

# DESIGN WORKSHOP 2020 IN TAMACHI

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THE FUTURE A.I. WILL CREATE

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# Design Workshop 2020 in Tamachi

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### Tokyo City University students:

Reina Osato, Sayaka Kubono, Miku Shiraishi, Miyu Kato, Natsumi Kurei

### CHiba Institute of Technology students:

Takuya Oshima, Ayano Yoshidomi, Naoki Tani

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	Team 9	YABA2
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	Team 11	HABI
	Team 12	HongShi
	Team 13	アンニョンハセよろしく

## Epilogue

## Outline of Workshop

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### **THEME**

There is one theme(A.I.) and 13 keywords for this workshop.

### **A.I.**

Within the theme of 2020 A.I., thirteen Teams(1-13) of graduated and undergraduated students randomly selected one keyword of the thirteen (Leisure, Education, Entertainment, Dating&Love, Trip&Tourism, Eating&Dining, Relaxation, Making Human-Relation, Foreign language, Mobility, Health&Beauty, Fashion, Design).



## SCHEDULE

	2/5(Wed)	2/6(Thu)	2/7(Fri)	2/8(Sat)	2/9(Sun)	2/10(Mon)	2/11(Tue)	2/12(Wed)	2/13(Thu)
10AM		<b>Imaging</b> Theme / Project Planning	<b>Research</b> (Field work / Free time)	<b>Definition -</b> affinity diagram / diagrams / persona...	<b>Ideation</b>	<b>Prototyping</b> scenario storyboard L-F prototyping	<b>Prototyping</b> scenario storyboard L-F prototyping	<b>Test</b>  Preparation for PT	
11AM									
12PM									
1PM	<b>LUNCH TIME</b>								
2PM		<b>Preview -</b> themes	<b>Culture</b> <b>Experience</b> (KMU only)	<b>Company tour &amp;</b> <b>Lecture</b> (DoHyung Kim) (IDEO)	<b>Mid-check</b>	<b>Prototyping</b> scenario storyboard L-F prototyping	<b>TEST</b> UT Role-playing	<b>Presentation</b> (Panel)  Documentation	Day-Off
3PM	<b>Orientation</b>								
4PM	<b>Grouping &amp; ice</b> <b>breaking,</b> team name	<b>Research -</b> desk.R. / observation ...			<b>Ideation</b>				
5PM									
6PM	<b>Welcome</b> <b>party</b>							<b>Farewell</b> <b>party</b>	
7PM									
8PM									



# Memories

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## Orientation & Welcome Party



## Field Research

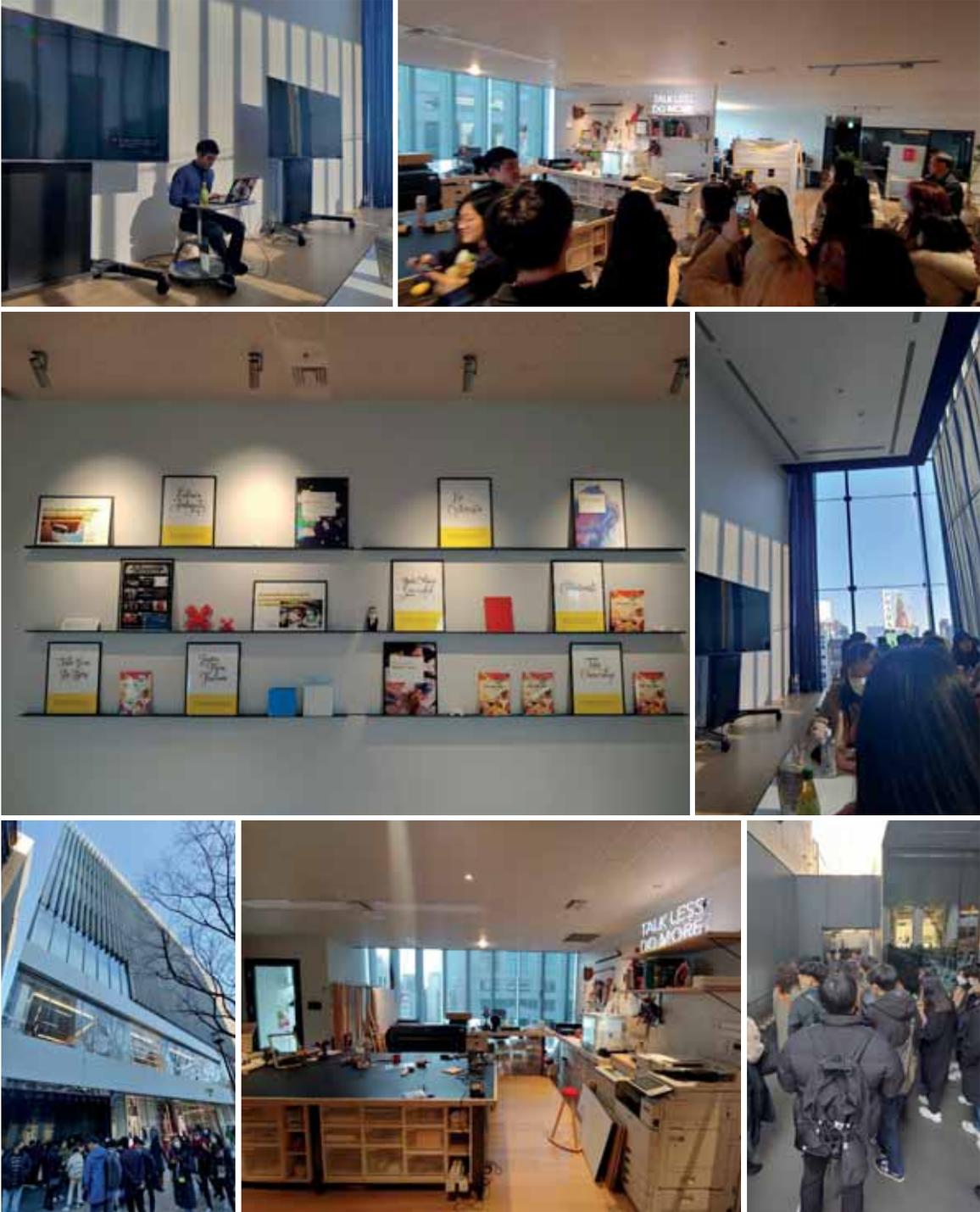


Design Work



# Memories

## Company Tour\_IDEO



Cultural Experience



# Memories

## Mid-Check



## Final Presentation



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Farewell Party





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# TEAM PROJECT

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## THE FUTURE A.I. WILL CREATE

Team 1	HanA Izzl
Team 2	Team II Kannji
Team 3	A1OK
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Team 11	HABI
Team 12	HongShi
Team 13	アンニョンハセよろしく

# HanA Izzl

A.I. x LEISURE

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Tani Naoki

Oshima Takuya

Shimizu Genryu

Park Juyeon

Park Hyeongwoo

CHoi Harim



## Concept



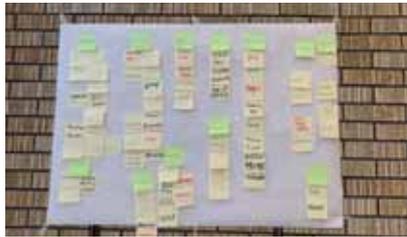
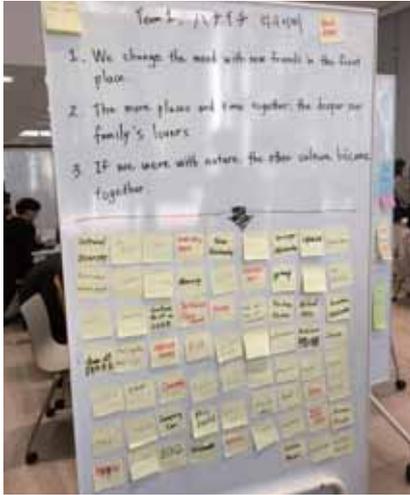
# Cotch



### We Change the mood with new friends in the first place

Our products and services offer fun meeting new friends through games. Users can enjoy new games provided by the service in the nearby park. A.I of our service provide a new game to understand the environment and user status of the day and to play with new people around. Through the game, User can easily meet new friends by making awkward and uncomfortable atmosphere into pleasant and comfortable atmosphere.

## Brainstorming



First, we thought about leisure. We used the idea of leisure to pick keywords and choose the main theme. Second, we thought about products and services that applied A.I technology to the main idea, and we came up with the final idea through user scenarios and idea sketches.

## Field Research



We visited Siva Park, a nearby park near the Tamachi campus of the University of Sibaura. Through an idea meeting the previous day, we decided on the place as a park, visited a nearby park, and took pictures of the park with the users. Through Field Research, we could see that the park's vast space was being wasted, and that each person was far away in the park.

# Persona



age : 80  
family : live alone  
personality : active, positive

problem :  
1. have little opportunity to engage in outside activities  
2. limited amount of exercise to do

features :  
1. exercise often for my health  
2. want to live an active and healthy life  
3. want to know another generation



age : 45  
Personality : negative, rational

problem :  
1. tired of company life  
2. don't have much time to spend with family.

features :  
1. relieve stress through external activities.  
2. want to find an activity that can do with son  
3. want to do something new



age : 18  
personality : Sensitive, Stressful

problem :  
1. have a stress in University entrance exam  
2. boring relationships

features :  
1. want to relase stress  
2. want to make new friends



age : 6  
personality : Easy-going, Mischievous, Curious

problem :  
1. can't play alone in the park  
2. he has no peers to play with during family piknic

features :  
1. want to go out alone and play with friends in the park or playground  
2. want more fun during playing

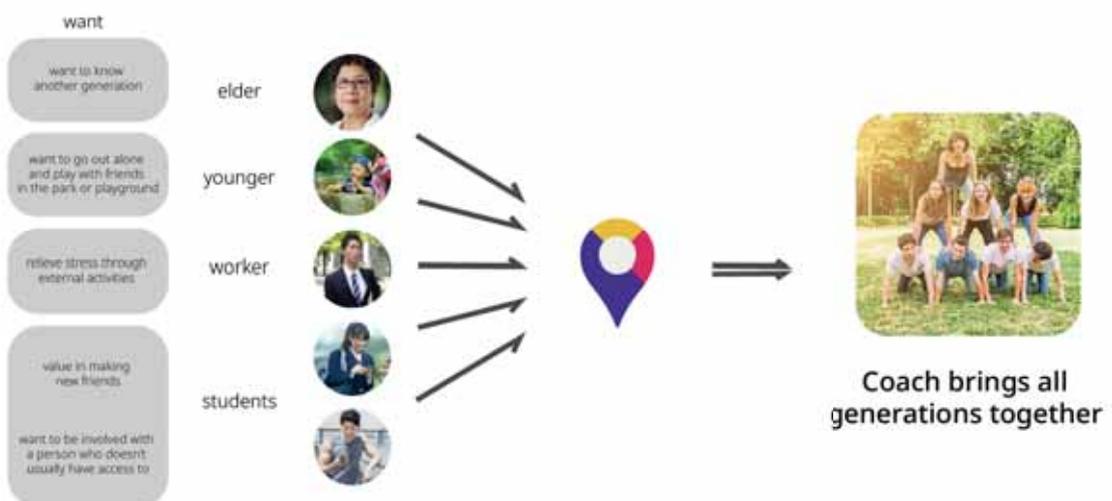


age : 20  
personality : Introvert, Shy

problem :  
1. few opportunity to play with friends  
2. difficult to gather people when he do sports in outside

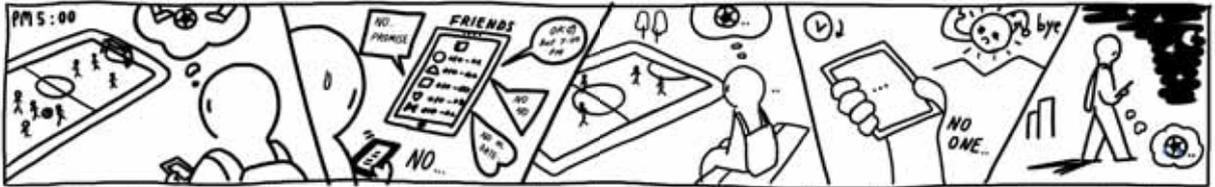
features :  
1. want to be involved with a person one doesn't usually have access to

# Service Scenario



## User Story Board

### Before



After class, he has nothing to do and he sees playing sports. He contacts his friends because he wants to exercise. But it's hard to make an appointment. He envies others and waits for contact. In the end, he couldn't find a friend to work out with a lonely return home

### After



After class, he has nothing to do and he sees people gathered. He sees the 'cotch' gathered in front of the product and searches for the 'cotch' and installs the app. He moves to the place where 'cotch' tells him He meets new friends through 'cotch' and enjoys them

## Branding



こっち

come here, gather here



creative, imagination



energetic, man, fresh



woman, emotional



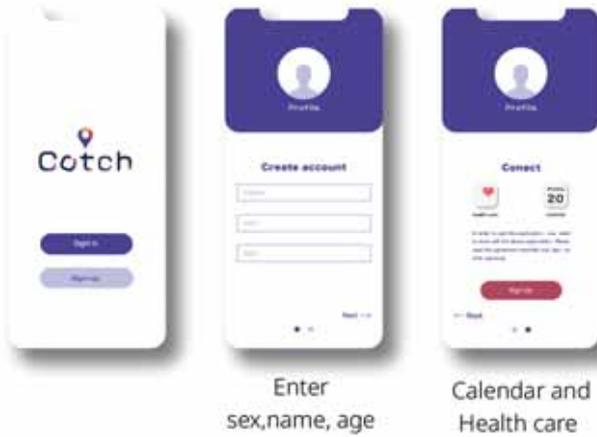
map  
gather in this place

# Product



# UI Prototype

## ■ Sign In



## AI gives us a new experience

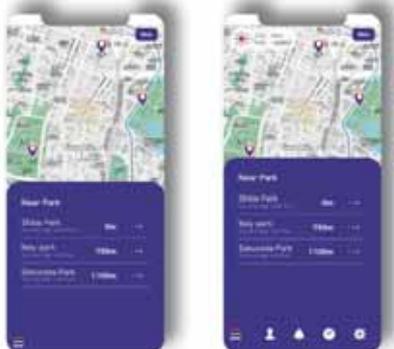
This APP recommend user the new game and connect user by the new game created by AI

## ■ Map

In the park



Switch between the park map and whole. User Know where it will be held. Check Rule explanation.



Outside the park

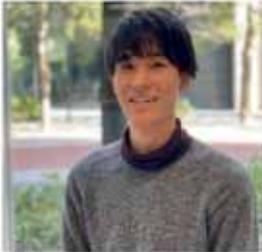
## ■ Notification/Plan



user in the park send notification when the game is decided. Check game plans in the park.

# After workshop

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## Tani Naoki

This workshop was a very exciting experience for me. Knowing the knowledge and values of different cultures has broadened my thinking about design. Thinking of idea proposals from stories requires various techniques. So it was a good opportunity to test my skills. Korean technology are amazing. I was inspired by them and I did my best. Thank you!

## Oshima Takuya

In this work shop, I could know a lot of new thing. I haven't ever experienced this process, so I learned a lot. Korean students are capable and I relieved this group work. And I realized English skill poor. I experienced the difficulty of communication. I can apply to future activities. It was more fun than anything. Thank you !!



## Shimizu Genryu

Group member can do things I don't know, can't do and and can't do well. I realized that my experience, knowledge, and abilities were still poor. It was not easy to communicate, but I learned a lot of fun. It was a very good experience for me.

## Park Juyeon

I enjoyed this workshop with my friends from other cultures. There was much to learn from Korean students and Japanese students who had different ideas. It was a good time to understand and learn about other cultures during the workshop.



## Park Hyeongwoo

Working with Genryu, Naoki, Takuya was great experience. I'm really surprised about their great work during this workshop, and I got inspired by their high passion. I hope to see them again in Tokyo. :)

## Choi Harim

The most memorable thing is to do gestures and use English to explain korean ideas to Japanese friends properly. I can understand the japanese culture while eating and working together. It was 最高 time!



# Team I I Kannji

A.I. x EDUCATION

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Lim Juhyeong

Hirabayashi Kento

Tanaka Issei

Fujisaki Hikaru

Yakawa Kana

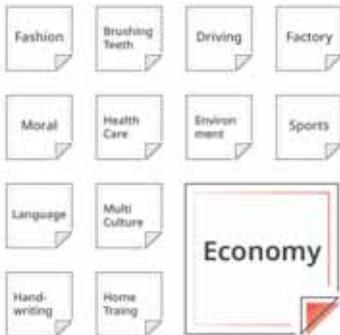
Oh Minkyu



# BrainStorming

## A.I. x EDUCATION

What comes to mind when you see the word "EDUCATION"



## ECONOMY

What comes to mind when you see the word "ECONOMY"

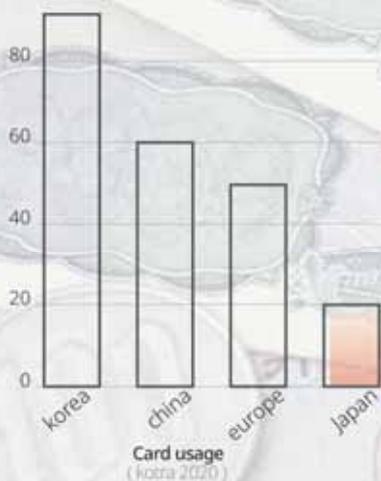


## Keyword

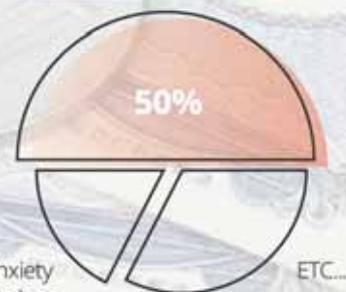
After selecting a keyword, start desk research.

Let's research about  
**Cash & Card**

- Japanese card use rate is 18% (korean 89%, China 60%, Europe 50~30%)
- Japan government intends to increase the Japanese card usage rate by 40% by 2027.
- people worry that personal information will be leaked if they make cards.
- **People do not feel uncomfortable using cash.**
- Due to the nature of Japanese people, purchasing in cash is common.



### Anxiety that seems to waste



Why are you anxious about using your card?  
(ask 69 univ students)

## Problems & Goal

### PROBLEMS

- People do not feel uncomfortable using CASH.
- People think that if they use a card, they will waste money.

### GOAL

to Highschool Student

Give **an experience of Using Card**

Let people know how comfortable it is to use CARD.

Reduce the anxiety that people are likely to waste.

**Encourage card use and eliminate stereotypes.**

## Persona



Ikuda Ikan / 17  
High school 3rd grade

### Character

Active ————— passive  
Conservative ————— challenging

### Behavior

- Receive allowances in cash from parents.
- I have used SUICA and have never used a card other than it.

### Context

- There is no inconvenience to spend cash now.
- Carry a big wallet and a card holder with a suica.

### Activities of Highschool Student

What they do and what is pleasant activity?



## Make a Small Society at high school Festival

Why did we pick the Festival and what it mean.

At high school festivals, people become sellers of merchandise that sells takoyaki on their own, service providers who prepare for performances and offer them in front of people, and buyers who buy yakisoba.

In conclusion, the cultural festival is a small society created by students.

### Cashless

### A.I. helps, coexist,

### Create a small Society

## Activities at Festival

Step	Prepare	During the Festival	Remove
Activities	Shopping, Installation, Making, Prepare change, ...	Meet Friends, Take Pictures, Get bouchure, Watching a movie, Visit girlfriend's class program, Buying Takoyaki, Throw away trash, Change T-shirt, Walking around, Selling Things, Make Food, Doing a Contest, ...	Removing installation Trash cleaning Income calculation ...
Bad Experience		Too long waiting line / Products sold out / When and where the contest begin / Lack of money / Want to play more / Hard to find Trash bin / ...	Hard to calculate income
How to solve		Provide updated information in real time(Map, Utilities, Time Schedule, ...) Provide status information and warnings based on your balance Recommendation based on user's status and needs	Card Use

## | Provide Card case with A.I.

**Rapid change** from cash society to cashless, it **gives anxiety** to japanese who are sensitive to change.

**it changes Thicker and thinner** as how much they have

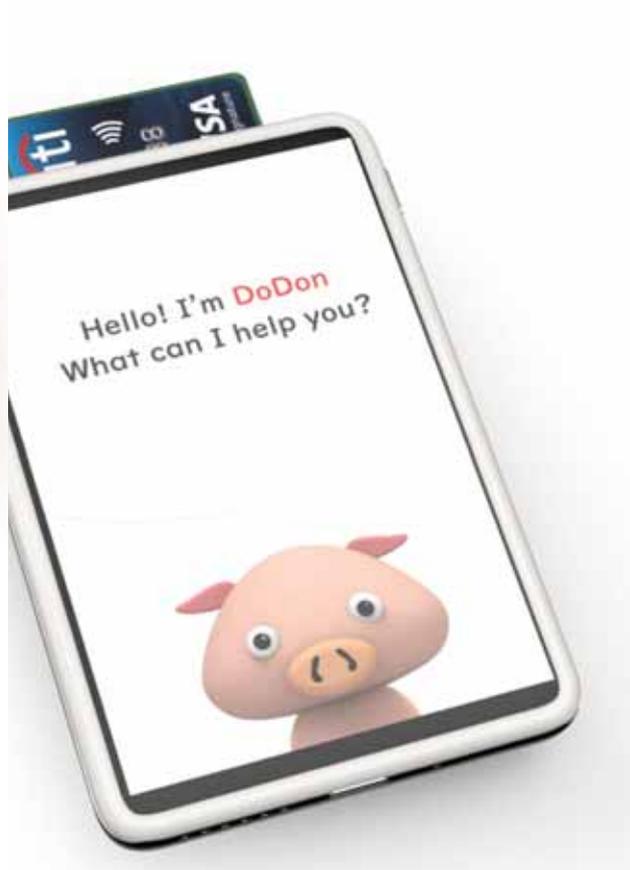
## | DoDon

# DoDon

A small Society with Cashless & A.I.



## Product Design



If the balance of the card is large, the product swells and thickens.  
If the balance of the card is light, the product becomes thin.

## GUI Prototype





# After workshop

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## Lim Juhyeong

It was great to be able to share a variety of ideas through different Japanese students and Korean students. I hope that this good exchanges will continue in the future.

## Hirabayashi Kento

At first, I was worried that I would be able to get into a single high school student group and be able to do it properly, but since the seniors were kind to me, I was able to enjoy my activities. It was a good experience because I would do the same thing when I entered college.



## Tanaka Issei

Before PBL, I heard bad stories about Koreans. But the Koreans were kind, nice and the same as the Japanese. PBL has given me a good image of Koreans.

## Fujisaki Hikaru

It was my 4th time and last workshop, but I was able to work on this workshop with a fresh feeling thanks to young energy of everybody. I think that our team is good team. Our members have a different characters ,specialty fields, good at doing each person. I want to participate in a workshop again... (I'll graduate next month)



## Yakawa Kana

This time gpbl was very valuable to me majoring in product design. In everyday classes, emphasis has been placed on the structure and shape of objects, but this time it was the first field to challenge such as AI and GUI. At first, I was confused by differences in way of thinking and values, but I was glad to finally understand a little. In addition, I wanted to be a designer who can do a wide range of designs with this opportunity.

