

JiYounJung

Design for Interaction portfolio



Design,
Prototype,
Deploy.



Hello, 🖐️

My name is Ji Youn, Jung

Interaction Designer

from Seoul, South Korea.

Here's my work. Enjoy!

Yonsei University, Seoul, South Korea **2014 - 2019**

B.S Human Environment and Design

B.S. Cognitive Science

Things I love

Glitch Art, Cats, Galleries, Cult Movies

Contents

1.	Dis_connection	3 - 4
2.	Memory Box	5 - 10
3.	Carebility	11 - 17
4.	WalkUni	18 - 23
5.	SMACCO	24 - 25
6.	MalCongMiMon	26 - 27
7.	April Greiman	28 - 30

Dis-Connect

Disconnect to connect

Summary	Time	Type	My Role
A product service system that helps you disconnect from mobile addiction	06/2019 - 07/2019	Personal	Primary: UX Design, Product Design, 3D Modeling
	Duration 8 Weeks	Team Ji Youn Jung Nayoung Kim Gunwha Lee Jueun Kim	Secondary: UI Design

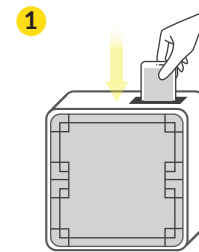


Concept

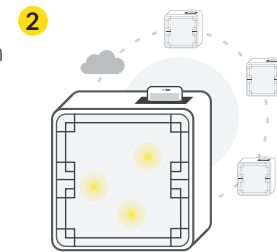
How could one overcome the Fear Of Missing Out when one could easily be connected through a small mobile screen?

Dis-connection presents a fun twist for people desiring digital alliance. When users insert their phone into the window- shaped device, small 'stars', each representing another person, illuminate through the window. This new concept of networking will motivate people to give a pause, reduce their anxiety and simply relax.

How to use



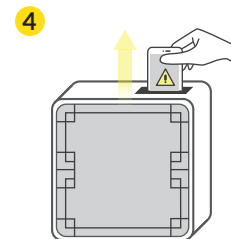
Insert phone to turn on device and get connected with other stars. Once plugged in, your phone will be charged.



Meet with other stars inside your window. The number of stars represent other dis-connected users.



Stay connected longer and gradually create movement of stars. Stars will increase its speed and bump more often with each other.



Using phone will reset your window. Attention of phone removal will be sensed and a pop-up alarm will appear on phone.

Background



Many users focus too much on satisfying their needs to belong by means of permanent and mindless connection to other people via SNS.



Traditionally in Korea, window stands for both connecting and blocking the world. The pattern used here is called Ajasal.

Solution

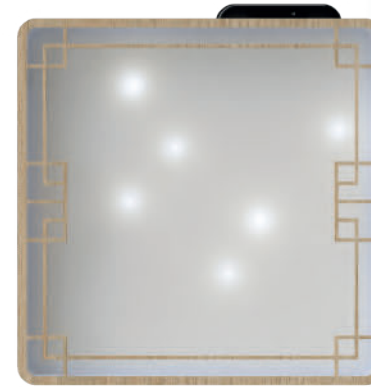
Satisfy your needs to connect

Users can satisfy their needs to belong by simply connecting to people who are disconnected from their phones

Out of sight, out of mind

The device physically hides the phone and helps demotivate users from compulsively grabbing their phones.

Product



Connect to your window during anytime of the day through an app

Memory Box

Edu-tainment service for dementia prevention

Summary

A service design that helps elderly to prevent dementia. With Product, Graphic, Interaction Design outcome

Time

03/2017 - 06/2017

Duration

16 Weeks

Type

Coursework

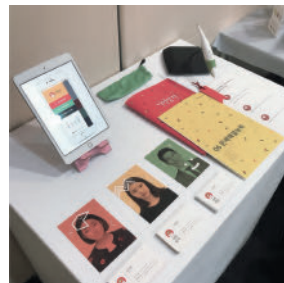
Team

Ji Youn Jung
Gohyeok Dok
Boa Seo

My Role

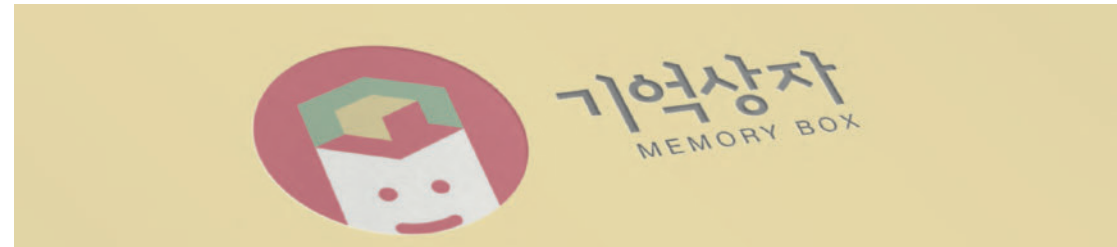
Primary:
Service Design,
Product Design,
Branding

Secondary:
UI Design



Concept

Memory box is a service that not only relieves the burden of the elderly but also the burden of the family by visiting the home directly. Traditional services provided only content that lacked active stimulation. Memory boxes are provided with parishments to provide more diverse cognitive plays, and content that is not boring, making the prevention of dementia a waiting time, not just an obligation.



Value



Visiting Service

Visiting tutors bring learning materials and visit home directly to relieve the burden



Systematic Care

Provides feedback based on the learning management app provided for tutors to systematically analyze student's status.



Personalized Contents

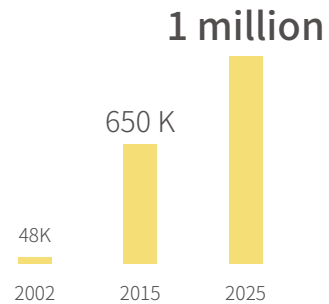
Provides paper and tangible material to stimulate both of cognitive and mobility ability.

Background

Increasing number of dementia patients as the population ages.

Population Trends and Prospects of Dementia Patients

(Statistics Korea, 2017)



Cost of spending a year on one person with dementia.

(Ministry of Health and Welfare, 20015)

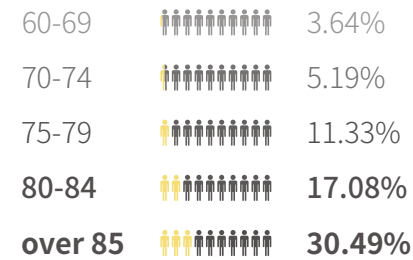


Key Insight

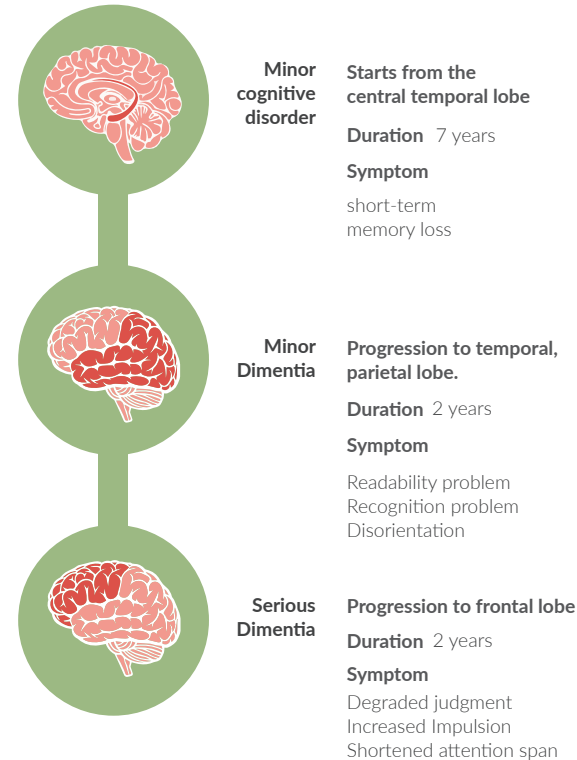
If dementia is detected in an early stage and delay the progression for two years, the prevalence rate will be reduced to 80 percent after 20 years. The severity gets significantly lower too.

Dementia Prevalence Rate by Age Group

(Ministry of Health and Welfare, 2008)



Dementia Progress



Cognitive ability that gets stimulated from Memory Box contents

Left Frontal Lobe

The process of generating as many words as possible can activate the left frontal lobe of the brain.

