

ICHI-GO ICHI-E

one chance in a lifetime

ABSTRACT

This project is about design for social interaction in a concrete neighborhood, which is based on the urbanization and increasingly sophisticated networked social background. It starts from a local area with lower income and education level in the city of Eindhoven, aims at enhancing the social interaction and contact between residents through research and design. The targeted neighborhood has a poor reputation within the city, with more than 50% single housing, where the residents lack social communication with each other. The project wants to establish a sense of connectedness in the community, increase social communication, develop a more healthy neighborhood, and build a more positive city spirit.

This design project starts from observing and investigating the real neighborhood context Eckart-Vaartbroek, attempts to generate deeper understanding and analysis from different stakeholders, and obtaining knowledge and comprehension on the design for social interaction in neighborhood. During the process of design project, several prototypes are made according to each phases of the iterative design process.

This design is a social interaction installation along the water side in the neighborhood. People can talk to each other from different sides of the lake, to enhance social connectedness and trigger a poetic lifestyle.

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A hand-drawn map on a piece of paper. It features several labels in different colors and styles. A thick black line runs vertically on the left side. A red label 'Joan F. Kennedylaan' is written vertically along this line. A horizontal line at the top is labeled 'MIRABELWEG'. In the center, there's a red label 'VAARTBRUEK'. Below it, a small red label 'BIEB' is underlined. A yellow line crosses the map diagonally. At the bottom left, a red label 'ECKART' is visible. Near the bottom center, a black label 'Planetenlaan' is written. The map also includes green and blue outlines representing various shapes, possibly buildings or terrain features.

INTRODUCTION

INTRODUCTION

Vision as a designer: Connected community

While currently people are putting more emphasize on their own value, at the same time, nowadays people are paying more and more attention to the positive interactions with other people in society. Social communication has the potential to enhance people's quality of life and make us a more positive and healthy person. Design offers a fancy way to connect the community. It brings spirits and joyful communication for everyone in daily life and enhances people's coherence and communication with various possibilities. (Figure 1, Figure 2)

Project background

This project is about design for social interaction in the concrete neighborhood. By facilitating residents' social participation to enhance their sense of connectedness, I aim at making the community a more positive and healthy place to live in. In this project, I will work on real-life challenges with the relevant stakeholders, to learn from professional attitude, multi-stakeholder collaborations and my role as a designer in societal issues.

Start point

I chose this project because after I was greatly inspired by the "dancing traffic light", I became interested in the social interaction in the public places. I'm so encouraged by the potential positive qualities and feelings the design can create among people, and I see design as a media to connect people and make the city a better place to live in.