## Oh Minkyu

In Japan, everything was different when I did the design that I always did in Korea. Different approaches to the way they think, the order of importance, and the approach to the problem have made my thinking flexible. I think this valuable experience will be a big foundation for my design in the future. It was a really good time.



# A10K

A.I. x ENTERTAINMENT

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Hada Kohei

Yoshidomi ayano

Nakao Kaede

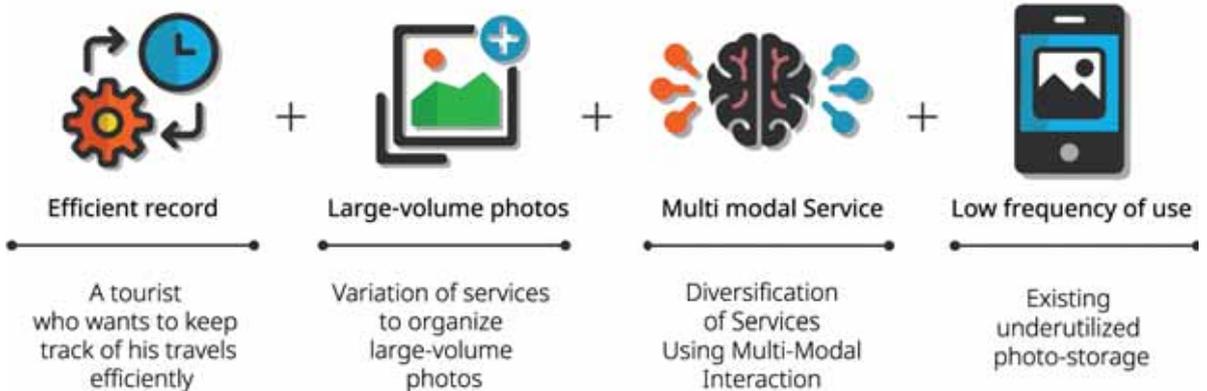
Kim Yejin

Kim Hyunjin

Kim Jihyang



## Background



### Multimodal Interaction-Based Data Editing and the Activation of Travel Data through Synesthesia



Our team was feeling tired of managing the photos and video data generated during the trip, and basically had questions about why tourists were filming. We used very little data from the gallery, and we tried to solve this problem. The main purpose is to efficiently edit the data and increase the frequency of data usage.

Efficient editing of data after travel



Data that is over time but feels real

Our team focused on these two concept ideas.

# Persona

## Persona #1 : Food Trip

### Profile



A place of residence	Tokoy, Japan
Sex	Woman
Age	27
Occupation	Patisssier

### Personality

- Character**
- The spirited show-off who can make friends with anyone full of curiosity immediately
  - Like to be in the limelight (Attention seeker)
  - Relieve stress by eating
- Values**
- She values quality and the boundaries between work and life must be clear (Work-life balance)
  - To be recognize by others
- Goals**
- Want to eat everything other do
  - Want to feel the memories of trip
  - Want to be compensated of investment

## Persona #2 : Landscape Trip

### Profile



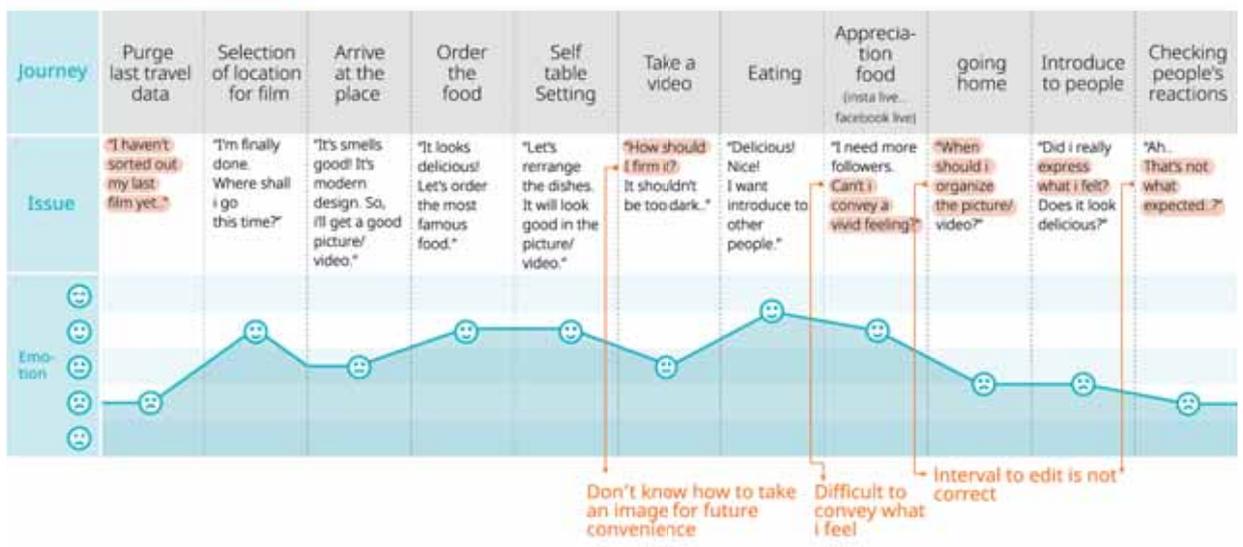
A place of residence	Busan, Korea
Sex	Man
Age	22
Occupation	student

### Personality

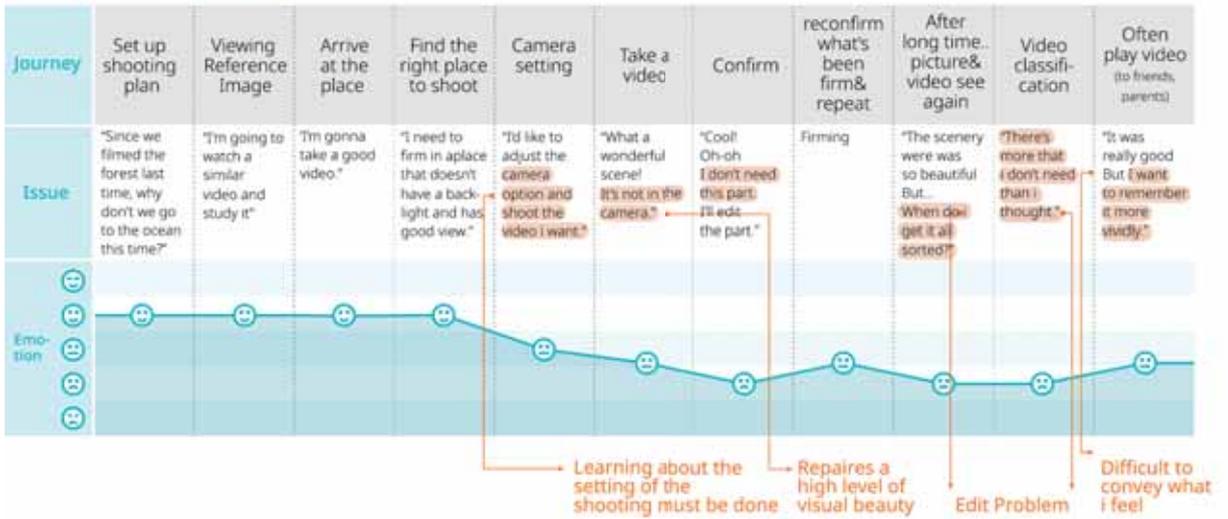
- Character**
- Emotional, Sensitive, Meticulous, Be-self asserlive
- Values**
- Old photographs
  - Memories of travle
  - Beautiful sight
- Goals**
- Want to open picture/video exhibition
  - Want to share the memories i felt
  - Want to increase the efficiency of the trip memories

# Customer Journey Map

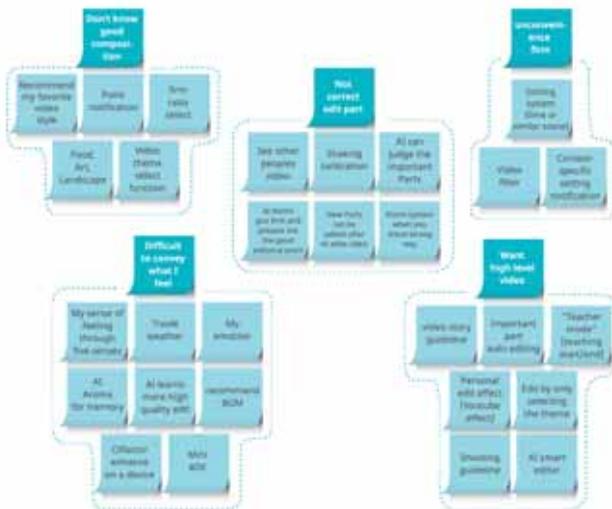
## Persona #1 : Food Trip



**Persona #2 : Landscape Trip**



## Brainstorming



Our team conducted the data around the major Pain Points from the Customer Journey Map. Since then, we have collected similar ideas and selected the main functions. Then, prototyping was carried out around key functions.

## Service Model



## Service Scenario



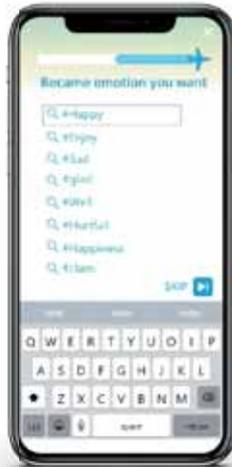
# UI Prototype



Home manu



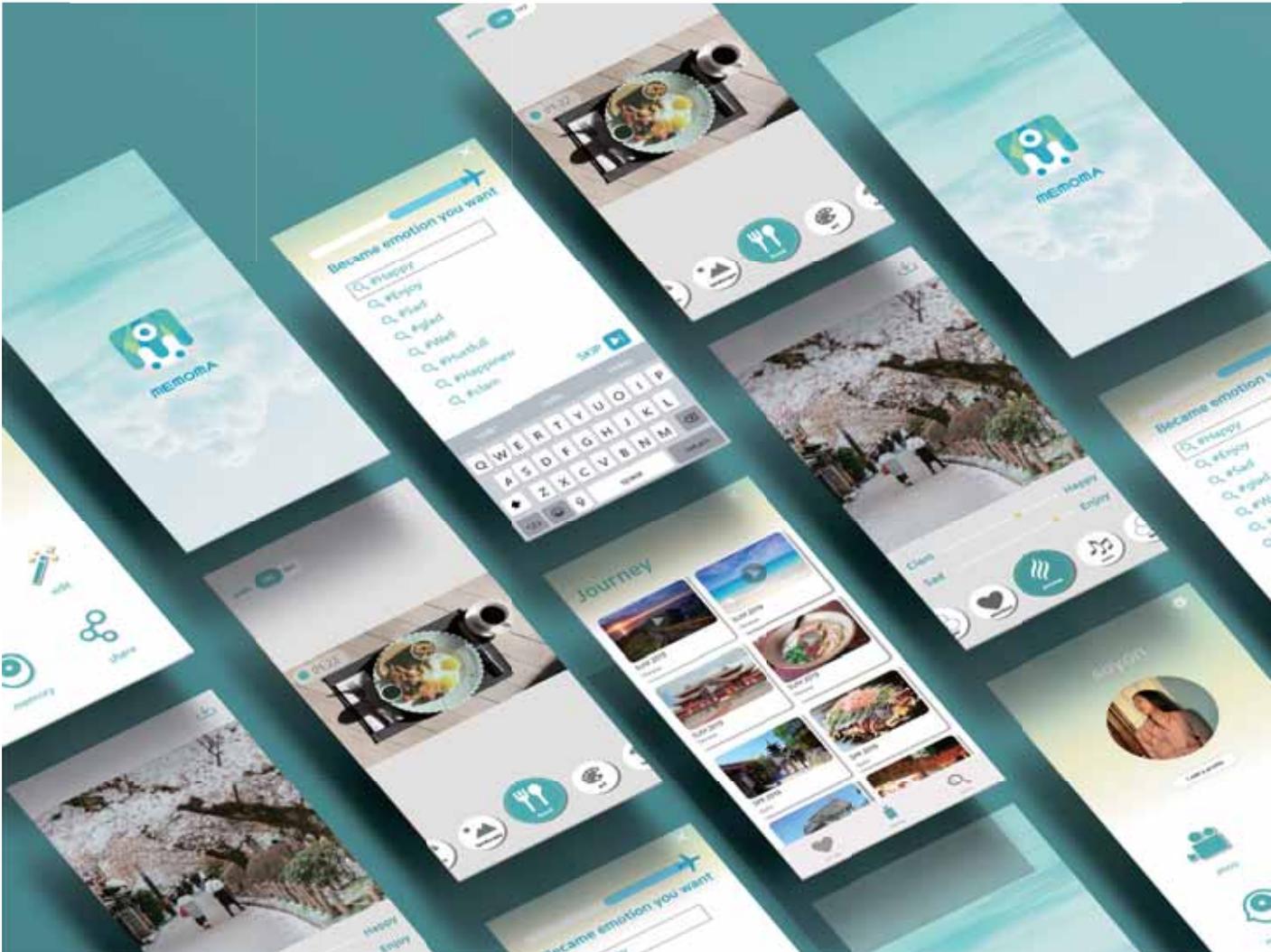
Firm guide



Hashtag search



Keyword kategorie



## Product Prototype



reference image



2D Sketch



Remember  
Your  
Travle memory  
By synesthesia



# After workshop



## Kohei Hada

The language barrier made it difficult to communicate and the theme definition was too broad, but it was a fresh and good experience.

## Yoshidomi ayano

It was uneasy, but was able to work thanks to everybody happily without being able to speak English. Will be strengthened for a future activity.



## Nakao kaeda

I was surprised at the high level of design skills of Korean students. Good stimulation from the workshop.

## Kim Yejin

In fact, it wasn't easy to do team work with people I didn't know at all. Even the time to work was short. There was a misunderstanding because communication was not easy. But the process of work was very interesting. It was interesting to look at the same problem from different perspectives. I bring many good memories from Japan.



## Kim Hyunjin

At first, I felt that working with other people in foreign countries was very difficult. Over time, however, things went smoothly as each of them started to share their roles well and actively come up with their ideas. This workshop will be very memorable and I want to do it again if I have a chance next year.

## Kim Jihyagn

The early part of the workshop was hard because of communication, but I was impressed by the ideas of the Japanese students. Thank you for the opportunity to interact with Japanese students.



# AIAI

A.I. x LOVE & DATING

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Shin Jina

Tabei Kosuke

Kang Suji

Unotsu Ami

Osato Reina

Ha Seonghyeon



## Background



**Kokoro Sappari Sento** is an emotional interaction space using AI that helps people who are struggling with pain of love to start their next love with a fresh heart.



\* kokoro(心) : heart  
sappari(さっぱり) : refreshing  
sento(銭湯) : public bath

## Brainstorming

We brainstormed the problem of the theme in the team, and investigated the existing service to solve the problem, and noticed that there were not many existing services related to the broken heart.

We designed AI to help people who had a broken heart, interested in the combination of human and AI after a broken heart.



## Persona



### AIKO

- \_Female
- \_24 years old
- \_Office worker
- \_recently broken up with boyfriend

She has been dating a college junior for 3 years and recently broke up. She has done a lot to him but she doesn't know why she said that

## Aiko's 1day after broken up



people who had lost love would be able to improve by looking back on their past love experiences and sorting out their feelings.

## Ideation



## Concept

### Farewell

- services that focus on a broken heart doesn't exist.
- We designed AI services to help people who had a broken heart.

### Cleaning

- people who had lost love would be able to improve by looking back on their past love experiences and sorting out their feelings.

### Space

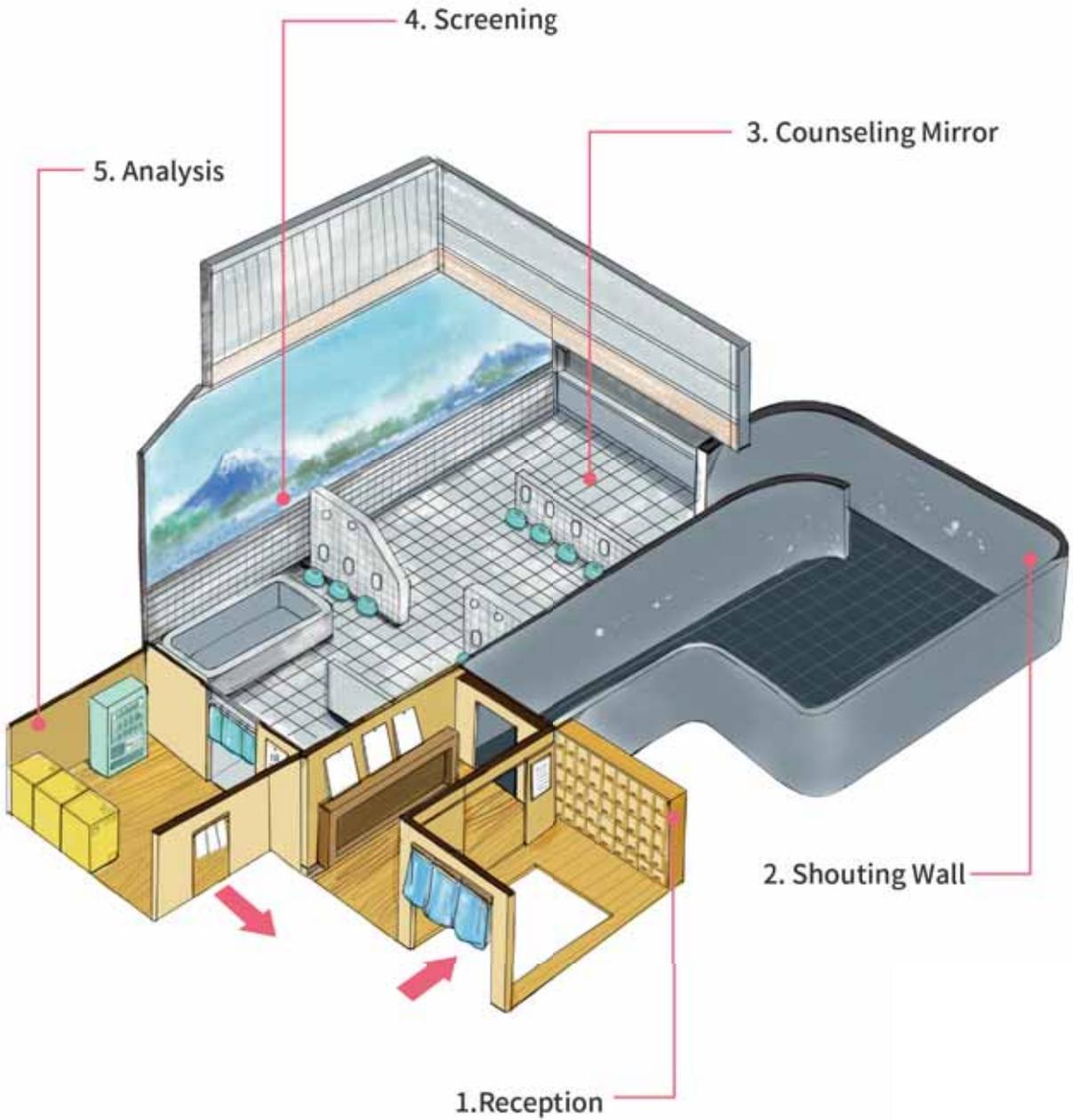
- Space provides the refreshing experience which cannot be done in house.
- Space can appeal to the five senses of the person and it offers more comfortable experience.

### Sento

- Sento make it easier to imagine what they are going to do.
- Sento provide users more emotional interaction rather than mechanical one.

**Make Feel Better & Meet Better Experience**

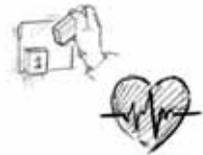
## Service Flow



The perspective view of Kokoro Sappri Sento



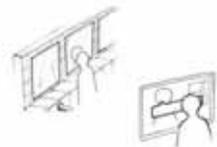
The user receives an introduction to this space (service) and a card to recognize the user's location.



The space that responds to the user's voice, relieves the user's emotions and collects data on the state of emotion.



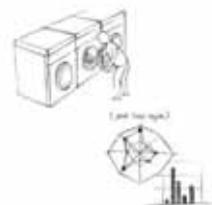
The user interacts with A.I (interface or virtual character) in the mirror and provides more specific information



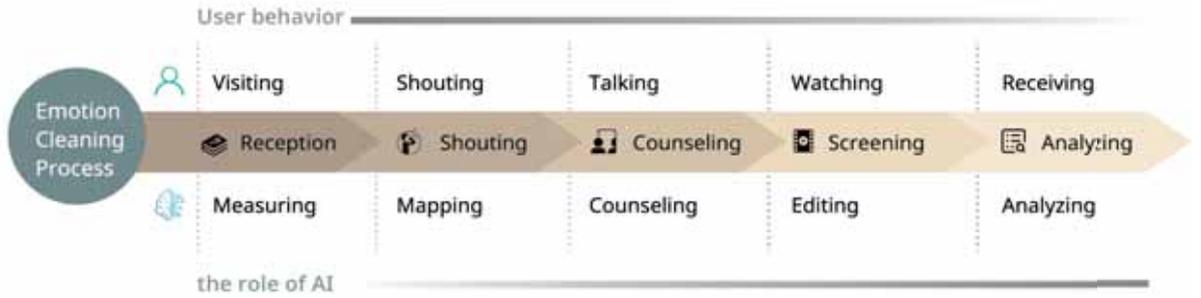
A movie edited by AI is screened that base on the information obtained in (3).



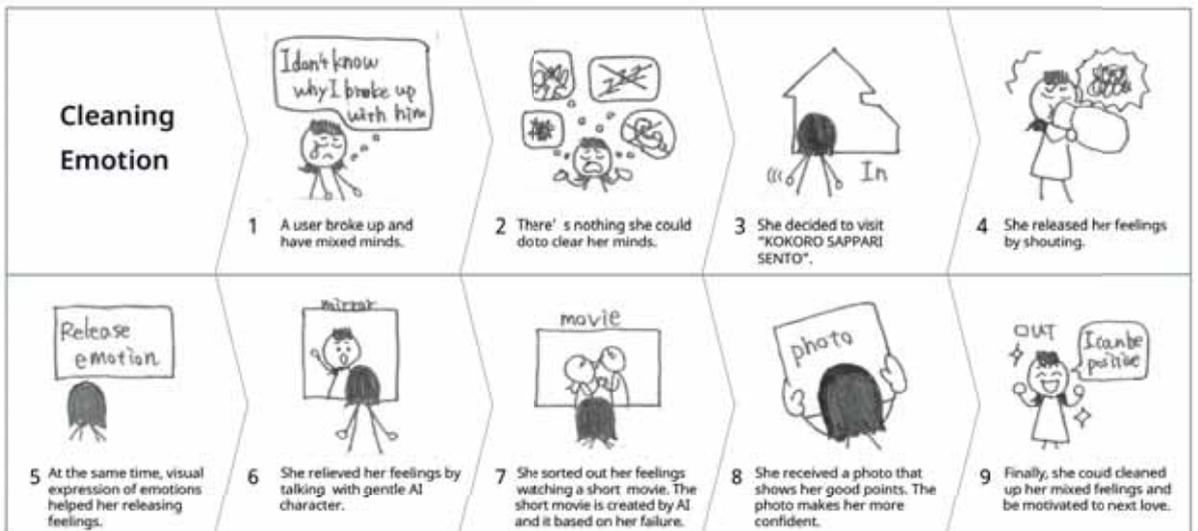
When the user puts the paper received in (1) into the washing machine, the AI analysis results such as the user's dating patterns, advantages, and advice.



