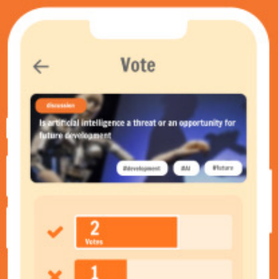


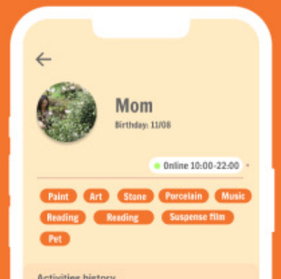












Its first notable value lies in fostering more profound conversations within the family. By addressing each member's unique preferences through 'topic tags', it encourages meaningful interactions based on shared interests, leading to a deeper understanding among family members.
Secondly, its customizable conversation lengths cater to everyone's pace. Be it a quick catch-up or a long, heart-to-heart conversation, it meets varied user needs.
Thirdly, the application instills a sense of unity within the family. By promoting shared learning and discussions, it strengthens familial bonds and ushers in an atmosphere of mutual respect and empathy.

Traditional Chinese medicine

Sept. 2024 - Nov. 2024
Individual Project

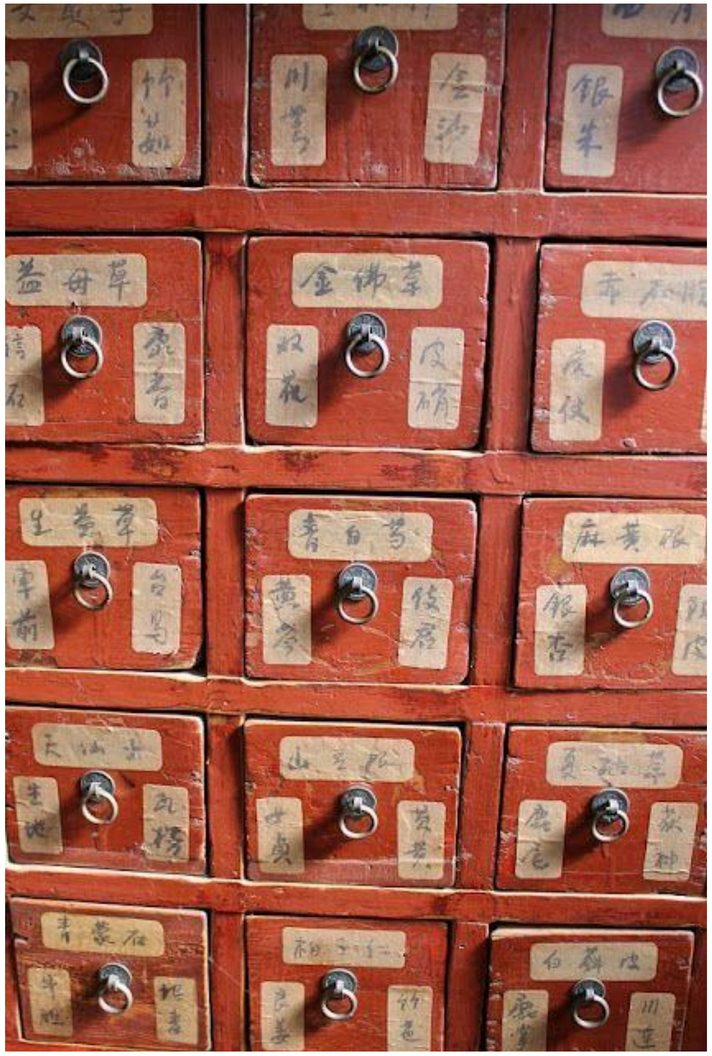
I suffer from chronic rhinitis, which I inherited from my mother. In an effort to cure it, I tried numerous Western medications, but the results were never significant. A traditional Chinese medicine practitioner prescribed several herbal remedies, and after just a few days of consistent use, my long-standing condition was finally cured!However, my father remains skeptical about it.
Through this experience, I hope to promote a better understanding of traditional Chinese medicine, helping more people recognize its scientific basis and value. Traditional Chinese medicine deserves to be acknowledged and appreciated for its unique approach and healing potential.

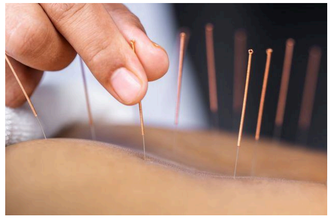
Stone clay was used in the creation, and the textures on the clay abstractly represent symptoms in Traditional Chinese Medicine. For example, the wrinkles and crevices on the kidney-shaped stone clay sculpture symbolize the fatigue and bone fragility caused by kidney qi deficiency, visually illustrating its impact on the body.

Background Research

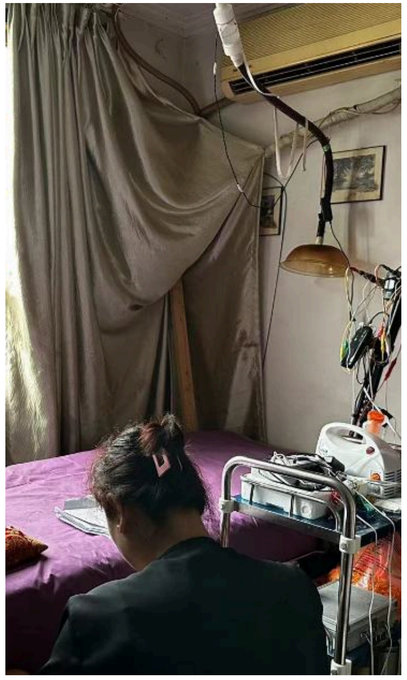
Traditional Chinese medicine includes theories, diagnostic methods (inspection, inquiry, palpation), and treatments (herbal medicine, acupuncture), focusing on prevention and health management.