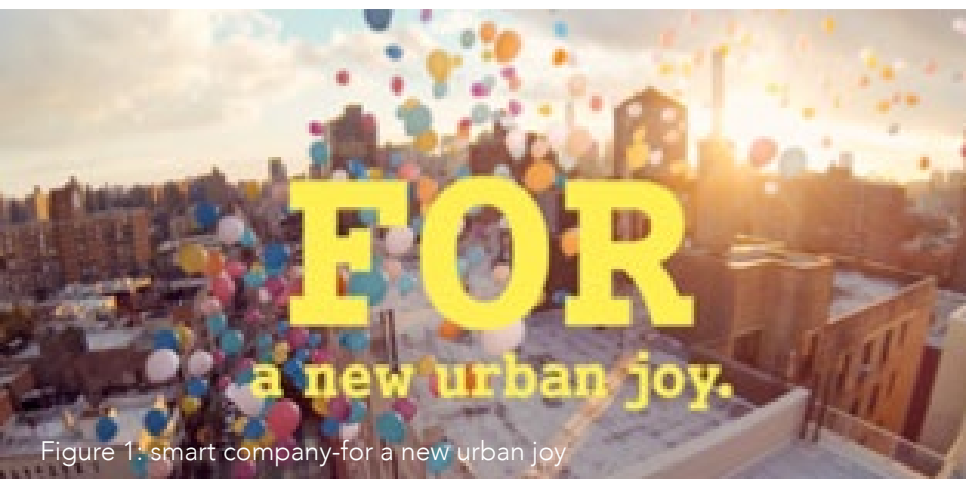


Figure 1: smart company-for a new urban joy

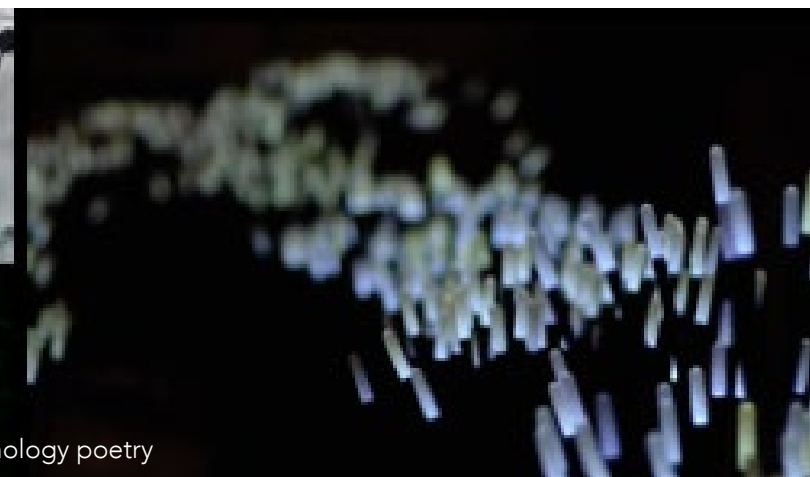


Figure 2: Daan Roosegaarde, technology poetry

INTRODUCTION

Context and dilemmas

Context: The context for this project is set in a specific real context, which is an area called Eckart-Vaartbroek in Eindhoven. Eckart lives 4313 people in the area, has 2060 household. Vaartbroek lives 5228 people in the area, has 2493 household. [1] This area has a negative image in city for crimes, lower income and lower education level. The problems in this area also contain social isolation, especially for the elderly. Many residents among this area are out of jobs or job seekers. There is a changing role in the citizens and government relationship in the neighborhood. Some self-sufficient local community is run by volunteers in the neighborhood, where they arrange different kinds of activities for people to stay active in their social life. There are nine main focuses on the development of the neighborhood like strengthening residents organizations, facilitating resident initiatives, developing Bieb(the community library), which are collaborated by multi-stakeholders like municipality, housing coops, welfare organizations, community organizations and Wijeindhoven.

Dilemmas: This semester is a quite challenging process for me. For the research, the context is set to a very specific neighborhood and there are many stakeholders around the project. Because of the language barriers, I have to take more efforts when conducting the research and making the interviews with different stakeholders in the neighborhood. Also, some unexpected arrangements like cooperations with Summa College and Fontys students who don't have the skills of English communication, makes the process an "impossible task" for me to continue to some degree, I finally struggle to control myself and finish the process. Also, previously I was not a technical person, but this semester I choose to combine my design with the electronics, during the design process, although I suffer a lot with different kinds of technical problems, I have tried my best to consult relevant experts and finally build my prototype.

PREPARATION



Mentale wel
vergeving
Scherpe deet
mij wong

Mentale wel
vergeving
Scherpe deet
mij wong

PREPARATION

At the beginning of the semester, I attended the module Location Based Tool for neighborhood transformation, the context of which is also set in Eckart-Vaartbroek. The module helped me step into the neighborhood, engage people there into discussion by using probes, and gain my first insights of this real neighborhood context.

Goal: I'm really interested in how residents can be connected with each other to form a more benign and vital neighborhood environment. The goal for this module is that I would like to gain my first insights from the specific neighborhood context and learn how to open a dialogue with people, also how to engage people into collaboration and trigger their participation.

Activities and deliverables: During the one-week process, we first made the neighborhood observation and stepped into some local community like Bieb, Andromeda and Biemorang. We used "block towers" as a probe to make people engage in the discussion and make choices. Each pile of blocks has a topic they might find interesting to discuss. People can pick one block they think is less important and place it on the pile they think is more important. In the end we build a prototype for our final concept "participile", which is a voting installation in the public area of the neighborhood, with several piles of boxes, people can either write on the boxes or record sound into the box. There is also a digital platform for people to check the results and the choices different people have made. (figure1,2,3)

PREPARATION

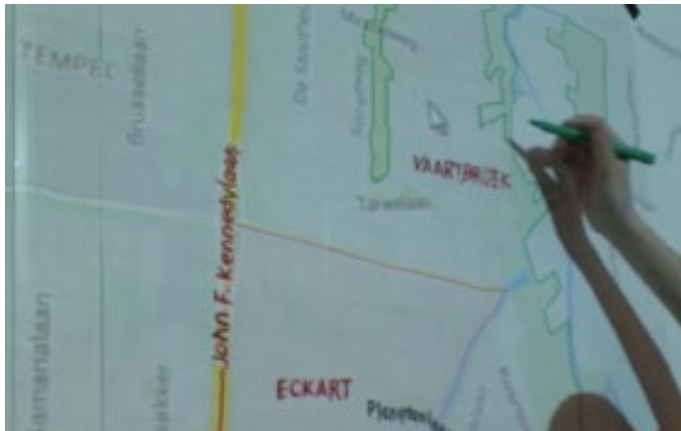


figure 1: mapping the neighborhood area

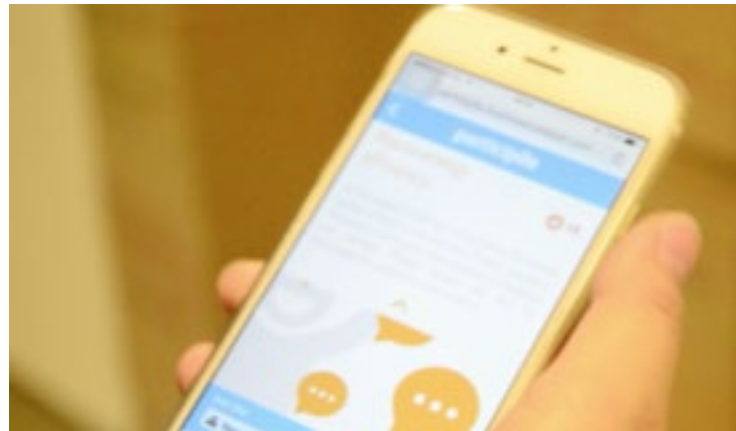


figure 2: digital platform of the concept Participile



figure 3: physical prototype of Participile

PREPARATION

Neighborhood observation

There are big green areas and lake areas called "Doode Gracht" around Eckart Vaartbroek. I notice many dogs keepers walk on the paths. There are many playing children and schools surrounding the area, which might be a good place for education.(figure 1, 2)

Also many local communities are run by the volunteers in this area, like the community center Bieb, which is also a local area in this neighborhood, and Andromeda, a local living room for the elderly people, Boemerang, a local community arranging different activities for people from different cultures background. I attended a local meeting in the community center Bieb, which has a nice, clean, well-organized environment, plenty books resources, place to sit, read and have a rest. The meeting happens every Tuesday, and both residents and stakeholders from different organizations will attend the meeting to discuss the local issues and improvements for this area. (Figure 3)



Figure 1: map of the lake



Figure 2: surrounding of the lake



Figure 3: week meeting in the community library Bieb

PREPARATION

Short interviews with residents

I made short interviews with passers-by in this area on how they feel about this neighborhood, most people comments that they enjoy the life living in this convenient area (near schools, supermarkets, lakes) and like the cheap rent. But they have little contact with others in the neighborhood. Somebody feels it's not safe to walk out in the evening and the neighborhood doesn't have a good name: safety problems, some crimes might take place in this areas.