Parietal Lobe

- spatial reasoning,
- Recognition ability

Temporal Lobe

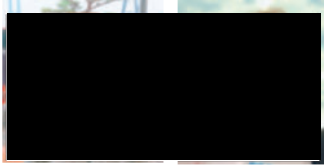
The process of learning and storing information can activate the temporal lobe of the brain.

Frontal and Parietal lobe

These area gets stimulated by solving few simple calculating subjects while paying attention,

User Research

In-Depth Interview

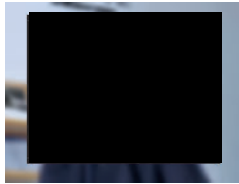


Insight

- Too much detail or detailed feedback may cause resistance
- Have a self-regard issue. Should be careful while approaching

Expert Interview

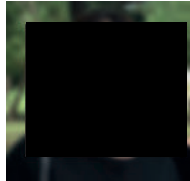
Head of a department, Seoul 50 Plus Foundation



Insight

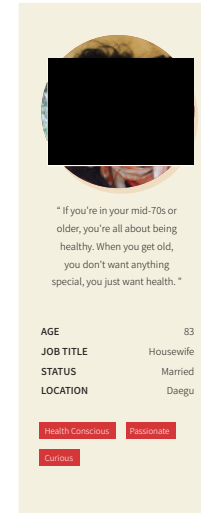
- There are a lot of people with dementia who are illiterate and have a lot of desire to learn Hangul.
- It would be nice to add contents that can recall memories
- A game that can be played simply using existing rules. Try to use one material in different ways

So Eun Park, Ph.D.
Auditory Electrophysiology and Aging Lab
University of Wisconsin-Madison



- Visual training content using color, hand-moving content helps brain activity
- Repetitive cognitive stimulation is crucial
- Input of different senses - auditory, visual, tactile, etc - stimulates different parts of brain

Persona 1



BIO Choi Ok-soon is sensitive to health care. Although her physical function and other health conditions are good, she is worried about changes in her memory or knee as she gets older. Choi Ok-soon's biggest concern is her family. She places the greatest value on spending time with her family. Her goal is to be healthy in her late years so that she won't become a burden on them. Her main concern is preventing dementia, and most of her daily life consists of activities that keep her healthy and prevent dementia. She watches health-related broadcasting programs every day and visit the swimming pool more than four times a week. However, she is not sure exactly what she should do to prevent dementia, and some of the activities she knows are difficult to do consistently.

GOALS

- Live a healthy life
- the steady and easy prevention of dementia in everyday life.

NEEDS

- Help maintain a steady level of health
- Simple and efficient way to prevent dementia

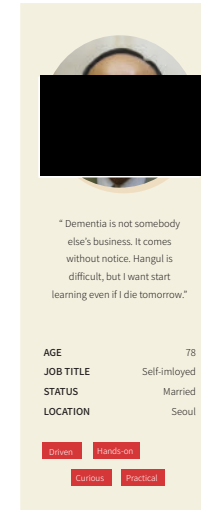
PAIN POINTS

- Concerned about degrading cognitive ability
- Lack of confidence
- Don't do activities that feels boring

PERSONALITY



Persona 2



BIO Jang Soon-won recently has become more and more unable to remember what he heard a while ago. When he was young, he often drank alcohol because of his work, and his livelihood was stressful. High blood pressure and hyperlipidemia were also poorly managed. His memory seemed to be getting worse, too. In the end, five years ago, Jang underwent a cognitive test and brain imaging at a hospital. "I'm not Alzheimer's yet, but since I suspect a longitude disorder, let's take a brain nutrient and watch it." He was worried about when it would lead to dementia. It was also unclear whether there would be any way to prevent dementia or how to manage it. If he had a dementia prevention program, he would like to participate, but he had no other option but to go to the hospital regularly. He wants to spend his old age with people who are precious to him, and wants to learn Hangul, which he did not fully learn when he was young.

GOALS

- Prevention of dementia
- Learn Hangul

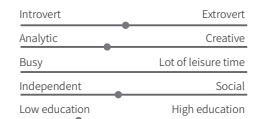
NEEDS

- Dementia prevention program
- Simple and fun Hangul education

PAIN POINTS

- Takes time to read letters
- Cognitive disorder started
- Sometimes gets shameful of his ability

PERSONALITY



How it works

1

Sign up & Diagnosis

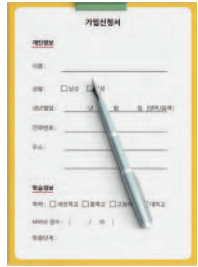
Elderly customers can sign up with personal tutor's help, and they can check up their condition based on Table PC application or print outs.



2

Service Starts

Elderly Customers get assigned to program that suits them, and get notified about pricing plan. Service begins in earnest.



3

Individual Study - paper activity

Using individual study papers and tablet PC, users start individual classes with an help with tutor

Learning levels



Sprout

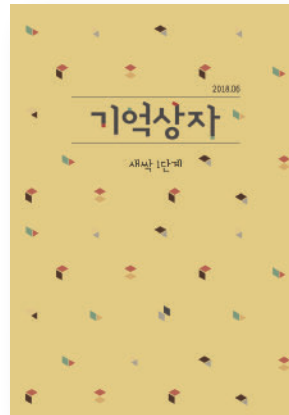


Tree

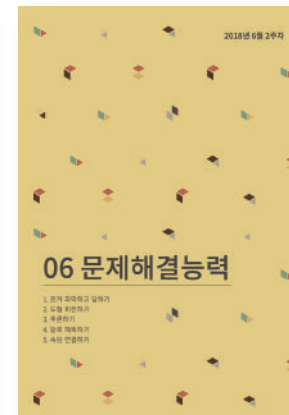


Forest

Paper material



Cover



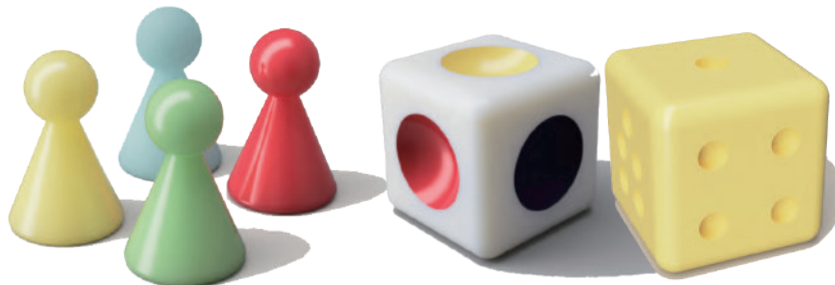
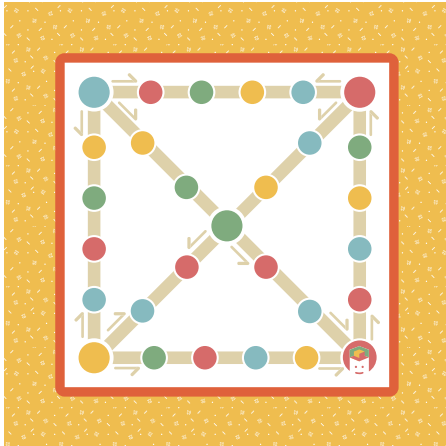
Contents

Smart
Pen

4

Tangible activity

Users can take part in physical activities in social settings using objects. They can develop hand-eye coordination, hand muscle mobilities, and cognitive skills



5

After class

Users can carry out practices with rented paper materials and objects on daily bases, without tutors help

6

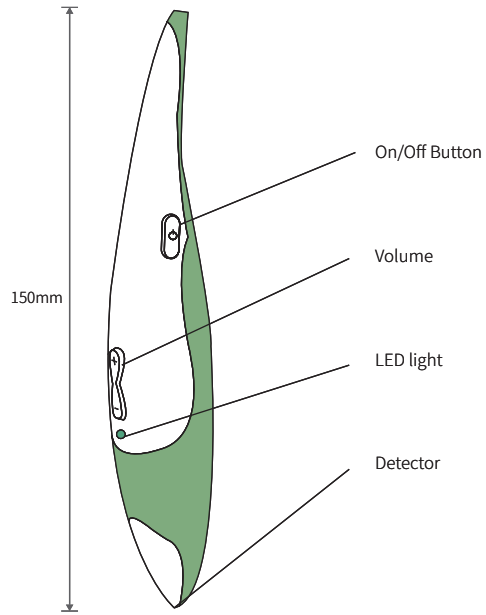
Follow-up management

Users can receive feedbacks through mails and mobile apps(optional), and they can decide if they want to continue our service



Smart Pen

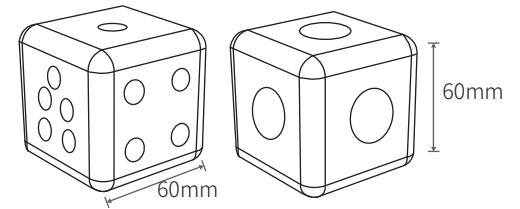
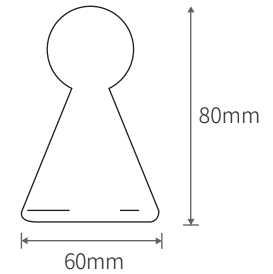
Smart Pen is easy enough for 3-4 year olds to use. Users point smart pen in selected area in paper material. Pen detects the contents and interacts accordingly. This interface not only helps illiteracy learners, but also literate learners. For usability, I picked ergonomic shape and put a number of buttons as minimum.