## Service Process



## Service Scenario



# After workshop

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## Ha Seonghyeon

Learning the difference in design process between Japan and Korea, I could to think again about the direction and process of design. It was a great opportunity. Team members, thank you a lot!

## Kang Suji

I think I had a really valuable experience through this workshop. The process of working with Japanese friends was new and fun. Even when communication is not done smoothly due to language, it will remain a good memory to try and communicate with each other.



## Osato Reina

It was my first time to do everything I did, and it was a fresh experience and it was fun. During the discussion, We went back to the beginning many times, stopped, and had difficult situations, but I had a sense of accomplishment that we were able to go through to the end, and it was a very unforgettable memory for me to interact with people who grew up in different cultures, Japan and Korea.

## Shin Jina

The workshop was meaningful beyond the differences of language and culture, and I am pleased to be able to proceed with experimental and fun concepts. Thank you to all the members of the team for their hard work during the workshop.



## Tabei Kosuke

I was motivated to develop my skills in a week-long workshop. Having friends in Korea was also one big meaning for me.

## Unotsu Ami

I am now a member of society since April, and it was good to be able to have a great workshop at school before I graduated. I am happy to make good memories with my Korean friends.



# SeoulTama

A.I. x TRIP&TOURIST

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Jo Wonheung

Mochizuki Miyu

Muto Takumi

Yoshida Keigo

Mun Hyunhun

Jang Jaepil



## Concept

### REPIC IMAGE 3 ELEMENTS



#### Technology:Horogram

We are inspired the idea of "Hologram" by Love Death and Robots.

#### Product:Column

We thought about product in the image of flower.



#### Users's Perspective:collection fun

We went to Akihabara and realized there was ademand for copllection.

## Branding

### 1,You can make world with your own memory.

AI three-dimensionalize your picture.  
Our product "REPIC" mixes your picture with "Pic".

### 2,REPIC will bring back your memories.

Your memories that are made into three-dimensions will be more vividly remembered than the two-dimensional images.

### 3,You have only one "REPIC".

If you have one,you can use a lot of "Pic".

## Persona

Travelers wanted to visualize their special moments vividly, As a result, they take pictures, videos and buy souvenirs for the others. But is there any more other ways to vividly visualize our moments and experiences?



## Brainstorming



We started by listing out keywords related to our topic "Trip/Tourism". Randomly each of us choose 3 words to ideate an idea then posted on a white board. Subsequently, the brainstorming overall, destroyed the language barrier, allowed us to share our ideas much more easily.

## Brand Logo

Remember + Picture



REPIC

## Field Research



AKIHABARA-TOY SHOP



OMOITESANDO-LUSH

Since our design was related with souvenir and collectable figures/ toy. We initially visited Akihabara (one of the biggest downtown in Tokyo). We were able to find out the average cost of figures and how toys were being packed up. The lush store inspired us with the size and shape.

# Persona & Journey Map



**Ayumi**

Gender : female    Info : Young Son +5years  
 Age : 32                      Trip lover with son

Customer needs

- Record child growth
- Vivid / Clear memories
- Anytime,Anywhere Memorable
- To Prepare gift

STEP	arrive Souvenir Shop	buy	use our product	give present	1 year later
ACTION	I need to buy gifts for my daughters and friends but don't know what to buy (reasonable price)	find out how to use our product	View the product by sending pictures to our product	share photos by our product	remember past moments
WHAT WE SHOULD DO	Let customers know the unique selling point	give a manual	guide to use app		
SOLUTION IDEA	In-store functional experience	user centered App design	our own app and smart photo analysis	video letter	alarm today's - last year



**Yong Jun**

Gender : male    Info : Wealthy,  
 Age : 35                      Loves going abroad,  
    Social network Star

Customer needs

- Want to decorate his room
- Self Satisfaction
- Want to show off

STEP	arrive Souvenir Shop	buy	use our product	show off	1 year later
ACTION	looking for souvenir to collect (Recognizing things to collect)	find out how to use our product	to place in a cabinet	share in social network service	Searching for next trip to buy our items
WHAT WE SHOULD DO	Let customers know that this is a collectible product	provide manuals	guide to use app	easily upload in Instagram	
SOLUTION IDEA	show other item's virtual silhouette	user centered App design	Light energy	Provide short video with 3D modeling	Recommend other countries to buy our items

## Final Concept



Get a 'Pic' that can only be bought in tourist attractions.



Place the 'Pic' on top of 'Repic'.



Use the app to send pictures taken from the trip to the product.



## Function

### Remember Together



01  
You can Remember the moments you have travelled



02  
Share the moments with your close friends.



03  
Implement hologram of a person who you haven't been with. As if, you are with that person

### Enjoy our AI

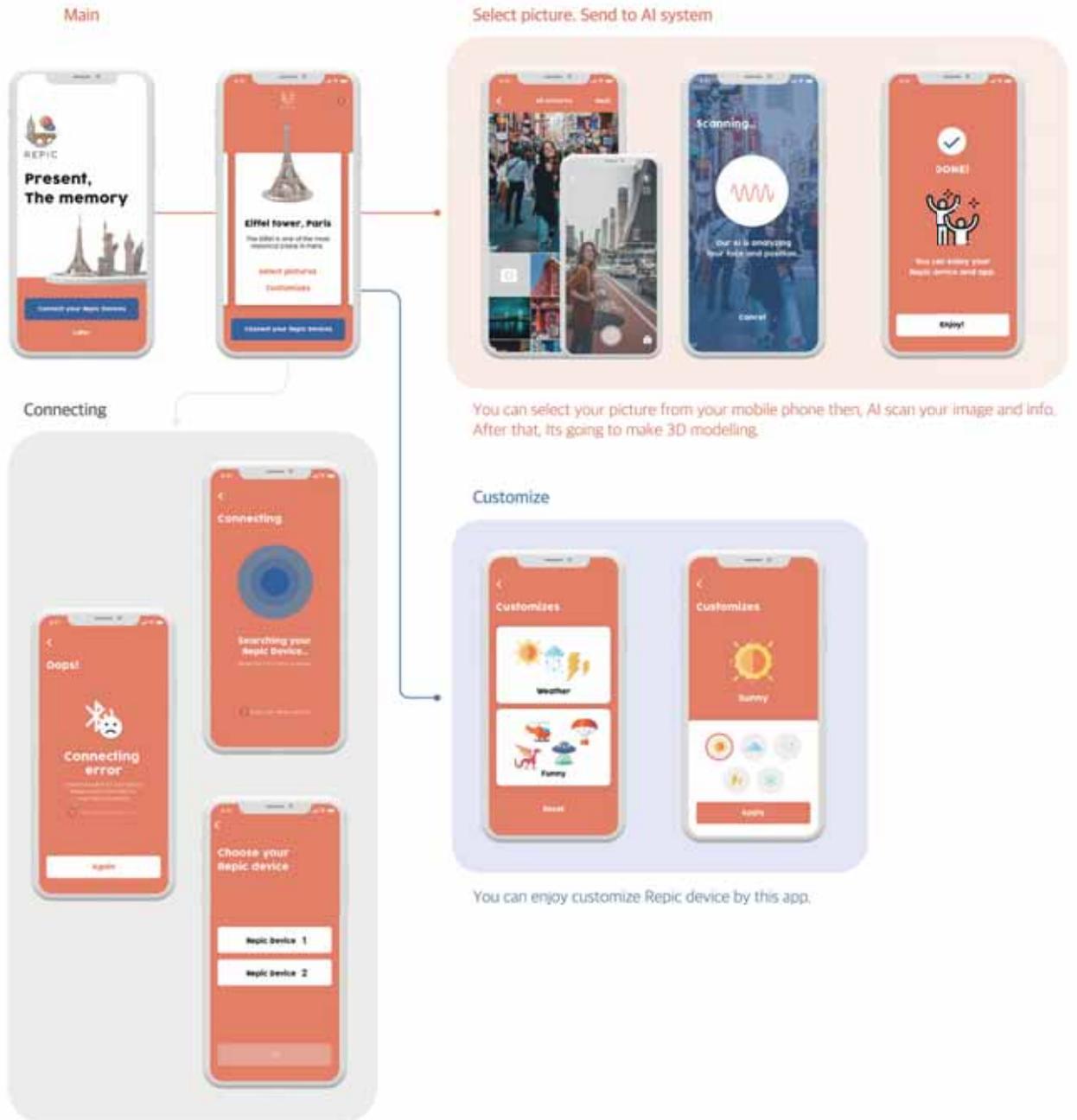


Users send data/face, place, body, weather to our AI server.

Our AI system read the data and analyze photos.

After that, it return to Repic product as a 3D data.

# Application Prototype



# After workshop

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**Jo Wonheung**

I'm really happy to meet new friends to work together in other fields. I was able to learn new inspiration and skills from them. It's very proud to learn Japanese culture through this Japanese workshop and complete a project with them. And thanks for our team members! I love you guys!

**Muto Takumi**

It was hard to think about service planning using AI technology. Yet, it was nice to work with Korean students skillfully. We got along so well with each other and actively discussed about our design. It's such a difficult gPBL.



**Yoshida keigo**

I was very happy to be our group in a short period time. Moreover, I also had gain huge improvement and motivation. Thank you all.

**Mochizuki Miyu**

Participating in this program was such a great experience. I was overwhelmed by the skills of Korean students, which stimulated me to learn more. I was also very happy to get along with everyone in our groups



**Jung Jaepil**

It was a great experience for to work on the project with everyone. The university students in Japan, the closest country, were a new opportunity to know how it was and a workshop was a good opportunity for me and my teammates to develop.

**Mun Hyunhun**

We all had struggled from a same problem " Language" Yet, throughout the end of this workshop, language wasn't such a barrier. Our team really did a great job and strived a lot to accomplish the task. Thank u guys & Hope to see you again



# 6 PEACHES



A.I. x EATING & DINING



Chiu Enyi

Ozawa Yuka

Kim Dohee

Nagasaki Aika

Kan Hyeyeong

Kazuho Takei



## Overview

Sometimes we have no choice but have to separate from our loves (family, friends, or lovers) and living alone. Living alone has its pros and cons, it's easier to feel lonely sometimes.

Although not everyone who lives alone is lonely, those who are lonely can become anxious and depressed. Moreover, most of them eat alone and eating alone may affect how much we eat, what we eat, and our mood

We would like to make service by enjoying tasty- food and keep a relationship with those we always miss but not staying beside us.



## Process



### Research

Background  
User analysis



### Define

Persona  
Customer journey  
Brainstorming



### Develop

Service concept  
Service flow  
Service Senario  
Prototype

## Background

We did some research and found out there are some problems that might be faced while people living alone. First is health problem, second is dining problem.

### Health Problem



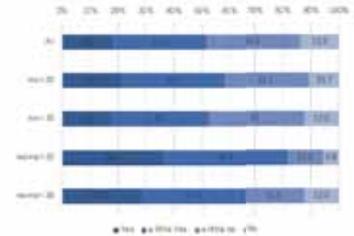
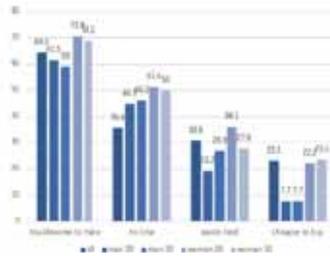
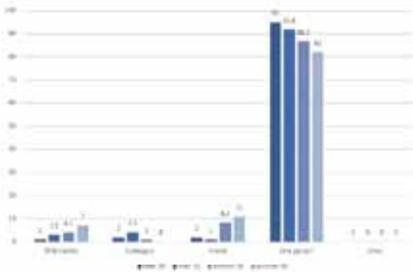
A couple of studies noted increased health problems among people who live alone. In the REACH study, people with or at risk for atherosclerosis (the cause of most heart attacks and many strokes) were more likely to die if they lived alone than if they shared a home.

Another study found that people who were lonely (regardless of their living situation) were less able to care for themselves and more likely to die.

## Dining Problem



There is a research about the dining problem for people who living alone in Japan that indicated that most people feel it's annoying to cook at home and always have dinner alone. Also, this research showed that over 70% of people would like to eat with friends.



### Whom do I usually eat with

The graph shows that most people eat dinner alone.

### The reasons that I don't like to cook

The biggest reason people don't cook is because it's annoying. Following by no time and not want to waste food.

### I would like to eat with friends

It showed 88.3% of women in their 20s want to eat with someone and men are 58.3%.

\* Reference: <https://www.health.harvard.edu/mind-and-mood/the-challenges-of-living-alone>  
[https://food.fordays.jp/wp-content/uploads/2018/01/research\\_201801.pdf](https://food.fordays.jp/wp-content/uploads/2018/01/research_201801.pdf)

## User Analysis

We have interviewed some people who are living alone and the age are around 20-30, students. We asked them about what kind of problems they are facing while living alone. The following is our insights.

### Their painpoints



Easy to feel lonely.



If cooking meal, it always happens food waste problem.



Being lazy and don't like to do household things.\*



80% don't like to eat alone since there is no one can talk to or it make they look like lonely person.



Difficult to deliver the food for one person because it cost much and food amount is too much.



It's not easy for couple to maintain the long distance relationship since the time difference was a challenge.

# Persona & Customer Journey



**Kazuho**

**He is**  
University student  
22 years old

**His background is**  
Live alone ( His hometown is far from school )

**He needs**  
He has a girlfriend from his high school but cannot meet often  
His mom' s cook

**He loves**  
Eating with friends  
Eating a lot



**Yuka**

**She is**  
Office lady  
28 years old

**Her background is**  
Her company sent her to other city to work

**She needs**  
She wants to make more friends  
Getting the promoton

**She loves**  
Fashionable things  
Eating healthy food



## # the young student Kazuho' s journey

# What are their journey?

<b>stroy</b>	He went to <b>convinience store</b> after school	He bought food for his <b>dinner</b>	He goes <b>home</b> eats dinner alone	He <b>cleans up</b> the desk after finishing the meal	He <b>calls</b> his girlfriend
<b>needs</b>	He needs <b>home made food</b>	He needs some one to <b>recommand</b> food to him	He wants to eat with <b>girlfriend</b>	He needs some one to <b>clean up</b> for him	He needs his <b>girlfriend</b> beside him
<b>mood</b>					
<b>problems</b>	He wants to have <b>home-made food</b> but <b>cannot</b> eat	He had <b>no idea</b> what to eat at convinience store	He <b>miss</b> his gf but they have <b>long distance</b>	He feels tired because he needs to <b>do everything</b> by himself	He felt <b>empty</b> again after finishing the call with his gf



## # the office lady Yuka' s journey

# What are their journey?

<b>stroy</b>	She is going to have <b>lunch</b>	The <b>restaurant</b> she wants to go is <b>full</b> of people	She goes to <b>other restaurant</b>	She <b>chooses</b> the menu	She <b>finishes lunch</b> and go back
<b>needs</b>	She needs someone to <b>recommand</b> restaurants near by company	She needs to know the restaurant is <b>full or not</b>	She needs to know other restaurants <b>information</b>	She wants to have more <b>different meals</b>	She wants to make <b>friends</b> who can have meal with her
<b>mood</b>					
<b>problems</b>	She feels <b>lonely</b> because she has to eat alone	There is no way to know the <b>information</b> of restaurants (including waiting time)	There are more dishes for 2people set but she cannot choose	She is <b>shy</b> does not know how to make friends	

## Brainstorming

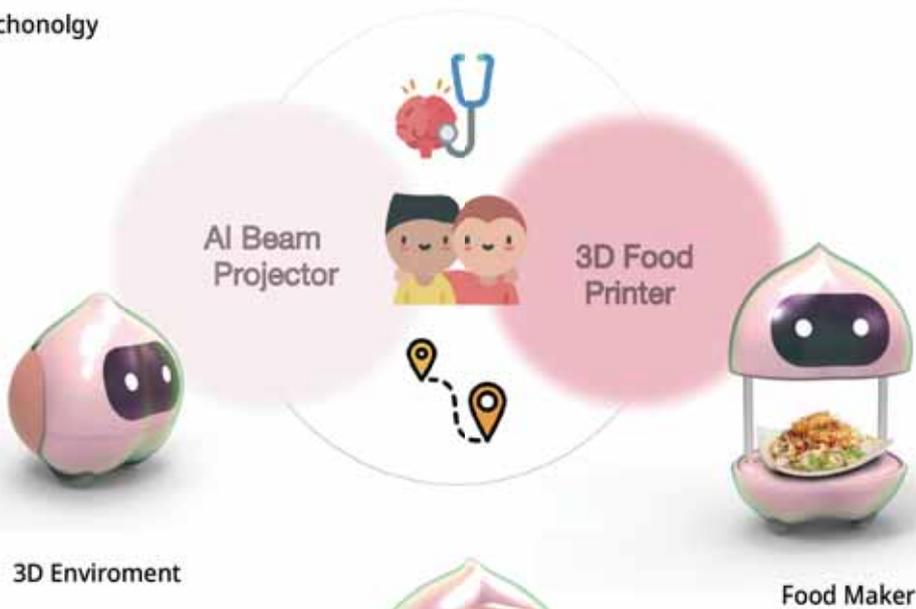


## Service Concept



Let's Eat Together and Talk !

Use AI technology



Use AI Beam projector to project 3D environment and 3D food printer to make healthy food.

Peopole could stay healthy and make them feel like beloved people are beside them which help them not only better their body healthy but also mental healthy

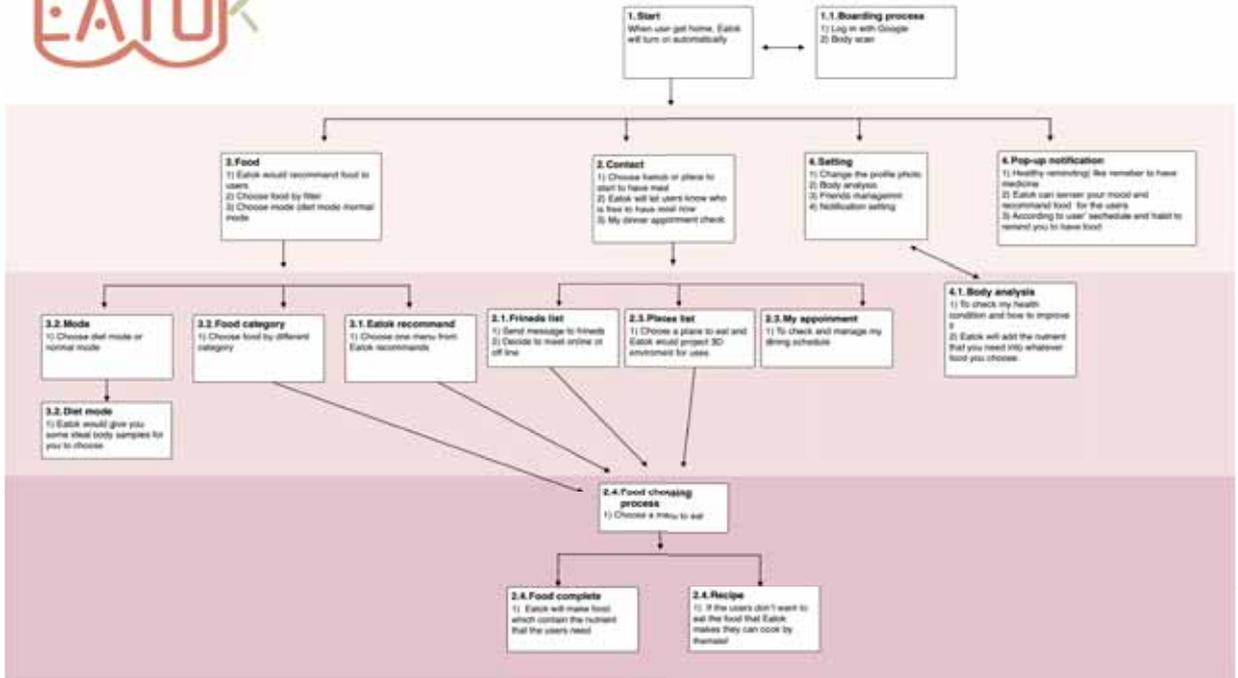


Backside

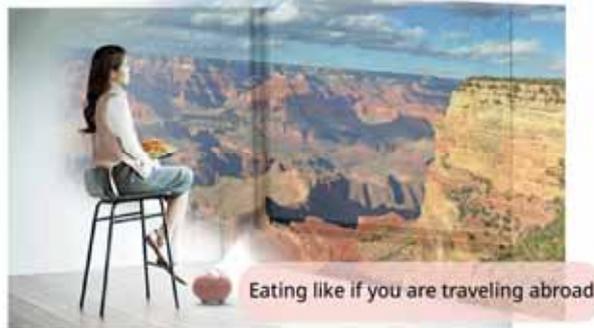


Charger

# Service Flow



# Service Flow



# Function Prototype

## Contact

1. Choose freinds or place to start to have meal
2. Eatok will let users know who is free to have meal now
3. My dinner appointment check

## AI notification

1. Healthy reminding( like remeber to have medicine
2. Eatok can senser your mood and recommand food for the users
3. According to user' sechedule and habit to remind you to have food



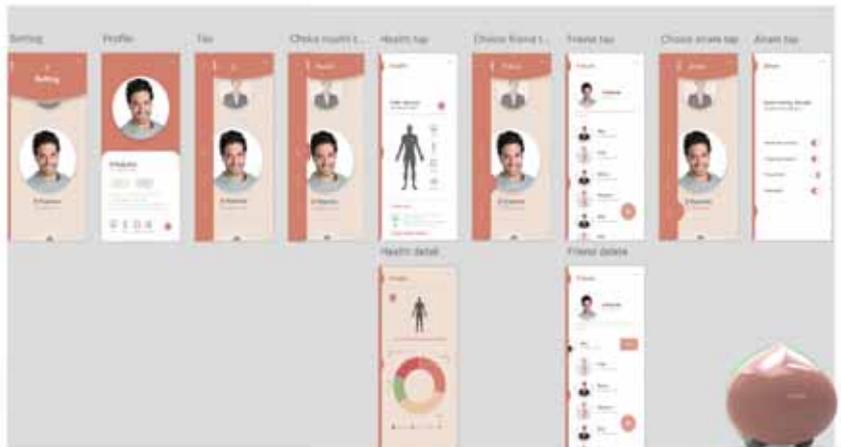
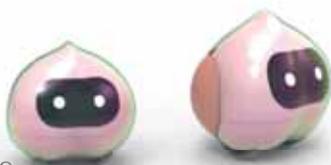
## Food

1. Eatok would recommand food to users
2. Choose food by filter
3. Choose mode (diet mode /normal mode)



## Setting

1. Change the profile photo
2. Body analysis
3. Friends managemnt
4. Notification setting



# After workshop



## ENYI CHIU

I have participated in some workshops before but this is the first time for me to be a team leader. It means a lot to me, from this workshop I learned how to lead a team. From brainstorming the problems to develop our service, each part is a challenge for me. However, since having lovely teammates, everything went fluently. I appreciated having team members like this :D

## AIKA NAGASAKI

I was nervous to participate in PBL for the first time, but it was fun to have a workshop with everyone. It was even more difficult to do it in English, even though it was difficult to conclude or convey opinions during regular discussions. I wanted to study English more. It was very helpful that enyi spoke. I appreciate it very much. It was a lot of hard work, but it was a very good experience.