Reflections

I always regard every people as a part of the community, and I always think although one person's strength might not be strong enough to change the world, but the gathering power of different people in society can be immeasurable. This time the feeling grew stronger, especially when I stepped into Andromeda, the living room for the seniors in the neighborhood, I was moved by the eagerness of the elder who also wanted to "re-socialize". I would like to gain more insights on this social aspect in my future learning process since a more benign and intelligent community to make citizens connected will be unavoidable future.



A wooden cutout of a person walking on a wooden track, with a blurred background of a person walking.

FIRST ITERATION

FIRST ITERATION

Secondary research

A desktop research is done by concluding current problems and basic neighborhood environment. The goal in this phase is to gain a certain acquaintances with the available body of knowledge in the area of social interaction. feature research methodologies.

Research on current activities run by different stakeholders in the neighborhood

I got the secondary materials of the neighborhood from municipality and try to list out the existing problems and potential design opportunities for the project.(figure 1)

Literature reviewing of connected community and social interaction in public places

Going through the journals related to the social interaction found from the online literature libraries, i.e.ACM, Google scholar, gathering the issues and themes that are relevant to the topic of design for social interaction in neighborhood.

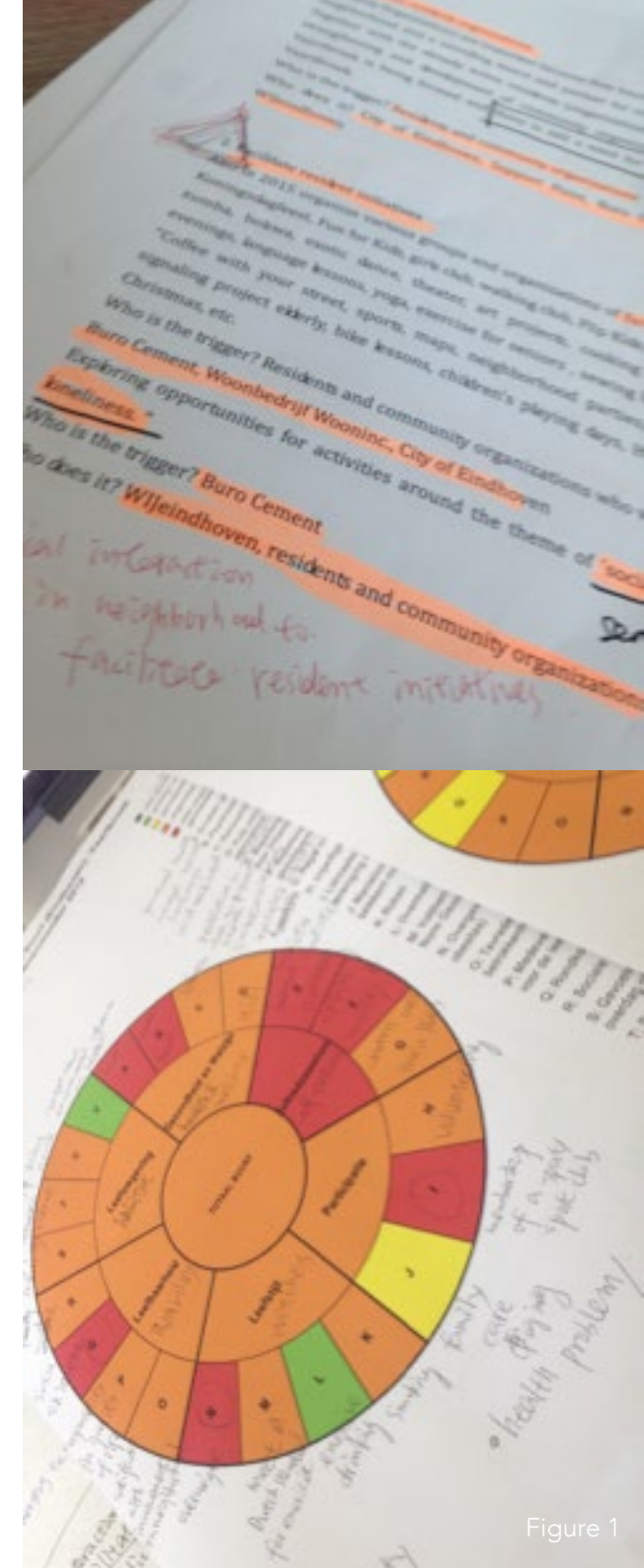


Figure 1

FIRST ITERATION

Literature analysis

Related research on Eckart- Vaartbroek

A government report is gained from Rob Woltinge from municipality, which describes a general neighborhood information, existing problems and current actions, which have been taken in the Eckart-Vaartbroek.(Gebiedsopgave Eckart en Vaartbroek, Municipality)

From the report I have found that the neighborhood has a bad image and the residents have lower education level and lower income, also more than 50% of households are single, which leads to less communication between residents. The pie chart from GGD also illustrates that Eckart-Vaartbroek is lower than the average level of the city in health wellbeing. All the materials I have translated into English by myself.