Alphabet Matching Board Game

Through the matching process, the cognitive function is stimulated, and the learning of Hangul gets easy and fun for illiterate learners. Existing dioceses can be used over a minimum of five weeks, supplementing that they are disposable.

It consists of fabric board, human-shaped horse, dice, jjamppong, memory card, etc. and is the form of the front back. A guide-book with the rules of the game is provided.



Prototypes



Carebility

Premium outpatient assistance service

Summary

A service design of Premium outpatient accompanying program.

Time

03/2019 - 06/2019

Duration

16 Weeks

Type

Coursework

Team

Ji Youn Jung
Yesul Yoon
Jungyeok Lim
Yoonjung Jung

My Role

Team Leader,
Service Design,
Branding,
Prototyping

Note 06/2019
Oral presentation |
Corresponding Author
| Journal of Korean
Academy of Nursing
Administration, Seoul



Journal
Oral presentation
Accept Letter



Service Introduction Video
<https://youtu.be/bcP8njVDysg>

Concept

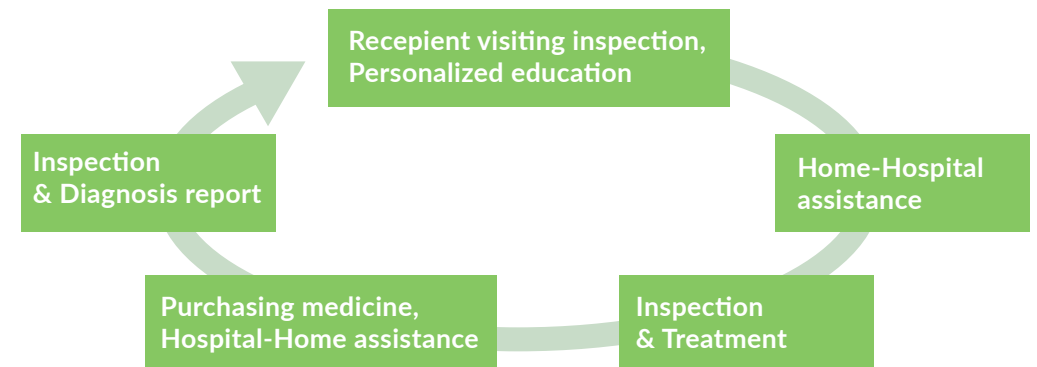
Visiting hospitals can be tiring and frustrating experience not only for patients, but also for their families. It usually takes half to all day for the whole process. Stress caused from this can lead to discord or depression.

Carebility offers care and mobility for outpatients having trouble visiting hospitals.

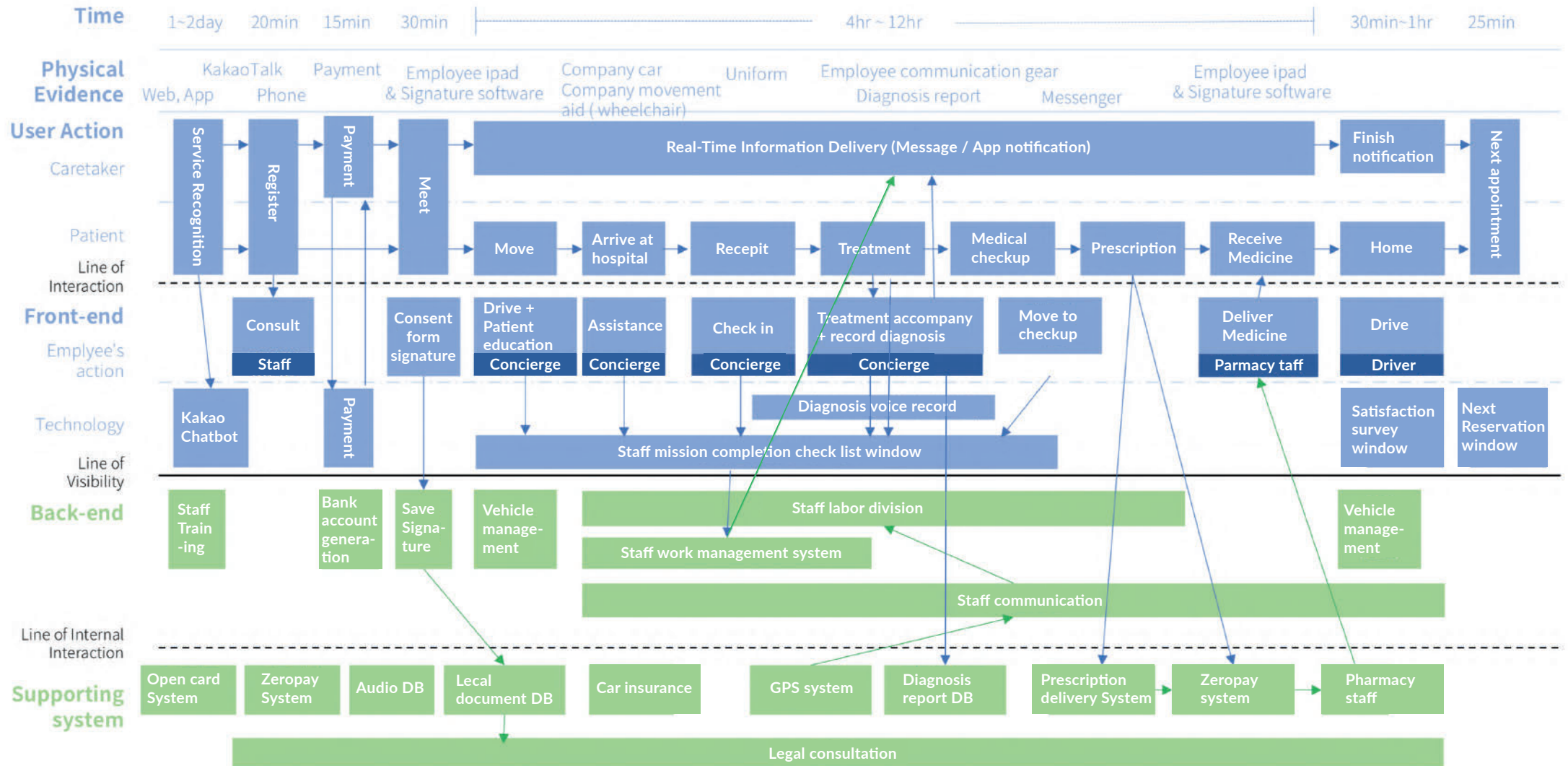


Make your hospital visiting experience safer and special. Carebility helps you to manage a healthy life on your own with well trained staff, as well as nursing expert