Pulse diagnosis is a key part of traditional Chinese medicine's "Four Diagnostic Methods," used to assess qi and blood flow and organ functions. It is based on qi-blood theory, the Five Zang and Six Fu organs, and the meridian system, with illnesses reflected in the pulse. By analyzing rhythm, strength, and depth at the three positions (Cun, Guan, Chi), practitioners identify disease causes and mechanisms. Common pulse patterns include normal (balanced), floating (external), deep (internal), thin (qi or yin deficiency), wiry (liver stagnation), slippery (phlegm or pregnancy), rapid (heat), and slow (cold). This helps traditional Chinese medicine guide diagnosis and treatment.

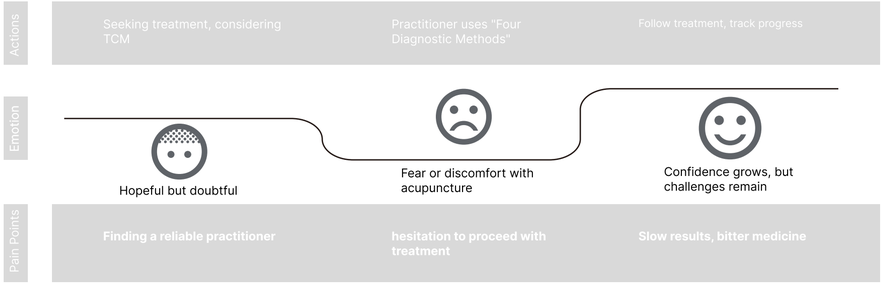




The doctor used the "Four Diagnostic Methods" (inspection, listening, inquiry, palpation) for a thorough assessment, observing my appearance, checking my tongue, asking about my history, and performing pulse diagnosis. They prescribed personalized herbal medicine, which cured my illness after a few weeks. The practitioner emphasized traditional Chinese medicine's holistic approach and syndrome differentiation, especially using pulse diagnosis to assess qi, blood, and organ functions. They also highlighted the importance of "preventive treatment" and the effectiveness of combining herbal medicine, acupuncture, and massage for chronic conditions.



Many patients turn to traditional Chinese medicine after limited results with Western medicine. One found relief from insomnia through herbal medicine, while another alleviated chronic stomach issues by balancing the spleen and stomach. Patients valued traditional Chinese medicine's personalized treatments and its focus on addressing root causes.



Design Opportunities

Deconstructing the Mystique of TCM Pulse Diagnosis

Enhancing Trust in the Scientific Basis of TCM

Interpreting Core Theories and Pulse Characteristics

Providing Clear Principles and Process Analysis

Boosting User Engagement with Interactive Design

Highlighting the Logic and Practical Value of TCM

Insight

Patient

· has a cough that is difficult to cure

· wants to try Traditional Chinese Medicine(TCM)

Talk about condition

· communicate with a TCM practitioner about the condition

· cooperate with the doctor for treatment

Before Treatment

· has little knowledge of TCM

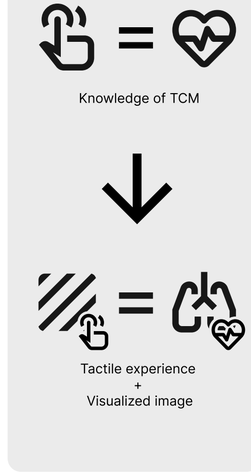
In the Treatment

· communicate with a TCM practitioner about the condition

· listen to the doctor's description of the condition

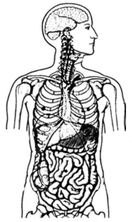
· Learn about TCM through cards

Design Goal



Form Exploration

1.
In the design process, I will thoroughly research the target condition (such as "Kidney Qi Deficiency") from a modern medical perspective, focusing on its symptoms, underlying mechanisms, and diagnostic methods to provide a scientific foundation for the design.



脾胃

2.
Through design, I aim to combine TCM's concept of "Kidney Qi Deficiency" with modern pathology to visually showcase its key features and effects on the body. Using clay models, the design will depict its impact on the heart, liver, and kidneys, including pulse changes and symptom associations.