Related to social interactions

'Urban space is emerging as a prominent arena for information systems design and presents a unique set of challenges and potentials for the design of interactive systems and installations.'(Dalsgaard Peter, Halskov Kim, 2010) Public interactivity can motivate people to be social in a way like self-expression or curiosity.(Cassinelli, Alvaro et al.,2013) Social interactions have impacts on "enhancing the user engagement, facilitating the feeling of connection, and exploring the range of social acceptance." It offers people spaces and opportunities to "exchange information and communicate on local issues, enjoying the gathered experiences with others."(Lin Xu, Hu Jun, Rauterberg Matthias, 2015)

Potential methodologies that can be used during the process

The reflective transformative design process(RTDP), which refers to a new type of process in the transforming society, that design is not about sticking to the existing products, but to create something entirely new.(Peeters Michel, Meegens Carl, 2011)

Design thinking, which contains three spaces, referring to inspiration, ideation and implementation.(Euchner, Jim,2012)

Engagement catalyzers, "A means to connect people and enhance engagement, empathy and respect during a transformative collaborative design process".(Trotto a, Hummels C, 2013)

FIRST ITERATION

Interview with the stakeholder

Interview with the committee member of Andromeda(a local community in the neighborhood)

I make an interview with a committee member of Andromeda, he gives me the statistics: there are 4000 people in the Eckart, and 25% of them are more than 65 years old. Currently there are 25 volunteers in the committee. He also mentions many old people live alone in this area and they can be quite lonely because their children only pass once a month to visit them. The living room Andromeda provides a place for the elderly people to “re-socialize”, a place to make them meet and join in social activities, to help them they can stay social and active.

Currently there are some services and activities in this living room: they arrange social clubs and dinner clubs, the wall painting expo, screen sports twice a week, small concerts held by old musicians in this area. Also an excellent service contains a smart phone, a smart watch and an application sensing elderly's daily data. The application can send the data to their personal doctor so that they don't have to move so frequently to the doctors' place. The elderly only need to pay 10 Euros per month for the membership fee.

The next step for Andromeda is to find the financial/ socially isolated group, and to help them re-socialize, also make them join the social activities and their family.

FIRST ITERATION

Case study

Dancing traffic light (figure 1)

Introduction: It's an interactive traffic light that displays citizens dancing movement. There is a dancing house set in the public places, when people walk into the house and perform their free dance, their body movement will be displayed in real time to the public traffic light. In this interactive way the traffic light brings joy to the city and reduce the citizens' anxiety while they are waiting for the green light.

Insights: This design is the original motivation for me to choose this direction. I like the way it presents the interactive playfulness, which brings joyful social communication to the city. Also I find the interaction between people happening in real time is quite inspiring.



figure 1: Dancing traffic light

FIRST ITERATION

SNCF "Europe. It's just next door"

Introduction: The doors are set in different cities, and they are like portals. When citizens from one country open it, he/she can get the real time view of another country and interact with people from another country

Insights: One of the elements I like in this design is the cultural interaction among people. I like the way it presents the spirit "can you feel what I feel" among people in different cities with diverse culture, this kind of message transformation invites people to really feel and experience people from far away.(figure 1)

Van Gogh Road, the Smog Park, Dune (BY Studio Roosegaarde)

Introduction: There are all designs from the Dutch designer, Roosegaarde.

Insights: I like the concept of using technology to bring poetic spirits to every day life. For me, design should have certain "spirits" and provide aesthetic experience, which can raise people's subtle feelings and affections when people see and feel them.(figure 2)



Figure 1: "Europe. It's just next door"



Figure 2: works of Studio Roosegaarde

FIRST ITERATION

First ideation

Since the neighborhood also contains multi-cultural background, the first attempt for me is to integrate cultural element into the possible interactive communication among people. For the first ideation, I was inspired by traditional Chinese shadow puppet, the concept is a installation in the public place, when people walk in front of the display, their movements will turn out to be the shadow puppets on the screen and they can go on a shadow play with each other. (figure1, 2)

Feedback from coach: I discuss my prototype with my coach and my coach should find the “why”: why I can put this in the neighborhood. And he comments that the design can be more suitable for the context.

Feedback from video meeting: The prototype turns out to be a good way to illustrate my idea and concept. Also they comment the shadow can be a good format. The framework of the presentation on the video meeting has good logic.

Reflections: From the first ideation and feedback, I see the the concept has a potential to be a platform to emerge participation and make people in the neighborhood to join in and co-create something. More research can be done to invest more relevant people and really dive into the neighborhood. From the comment I know I should try to find a more clear and reasonable direction on which way I would like to go and try to find the reason behind the context.



figure 1: Shadow puppet



Figure 2: First prototype

SECOND ITERATION

Participate in
social activities

SECOND ITERATION

Goal: Context can be a central factor in social analyses of interaction. (Paay J. Kjeldskov J.,2008) Since from the feedback of the first iteration, the purpose and context of the design are a bit unclear and I would like to make the design more context-oriented and think through how design can bring along new solutions for a healthy neighborhood. So the goal for my second iteration is to enhance my comprehension on the topic of health wellbeing and seek for potential design decisions for a healthy neighborhood.

What is health wellbeing?

health is "a state of complete physical, mental and social well-being. It's the ability to adapt and to self manage, in the face of social, physical and emotional challenges(M.Huber, J.Knottnerus, L.Green et al.,2011).