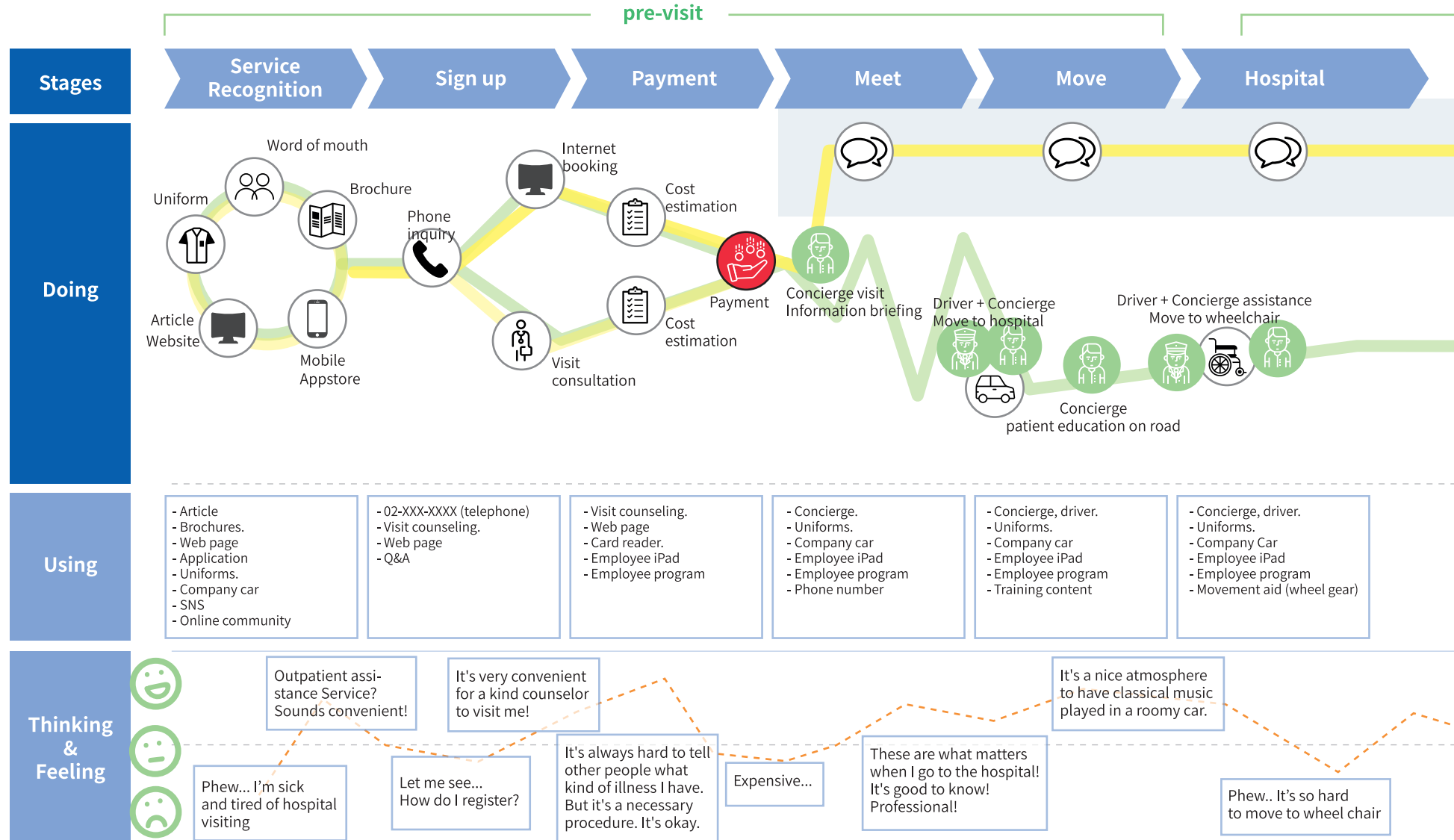
Process

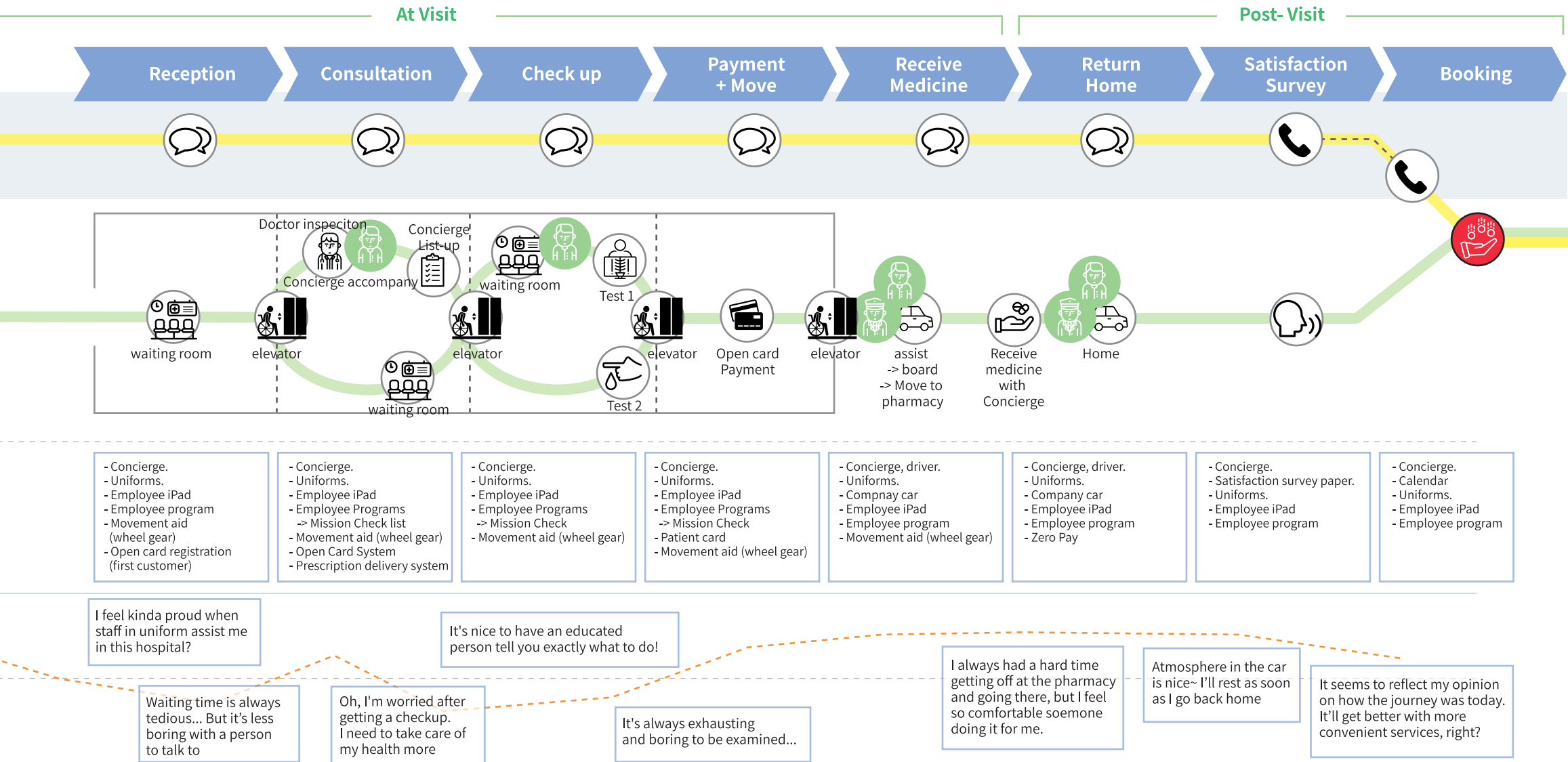


Service Blueprint



Customer Journey Map





Business Canvas

Partner network

- Car insurance
- Payment system (Zero Pay, Open Card)
- Server Management Outsourcing
- Legal advice (law office)
- Big 5 Hospital
- Pharmacy

Customer relationship

- Customer Service
- Service of professional nursing care staff
- Professional nursing staff counseling service
- Visit counseling
- Instant feedback
- First aid
- extra service to subscriber customers
- Personalized patient engagement health education service
- Subscription
- Price Management

Value proposition

Care (for patient)

- at the patient's eye level
- We've got a lot of pre-trained staff working on it.

Time Saving (for guardians)

- Spending half-a-day in the hospital.
- Only need presence when needed

Trust (for both)

- All employees are well aware of the diseases and symptoms.
- System well-established (seamless)
- Open to customer feedback
- Reachable at any time during the service.

Core capability

- Safe treatment of patients
- Real-time alarm, should be able to get in touch at any time
- Patient education during travel time (patient involvement)

Activity configuration

- staff training
- vehicle management
- inter-employee communication link
- Communication with the customer
- Subscribed Customer (VIP Customer) Management

Distribution channel

- Zero Pay
- iPad Program (For Employees)
- Online platform (website)
- Telephone (wired)
- E-mail
- Uniform
- Brochure
- News article
- SNS
- App store
- Vehicle
- Txt message

Target Customer

- Patient with the degree of illness that he or she needs to be treated in a large hospital
- Upper classes enough to pay for VIP wards.
- Mentally-alert patient
- Patient visiting for cancer treatment on the same day
- Stroke patient
- Patient's family.