An Edo- Period Flap Anatomy Manuscript

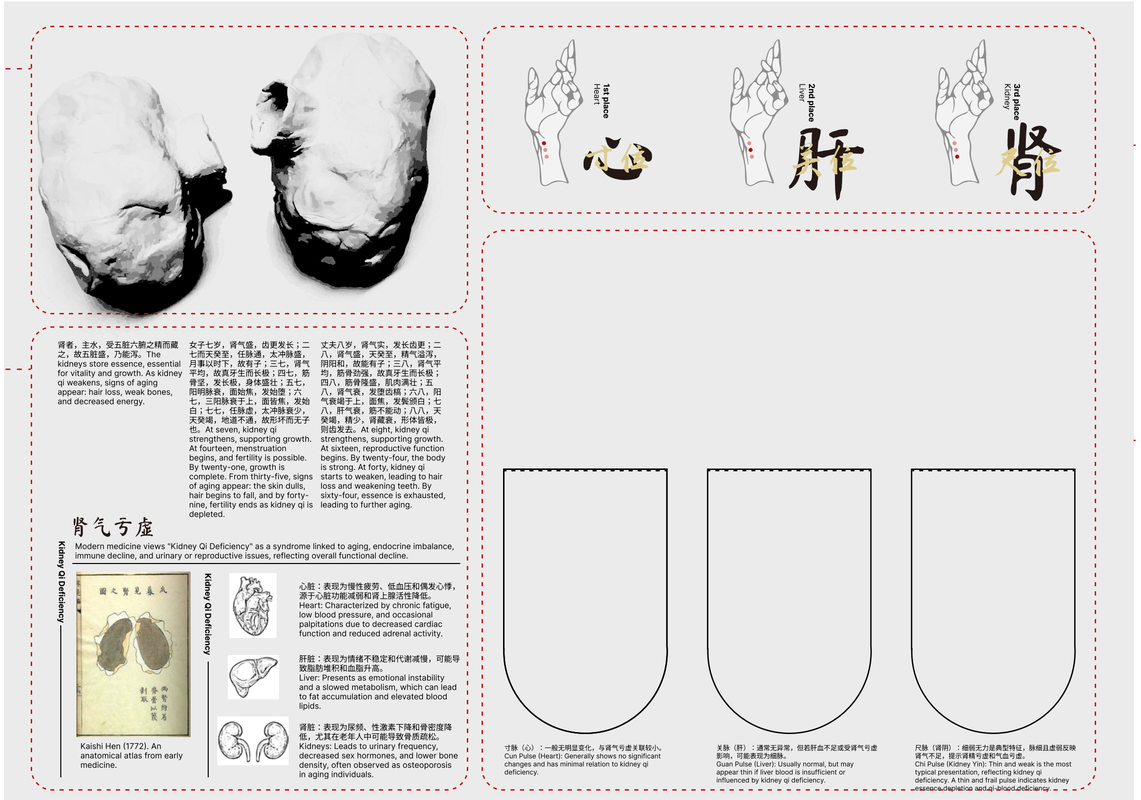
3.

Cun Pulse (Heart):
The pulse is smooth and gentle, detectable with light pressure. It feels even, like water flowing steadily—soft yet firm, commonly indicating normal qi and blood circulation.

Chi Pulse (Kidney Yin):
The pulse is thin and weak, detectable with deep pressure, feeling fragile like a fine thread. In severe cases, it is deep and faint, suggesting kidney yang deficiency or lower organ dysfunction.

Guan Pulse (Liver):
The pulse is fine and long, detectable with light touch, feeling thin and thread-like. It is soft and continuous, often indicating liver blood deficiency or poor qi and blood circulation.

Outcome01



1. Visualized expression to the condition on the organs made with clay sculpture
2. Ancient record of *Kidney Energy Deficiency* from *The Inner Classic of the Yellow Emperor*
3. Indicate the corresponding positions of pulses through icons and images
4. Experience area of the abstract concept of pulse through touch, and the following text explains the corresponding pulse for the three types of pulses in *Kidney Energy Deficiency*

Typography

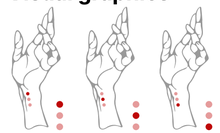
Aa Bb Cc
Inter Regular 6pt

Aa Bb Cc
Inter Bold 6pt

心肝胃
Zhi Mang Xing Regular

肾气亏虚
Ma Shan Zheng Regular

Visual graphics



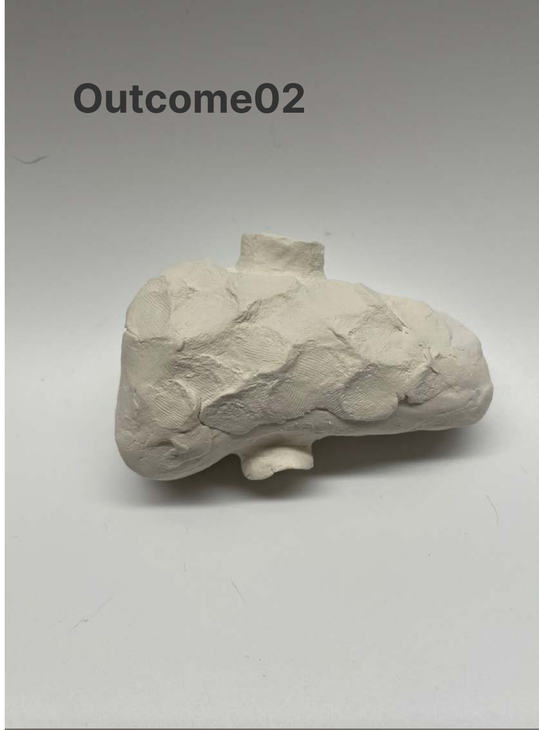
First place　Second place　Third place

Color

#BE0707 40%　#DDCD8D 100%　#BE0707 100%　#EBEBEB 100%

Heart place　Liver place　Kidney place

Outcome02



Reference resources
http://www.ecsponline.com/yz/
BA6F397E3495F4FDDB7EE6E7F83AFA61E000.pdf
chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://
www.ecsponline.com/yz/
BA6F397E3495F4FDDB7EE6E7F83AFA61E000.pdf
www.erj.cn/UploadFiles/中国居民卫生医疗需求行为研究.pdf

VisionCare – Smart Health Monitoring Glasses

Multi-platform interactive body data detection for the elderly

June.2024-Dec.2024
UI/UX Design
Individual Project

This project aims to design smart health monitoring glasses for elderly users, enabling real-time tracking of key health metrics such as blood pressure, heart rate, and blood oxygen levels. The glasses feature emergency alerts, medication reminders, and data sharing, ensuring timely assistance during emergencies and allowing family members and doctors to remotely monitor health conditions for improved care management.