## KAZUHO TAKEI

We should think about AI. Our suggesting is good, I think. but in point of AI, our suggesting is not good. we should have more time to think about "What AI is?" and what can AI do? (I think that this schedule is very tight, it can not be helped) I'm very satisfied with this project! I have much benefit!

## YUKA OZAWA

It was very difficult to give an opinion or convey ideas in English. I am looking forward to the future in which the services we have considered will be implemented.



## DOHEE KIM

During the workshop, it was the most difficult part to communicate because of language barrier, but I think it was a great experience because it was time to understand friends from other cultures..

## HYEYONG KANG

Doing this project, I felt fresh and happy to have a new experience. Although the discussion was prolonged or misunderstood due to communication problems, it was a meaningful experience to exchange many ideas while talking with students with diverse minds.



# Kyuky

A.I. x RELAXATION

---

Seokjoon Seo

Yejin Ma

Younggok Moon

Shiraishi Miku

Maejima Nana

Uematsu Daichi

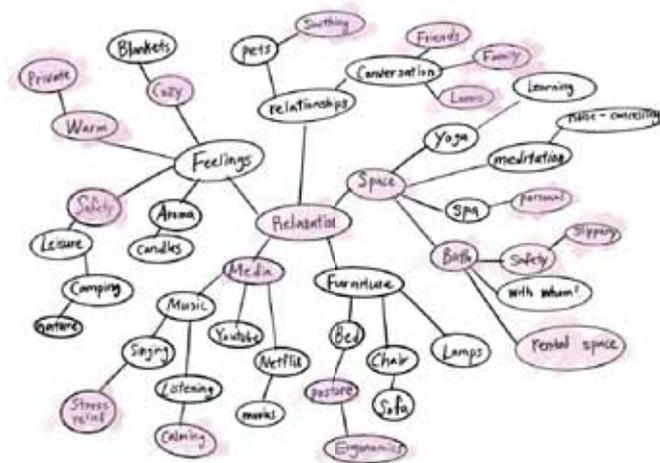


## UI Prototype



How can people experience better relaxation with the help of AI? We constructed a rental space for private baths for individuals, friends, families, and even couples. From the entrance to the exit,

## Brainstorming



### Concept x Keyword

the AI will provide the best **relaxation process** customized to each users.

Proper relaxing is not only crucial for stress relief, but it is also an inevitable factor in improving work efficiency.

Through the brainstorming process,

we could come up with several keywords for relaxation.

Our team decided to focus on building a relaxing **spa experience** which the users are able to **interact with artificial intelligence**.

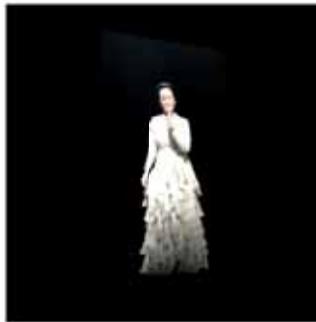
The main keywords are rental space, private, soothing, safety, and ergonomics.

## Field Research



**Mori museum**

We went to an exhibition on AI technology, and we were inspired by works using AI.



**Hologram**

The AI learns and reproduces the voice and appearance of the singer.



**Face recognition**

The camera recognizes the face and determines the person's attributes.

## Persona

### Nomura family



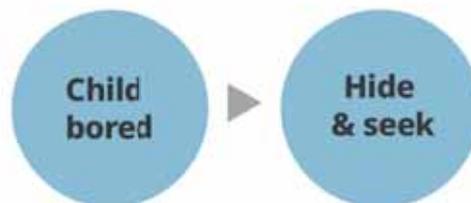
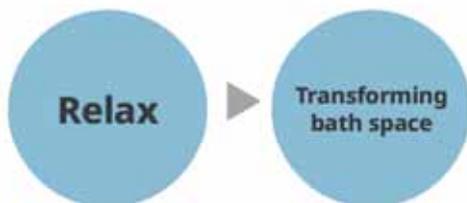
**Purpose**

**Refresh**

**Scenario**

Wife likes hot spring, spa and massage, because she is tired by childcare of son. Husband works weekdays, so he would like to heal work fatigue.

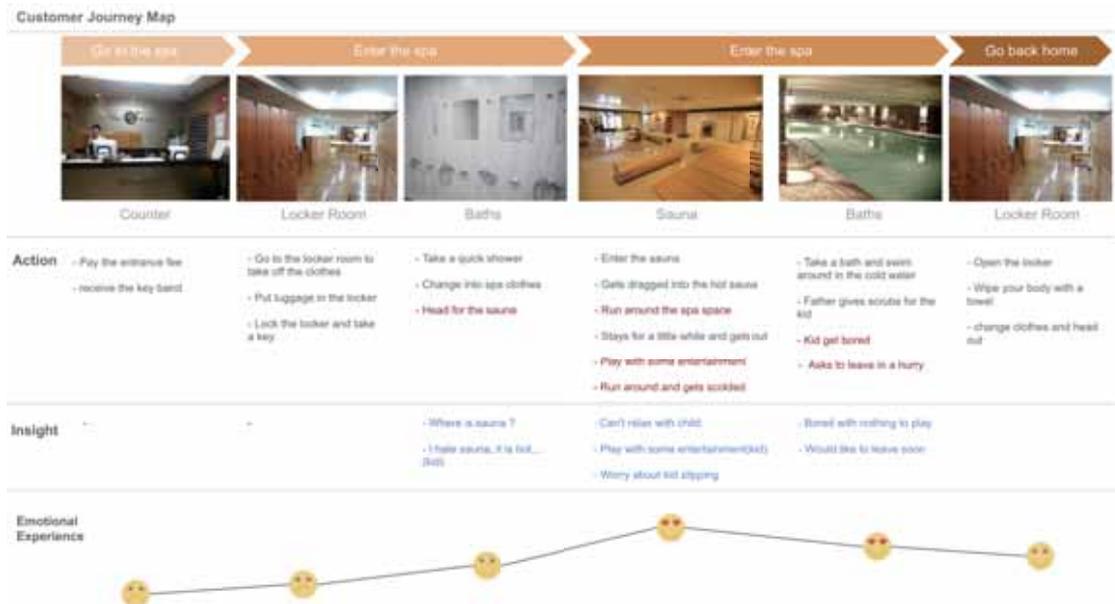
### Needs & Solutions



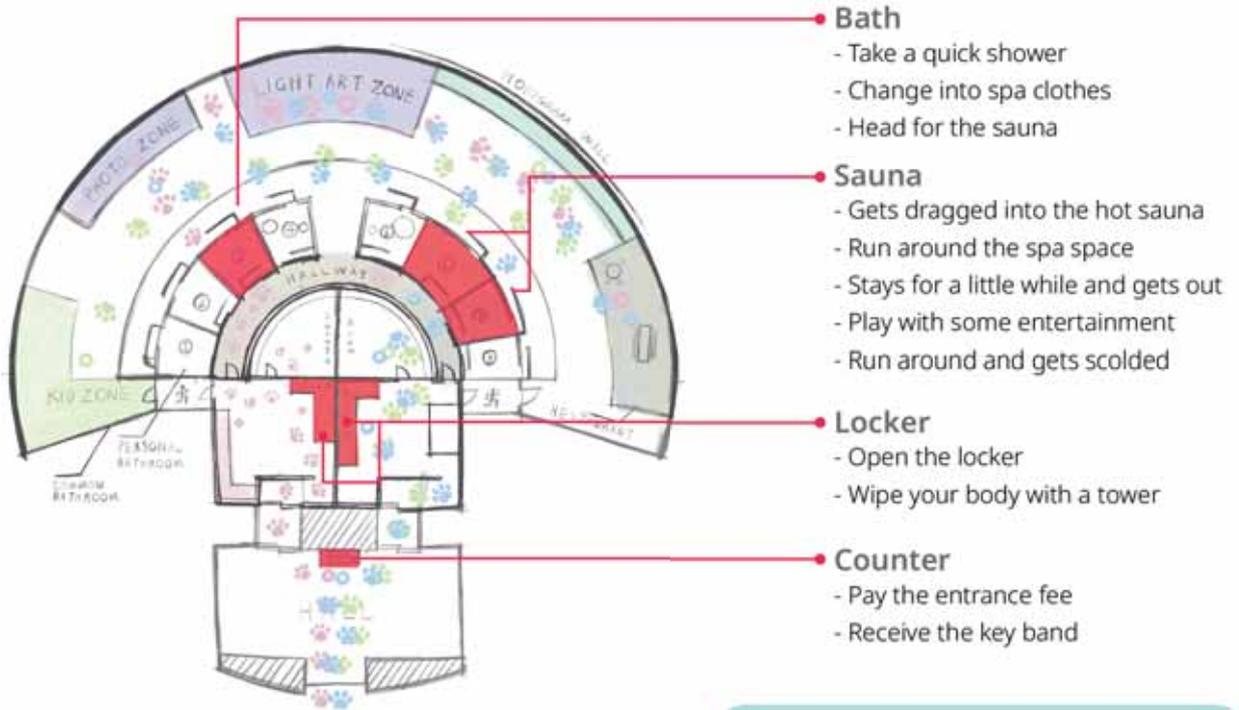
## Ideation



## User Journey Map



## Prototype

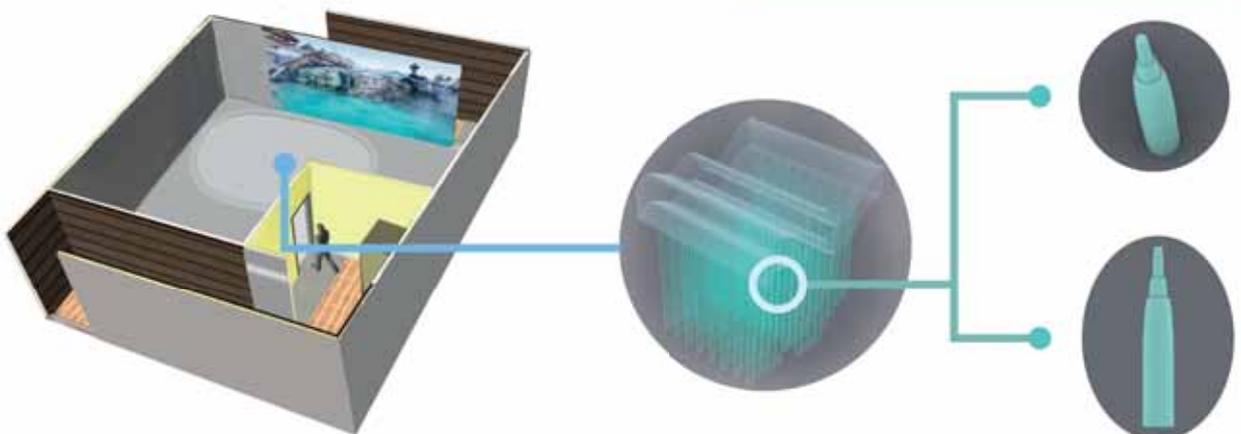


### Hologram walls

The walls of the personal space are redesigned to create different atmosphere that can satisfy the users' tastes.

### Transformative bate tub

The tube is constructed with numerous pillars that are able to customize the tub for the best seating posture for users of different physical condition.



# Prototype



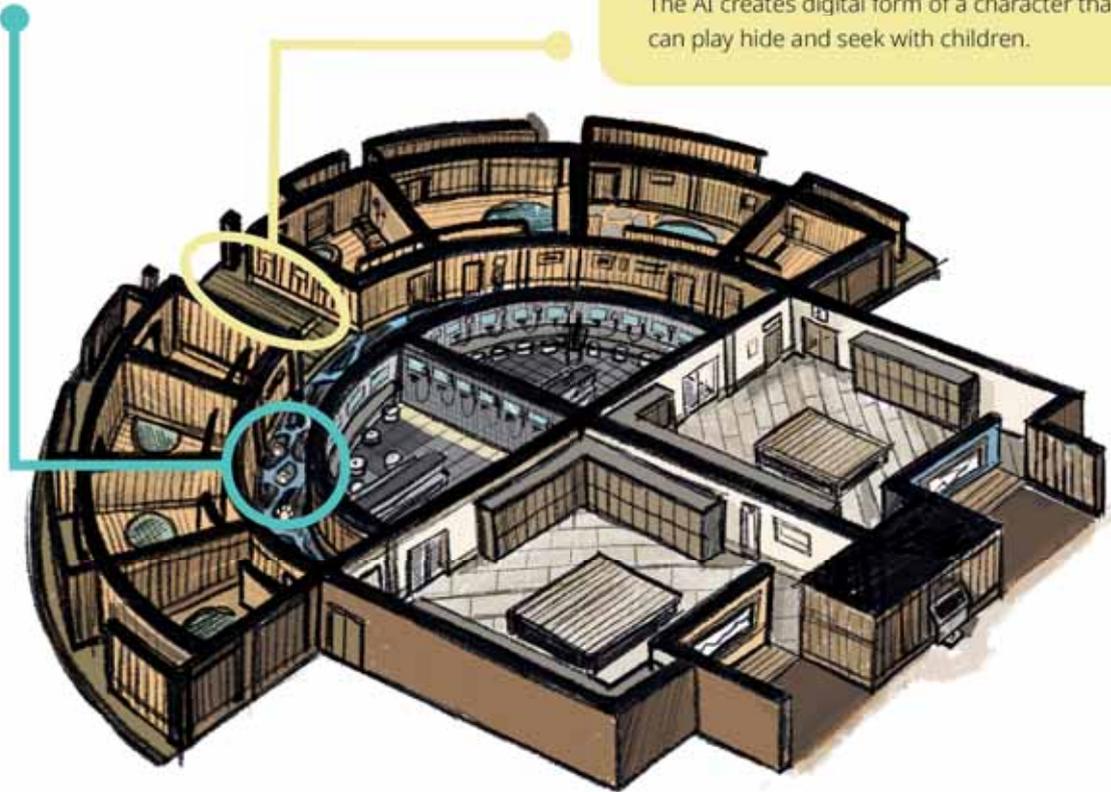
## Footsteps Guiding Systems

Footprints are displayed on the floor to guide each user to their destination.



## Hide-and-seek

The AI creates digital form of a character that can play hide and seek with children.





# After workshop

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## Ma Yejin

Sharing ideas with students in different cultures was an amazing experience. I look forward to having our Japanese friends in Korea!

## Uematsu Daichi

We did our best. It was very fun to spend with these members.

The time we spent together was very short, but it was nice to be able to meet. I hope to meet you again someday. Thank you

Friends.



## Seo Seokjoon

Thanks to the Japanese students, the workshop had been so much fun. I wish you all the best of luck.

## Shiraishi Miku

I could get to know not only AI but also intercultural communication in this workshop. We grasped the meaning through our own mother language and culture. I thought it is important to discuss well so as not to misunderstand each other.



## Moon Youngguk

Cooperating with the Japanese students was a very exciting experience. I have learned so much, and I am thankful for that.

## Maejima Nana

What the most difficult thing is changing my opinion into English words. But I could overcome the hardship by team members listening carefully to what I wanted to say. Thanks to them, I can to have fun design workshop.



# ctoperson

A.I. x MAKE HUMAN RELATIONSHIP

---

Kimura Atsuya

Hyun Donghee

Sato Akane

Im Yekyoung

Kim Hakyoung

Fukuda Seiya



このサービスはストレスフルな現代の電車通勤において、周りの同じ状況下にいる人々を認識し、同じ場所で同じことを共有することで、退屈な電車通勤をより楽しく感じてもらうモバイルサービスです。



## Background



We commute lonely by train.

Young person tend not to read books much.

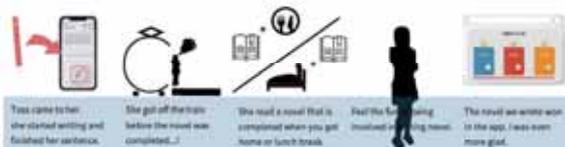
## Persona

Name: Kim Arisa

- Age: 27
- Gender: Female
- Occupation: Business person(Design company)
- Status: Singleless
- Location: Chiba, Japan(Live alone)
- Hobby: SNS, Watching advertisement
- Personality: Shy, Creative, No plan, Receive passive
- Commuting: Chiba(Chiba) - Tamachi(Tokyo) <1hour>



• Kim Arisa(Going to work)



Name: Matsushige Yutaka

- Age: 50
- Gender: Male
- Occupation: Business person(Executive)
- Status: Married(wife, son)
- Location: Saitama, Japan(Live family)
- Hobby: Eating delicious food, Sharing information
- Personality: No risk taking, Light drinking
- Commuting: Oniya(Saitama) - Tamachi(Tokyo) <40minutes>



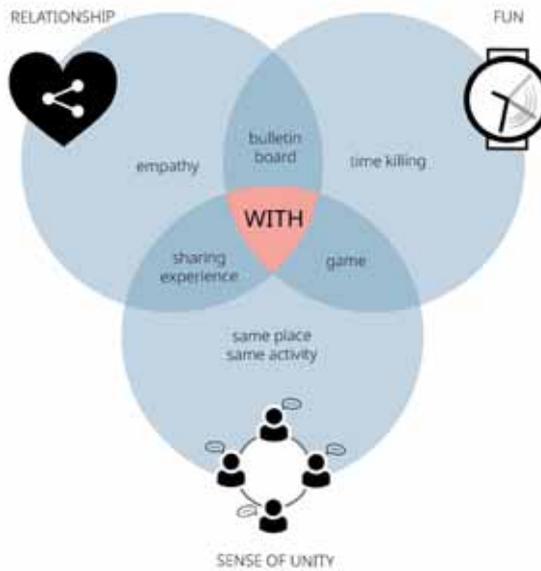
• Matsushige Yutaka(Way back)



## Concept

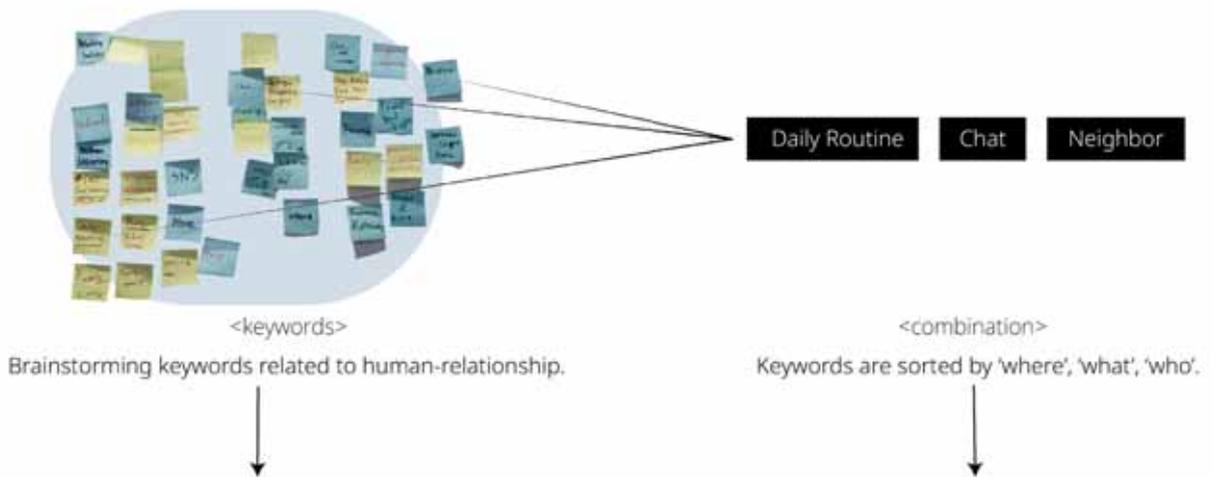
Our idea began on finding relationships that seems very weak or hardly can be established. We focused on how relationships are made in cities and the meaning of 'neighbor'. In cities, neighbors are not those who you live next to, but are those who you meet and be together on your daily routine. How can we relate those who rarely notice each others as their neighbors?

### Write and share novels with people on the same train



## Ideation

### \_Brainstorming



**Make combinations that seem interesting or possible to further develop.**

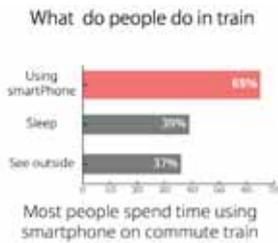
# Field Work



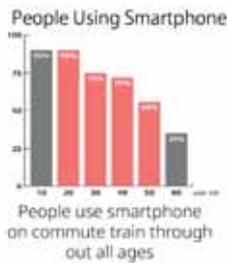
Field work in train station to investigate usual scenery of commuting train.