Cost structure

- Employee Training Costs
- Employee monthly expenses
- Vehicle Purchase Costs
- Vehicle Management Costs
- Legal Advisory Costs
- Payment System Costs
- Big 5 Hospital Marketing
- Marketing
- Employee communication fee
- Communication costs with customers
- Call Center Operating Expenses
- Management Costs
- Consumables Expenses
- Rental fee

Revenue Stream



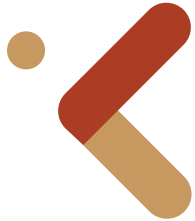
- Payment



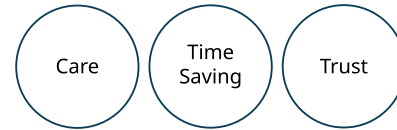
- Extra service charging

Branding

LOGO SYMBOL



Company Value



Brand Attribute

Carebility provides outpatient treatment total care service to **strong** customers in an **open** environment with a **trustworthy** voice. Helping them feel **worry-free** and **time-saving**. With a **premium** X-factor.

Tagline

함께할 수 있으니, 케어빌리티

Since we can make it together, Carebility

LOGOTYPE

케 어 빌 리 티
care & mobility for you

LOGOTYPE, SECONDARY

케 어 빌 리 티
care & mobility for you

케 어 빌 리 티
care & mobility for you

COLORS

Navy	CMYK = 100 / 73 / 51 / 59 RGB = 8 / 41 / 57 HEX = #082939
Caramel	CMYK = 20 / 35 / 64 / 8 RGB = 200 / 161 / 102 HEX = #c8a166
Apricot	CMYK = 11 / 30 / 47 / 1 RGB = 222 / 186 / 148 HEX = #deb894
Titan	CMYK = 23 / 88 / 100 / 16 RGB = 160 / 62 / 33 HEX = #a03e21

Symbol & Logotype on different backgrounds



Brand Application



Walkuni

Walk uni with augmented memory application

Summary

Inner-circle, walk tracking mobile application that archives and augments memory.

Time

09/2018 - 12/2018

Duration

12 Weeks

Type

Coursework

Team

Ji Youn Jung
JeongIn Choi
GangHyon Bae

My Role

Team Leader
User research
UI design,
Prototyping,
User testing

System Concept Statement

Campus is a place where memories and history of many people are accumulated. In particular, the campus of Yonsei University has a good environment for walking with a large amount of land, including green space, which was created across the surrounding mountains. However, many people lack exercise due to their busy academic lives and do not know much about the space on campus, even though it is a campus where students walk for years and faculty members for decades.

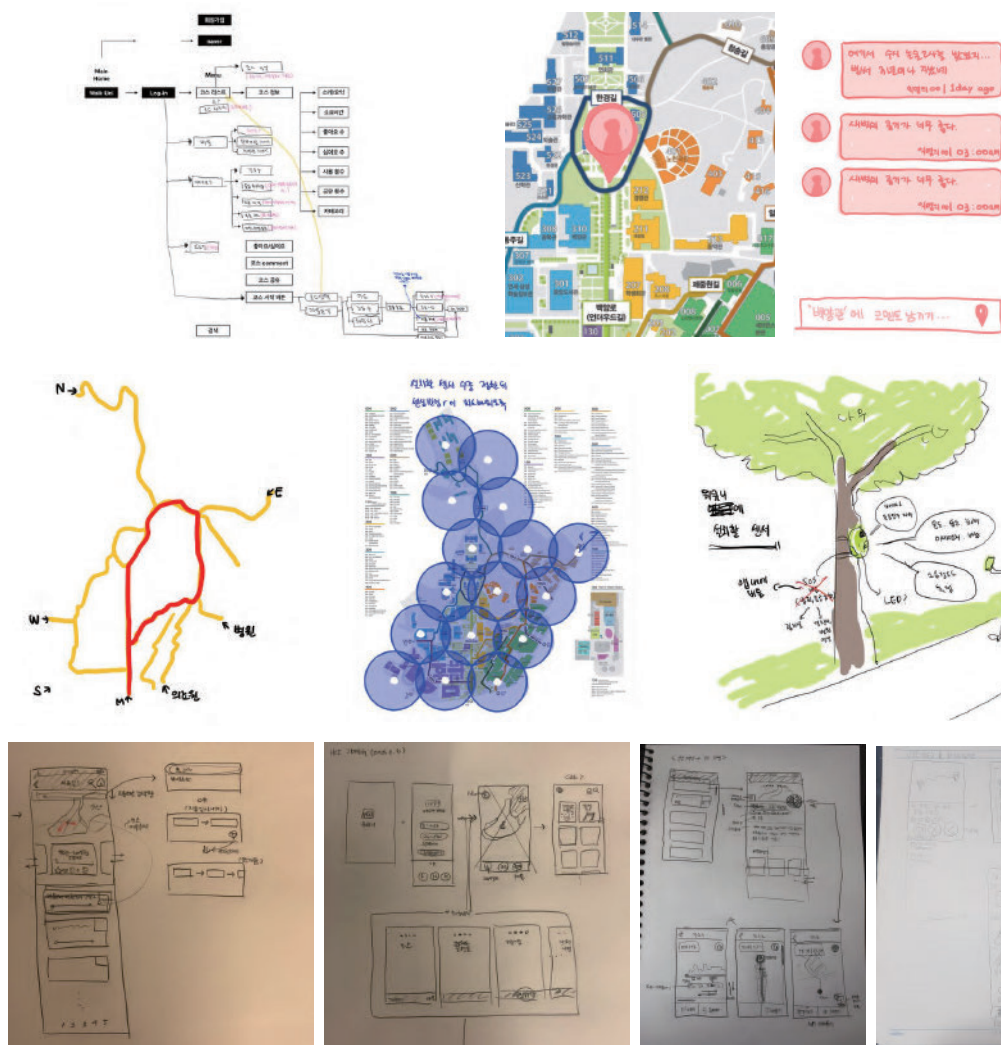
To address these problems, Walk Uni is a campus augmented memory walking service that allows students and faculty members of Yonsei University to walk around campus to share their feelings and find meaningful places. Walkuni allows users to upload individual paths and walk along courses registered by other users. It can be scraped or shared through SNS. As users walk through the course, they can leave the events, thoughts, or memories that have been on the road as a result. This allows users to share each other's experiences and follow the footsteps of other users, giving new meaning to campus itself. It provides motivation through the walking competition system, which uses school numbers and their affiliation to rank each group by the number of steps.



Campus Alley to alley
Augmented Memory Walking Service
WalkUni



Sketches



Persona 1

Name Jiwon Kim

Age 21

Area Seoul

Job Undergraduate

Status Single

Major English literature

Bio Kim Ji-won, who lived in Songdo for a year and became a rookie in Shinchon, was embarrassed by the too wide campus. The names of the buildings are so confusing, and it's hard to find one's own major. When we meet at a group meeting with our seniors, they say we want to meet somewhere, but we don't know where we are, and there are quick and easy shortcuts. Even if you ask around, everyone seems to talk about different things. The campus in my high school notebook was so beautiful, but I am sorry that I am not fully aware of it. Spring, summer, fall, and reddish lotus flower are so pretty. They take pictures in front of cherry blossoms in spring and in fall in front of red maple leaves and post them on Instagram. I hope other people will see me so pretty.

Goal Moving Inside Campus Efficiently

Become close to the campus, know every nook and cranny.

Interacting with the people at school

Needs Wants to know a shortcut or an efficient route to travel.

Wants to find space or interesting element that I didn't know.

Wants to communicate with the people of the school by sharing my experience about campus.

Pain Points There is no basic knowledge of campus geography.

I don't want to run into a strange student offline.

It's annoying to exercise. I hate uphill.

Personality

Extrovert ☐ Introvert

Social ☐ Independent

Conservative ☐ Adventurous

Busy ☐ Free

Prefer Indoor ☐ Prefer outdoor

Persona 2

Name Sanghoon Han

Age 42

Area Seoul

Job Professor

Status Married

Major Psychology

Bio Professor Han Sang-hoon wonders what university students are thinking these days. Even when I have a class, I don't ask a lot of questions and ask them something they don't know, because there are no students who come and ask questions or start talking. That's why they try to approach students with an open attitude during class, but they don't seem to be easily. Professor Han Sang-hoon, who attended Yonsei University in his undergraduate degree, said, "The campus of Yonsei University is not just a job but a home. I feel a little underweight since I'm in my 40s. However, as I study in the lab, teach graduate students, and do a few undergraduate classes, I just can't find time. So, I tend to walk alone or enjoy a walk on campus with graduate students and fellow professors.