With an ergonomic design, the glasses offer comfort and ease of use, integrating voice prompts and mobile data synchronization for a user-friendly experience. Leveraging 5G and NB-IoT communication technologies, they ensure efficient and accurate data transmission and processing.

The project's goal is to address elderly health monitoring challenges through innovative design and smart technology, enhancing quality of life and building a safer and more convenient health management ecosystem.

Inspiration

I was inspired by my grandfather's experience. A long time ago, he got a benign cancer for some reason. Fortunately, it was found in time and cured after treatment. At that time, my mother went to many hospitals and finally found the right treatment to prevent a worse outcome. After this experience, I realized that if there were a device to monitor the physical condition of the elderly at any time, many health problems might be detected and dealt with earlier.
After that, Grandpa still needed to go to the hospital for a check-up every year, which made me always worry about his health. In addition, seeing that many elderly people around me are also facing similar health management problems, I thought of designing a simple and easy-to-use device that allows elderly people to stay on top of their health status without relying on frequent hospital visits. Such devices can help detect potential health problems in a timely manner.
Through this project, I hope to design a wearable health monitoring device that can provide the elderly with real-time monitoring of key indicators such as blood pressure, heart rate and blood sugar, and automatically notify family members or doctors in emergencies. This not only allows the elderly to get timely help, but also allows the children to stop worrying about the health of the elders.

Initial research

Health monitoring the current situation in the country
.The smart health monitoring market in China is expanding rapidly, with the market demand driven by the pandemic and influenced by an aging population and increased health awareness. National policies supporting the promotion of smart elderly care, home health care and health equipment have further boosted the market.

Typical technologies include NB-IoT, 5G, sensors, chip technology, etc., which enhance the real-time monitoring and data processing capabilities of health devices.

Problems and shortcomings:
The domestic health monitoring system needs to be optimized in the fields of respiratory frequency monitoring and personalized health services. Some products have poor experience, such as wearing discomfort caused by inertial sensor applications. In addition, the market is insufficient in terms of professional talent, capital investment and technological maturity.
Distrust (distrust the results of the test or go to the hospital to confirm) (and hospital connection)
Wear discomfort (inconvenient too bulky)
Personalization

Information security

Reminder medication

With the deepening of aging, the elderly's demand for healthcare equipment is increasing.

Sudden accident

Mobility disorder

The smart elderly care market has gradually become an important application field of wearable devices.

lapse of memory

loneliness

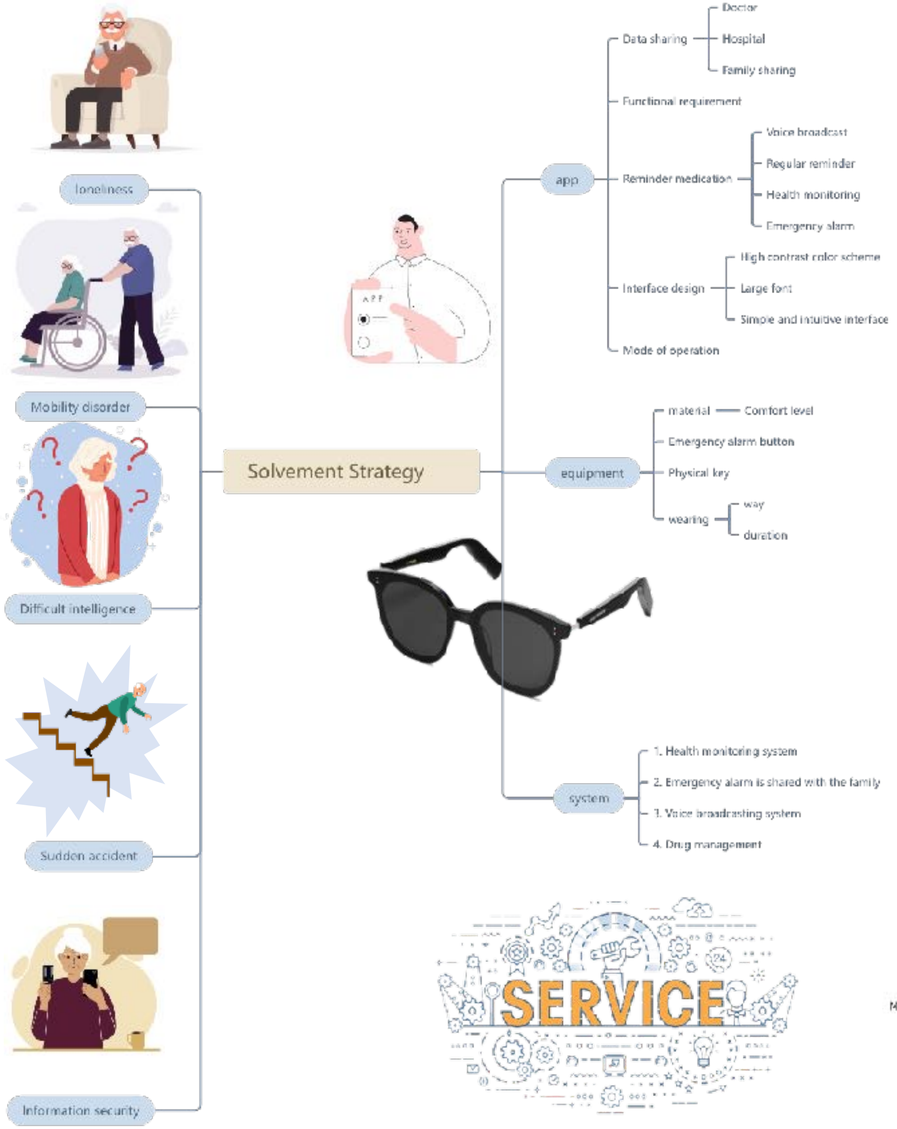
Hard to be "intelligent"

Smart bracelets and other devices can provide security and convenience for the elderly during daily monitoring and travel.