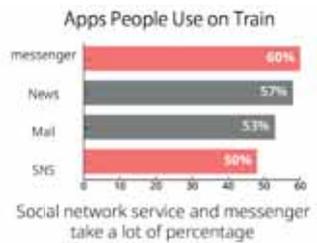
# Research



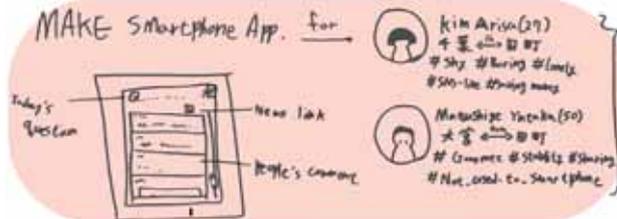
Touchpoint of our service : Smartphone



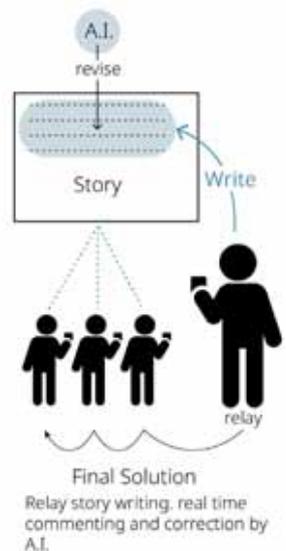
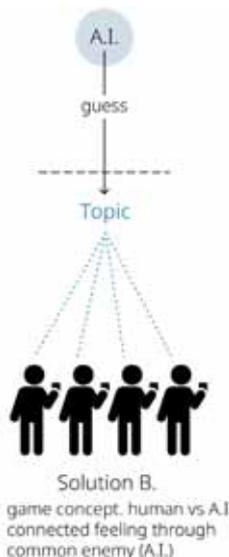
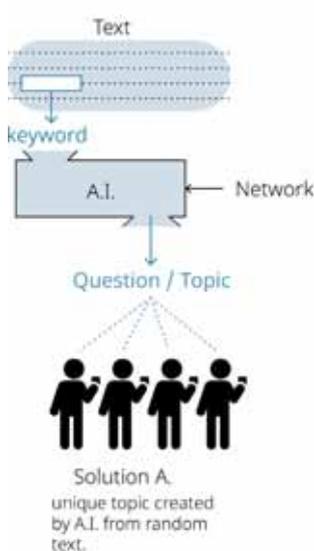
Target of our service : 20s-50s (those who commute)

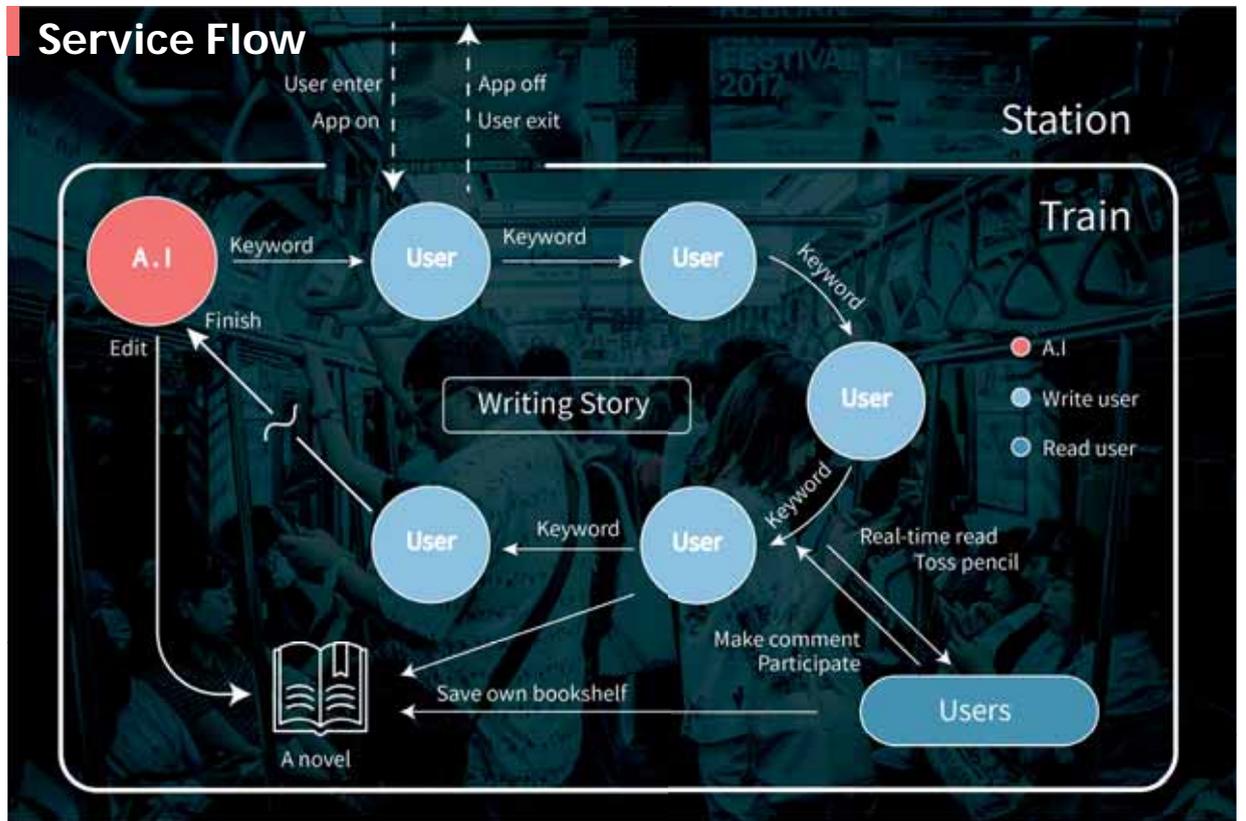


Make a service that connects those who are on the same train. Find a way to connect

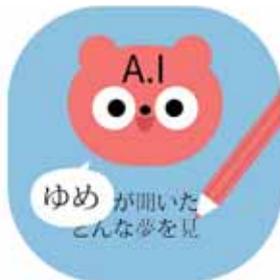


# Solution





## Service Detail



A.I makes first sentence with main keyword.



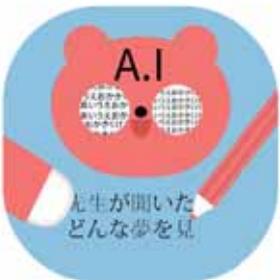
A.I passes the following keywords and sentences to the user.



The user completes their own sentence in time.



The next user can join at the end of the sentence, taking over the keyword and turn.

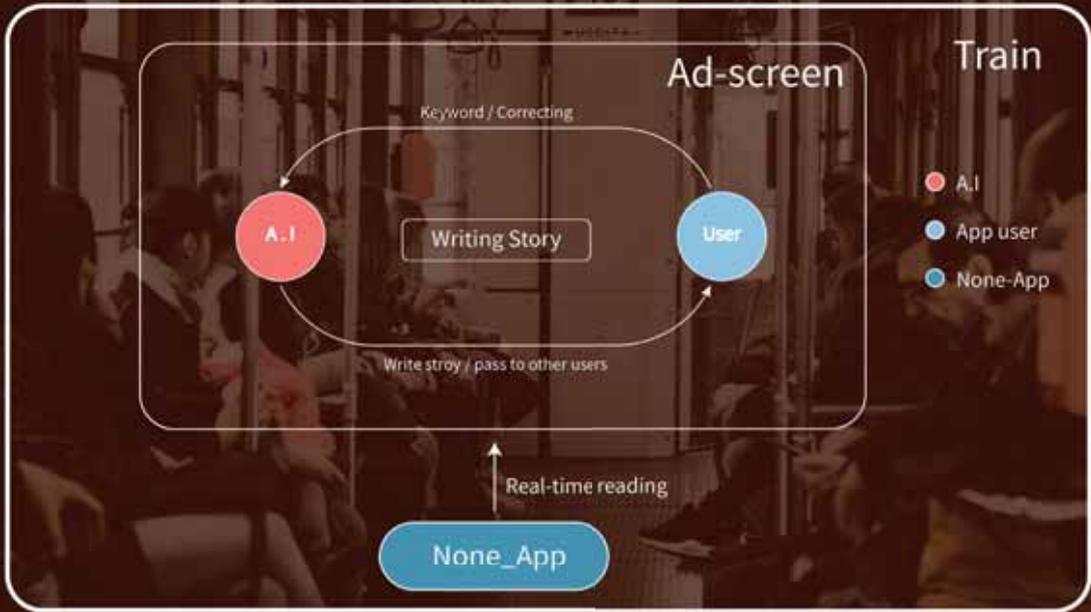


A.I corrects the user's sentences, analyzes the flow of the story and makes it natural.



After several repetitions, a subway literature consisting of the sentences of the user and Ai is completed.

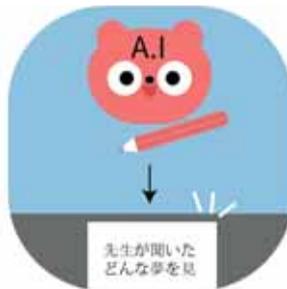
## Service Flow (for none\_App)



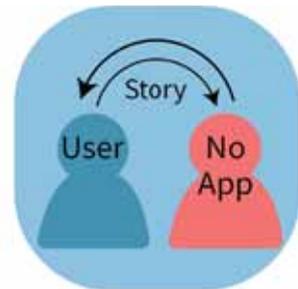
## Service Detail (for none App)



In the Ad screen, a novel that is currently being written by a user appears.



Who has not downloaded the app will be able to read the novel after A.I corrected.



Even people who haven't downloaded the app will have the experience of sharing the same thing with people in the train.

## Service Value



**Unity**

Act same in the same place. So people can share experiences and feel unity to each other.



**Relationship**

People recognize that there is a 'person' by reading sentences that contain other people's thoughts and personalities.



**Fun**

A little fun that makes people little more happy on the commuting road.

## A.I. Character Design



*With* \_\_\_\_\_

Designing cute characters with animal pandas motifs to encourage users to continue using apps with friendliness.



UI Button design

## Application UI



*Splash* \_\_\_\_\_

Designing a screen with a logo(With) is a sign of a commuter's thoughts gathering together to write a novel.



*The beginning of a novel by AI* \_\_\_\_\_

AI character appears to present the first part of the novel.



*Toss* \_\_\_\_\_

Users are entitled to continue writing novels by pressing the button most quickly, which means handing over the air character pencil.



*Writing a novel* \_\_\_\_\_

The first person to press the button can write a novel with 20 letters in less than 40 seconds.



*Chatting* \_\_\_\_\_

Even if you don't write a novel yourself, you can read a novel that's going on in real time and express your thoughts in the chat room.



*Bookshelf* \_\_\_\_\_

Because novels written on the train are gathered on the bookshelf every day, you can see novels written on the train that have gone out of time, and novels that have been written on the train that I don't take.

# After workshop

---



**Kimura Atsuya**

I was fun to have a workshop with a great team.  
This workshop was too short. So I want to meet again!

**Im Yekyoung**

I was so happy during the workshop. I think it's all thanks to the team members.  
I'd like to thank my team so much. I hope we can meet again if we have a chance.



**Hyun Donghee**

Week was short, but meaningful. Got to know good people and had  
a really fun time with my teammates.

**Kim Hakyong**

I had a great week thanks to my lovely teammates.  
The week seemed too short. Be happy, everyone. I'll see you soon.



**Sato Akane**

I really enjoyed this program and I was inspired by their high level.  
Thank you so much!

**Fukuda Seiya**

I feel lucky to have such great members.  
I'm glad I met you guys! Let's go out for a drink sometime.



# YABA2

A.I. x FOREIGN LANGUAGE

---

Park Hyunwoo

Sakurako Holikawa

Kim Yelin

Kurei Natsumi

Lee Yumin

Saika Kohei

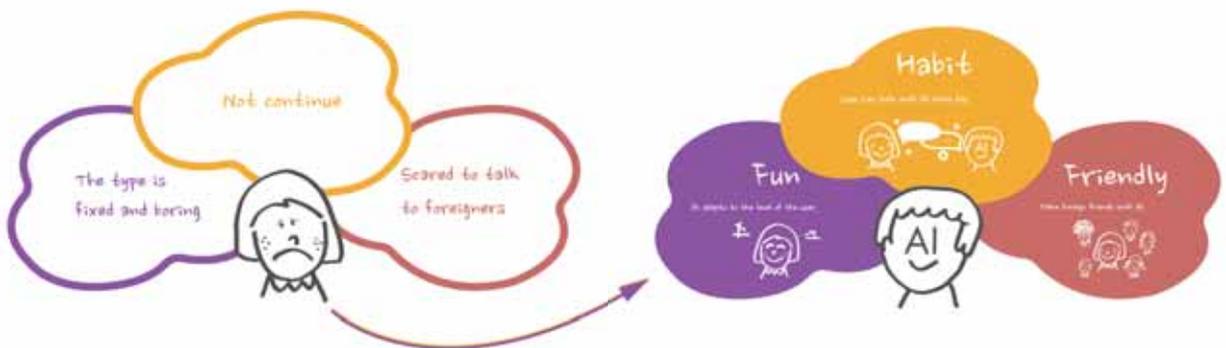


## Background

We wanted to develop an application that would allow people to learn a foreign language more efficiently. But We felt that just learning a foreign language was not interesting and that it was difficult to continue. So we thought that it needs a function that allow user to enjoy communicating in a foreign language. So we decided to develop the concept that would give users a very interesting experience that they had never experienced before.

## Main Concept

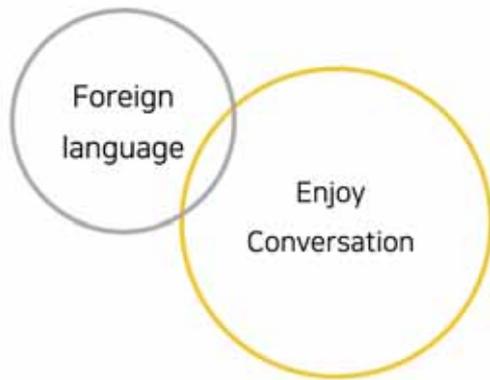
Through conversations with the user, they understand the user's language level and what they like, and change accordingly. Users can learn at their own pace.



## Working Images



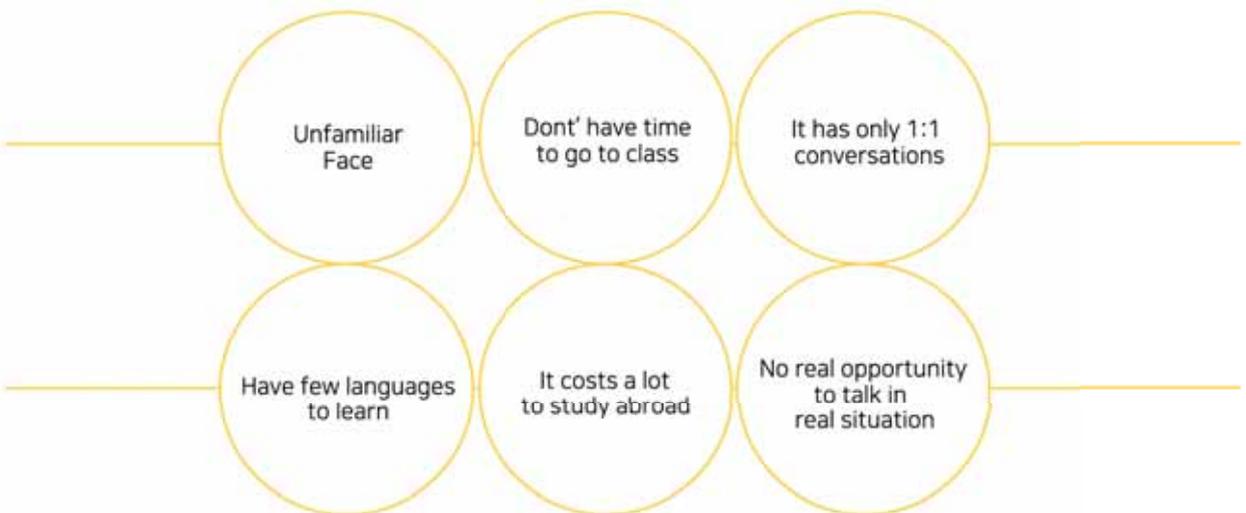
## User Needs



- Free of charge
- Can enjoy conversation
- Anytime, Anywhere
- Can learn languages from all over the world
- Have a practical conversation
- Don' t want to feel pressure of being wrong

## Survey

It is when we researched existing services the biggest problems that users felt. We hought about the needs of people using our services.

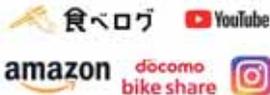


# Persona

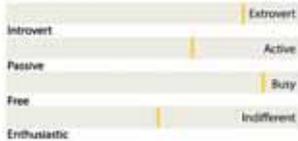


NAME YAMAZAKI KENTO  
 AGE 30  
 WORK Shibuya Bartender  
 ADDRESS Tokyo Shibuya-1-2-59

RECENTLY USE



PERSONALITY



## I want to talk with my foreign customer

Yamazaki, who runs a small bar in Shibuya, has recently welcomed many foreign tourists. Posts uploaded through Instagram seemed to be gaining popularity. English menus are available, but speaking English is often needed to respond to numerous liquor explanations and customer questions.

He understands that he needs to speak English in order to thrive, but he doesn't have enough time due to the business. He's looking for a way to use artificial intelligence to simulate the situation of talking directly with customers.

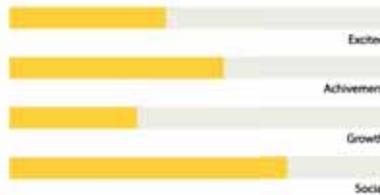
PAIN POINT

- (1) A typical learning program cannot be used because of differences in living patterns with others.
- (2) He didn't have much time to study because he operation of the bar.
- (3) I feel a barrier in communication when dealing with foreign guests.

NEEDS

- (1) Study at his own pace.
- (2) He can learn fields of interest with AI.
- (3) Practice conversations with customers at the bar

MOTIVATED



GOAL

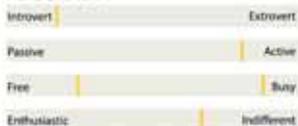
Yamazaki wants to have a pleasant conversation with guests who have visited the bar, so he wants to effectively learn greetings or simple conversation from various countries in a short time.



RECENTLY USE

NAME Lee ChaeKeyong  
 AGE 25  
 WORK Majored in Violine  
 ADDRESS Korea, Seoul, Secho

PERSONALITY



## I want to study foreign languages in a new way

Chae Kyung recently took a leave of absence and is preparing to study abroad. She would like to go to a university in Germany to learn a bit more of her major violin. In addition to the entrance examination, She wants to study conversation in order to live abroad alone. She tried a variety of apps or services quickly, so she used a popular English conversation app on the market, but she

was not satisfied. She has heard that the English Conversation Study Group works well, but she was uncomfortable talking with strangers in English and constantly looking for other ways. As a conversational person, she wants to improve her skills easily and fun rather than studying hard.

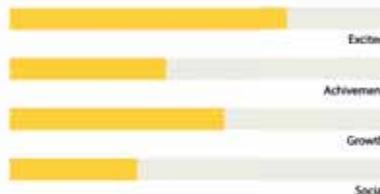
PAIN POINT

- (1) There are many conversation study apps on the market, but most of them are similar and don't match her personality.
- (2) It is frustrating to study hard even conversation.
- (3) Conversational skills increase with conversation with people, but it is burdensome to meet and talk with strangers directly.

NEEDS

- (1) She wants a new and fun service
- (2) Find an easy way to increase her skills alone
- (3) In addition to English, she hopes to study relatively less popular foreign languages like German.

MOTIVATED

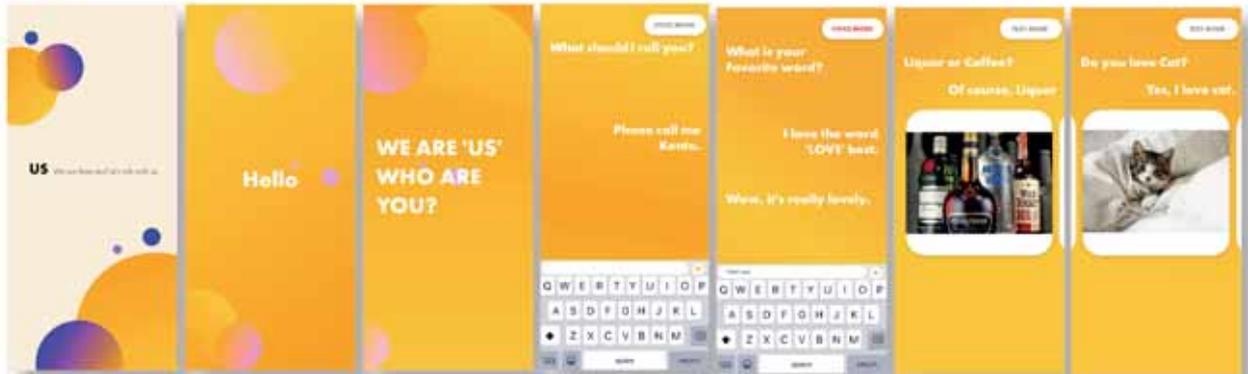


GOAL

Chaekyung wants to improve her conversation skills without having to meet people. And for that reason, you want a fun and easy service than many of the learning applications you've already used.

## User Scenario

### 01



The most important consideration at this stage was to design people to feel like they were talking to friends, not robots.

When 'US (artificial intelligence)' ask a question to find out about Kento, it designed to ask questions that can help you build relationships, not just a hard question and answer. At this stage, 'US' collect and analyze informations about Kento to make friends that Kento wants.



- 😊 It's feels like talking with real friend!
- 😞 It's too robotic

### 02



At first meeting, US asks Kento some questions. It's not just about entering information, it's about finding which friend will best suit to Kento. They talk about how he's doing and where he's eyeing these days and make Kento's 'main friend'.

The call comes from 'Jessica', her first friend and his 'main friend'. Jessica will have many conversations with Kento from now to get to know each other. Talk about what Kento sees and thinks in the language he wants.

### 03

While talking to kento, jessica finds out that he needs another friend. When more than a certain level of conversation comes about a topic or interest, jessica introduces Bob who knows the topic better.



### 04



Even when kento were sleep or didn't talk to 'us', we talk a lot. Based on the conversation we had with kento, we exchange information and create new stories.

### 05



Say hello to Seisei! While Kento is talking with us, we also greet with the other 'us' he encounters. Invite another 'us' as a friend of Kento who grew up in conversation with other users. He will encounter new conversations that we have not shared with us. If he wants, in someone else's language!



- ⊖ Never be bored because kento can listen live reaction.
- ⊖ Kento can be irritated of too talkative friends.

- ⊕ Glad to meet another user and his friend.
- ⊕ Surprised by sudden event.

If Kento wants, they can share their AI friends with other user (to experience new language or make new friends.)



MY FOREIGN AI FRIEND  
**US**

WE ARE HERE AND LET'S TALK WITH US



# After workshop



Park Hyunwoo

I had a great time meeting nice team members. While I was working on the project during the workshop, each day seemed like a trip to me. Personally, it was even more meaningful because it was my first time attending an official event with our class mates. I was strange and worried because it was the first time, but I met many good friends and talked a lot. It's a pity that the project is nearing the end. I hope everyone can meet again someday.

It is hard to talk each other in different languages at first. Interestingly enough, our group's theme just happened to be set in a foreign language. So we talked as much as we could, asking questions about each other's language. In the process, I learned that I could communicate with people with different languages without necessarily speaking the perfect sentences. While working together, I was able to experience the same thing. The process of working was really different, but nevertheless, it was interesting to work in concert with each other. I think I had a good experience.



Kim Yelin



Lee Yumin

At first when I get here, I didn't think that I will learn many things. But when I get here, I learned that working as one team with people who are in other culture and different thought is not an easy thing. It was great experience to be with you. When I look back after time, I think it'll be a good memory. And I was happy to meet good team member, especially Yelin. Thank you for your compliment and cheering me up! It was a real help for me. Thank you everyone!

At first I was anxious because I was not good at English, but Koreans student seemed to speak slowly and easily, and they was kind and I hard to speak English. I think it's a good idea to be able to communicate my opinion! I was able to feel a sense of accomplishment. The student of the group were also interesting and very fun pbl!!!



Holikawa Sakurako



Kurei Natsumi

At first I was very nervous, but the group members were kind, so I enjoyed working on the project. I realized the difficulty of creating new things. However I think it was a very meaningful time.

I have been very happy for these 8 days. I was not good at English and couldn't speak very well. But my team members were so good at understanding my poor English, so it was great to be able to communicate. Thank you very much. I want to study more English and speak more. See you again.



Saika Kohei

# dAIski

A.I. x MOBILITY

---

Kwon Soonwoo

Choi Hyukjin

Jeong Yaejin

Yuzakino Fumiya

Tauchi Itsuki

Ehara Ryota



## Background

In the spare time on the lift .....

### coaching



dAIski suggests new play and advice for improvement ski or snowboard technique.

### pleasure



dAIski takes video of our ski and snowboard scene and show us the video and we can get video of memories

### dAIski can do this also



## Brainstorming



### Definition of Mobility

first of all, we define "What is Mobility?"



### Various approaches

We thought about the various forms that occur when AI and mobility combine.



### Affinity Diagram

We categorized various types of mobility according to specific situations and forms.