Goal Want to know what students think.

Steady exercise and physical fitness

Needs Easier way to interact with students

A simple exercise in a busy life

Pain Points Too busy with one's life

The students find it too difficult of him

Afraid of getting older

Personality

Extrovert ☐ Introvert

Social ☐ Independent

Conservative ☐ Adventurous

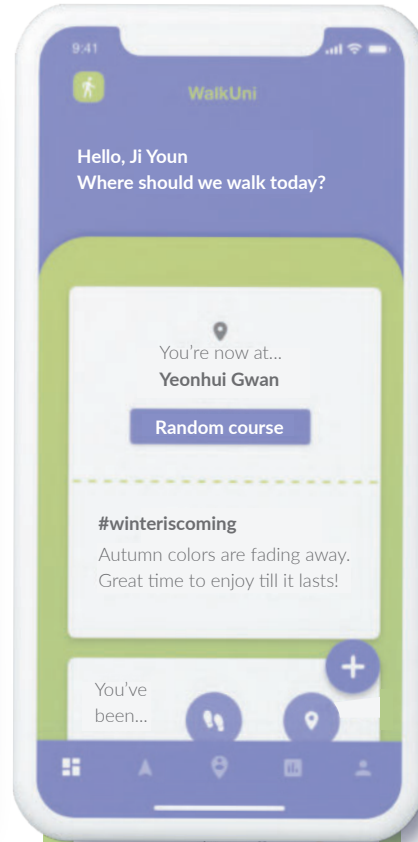
Busy ☐ Free

Prefer Indoor ☐ Prefer outdoor

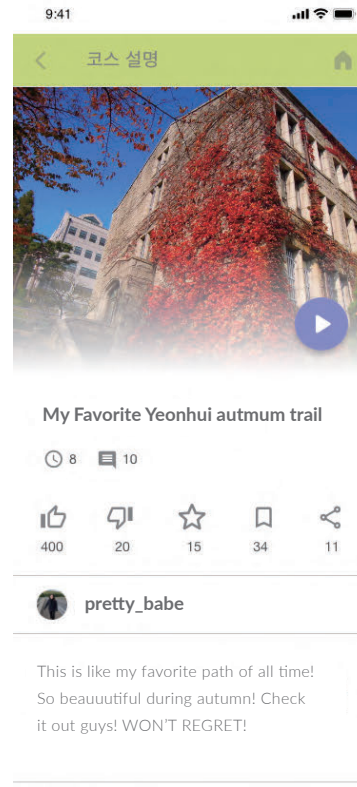
Loading page



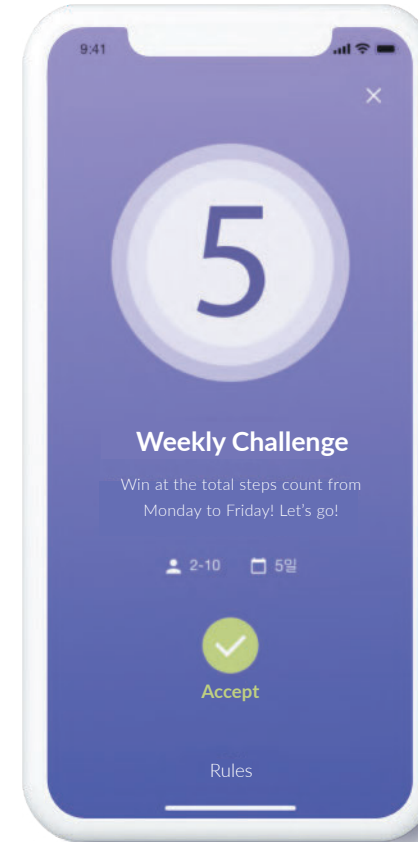
Dashboard



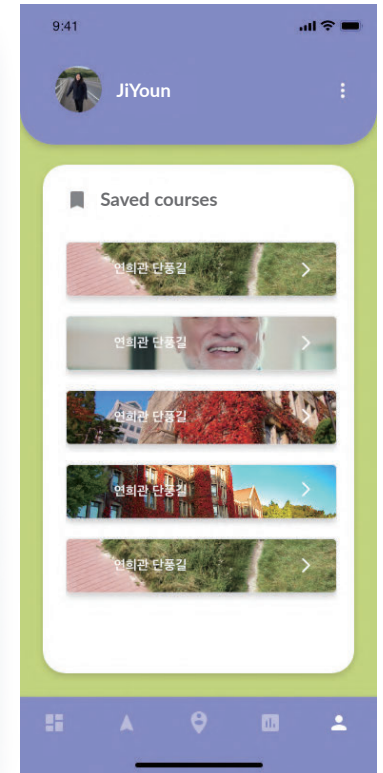
Course Page



Challenge Page



Profile, Scraps page



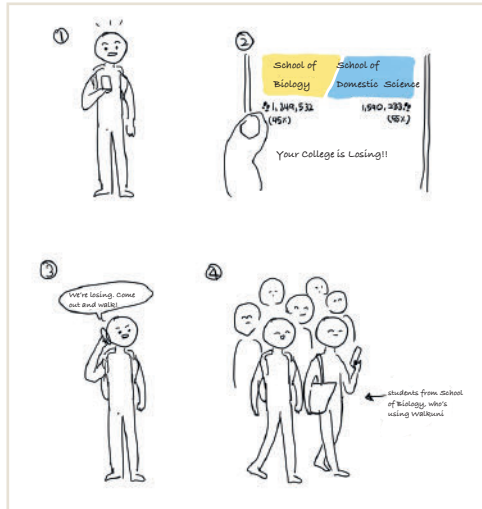
Scenarios



'Don't get wait on rainy day to the main gate' course



'Enjoy maple viewing' course



You can't lose! College battle mode!



Too busy for walking? Take a walk virtually!

UX Evaluation

UX matrix

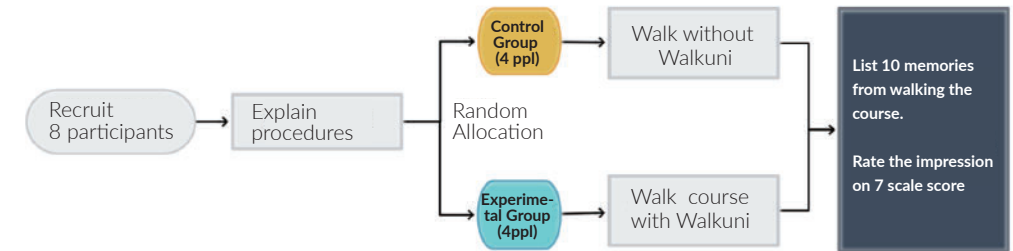
Work Role : User Class	UX Goal	UX Measure	Measuring Instrument	UX Metrics
Control group : taking a walk on campus	Quality of user experience	User's memories of the course	List 10 memories	Ratio of 사회적, 타인에 대한 기억/ 개인적, 물리적 기억
	Overall user satisfaction	User opinion of overall experience	Emotional reaction questionnaire Q1-Q7	Average ratings across users and across Questions
Experiment group : talking a walk on campus using walkuni	Quality of user experience	User's memories of the course	List 10 memories	Ratio of 사회적, 타인에 대한 기억/ 개인적, 물리적 기억
	Quality of user experience	User opinion of overall experience	Emotional reaction questionnaire Q1-Q7	Average ratings across users and across Questions

Research questions

1. Does the use of an augmented memory system result in a change in perception of a particular course?
2. After using an augmented memory system, can individual memory be extended to a 'common memory'?

Experimental Design

A Study on the Possibility of Augmented Memory System in Campus

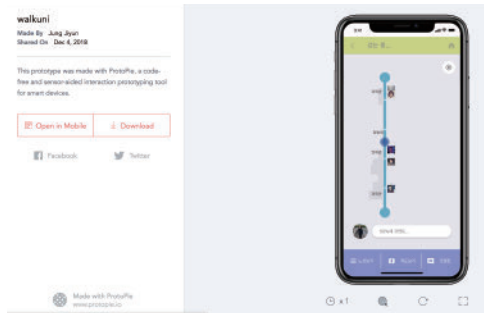


Conduct a experiment, controlling : age, Walkuni experience, course.

#Control group: Walk the same course (path) without Walkuni and answer the question.

Experimental group: Walk the same course (path) while using Walkuni and answer questions.