I have found a journal that describes health wellbeing in six main aspects in the following chart.(Factsheet Gezondheidsconcept Huber et al., 2013) And I list out different potential stakeholders for each one. I pick "life quality" and "social participation" these two aspects as the main directions I would like to go for a healthy neighborhood.

Also, the following pie charts, provided by GGD, also list out different problems around the topic of health. The red and orange color marks the more severe issues in the area compared to the average level in Eindhoven.

Body	Mental function	Spiritual dimension	Life quality	Social participation	Daily functioning
mental facts	cognitive function	meaningfulness	quality level	social communication	work ability
medical observation	emotional condition	goals	happiness	significance	health literacy
physical functioning	esteem/self respect	future perspective	enjoy	social contact	basic ADL
complaints&pains	control feeling	acceptance	health perceived	sense of acceptance	instrumental ADL
energy	resilience		lust for life	social involvement	
			balance	meaningful work	
insurance Zuid Zorg Airbornlaan GGzE	insurance Zuid Zorg Airbornlaan GGzE	Bieb Vadercomite Buro Cement	Municipality Housing coop Buro Cement	Boemerang Bieb Vadercomite Buro Cement Andromeda WIJ Eindhoven	Municipality Housing coop

Lichaamsfuncties	Mentale functies & -beleving	Spirituele dimensie	Kwaliteit van Leven	Sociaal-maatschappelijke participatie	Dagelijks functioneren
Medische feiten	Cognitief functioneren	Zingeving/meaningfulness	Kwaliteit van leven/welbevinden	Sociale en communicatieve vaardigheden	Basis ADL
Medische waarnemingen	Emotionele toestand	Doelen / ideale nastreven	Geluk beleven	Betekenisvolle relaties	Instrumentele ADL
Fysiek functioneren	Eigenwaarde/ zelfrespect	Toekomst-perspectief	Genieten	Sociale contacten	Werk vermogen
Klachten en pijn	Gevoel controle te hebben/manageability	Acceptatie	Ervaren gezondheid	Geaccepteerd worden	Health literacy
Energie	Zelfmanagement en eigen regie		Lekker in je vel zitten	Maatschappelijke betrokkenheid	
	Veerkracht resilience, SOC		Levenslust	Betekenisvol werk	
			Balans		

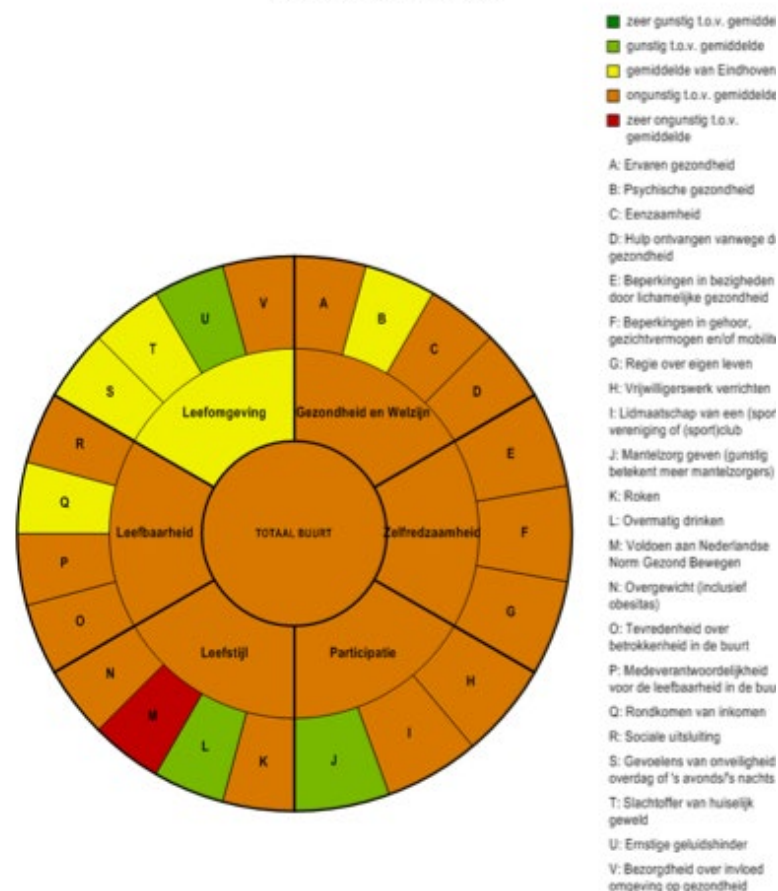
SECOND ITERATION

Buurtgezondheidsprofiel, Buurt (Eindhoven): Vaartbroek
Volwassenenmonitor 2012



Bron: GGD-Volwassenenmonitor 2012

Buurtgezondheidsprofiel, Buurt (Eindhoven): Eckart
Volwassenenmonitor 2012



Bron: GGD-Volwassenenmonitor 2012

SECOND ITERATION

Further context exploration

Card sorting

In order to enhance my deeper understanding on a positive and healthy neighborhood, further context exploration is made to the Eckart-Vaartbroek. I used the card sorting method for the residents and ask questions on “what do you think is a healthy and positive Eckart-Vaartbroek?”. During the process, I find the residents are more willing to participate in this activity and talk about their attitude while they are picking their cards. And a resident even write down the most important element she thinks might be good for a positive neighborhood. I have found this kind of probe can act as a effective way to trigger the conversation and discussion among the residents. The results show that most residents are interested in participating in social activities, and many of them also regard fun as an important factor to a positive and healthy neighborhood.(figure1,2)