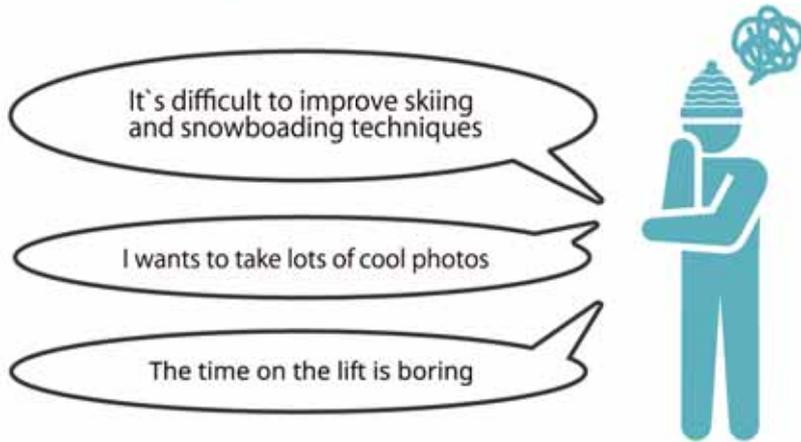


### Problem Recognition

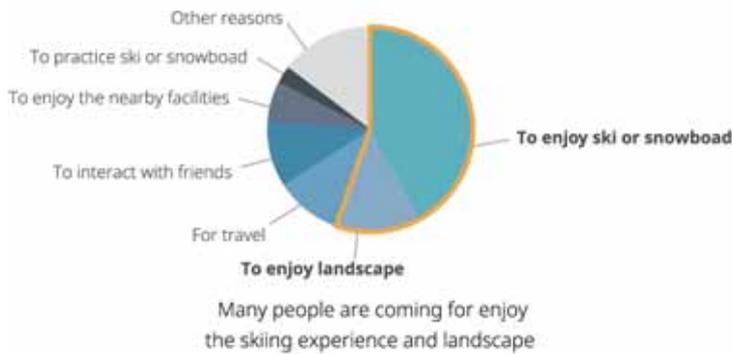
We analyzed about the problem of using mobility

## Research

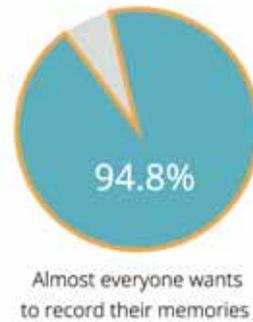
### Dissatisfaction at a ski resort



### Purpose of visiting the ski resort



### Rate of people who want to record memories at the ski resort



## Technic Research



#### LG LAT240DT

This transparent LED signage module can be installed on various glass structure. It can provide new types of display



#### SLOW SHOT-3

This camera is for tough outdoor activities. It can take a videos even moving object in various mode (like slow motion)

# A.I. Character Design



## Lee Suk Hee/male/18y-o/Korean

He is a Korean student who has completed college examination. In commemoration of becoming an adult, He planned a trip to Japan with my friends.

**Goal of visit- Having fun and make memories with his friends.**

stage	Interest	Collect data	Participate			Continuous contact and share
scan/place	home or school	Internet Cafe	First lift	Second lift	Riding after AI assistant	Home
channel	smartphone	PC or smartphone	Lift	Lift	Slope	Smartphone
touth point	advertisement	Website	Display	Dpaily	Ski	SNS
activity	Making plan for visiting ski resort with his friends. He saw AD about ski resort that have new lift facility. He informed it to his friends.	Learn about system. Check the options and money, place, etc. He should talk with friends about the options.	He and his friends answer questionaires analysing a user's level, situation	He and his friends watch LEE falling down and laugh together. She also see AI coach suggestion. It improve his skill. They decide to play game.	He wants to win the game, so he tries his best. (He tried to improve his skill.)	Using app, he downloads the videos that he skiled, and posts them on his account. Through app, he receives alarm of the ski resort. (He analyses his videos to do better next time.)
thought / feel	It is interesting. Because this system help us make memories easily.	With this system, we enjoy various activities like race. System can help beginner to ride ski well.	It's first time riding on he get a little bit nervous. But also excited since he is with his friends.	He feels it funny and useless since he is making mistakes with his friends.	He has a list of fun. He loves ski more	He has confidence and wants to visit the resort later again.

# Application UI



## Aoyama Saori/female/26y-o/Japanese

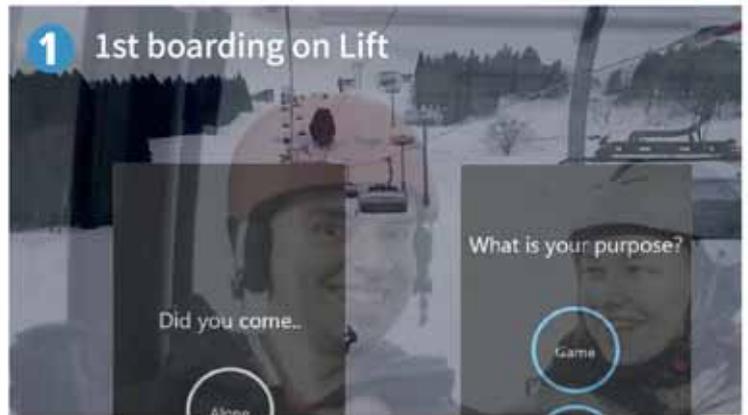
She is an office worker who likes sports. Interested in self-realization, she has been skiing since winter two years ago and visits the ski resort every year.

**Goal of visit- Improving her skills of ski.**

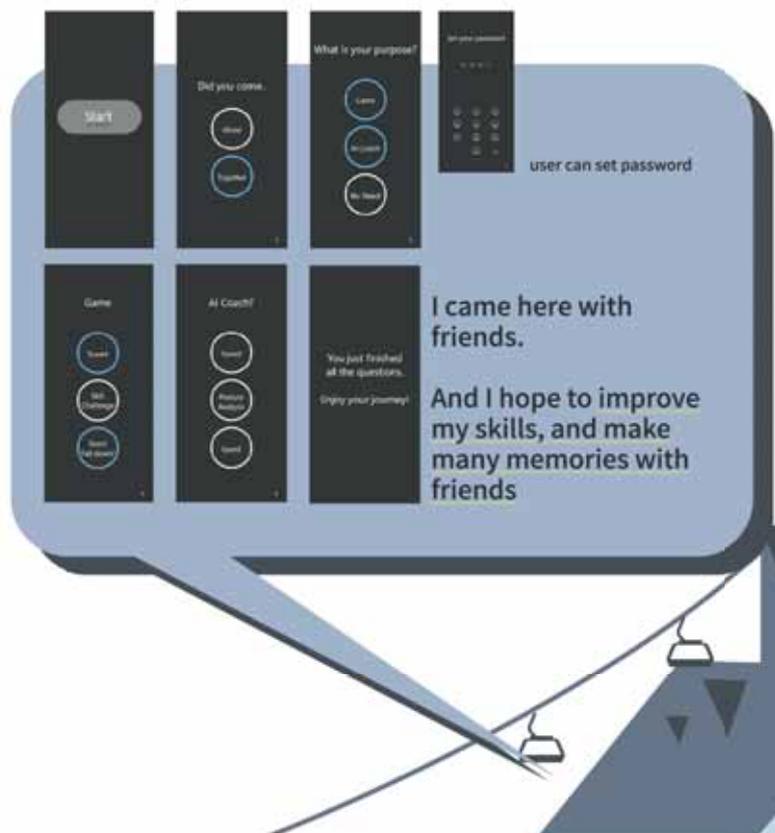
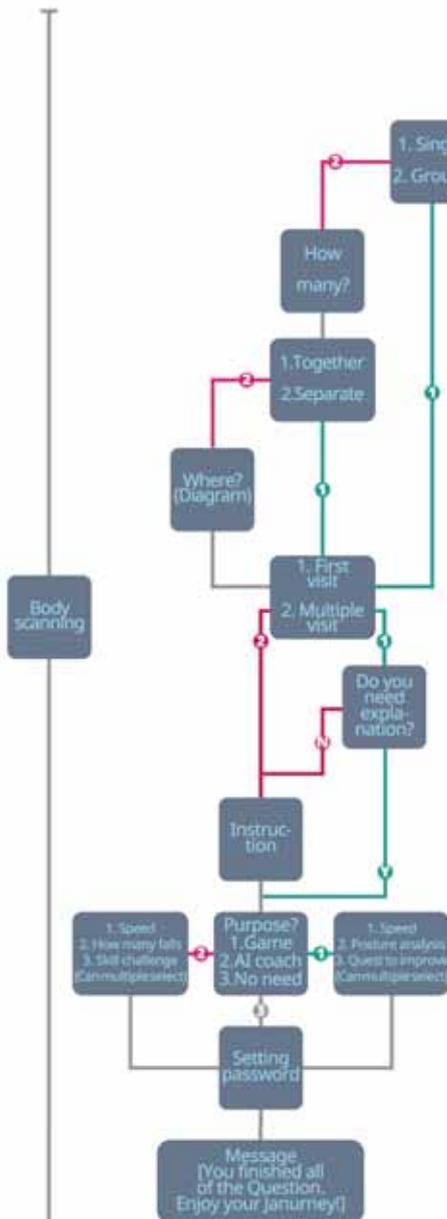
stage	Interest	Collect data	Participate			Continuous contact and share
scan/place	home or work place	Work break time in work place	First lift	Second lift	Riding after AI assistant	Home
channel	PC or smartphone	PC or smartphone	Lift	Lift	Slope	Smartphone
touth point	SNS from friendos	Link from SNS	Display	Display	Ski	SNS
activity	The app sends push alarm that attracts her impression. When she goes inside the app, the app shows video of her last year skiing and reminds her to visit again.	Learn about system. Check the options and money, place, etc. She should think about what level is the best for her.	She answer questionaires analysing a user's level, situation	Check her skiing with advice from AI. She downloads videos of her favorite skiing.	She progress conscious of what she was taught by AI	Using app, he downloads the videos that he skiled, and posts them on his account. Through app, he receives alarm of the ski resort. (He analyses his videos to do better next time.)
thought / feel	It is interesting. Because it would be fun to see skiing myself.	I can improve my ski skill.	Let's do my best to be better than last time.	This is my best point? I have to be careful.	Today's my skiing is great!	He has confidence and wants to visit the resort later again.

# User Journey Map

- 1 1st boarding on Lift
- ↓
- 2 Riding Ski
- ↓
- 3 2nd boarding on Lift



On the first boarding, The user provides Ai with his information. After knowing the situatio and status of the user, Ai provides the program that would be fun and helpful to users.





A user arriving at the top of the slope  
 Enjoy skiing as usual  
 Ai tracks the user.

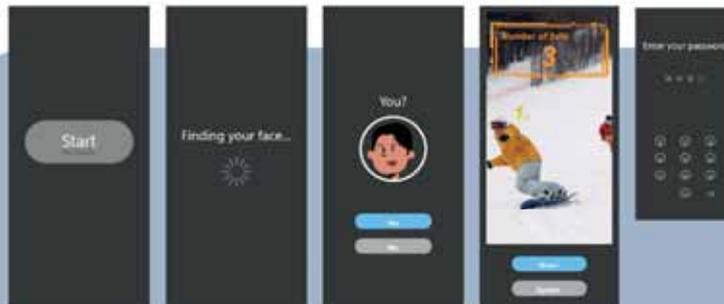
Ai uses the user's appearance  
 to identify users.



The person who came down on  
 all skis ride the lift again.

On the lift to the top of the slope,  
 users are recorded and analyzed  
 in various ways by Ai.

Users will be able to use  
 the application later on.  
 It can hold videos and use them in various ways.



If Ai cannot recognize you,  
 You can authenticate yourself with password.

After first riding, I ride a lift with my friends again.  
 Then We can watch ourselves.

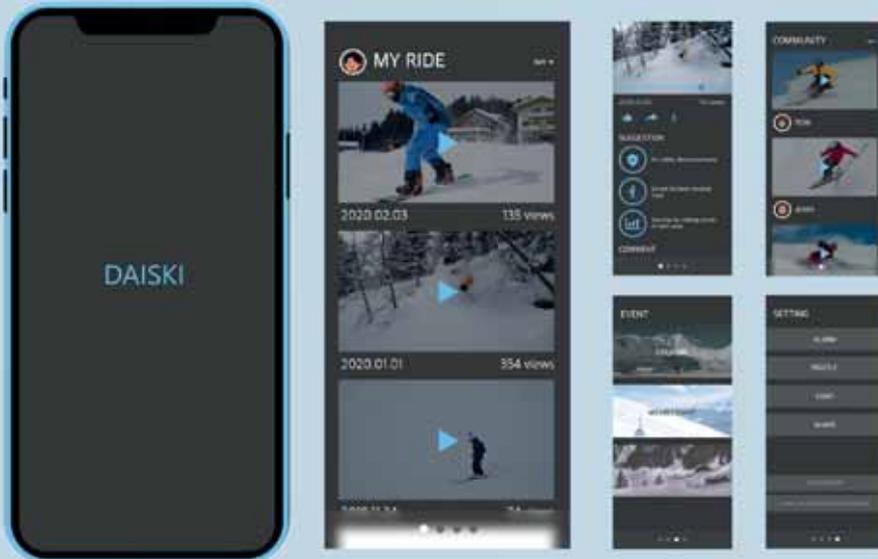
The Ai masured our speed, and make ranking among us.  
 My speed was 2nd, but My ranking was 3rd,  
 because I fall down 3times.

Ai show me riding also.  
 Ai analysis my posture, and give som advise for me.  
 (Lower your center of gravity)

I downloaded it through the application.



## A.I. Character Design



### dAIski App

With this app, the users can download their own skiing moment recorded by Ai. It helps users possess their memories, and improve skills. And they meet various service (community, events..)

It induces user continuous activities

## A.I. Character Design



# After workshop



## Fumiya Yuzakino

This was my third PBL, but I had a hard to speak English. This time the theme was difficult and it took time to decide on our idea, but we were good to come up with a great idea. And we were able to make panel and mockup quickly. I think member of this group is "dAIsuki" !

## Hyukjin Choi

It was a good experience to work with people who have experienced different cultures and learn a different design process from Korea. Also, I could understand the importance of language and I wanted to work with people from many countries in the future.



## Itsuki Tauchi

I'm glad we made lovely and new idea! It was fun to know Korean culture that I don't usually touch! I will definitely go to Korea! Thank you SHIBBAURA for a wonderful time !

## Yaejin Jeong

It was a really memorable week! I was able to learn how to communicate, compromise, and reach the solution that we wanted. We have totally different mindset and thought, but getting over the obstacles was fun!



## Ryota Ehara

At first I was a little nervous because it was my first gPBL. But once it started, I was able to have fun. In addition, I was able to work with members who could not easily interact, so I learned a lot and gained a very valuable experience. Thank guys!! dAIsuki iObaura!!

## Soonwoo Kwon

It was tough time.  
But I know it was a essential process for taking to the next level. Every time we communicate, enjoy, work together is precious experience. And we became great friends each other. This must be most valuable .



# MIRRAI

A.I. x HEALTH & BEAUTY

---

Bando Kotaro

Kanamaru Hinako

Tsuzuku Shunsuke

Kaoru Nagata

Park Hyowon

Ryou Jaekyeong



## Background

How we can keep our motivation?



Many people face this situation every year.

**But, they want to exercise for their ideal or healthy body.** It's easy to get the shape you want through exercise, but staying at that level is more difficult than what you think. We looked at the factors that influence motivation through the differences in health populations between

Japan and Korea. And by applying that factors to our service, **we tried to solve the problems for those who had difficulty sustaining the movement.**

## Design Process

### The Process of Design Squiggle

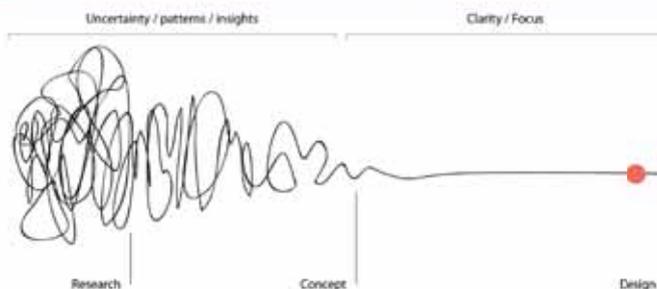
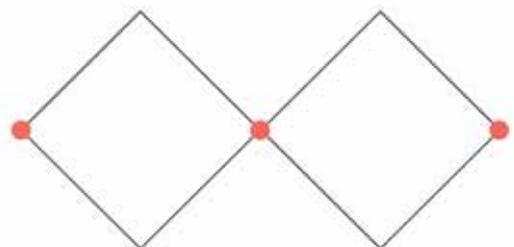


Image source by [KM]

### The Double Diamond Framework



## Combination of two types of Design Thinking Process

**We spent a lot of time on identification,** and this process allowed us to discover situations that were caused by cultural differences between Korea and Japan, but with the same essential problems.

**Then through double diamond methodology, the concept and concrete function of service were defined** by analyzing characteristics and journey of persona. The prototype was then tested to determine the final design.

## Desk Research

Why is there a difference in the number of gym users in Japan and Korea?



① We think about the reason is,

Korean show off own body on SNS more than Japanese



② We think about the reason is,

Existences of familiar role model. - such as K-pop stars

And maybe these help us to increase MOTIVATION!

## Field Research

  <b>Common space and more opened</b>	 <b>separated by a partition</b>	 <b>emphasize own body</b>
<b>○ Changing room • - - - - ○ Shower room • - - - - ○ Selfi zone • - - - - ○</b>		
  <b>common space or private room</b>	 <b>separated as a private room</b>	 <b>emphasize atmosphere of gym</b>

This step found some differences in gyms in Korea and Japan. (Picture above). And we got two insights.

One was about the right place to put a mirror. Another was that it would be nice to be able to see the results of exercise through a mirror.

# Persona



## Persona 1 | Advanced

Name Back Gongzu  
 Job Student  
 Age 22  
 Height 156 cm  
 Weight 48.0 kg

I want to have a nice body shape like her!

### Mobile Expertisement



Check everyday for SNS (ex) instagram, facebook

### Behavior

- Have been played sports, a lot.
- Like outworks.
- Have high level motivation, but hard to keep it.

### Gym Expertisement



Go 4days a week. have been tried various sports.

● Increase motivation for exercise.



## Persona 2 | Beginner

Name Lee Charming  
 Job Office worker  
 Age 37  
 Height 172 cm  
 Weight 89.4 kg

I want to loose weight for healthy body.

### Mobile Expertisement



Use sometimes (ex) for contact with boss

### Behavior

- Lack of exercise
- Heard "Go to Gym !!" by his wife, at least once.
- Have low level motivaton. (Almost 0.)

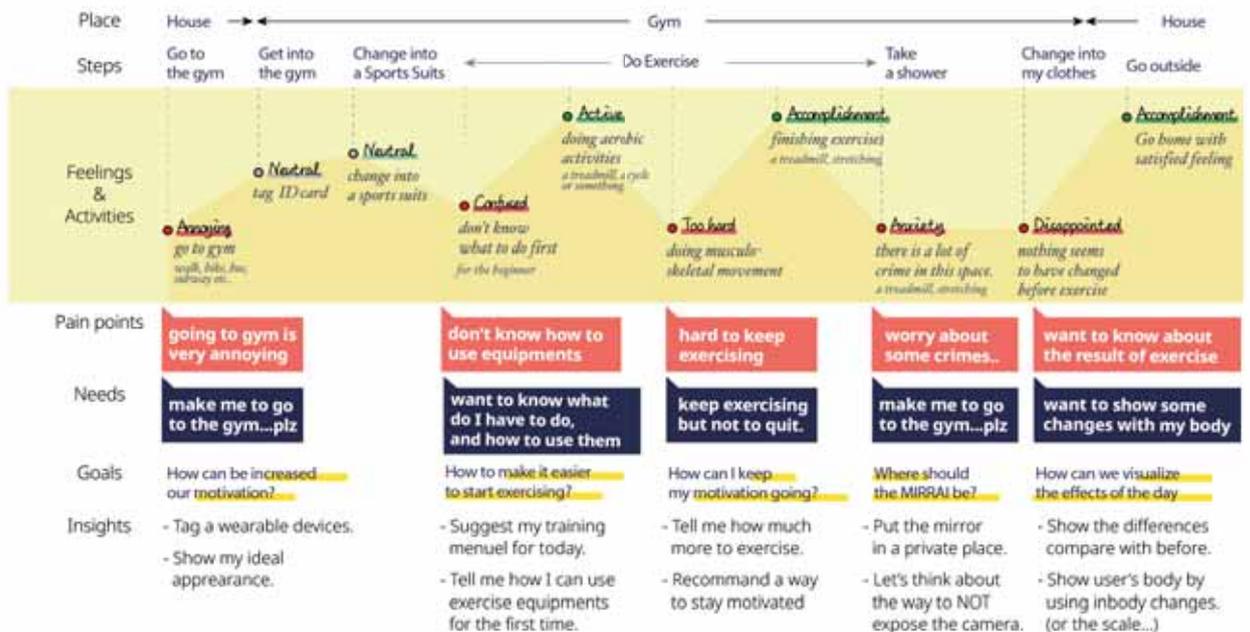
### Gym Expertisement



Never been before NOT have been tried sort of sports....

● Need motivation for starting exercise.