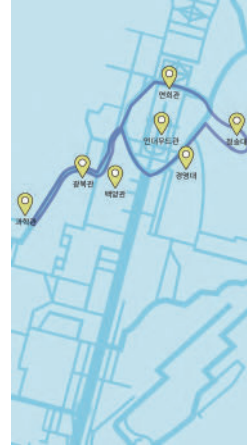
Walkuni prototype



Four pages

- Course Description
- Walking: To view the route.
- Walking: Map View
- Walking: View comments

Tasks given to participants



Science Building - Cheongsongdae - Science Building.
A 15-minute course walk

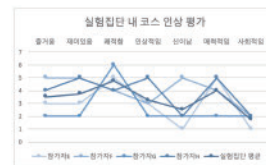
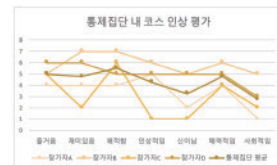
2 Page survey

1) Memory recall tasks
orally
= The experimenter
wrote it down

2) Evaluation of impression
on the course by
participants themselves.
7 point scale

Results

통제집단	2	1	1	1	1	2	1	2	4.571428571	0.4285714286
통제집단	1	1	1	1	1	2	1	1	2.14	0.1111111111
통제집단	2	1	1	1	2	2	2	1	5	1.5
통제집단	1	1	1	1	1	1	2	1	3	0.1111111111
통제집단	1	2	1	1	1	2	1	1	4.29	0.25
실험집단	1	1	1	1	1	1	1	2	3.802325714	0.44015625
실험집단	1	1	1	1	1	1	1	1	5	0.1111111111
실험집단	1	1	1	1	1	1	1	1	4	0
실험집단	1	1	1	2	1	1	1	1	6.43	0.1111111111
실험집단	1	1	1	1	2	1	1	1	4.14	0.1111111111
실험집단	1	1	1	1	2	1	1	1	4.6429	0.6533333333



Pictures taken during experiments



Course environment



* Temperature is between -7 and 4 degrees,
very cold

* The course starts from the Science Museum
on the campus of Yonsei University, goes
around the Underwood Hall, goes around
the Cheongsongdae area, and returns to the
Science Museum in front of the Underwood
statue at the end of Baekyang-ro.

* The course takes about 15 to 20 minutes.

* Experiment times vary from 9 a.m. to 8 p.m.

* At that time, the sunset time was 5:14 p.m.,
and participants who participated in the
experiment after 6 p.m. performed the
experiment on a very dark evening.

* Participants walked the course alone,
followed by one experimenter at a distance
of 2m

SMACCO

Quit nicotine without noticing

Summary	Time	Type	My Role
A product service system that helps you overcome nicotine addiction	06/2015 - 07/2015	Coursework	Primary: UX Design, User Research
	Duration	Team	Product Design
	8 Weeks	Ji Youn Jung Miji Kwak Nayoung Kim	
		Note	08/2015 Red Award

Concept

Smart e-cigarettes that automatically reduce the amount of nicotine without you knowing and help you quit nicotine addiction. Through the service, users can share their smoke-cessation accomplishments or receive support from people around them.

How it works



The nicotin-free liquid and nicotine liquid located at the bottom of the liquid cylinder are pressured and move through the hole to the upper part to mix.



When the power button is pressed, current flows through the coil, generates heat of resistance, which evaporates the surrounding liquid.



Evaporated vapor is inhaled by the user through the inlet.



Scenario

1. Nicotine autoregulation / Set-up the time period

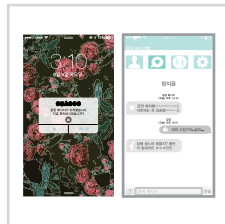


(1) Nicotine decreases daily in fixed-rate.

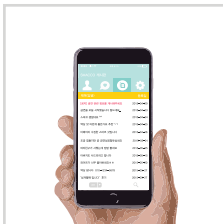


(2) If you put your information, you can check recommended time period and can set up your time period goal.

3. Cheer-up message & SMACCO community



(1) Exchange cheering messages from selected person. Also receives during block mode.

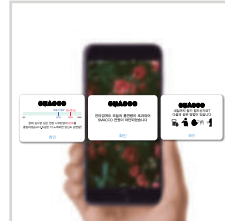


(2) Cheer other users and exchange informations with other users through SMACCO community

2. Warning / Block mode



(1) User's smoking informations are recorded through Bluetooth



(2) You get a warning sign and after certain point, your access to the device gets blocked

4. Nicotine cessation success & Set up maintenance period

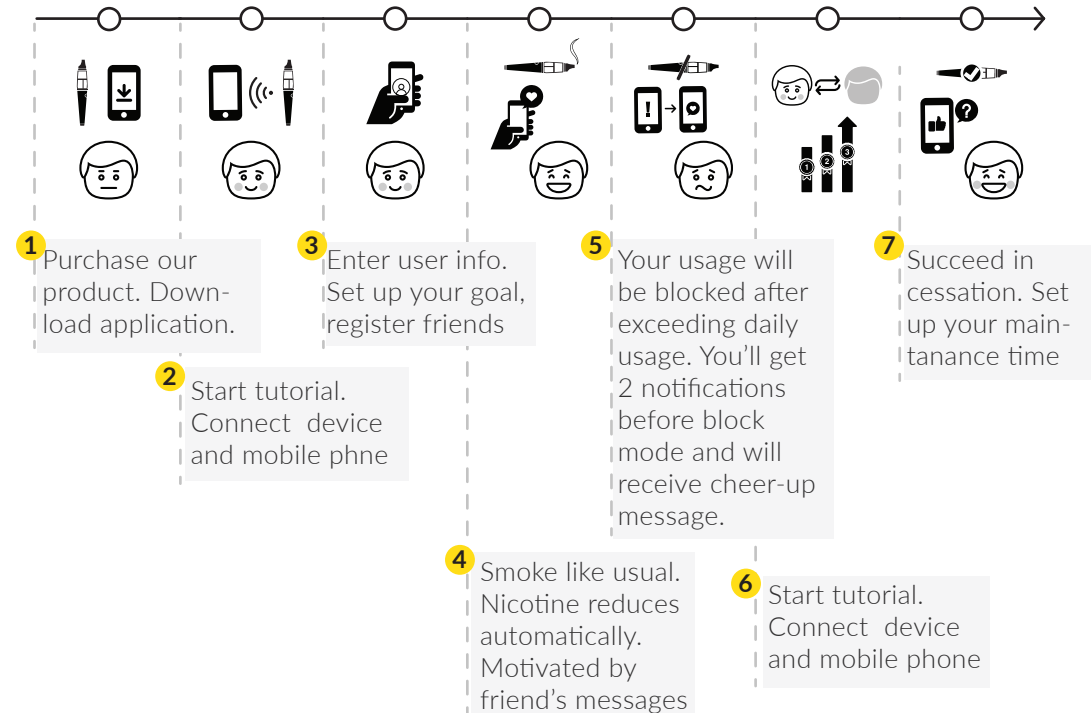


(1) When the goal period is met, you succeed in nicotine cessation, and get a notification



(2) You can use our service to maintain your success

Customer Journey Map



Mal Cong Mi Mon

Fun way to increase micro dust awarness

Summary

Mobile AR game concept to raise micro dust awarness for 3-6 year old kids

Time

11/2018 - 12/2018

Duration

8 Weeks

Type

Lab project

Team

JoonSang Baek
JiYoun Jung
Sujin Park

My Role

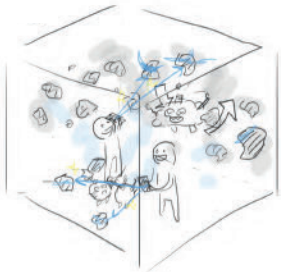
Primary:
UX Design,
User Research
UI Design

Secondary:
Character Design

Concept

My child, does our student wear a mask when there is a lot of fine dust? Mal Cong Mi Mon helps children over the age of four easily and interestingly understand the concept of fine dust and learn from the habit of wearing masks.