feel social connectedness	Connect with neighbors
No public nuisance.	More sports.
Receive financial support.	Youth can receive good education.
Contribute to the neighborhood.	Feel pleasant for life.
Involve in social decisions	Housing with fancy renovations.
More sports.	No crimes.
Participate in social activities	Quiet and clean environment.
More fun!	Less street conflicts

figure 1: Sorting cards

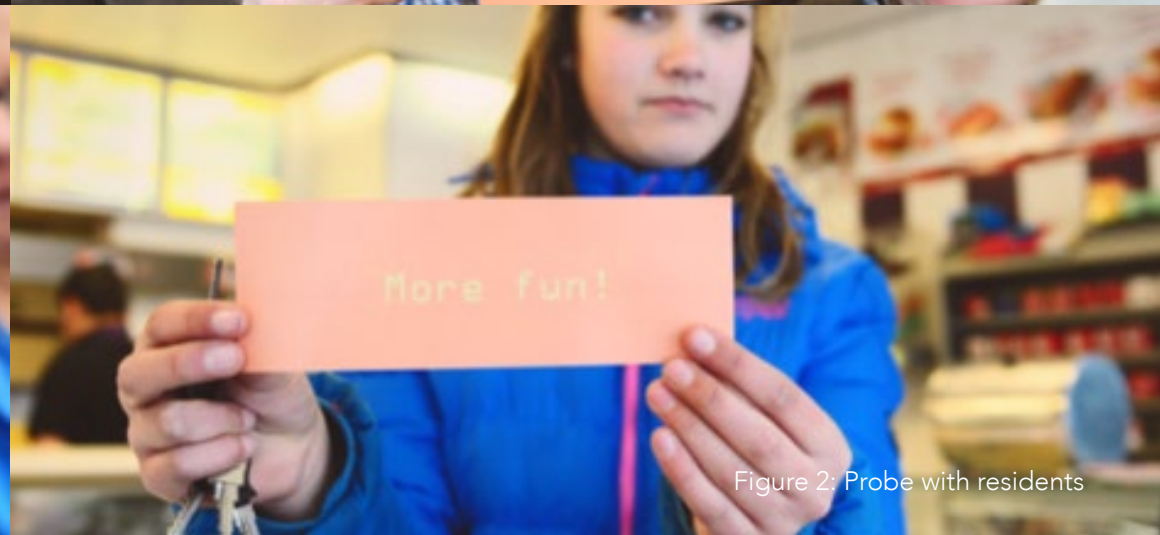
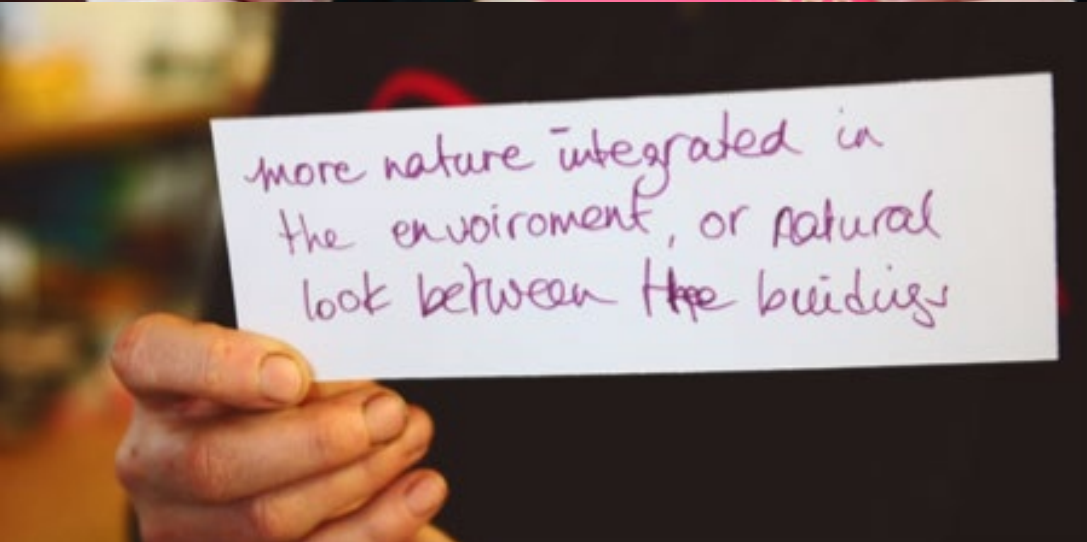