User Research

Mode of operation:

Equipped with physical buttons to prevent the touch screen from touching, suitable for the elderly who are not flexible in operation.
The key should be large and responsive, suitable for the operation habits of the elderly.
Functional requirements:
Health monitoring: real-time monitoring of key health indicators such as blood pressure, heart rate, blood sugar, and blood oxygen, especially for elderly people at risk of chronic diseases such as heart disease, hypertension, and diabetes.
Emergency alarm and family sharing: equipped with an emergency alarm button, once an anomaly occurs, you can immediately notify your family; Family members can view the health data of the elderly through their mobile phones and learn about their health status in time.
Voice broadcast: with voice reminder function to remind the completion of measurement, abnormal warning and medicine time, so that the elderly do not have to check the screen frequently.
Drug reminder: Provide regular medicine reminder function to help the elderly take medicine on time and prevent forgetting.
Hospital data sharing: Support association with community hospitals or doctor systems to upload data to doctors so that doctors can track health at any time.

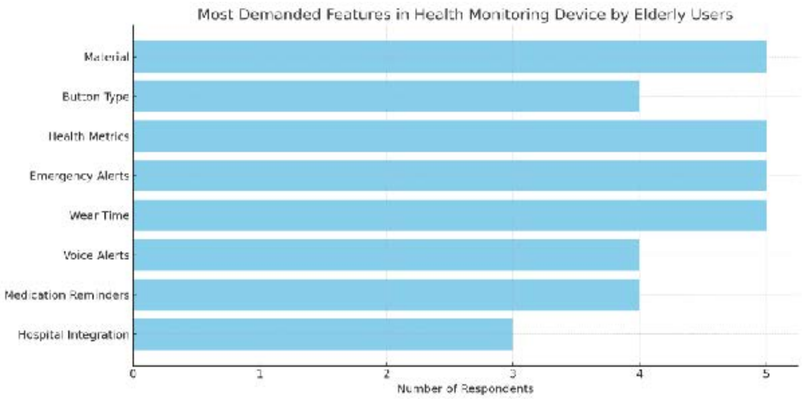


Material and comfort:

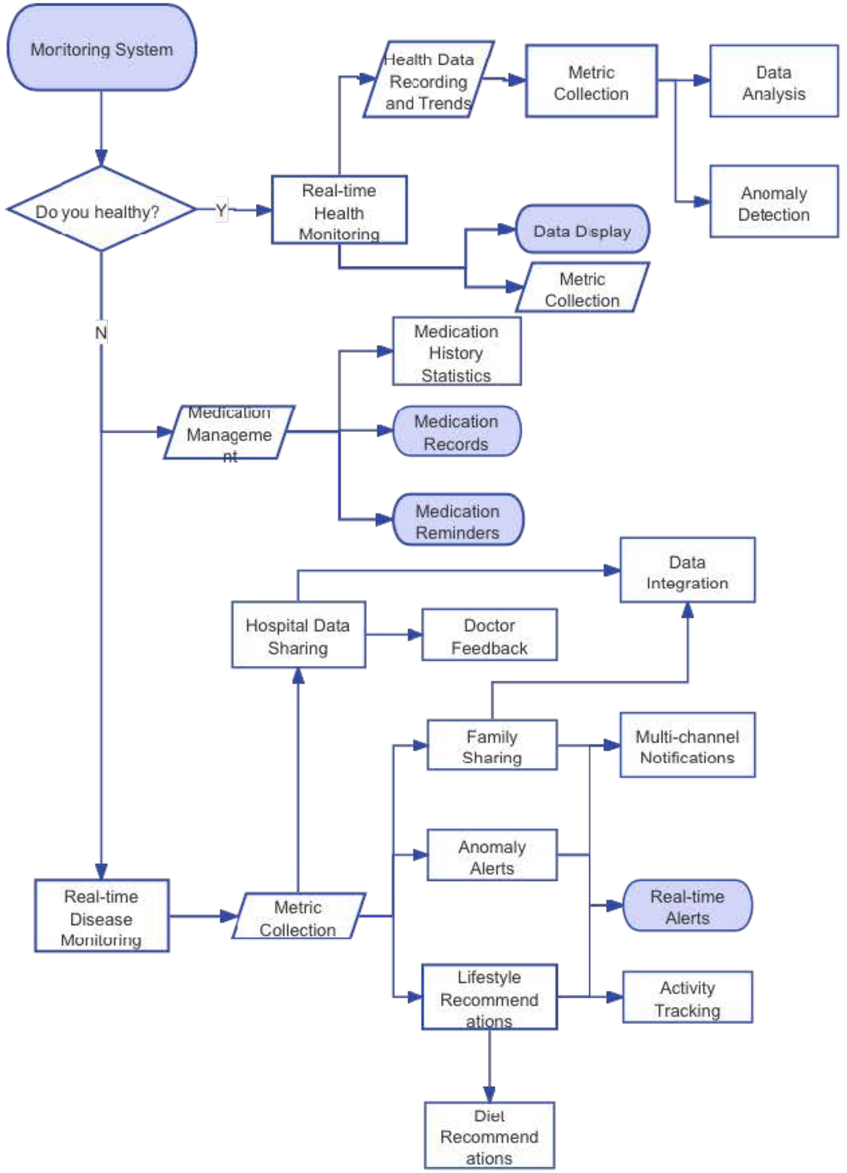
The use of soft, breathable, sweatproof cloth or silicone strap, suitable for long-term wear, avoid skin friction or allergies, especially in summer will not feel stuffy.
The equipment is lightweight, non-strangling, suitable for all-day wear, and does not affect daily activities.