Key Features



AR



Interactive
Narrative



Multi player



Game Scenarios



Wear Mask

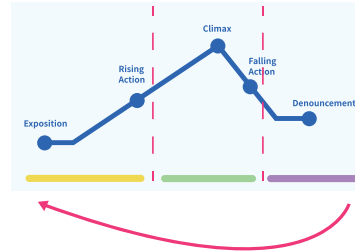


Transform

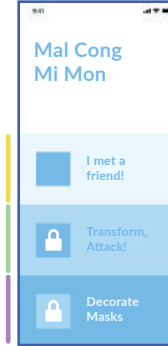


Beat villians

Narrative Arc

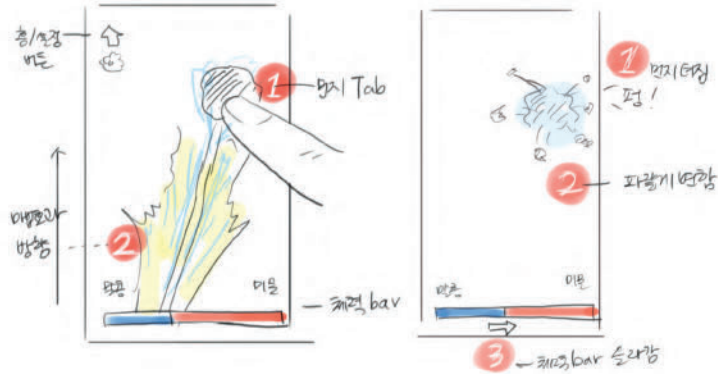


Use Gamification by
unlocking new stories and
feel accomplishments

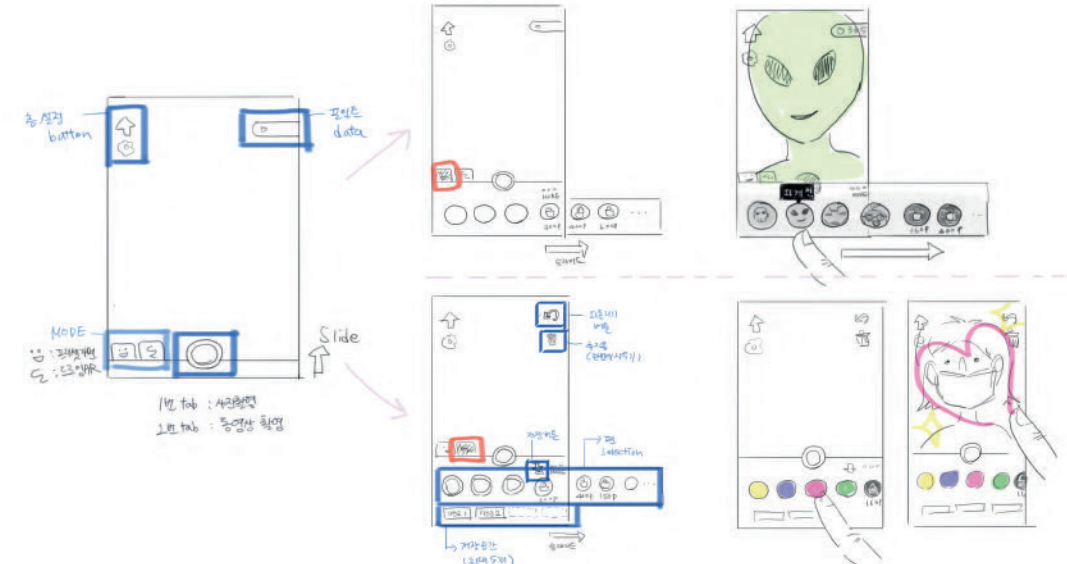


After finishing every stories, you can decorate your mask and enjoy the finished stories again

Battle Interface



'Decorate your Mask' Interface



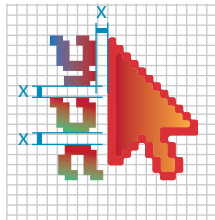
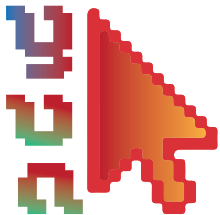
April Greiman

Wannabe designer, April Greiman Typography project

Summary	Time	Type	My Role
Typography design project, learning April Greiman's visual language.	09/2018 - 12/2018	Coursework	Graphic Design Motion Design
	Duration	Team	Note
	12 Weeks	JiYoun Jung	08/2018 Green Award

3D space
concept
design

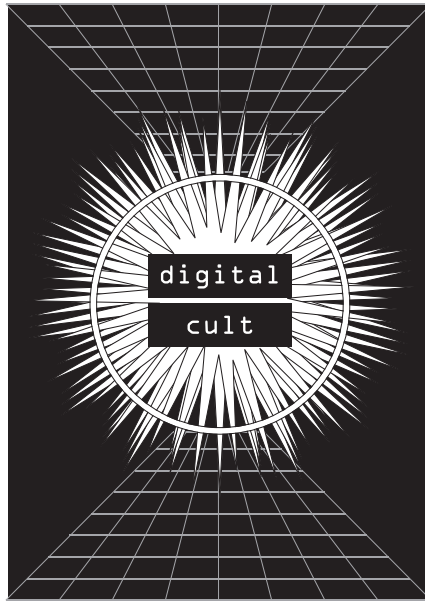
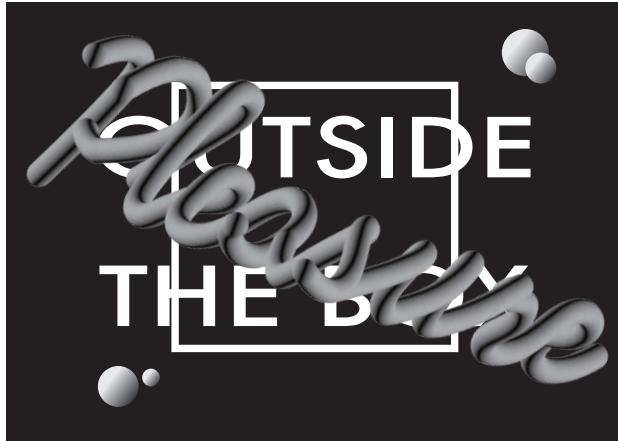
Identity
Design



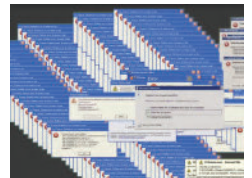
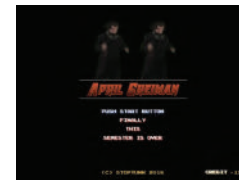
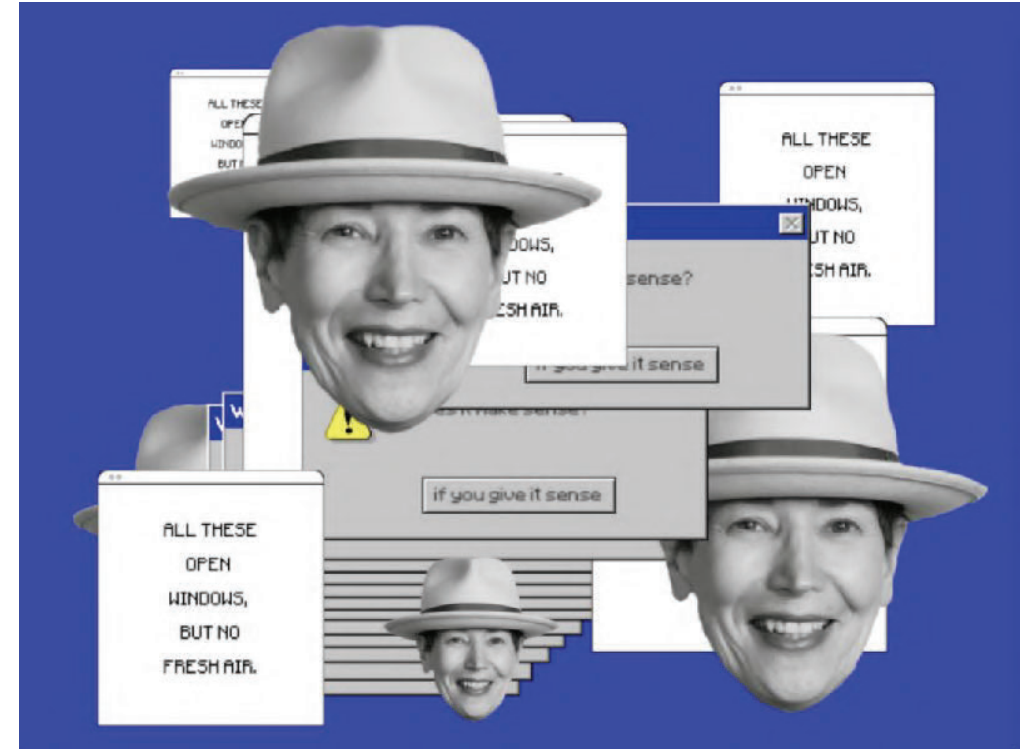
Poster
Design



Typography Design



Motion Graphic Design



Editorial Design