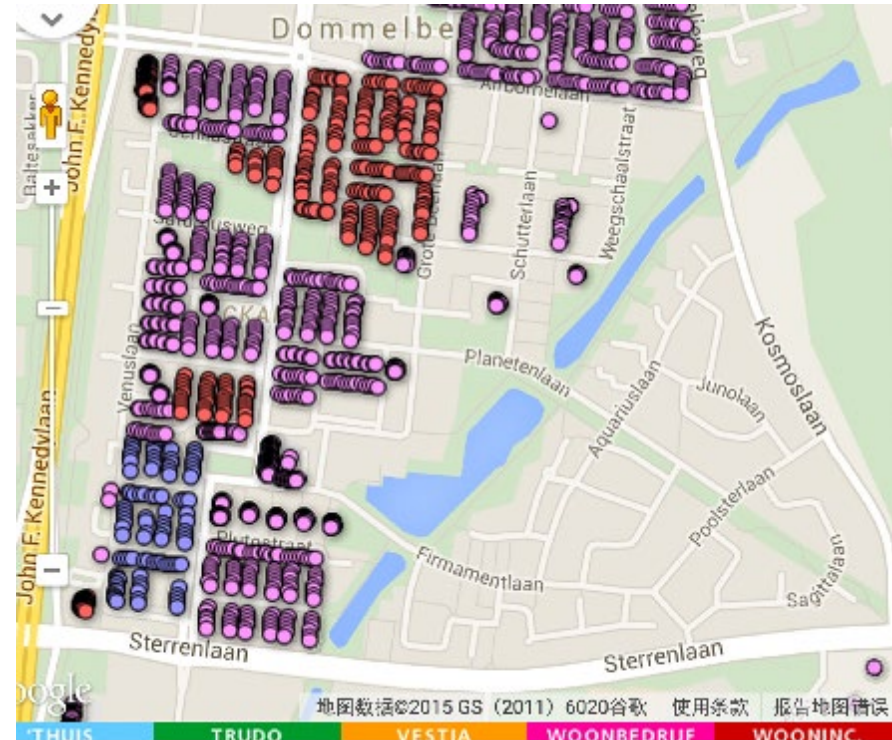
Figure 2: Probe with residents

SECOND ITERATION

Further stakeholder interviews

Interview with a manager Anita van Hezik from Woonebedrijf (a housing coop of the neighborhood)

During the interview, she mentions that many people have no work or they are job seekers. The pain they are facing is that many tenants in my context have no money to pay the rent, the problems are getting worse these years due to the economy crisis. The residents live around the part of Vaartbroek in fact have less sense of safety because many young groups often hang around in that area. Also, more than 50% households are single households in the neighborhood, most of them are doing their own business and don't care for each other. There are a two- streets area has very close community, the families in that area know each other very well and they have their own social activities. Woonebedrijf believes if the connection gets stronger between people, they will live more happily and have less quarrel and conflicts.



Interview questions

1.1 saw many decorations on the housing wall, is it your project to re-decorate the housing, why you did so?

Do residents satisfy with the results(like the renovation)? why?

2.What problems do the residents mostly complain?

What do you mostly want to hear from the residents?(what kind of information you want to get from residents) What are your current actions?

3.Do the residents live in the neighborhood satisfy with their life quality? Why? Do you think it's a important issue for you to tackle?

4.How do you cooperate with municipality/government/welfare organizations/local community organizations?

5.Do you think there is a need for a platform that people can put forward their needs and receive help from the right organizations?

SECOND ITERATION

Stakeholder analysis

BIEB (community center, local library)

Pains: depending on funding from the municipality

Facts: run by enthusiastic volunteers that have connections with WijEindhoven, the municipality, neighborhood watch and youth workers. they are able to fund initiatives from the citizens if necessary through their connections. the same building gives shelter to departments of Zuidzorg

Gains: little income from the things that are being sold

Results: working on a website that is set up locally by neighbors and for neighbors.

Woonbedrijf (local housing coop)

Pains: the way they retrieve information from the neighborhood is maybe not the right way.

Facts: they say they focus on mental processes and physical means of the citizens. They also say that they perform housing needs surveys.

Gains: they have the money to really make a change

Results: Bieb, Andromeda

Buurtlink (website that gives possibilities for sharing activities and facts)

Pains: the platform is not very well known within the neighborhood

Facts: if being used by much more people it could give a good insight of neighborhood. The means are there. Is that people do not know about the website or do they just do not want to use it?

Results: from a first impression it does not seem to have sufficient effect.

Leefbaarheids Team (LT)

Pains: financial support

Facts: they see themselves at the representation of the neighborhood that tells what is coming from the neighborhood. They have possible connections to kinds of funding through WijEindhoven. They share our vision of stimulating/motivating people to undertake activities themselves.

SECOND ITERATION

Buro Cement (local welfare team)

Facts: they also focus on the self-reliance of the citizens. Mark himself is a very active youth worker who also works separately from Buro Cement.

Gains: (a lot of) funding

Results: Mark has successfully decreased the crime rate in the neighborhood over the past years together with the municipality and police force through a special program.



SECOND ITERATION

Short ideation in the second phase

Concept introduction: Inspired by the discussion with the housing coop, I come to an idea for the residents to “co-create” their house renovations through AR technology. Residents can draw the house on the digital platform whenever they come to a house in the neighborhood. And other people can view the previous drawings through AR technology.(figure 1)

Activities: I print the drawing of the houses(figure 2) in the neighborhood and provide a coloring game for a committee member of Andromeda(an elderly center in the neighborhood). Although the game is quite simple but from the observation I find the participant can really devote himself into “drawing something for his house”. Then I combine the real house image with the drawing and ask for people’s feedback.

Feedback: The concept is new and can be adopted in more ways, and the direction is still unclear to most of the people. I was asked to find the purpose, like trying to pick several key elements that I would like to focus on for my design.



figure 1: concept



figure 2: draw the house

A scenic view of a pond with ducks and a wooden railing in the foreground. The pond is calm with gentle ripples on the water. In the background, there is a grassy area with trees and some buildings. A blue object is visible on the far right side of the pond. The text "THIRD ITERATION" is overlaid in the center of the image, flanked by two horizontal lines.

THIRD ITERATION

THIRD ITERATION

Key features

The term 'social value' refers to impartial, welfare, participation, public interest and so on.(Park Sunyoung, Nam Tek-Jin, Lim Yuree Stacy,2008) For the design, the main goal for me is to lower the thresholds for people to connect with others. In this session four key social values are picked to make a rule for my design. To trigger joyful social communication and enhance sense of connectedness, I would like to make the neighborhood more positive and healthy place to live in. There are several points I would like to focus on as following.