Interface Design:

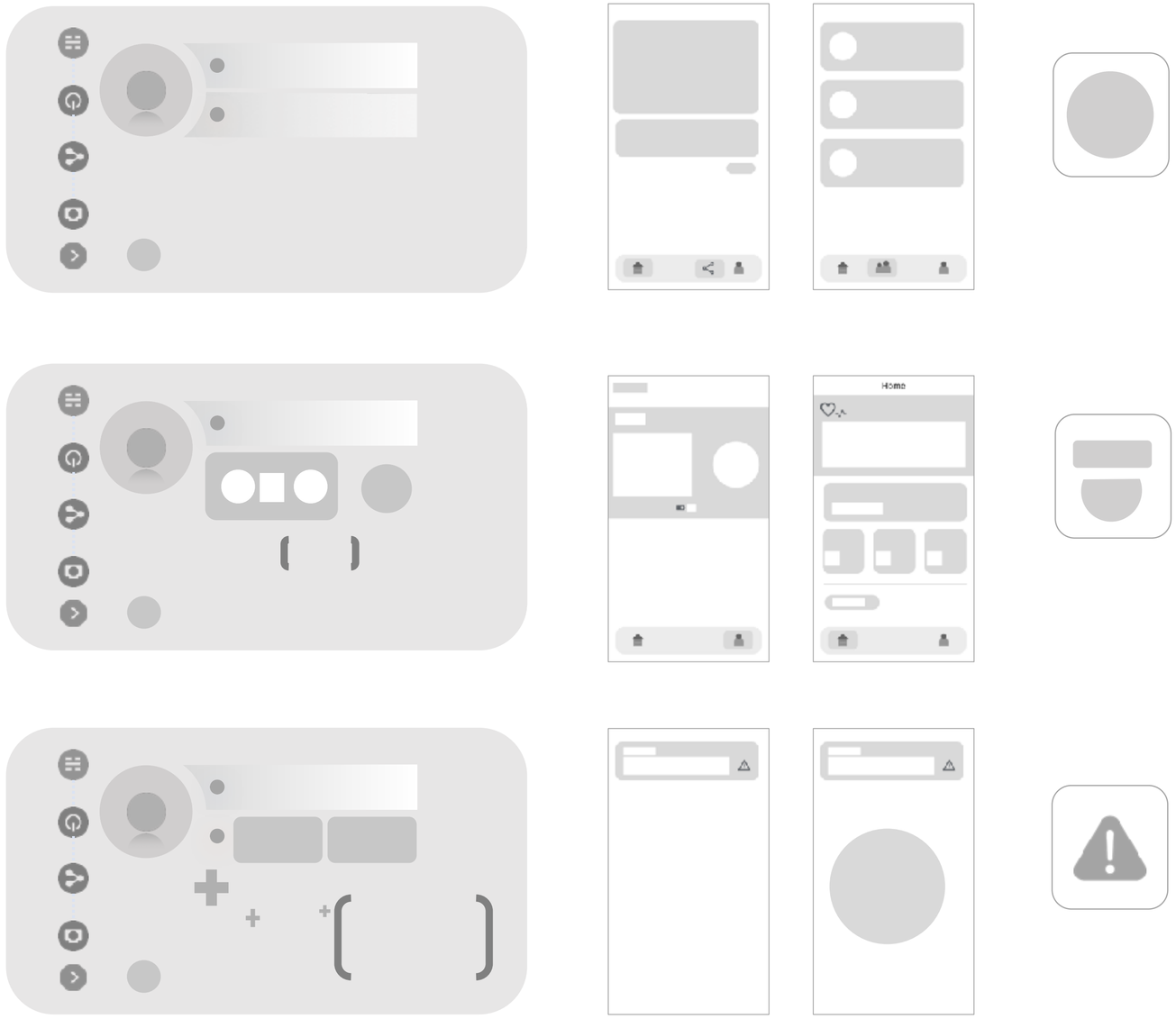
Large font and high contrast: the interface font is large, easy to read, with high contrast color design, convenient for the elderly to view when the vision is poor.
Simple and intuitive interface: common functions are displayed directly, the icon is clear, avoiding cumbersome operation, easy to understand and use