# Customer journey Map



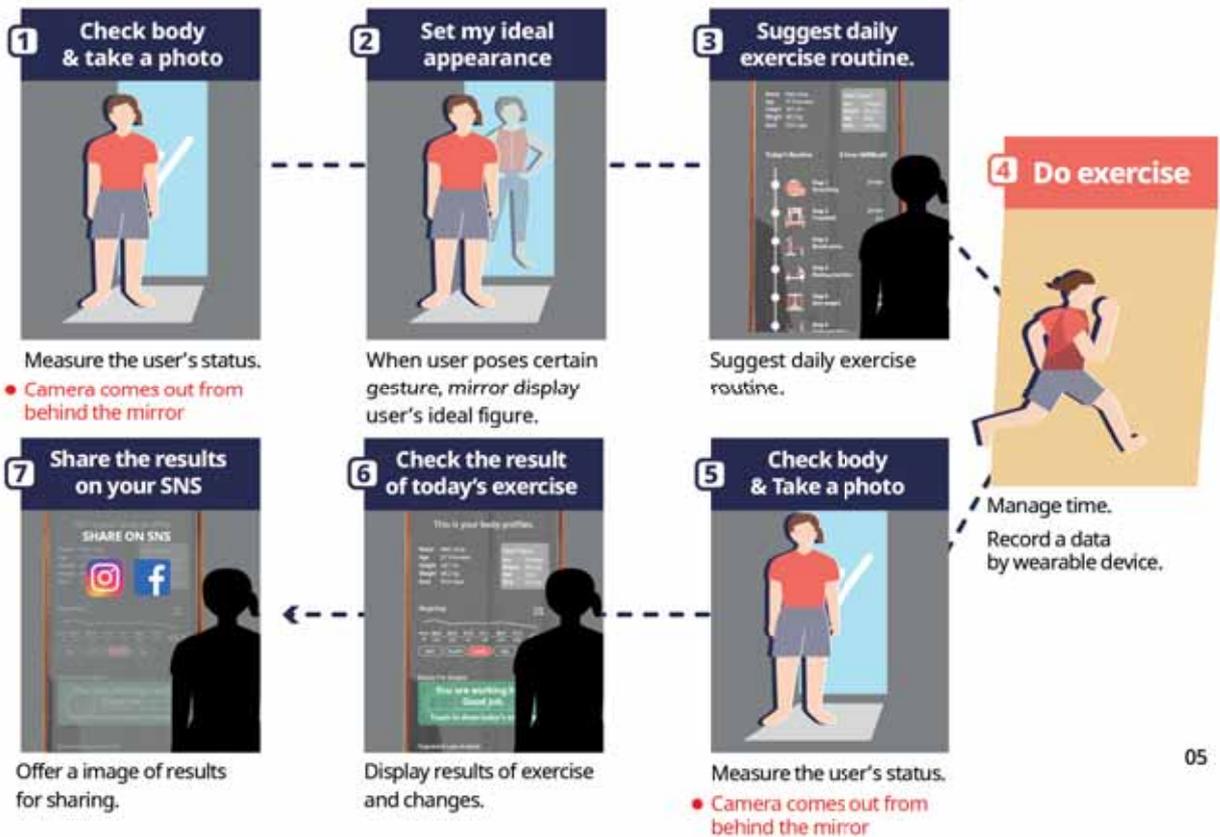
## Service Concept



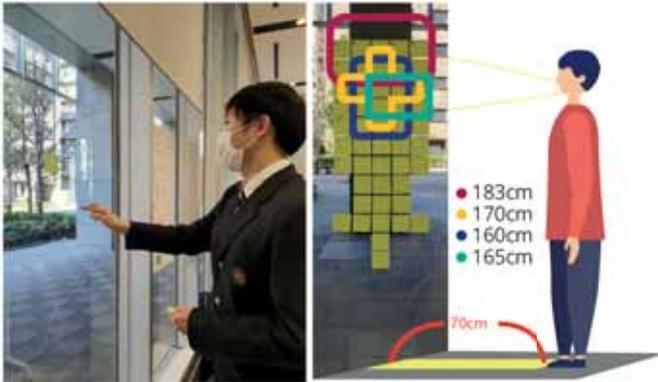
The diagram illustrates the service concept through three main steps, each accompanied by an illustration of a user and a list of actions:

- Check your body.**
  - 1. Measure and take photos before and after exercise.
  - 2. Check the changing in-body level after exercising.
- Show your MIRRAI.**
  - Give motivation by an easy and clear comparison of now and the future.
- Recommmend exercise.**
  - 1. Suggest me the day exercise to be my ideal figure.
  - 2. Share it with your friend after exercising.

## Service Scenario



# Prototyping



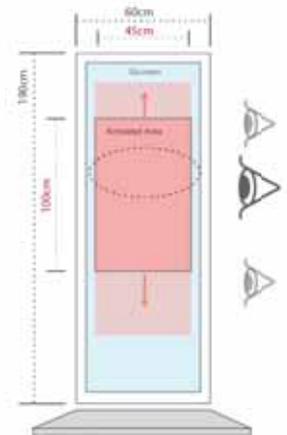
## What is this?

We limit activation areas in the mirror throughout several tests.



## How it works?

And this area will be moved to the proper position through gaze tracking.



## How to Compare me with myself in the future quickly and easily?

REALITY

MIRRAI

REALITY

MIRRAI

**You can see your inbody and your present self. (default mode)**

If you make this posture, light will on and you and see your real body.

**You can see your Ideal body by using certain gesture.**

If you make this posture, light will off and you can see your ideal body.

prototype -1  
Recommend exercise

prototype -2  
Check my status

## How to Use the wearable device in the gym?



### 1. Just put it at your wrist.

Then you can use this to tag in the mirror. And it check and helps you exercise using sensors to detect user movements.

### 2. Then, you will know everything.

The wearable device show users what exercise to do today. **The device can also check if the user has exercised.** This will help users make the ideal body they want.

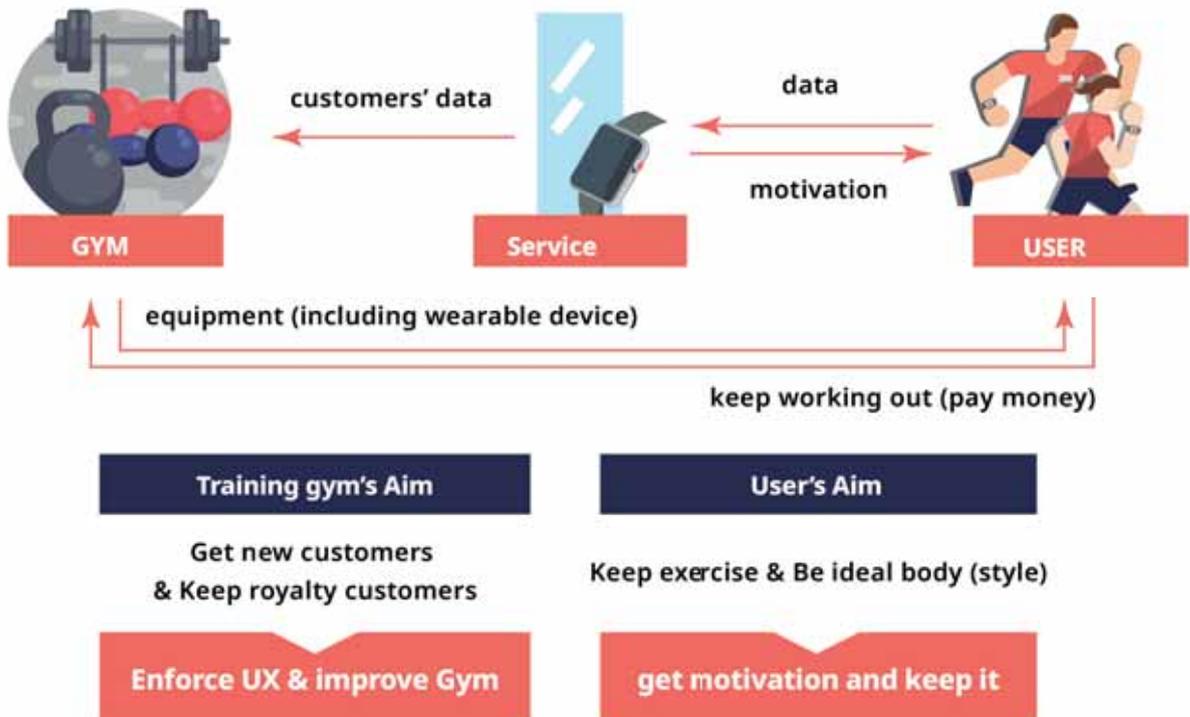
## Technology for MIRRAI Mirror



In the first use, the user may set an exercise goal in consideration of an ideal body shape and duration. In consideration of this, Mirai Mirror recommends daily exercise routines to users. When the user's

data piles up a lot, a person with a certain exercise goal can calculate a certain plan and work out a steady exercise to suggest a more sophisticated exercise routine.

## Business Model



# After workshop

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## Kotaro Bando

Good work for a week! Everyone worked hard!  
If JAEGYU and HYOWON come to Japan, let them know.  
Of course, I'll contact you when I go to Korea.

## Hinako Kanamaru

Thank you for your hard work! I feel that the high skills of students at Kookmin University and the completion of the program were really due to their strength. I'll be in the 4th grade now, so I'll do my best to be as reliable as Jaegyul :) It was a fun team with a variety of members! Thank you in Korea!



## Tsuzuku Shunsuke

It was a wonderful experience. The process of bringing everyone together is a truly meaningful experience. Thank you for your support and I will go to Korea and contact you!

## Kaoru Nagata

It was an interesting workshop. It was a great experience for me to learn a lot from the project with seniors and Korean students. I hope to join you in the next workshop. Well done everyone!



## Park Hyowon

I was so thankful. And it was a very fun time. I want to see you all again. Thank you for the present - Bando, Tsuzuku, Kaoru, Hinako. Take care. Please contact me when you come to Korea.

## Ryou Jaekyeong

Thank you for the gift and thank you for remembering the workshop as a fun experience! I'm very happy~! :) Please contact me if you come to Korea! I'll show you where you're having fun and buy you a drink.



# Hong Shi

A.I. x FASHION

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Kim Bora

Kubono Sayaka

Song Seohyeon

Sato Manaka

Sohn Joungim

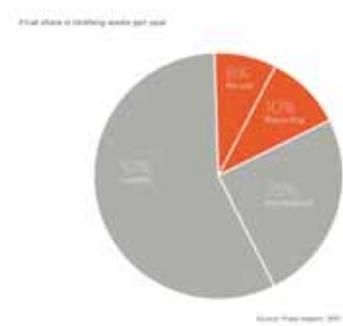
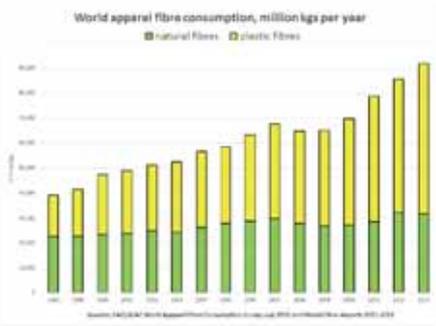
Noguchi Reina



## Brainstorming



## Background 1, Main Problem : Clothing Waste



Due to fast-fashion, there are too much clothing being thrown away. Every year about 90000kg of trash is being made, but only 10% is being recycled and over 57% goes to land fill. although many of them can be reused or upcycled, it is polluting the earth

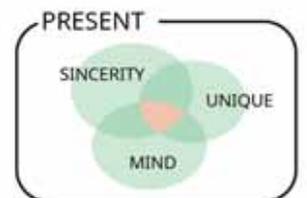
## Brainstorming



This is a advertisement of Korean brand. it says "when you are sick of same ordinary presents"



you can easily see related search terms such as recommendation of gift for those in their 20s and recommendation of mother's birthday gift.



In fact, many people worry a lot when they give gifts to precious people. The true value of a gift goes beyond what money can buy, and includes sincerity. We are interested in the view of these gifts.

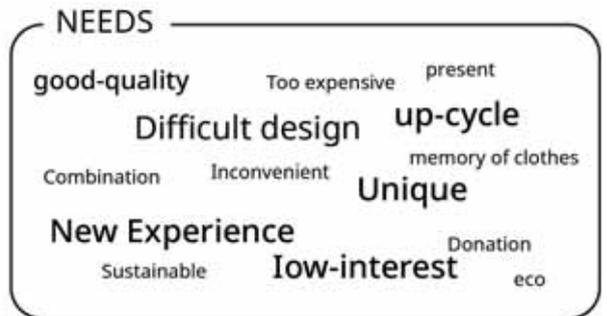
## Field Research

2020.02.07 reDESIGN closet in 3-18-21 jingumae, shibuya-ku, tokyo



We went to repair shops & recycle factories in Harajuku. We have learned how many machines are used in the current work site and how many can replace the human roles. We could also see what user's needs and what problems were not being solved at the moment.

## User Needs



## Concept

Problems of existing recycle systems



Traditional recycling processes require users to invest high interest in the design process themselves. This made it difficult for users to recycle. Therefore, the concept is based on a platform that makes the recycling process easy. In addition, through the revitalization of the clothing re-form business, the entry barrier can be lowered in terms of price.

Solution



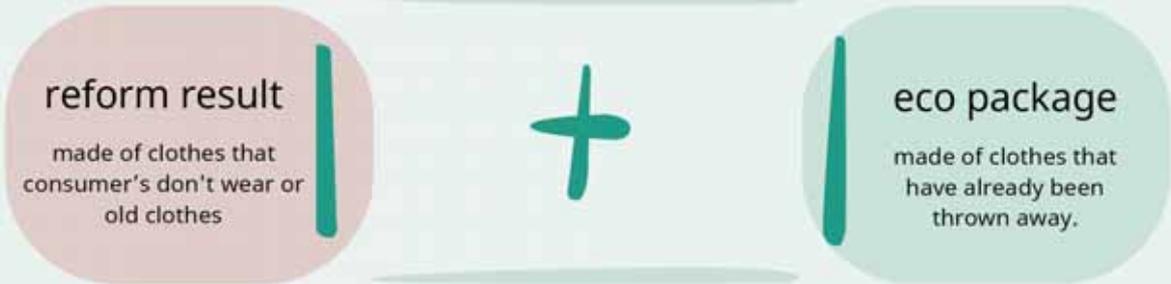
Usability of AI

In our platform, AI offers simple design suggestions, production processes and services. This increases efficiency and makes it easier for nonprofessional people to experience clothing redesign.

# Field Research

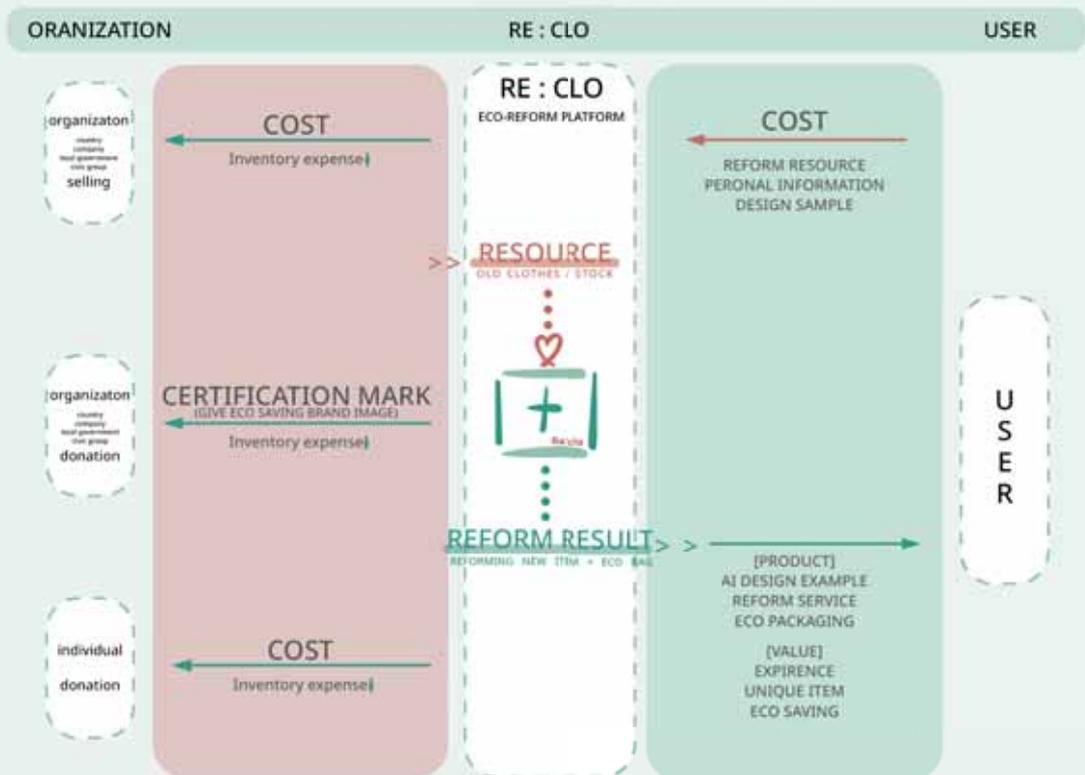


present for loving people



Users get valuable results from their old clothes, not only do they not make trash anymore, but they also use packages as already discarded closures waste. So, they experience two eco saving values.

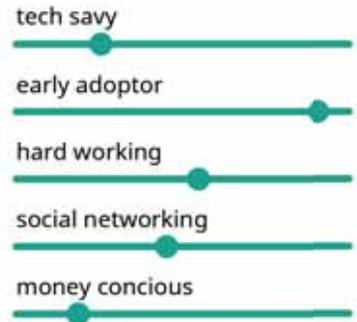
# Business Model



# Persona



Name : Rika  
 Age : 28  
 Job : housewife  
 Field of interest : family, child-rearing  
 Character : be bad at tidying,  
 Keywords : reform, arrangement  
 Needs : cherish someone's memory  
 Situation : Want to get rid of children's clothes that don't fit my size.



## Before Problem

1. Hard to find reform shop
2. Difficulty of communication with reform designer
3. Hard to think of how to use old clothes & memories clothes
4. An increasing number of misfitting children's clothes

## Solution

1. Application ( easy access )
2. AI Design ( human right expenses )
3. AI recommend - show idea of gift example
4. App UI help intuitive use



# Scenario



- 1 She is looking for her daughter's present. And she wants to use old clothes of her daughter.
- 2 She knew "Re:clo" on Instagram and installed app. First, she takes a picture of her daughter's used cloth and uploads the picture to the app.
- 3 Talk to app about memories of her and her daughter's clothes.
- 4 App recomends unique ideas. 「It's perfect idea or her daughter!!」
- 5 Go to Re:clo shop with the clothes. And decide details such as texture. And she chooses what kind of pakaging she wants. The packaging used to be old cloth.



- 6 Wait until arrival!
- 7 She knew that some people only donated clothes through this. And she is troubled with a lot of clothes.
- 8 She brings old clothes to Re:clo shop.
- 9 Check the condition of clothes using machine. And she gets the money. The money depends on the condition of clothes.
- 10 Managed to resolve her dissatisfaction!!
- 11 And good for the environment!!

# App Prototype



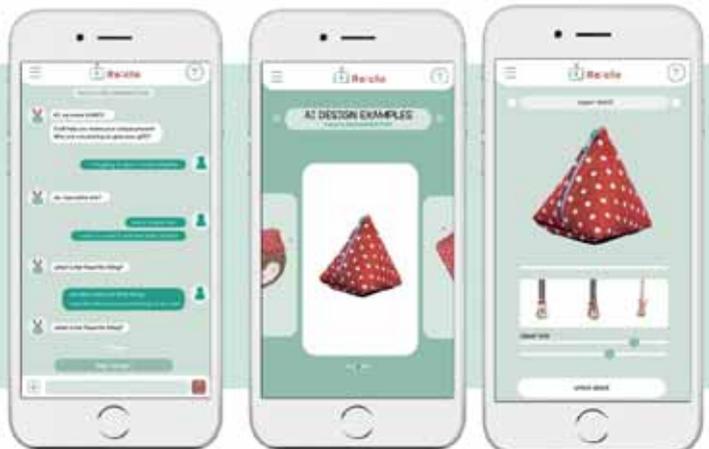
For reforming-

Users register their identity and clothes that they want to reform by scanning them.

Through a conversation with Ai, we analyze the information and taste of the person who will receive the gift.

Then, Ai shows simple reform design examples.

Of course, you can modify the details that describe your taste.



After this process, designs can be paid for at a lower price.

Visit the Reform Center or receive the reform result by delivery service- with eco packaging.

customers can also experience reform process and making eco package.



## Center Prototype



This is a center where ai machines help to reform.

Customers can see examples of cloth, use reform machines, pick materials.

Also, experience creating eco packaging if they want to.



## Device Detail



# After workshop



Kim Bora

It was an eye opening experience. I was shocked by different ways we approached the task. We exchanged thoughts and ideas and the result was nothing I imagined it to be. Although the journey was tough, especially communicating in different languages, the result was worth the trouble. I found new ways to improve my design abilities. I want to thank all my teammates for their hardwork. Thank you.

Manaka Sato

We focused on environmental issues with fashion as our main theme. Through this group work, Korean friends helped me many times. I was also surprised at the skills that Korean friends have. And I thought this experience would help my future. Through this group work, Korean friends helped me many times. I was also surprised at the skills that Korean friends have. And I thought this experience would help my future.



Sayaka Kubono

By attending this workshop, I learned that there are many ways to solve problems using design. I was also impressed by the wonderful skills of my Korean friends, and I thought I had to study more.

Sohn Joungim

Workshop with people who use different languages and cultures was a great experience. I could get a variety of knowledge that I did not know, including the way I thought or the way I expressed myself. The result is disappointing, but not only the result, but it seems to be getting a lot. It's a short time, but I'm grateful to the team members for their hard work, and to the professor for giving me this opportunity:-)



Song Seohyeon

It was really fun to communicate with foreigners and complete the project. I felt that working together as I worked out the cultural differences was enormous. I was proud to be able to make even more new designs using AI.

Reina Noguchi

Services using AI and fashion were very popular, so it was very difficult to come up with new services. There was a lot to learn from the Korean team. I want to make use of it in the future.



# アンニョンハセよろしく

A.I. x DESIGN

Anzai ryusei

Hasegawa Yukine

Kato Miyu

Won Gaeun

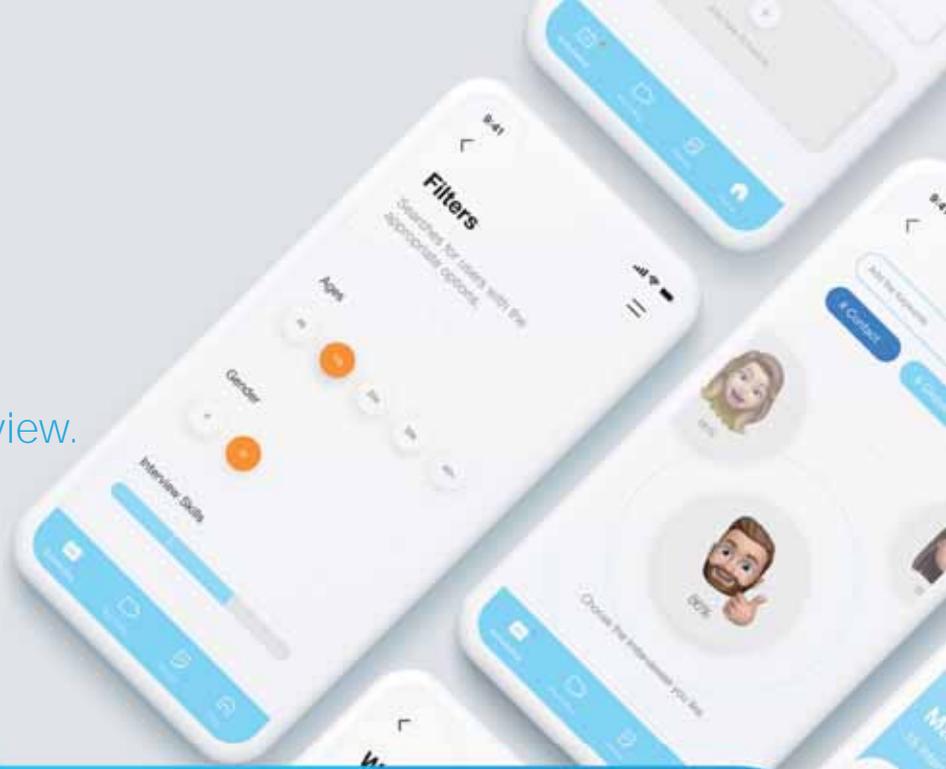
Kim Hyunjin

Bae soyoung



## Overview

Our Service is to help designer's interview.