Development



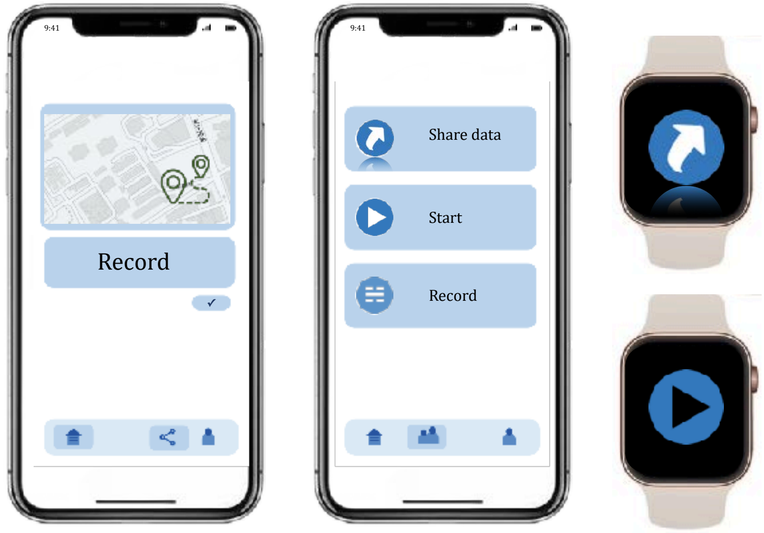
Wireframe



Interface

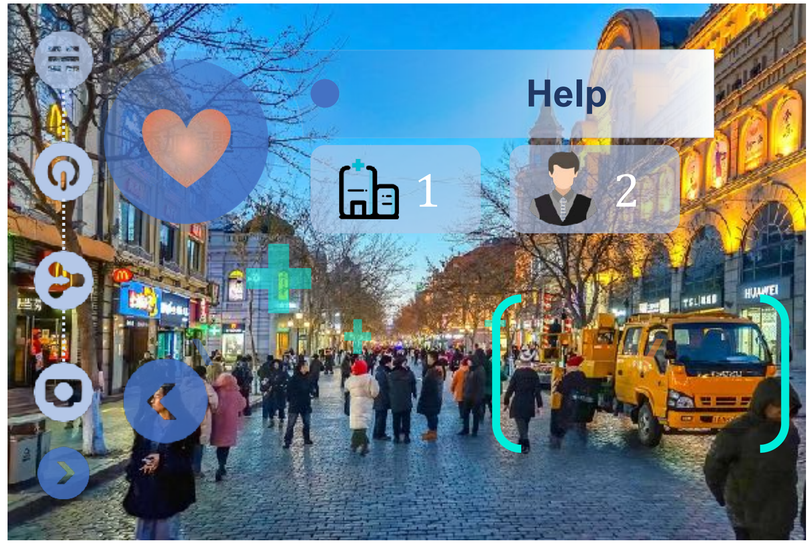
The design uses XR interactive augmented reality form to improve the health detection quality and stress feedback speed of the elderly. At present, the device needs to be improved in terms of functionality, ease of use and comfort, especially the aging design. Data synchronization, linkage and accurate monitoring are still technical difficulties, especially the accuracy of data in the state of motion needs to be improved.

Health Mode



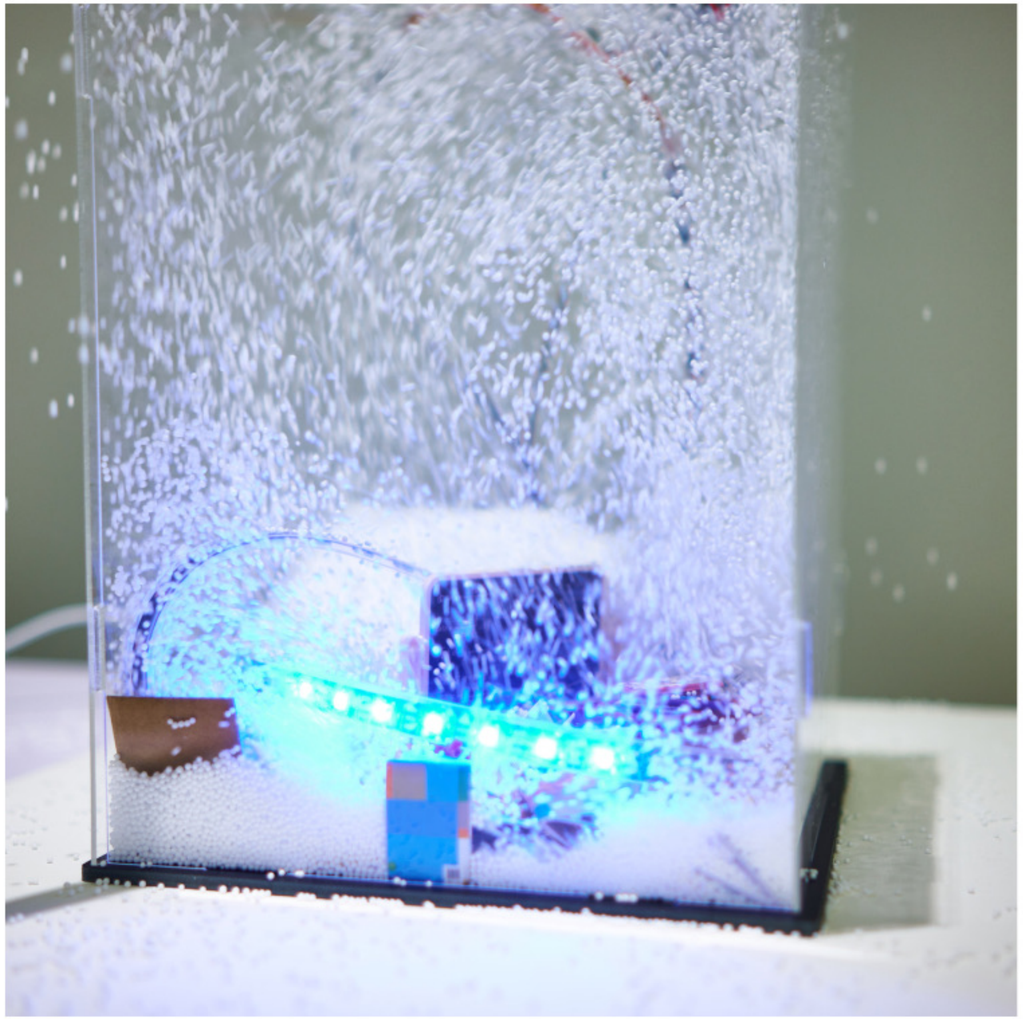
Disease Mode

Emergency Mode



Dreamscapes of Education

This project explores the impact of traditional and international education systems on personal thinking patterns and emotional development. Using dreams as a metaphor, I aim to convey the profound influence of education on my subconscious. Through an art installation, I attempt to express how the shared traits and differences of these two education systems have shaped my unique way of thinking in a non-binary and more multidimensional manner.