- Making Question
- Matching interviewee

- Recording interview
- Catching the interviewee

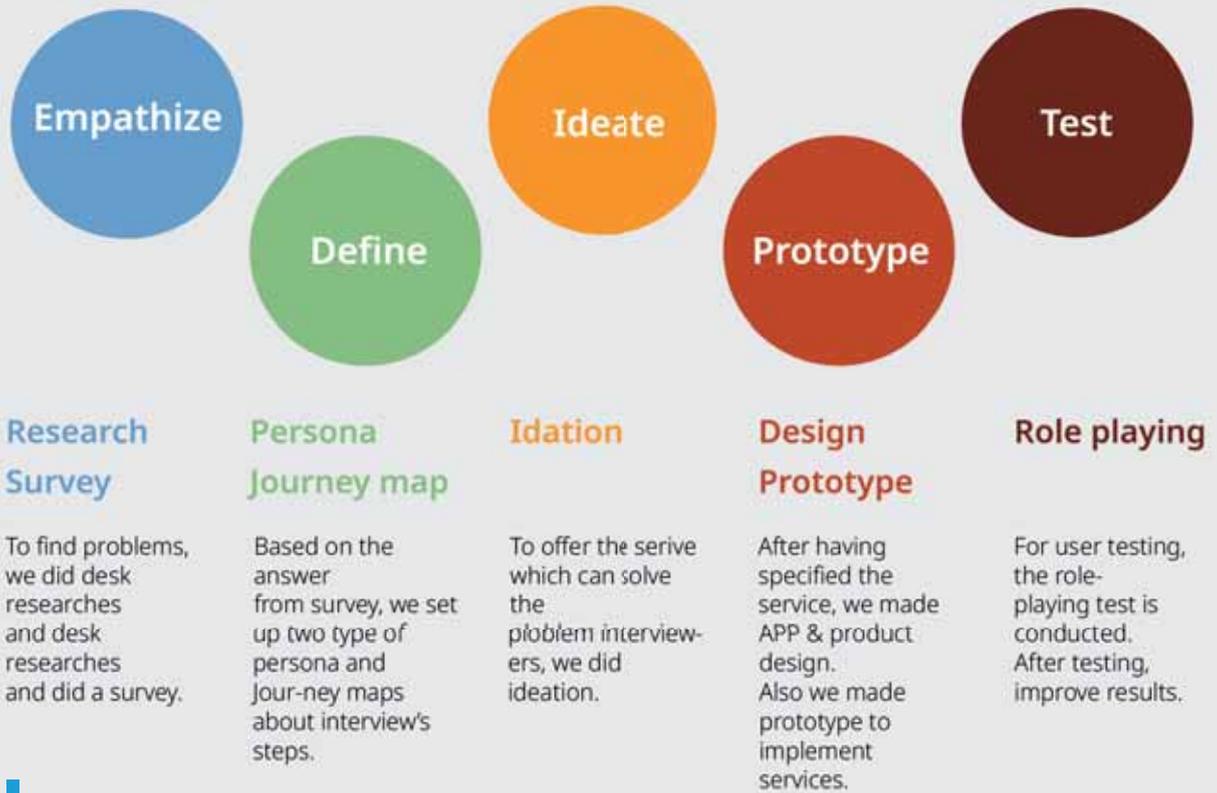
- Analyzing interview data

## Background



Designers often use a typical method of interviewing to get their needs. Designer needs to prepare questions before doing an interview, find people to interview, and then spend a lot of time and work to analyze the answer data after the interview. Our service goal is to help designers get quality interview results by reducing cumbersome steps, giving interview tips to inexperienced people, and getting insight.

## Project Process



## Research



We surveyed designers and prospective designers to find problems with designers. The results of the questionnaire showed that 36.5 percent of designers were satisfied with the interview, while 45.5 percent of the others were usually dissatisfied and dissatisfied with 18.2.

# Persona



Beginner

### Current status

She is very shy and not good at talking to strangers. But she wants a successful interview to create a better service.

### Needs

- She is lack at the financial to compensate for interviewee
- It's hard to make the question
- It's hard to adaptation to circumstances(臨機応変)



Professional

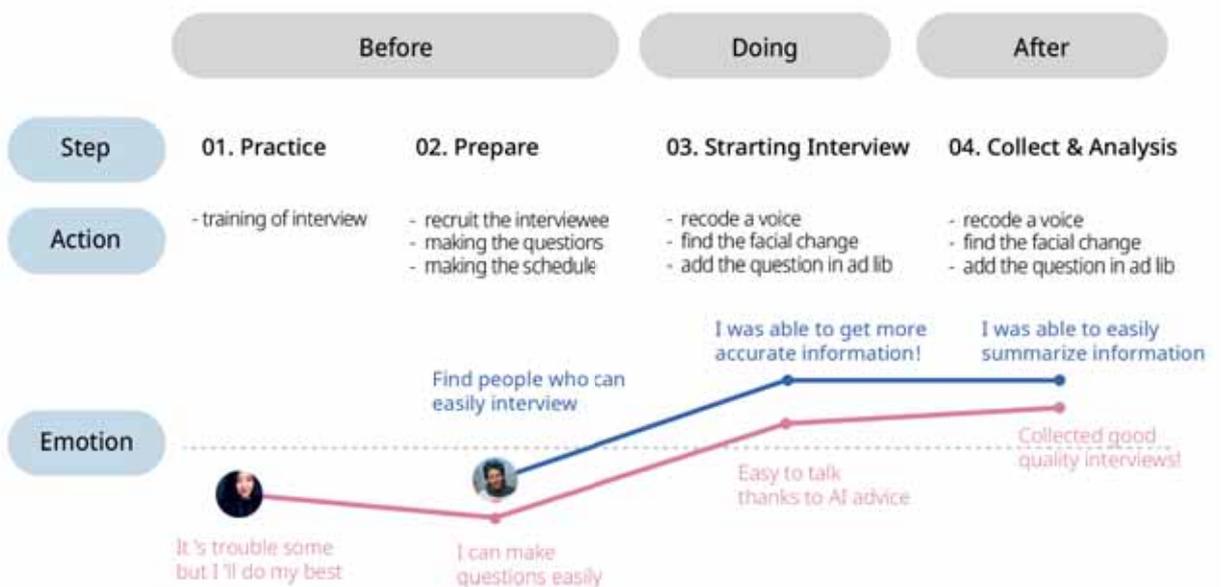
### Current status

He is very friendly and good at interviews. But he wants to conduct interviews more efficiently.

### Needs

- It's hard to find an interviewee.
- It's hard to Analyzing & categorizing.
- It's hard to the feelings from face.

# Journey Map

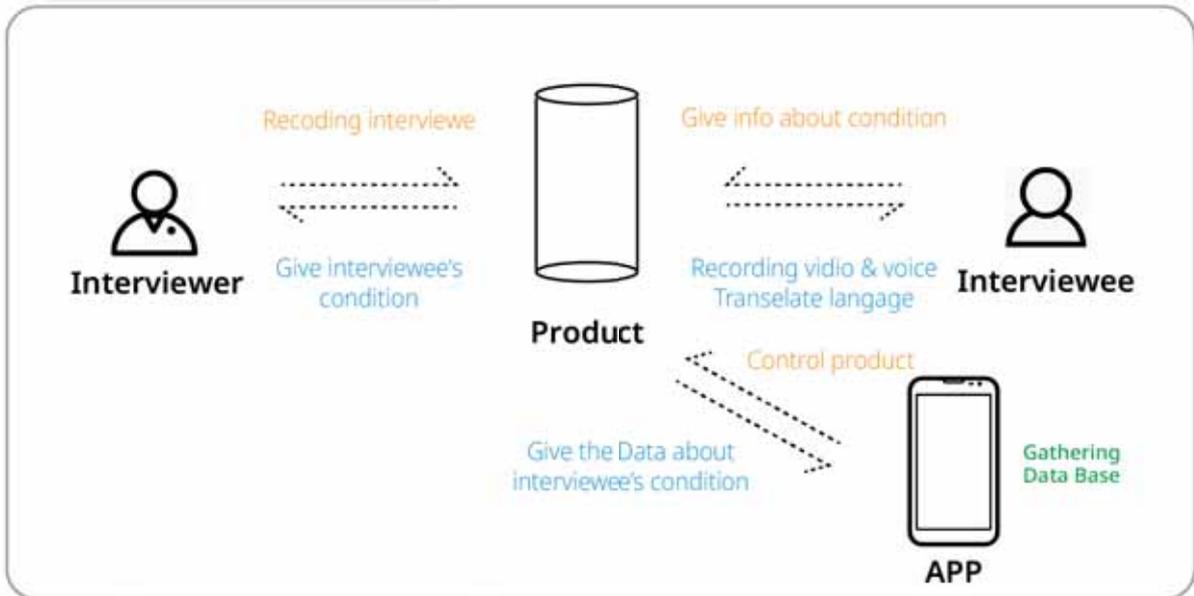


## Service Detail

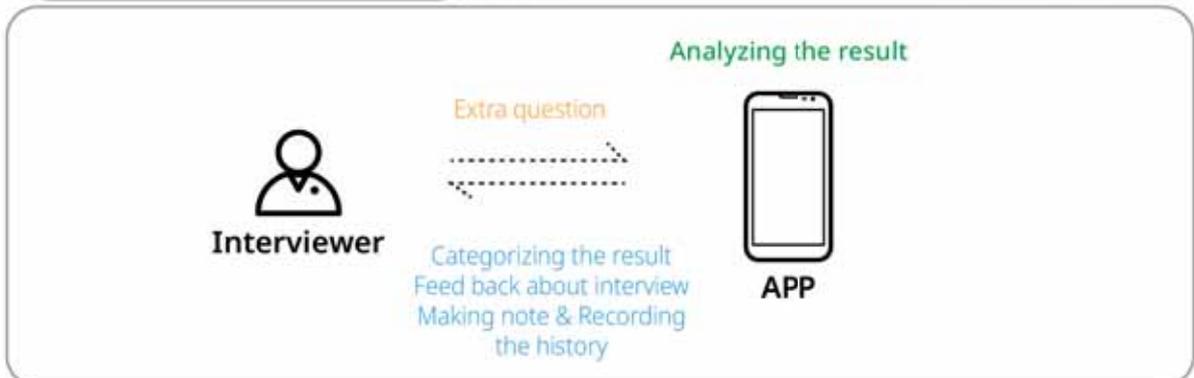
### Planing interview



### Doing interview



### After interview



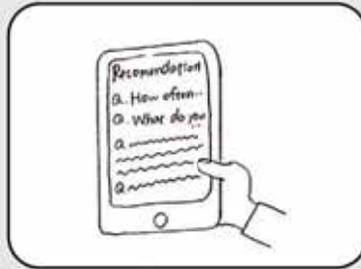
## Service Detail

### 1. Find interviewee



AI find the best person for the interviewee, and recommended.

### 2. Recommend Questions



AI suggests questions that you will need when designing.

### 3. Training



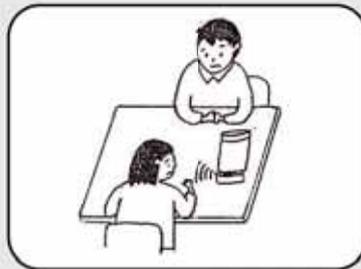
Beginners of interviews can practice interviews against AI.

### 4. Recoding & Dictating



AI records and dictates questions and answers.

### 5. Recognize interviewee's condition



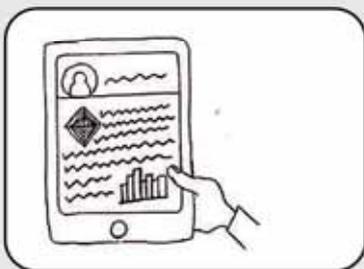
Check the condition of interviewee and, if anxious or frustrated, tell the interviewer to relieve the condition.

### 6. Recommended Extra Question



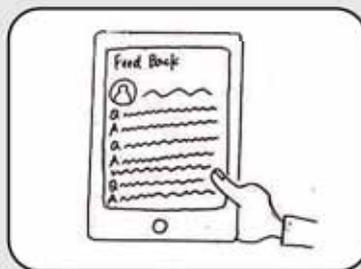
After answering questions, AI suggest additional questions.

### 7. Analyzing Record



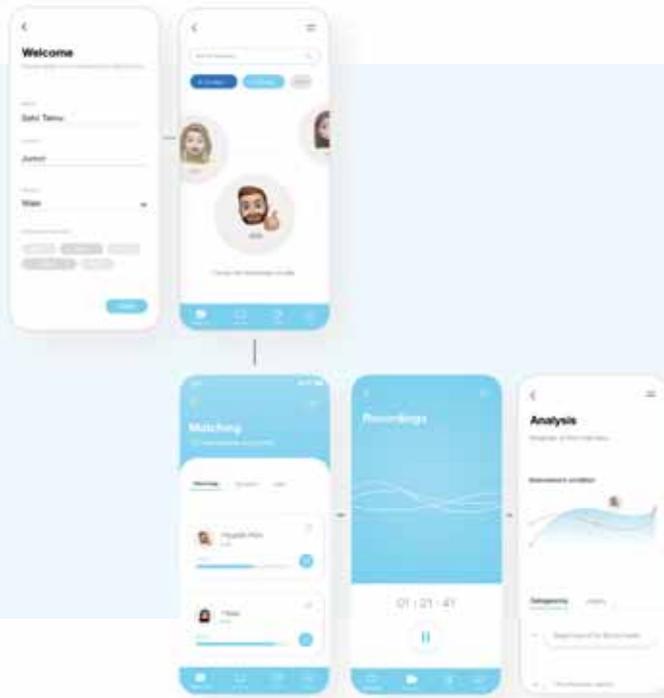
AI analyzes the characteristics of the person from the interviews results. Not only that, but also advice to improve the quality of the interview for beginners.

### 8. Feedback of interview



you can interview questions and answers. looking back, there may be new discoveries.

## App & Product Design



There are many ways to find a suitable target for project, to select options or search for keywords. Once you find the suitable interviewee, you can organize schedule too.

And then, connect with the product to record the interview, and analyze interview. Before the interview, beginner designers can be recommended some tips by AI. Professional designers can also get new inspiration from keyword recommendations.



Our design concept is that the interview is as likely to interfere with the interview as possible.

It's to help you do the interview naturally without answering. We designed it in a simple and modern form.

Using this product in conjunction with Insight App helps both professional designers and beginner designers to conduct efficient interviews. This product is designed to record the interview situation so that the interviewer can develop further, but the interviewer is not too conscious.

# After workshop



## Bae Soyoung

It was a short time, but a useful time. I was able to experience the process of thinking together and having fun with friends from different cultures to produce results. Thanks.

## Kim Hyunjin

It was a valuable time to think about and study the design process in detail. Also, I was very happy to collaborate with good friends. While working together, I learned a lot from Japanese friends, and also motivated too. I was thankful to making me a special experience.



## Miyu Kato

Through this week's workshop, I learned the difficulty of designing something. Also, it was very fun to have a Korean friend. It was a fun week to learn about Korean culture and communicate in English.

## Ryusei Anzai

I thought it would be fun on the theme of design, but at the same time I was worried. However, thanks to the strong support of the group members, we managed to produce the product well. Thank you!



## Won Gaeun

Through this workshop, I think I have a better understanding of design and Japanese culture, and I am more skilled at working as a team. It was sometimes difficult but rewarding for different people who grew up using different languages to work on the design process with a single theme.

## Yukine Hasegawa

I learned the importance of the brainstorm and the prototypes. It was the good experience because we rarely do design collaborations and we feel successful with the project. And I was glad to communicate with students from other college or country. My English was sophisticated as we make efforts in the project. I feel thankful to the members.





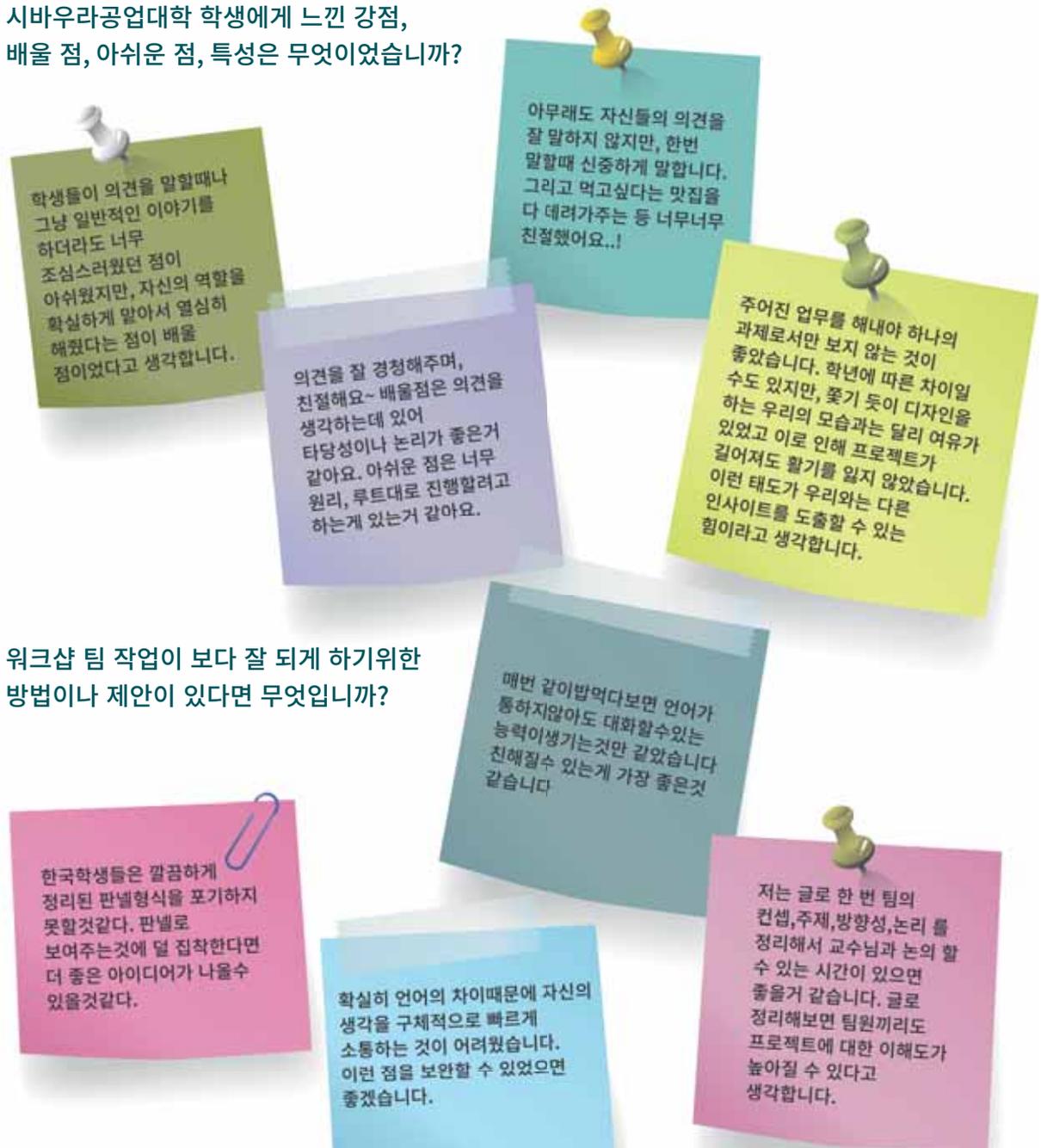
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# EPILOGUE

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## Epilogue

시바우라공업대학 학생에게 느낀 강점,  
배울 점, 아쉬운 점, 특성은 무엇이었습니까?



이번 워크샵에 대한 소감을 적어주세요.

일본학생들과 일주일간  
같이 작업하며 친해지고  
색다를 시각을 볼수 있었던  
점이 재미있었다. 한국과  
일본의 문화를 비교하며  
차이를 찾아내는 부분이  
재미있었다.

아주 좋고 유익했습니다.  
이런 기회가 앞으로도  
계속된다면 학생들에게  
큰 도움이 될 것  
같습니다.

너무 즐겁고 많은 것을  
배우는 워크샵이었습니다.  
UX에 대한 흥미가 큰 편은  
아니였는데 더 큰 흥미를  
얻을 수 있었습니다. 한번 더  
참여하고 싶습니다!

韓国国民大学の学生から感じた強み、学ぶ点、特徴などの  
気づいた点があれば教えてください。

向こうの大学の人がが  
ループワークの段取りがと  
てもよく、またプロトタイプ  
についてもアプリの画面だ  
けでなく3Dの  
ものまで作っていたり、場数  
を踏んでいて手慣れている  
印象を受けました。

イラストレータの使い方や  
早く質の高いものをデザイ  
ンする力、発案する力など圧  
倒的に韓国の学生たちより  
劣っていたと思います。今ま  
でにあまりないものを考え  
だそうとしているのが印象  
的でした。

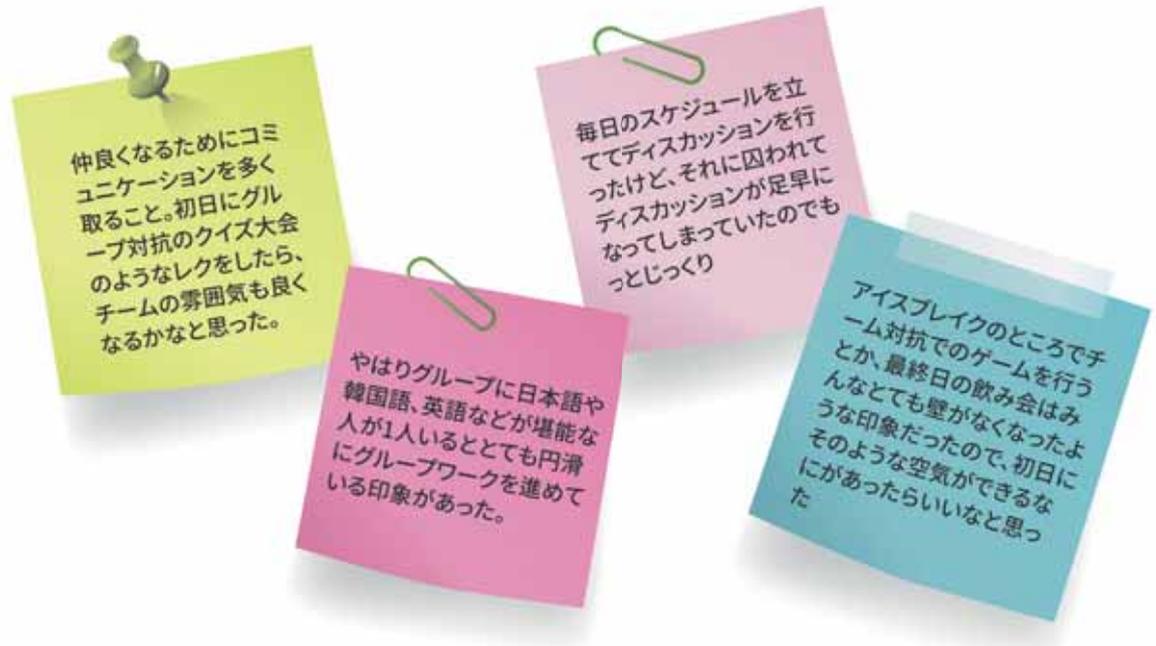
韓国の人は私たちが時間  
をかけて行くことをとても  
早くやっていた。それとテン  
プレートなども多く利用して  
おり無駄なことに時間をかけ  
ていなかった。

アイデアを出す際の、現状、実際  
に起こることから問題を考えよう  
とするところ、そのためアイデア  
にリアリティがでるところ。そのた  
め、プレゼンの時は相手がイメ  
ージしやすいが、既存のサービスに  
似てしまう部分があった。また、単  
純なイラレや3Dモデルなどのア  
プリに対する技術、英語力。  
まとまってから相手に話し合いを  
持ち込む

## Epilogue

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ワークショップにおいてチームワークがより上手く進められるために方法などの改善点があれば教えてください。



今回のワークショップについて全体的な感想を教えてください。