15cm*15cm*40cm box

Fan, MOSFET Driver Module, 9V Battery Clip with 2P Jumper Wires, 5V RGB LED Strip, Mini Model, Foam Ball

Inspirations

My learning journey revealed how traditional and international education systems uniquely shape thinking, balancing structure with creative freedom.

In my learning journey, I experienced a major shift when I transitioned from traditional education to an international school. Interacting with my former classmates, I noticed significant differences in our thinking patterns.

This made me realize how educational systems shape our thinking, affecting cognitive development, learning methods, and personal growth. Traditional education focuses on structured knowledge, while international education emphasizes creative freedom.

How was "I" shaped under these two educational systems?

Background

Personal experience

My education journey transitioned from traditional to international systems.
Traditional education:
focus on standardization and goals but restricte personal expression
international education:
encouraged freedom, individuality, and critical thinking
demanded better time management and responsibility

Social background

Both systems reflect different societal needs: traditional education values collective growth and fairness, while international education focuses on individuality and diversity. They are not opposites but complementary approaches to education.

"

Diary 1 (Traditional), 3 January 2018：During math class, the teacher suddenly asked me to answer a question. I froze, completely blank, and only managed to respond with a classmate's help. Although the teacher didn't criticize me, I felt I didn't do well. This made me pay more attention in class but afraid to speak up.

"

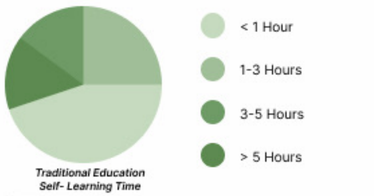
"

Diary 5 (international), 6 March 2022：In science class, I proposed a water cycle experiment idea, and my teammates supported and helped me carry it out. When the experiment succeeded, everyone clapped and celebrated. This warm atmosphere made me feel encouraged and more confident to try new things.

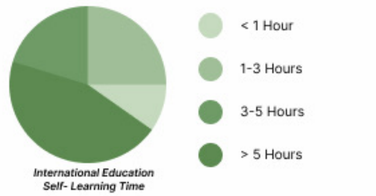
"

Questionnaire

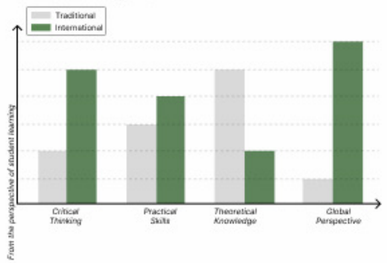
The survey questionnaire primarily targets students and teachers from traditional and international education systems. It aims to explore how these two educational models influence individuals' learning experiences, emotional states, and thinking patterns in practice.

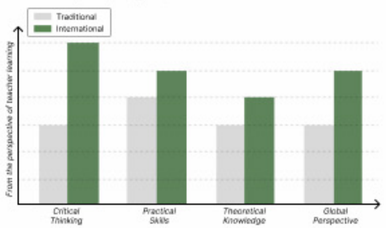


Traditional Education Self- Learning Time



International Education Self- Learning Time





Interview

Student in traditional education

Weekly exams have taught me to study efficiently and complete tasks quickly, but they have also made me reliant on instructions, lacking the habit of proactive exploration. I've become more accustomed to finishing assigned tasks rather than actively identifying problems.

Art classes require designing works that represent oneself, rather than following instructions to draw fixed content. This open-ended approach to learning is particularly effective in stimulating imagination.

Student in international education

Teacher in traditional education

In traditional education, I focus on systematization and efficiency, using textbook-based instruction and regular testing to ensure students grasp core knowledge. This results-oriented approach is effective, but it tends to reduce engagement among students who are not interested in exams.

My role is more like that of a facilitator, inspiring students to explore by designing open-ended questions or projects. For example, when studying literature, I encourage students to create their own short stories rather than simply analyzing the author's intent.

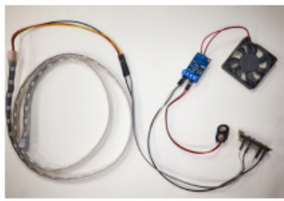
Teacher in international education

Summery

Different educational systems shape how we think, learn, and grow—traditional education builds efficiency and structure, while international education fosters creativity and independent exploration. Each system nurtures distinct aspects of engagement and thinking.

Construction of art installations

I combined elements of traditional and international education into a dreamscape, using blackboards and test papers to represent structure and sports and art materials to symbolize creativity, reflecting their impact on personal growth.



I used polystyrene balls to simulate a snow effect, creating a dreamlike atmosphere. A fan was added to blow the balls, making the scene more dynamic and surreal. Additionally, I incorporated LED light strip to enhance the visual effect and add to the immersive experience.