Sense of connectedness

The sense of connectedness can have a subtle influence on people. A connected neighborhood can have a positive impact on residents' life.

Healthy lifestyle

In this project, the very specific context is set around the lake in the neighborhood Eckart-Vaartbroek. People in current society have sedentary or physically inactive lifestyle(Peeters Michel, Meegens Carl,2011) I would like to create a social interaction around this area, so more people will enjoy hang along the green areas around the lake, which also trigger a healthy lifestyle among the residents.

Social communication in joy

The most important factor of happiness comes from enjoying the moment (Desmet Pma, Pohlmeier Ae, 2013)As currently more than 50% people live in single households in this area, they are doing their own business and have little communication with others. Also there are social isolation problems in the neighborhood, especially among the lonely elderly people. Here I would like to use design to provide an opportunity to trigger social communication in joy.

Good image of the neighborhood

Currently the neighborhood context has a negative image due to the crimes and some other social issues. The municipality would like to improve the image of the neighborhood. I see a good image of the neighborhood stands for not only "how others think of this neighborhood", but also " how they look at the neighborhood themselves". I would like to make residents think of more positive sides of the area by putting some positive elements into the design. I would like them to love the neighborhood more and enjoy some special moments in the area.

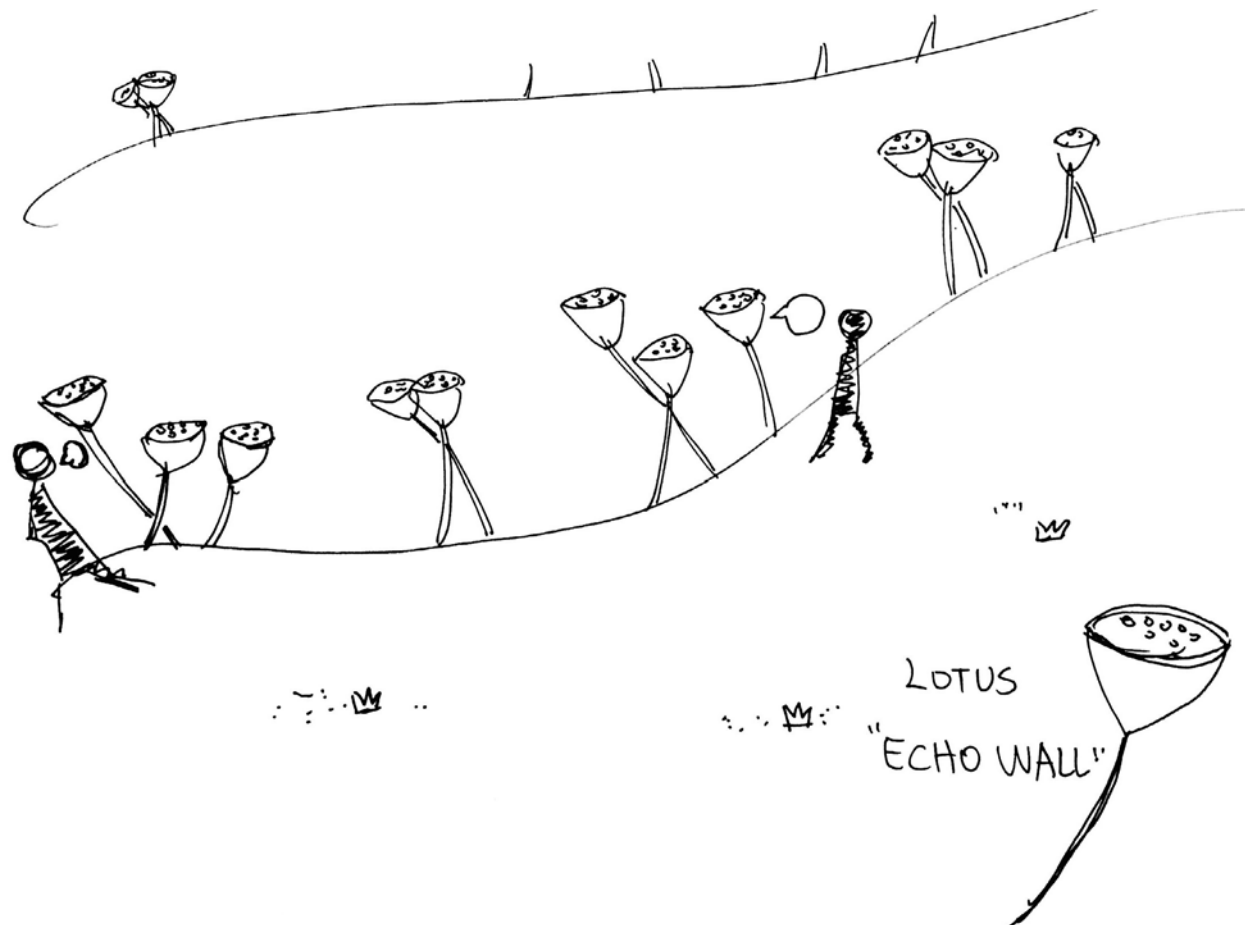
THIRD ITERATION

Four concepts

For the design, the main goal for me is to lower the thresholds for people to connect with others. In this session four key features are picked to make a rule for my design. To trigger joyful social communication and enhance sense of connectedness, I would like to make the neighborhood more positive and healthy place to live in. There are several points I would like to focus on as following.

Concept 1: Lotus echo wall

Lotus echo wall is sets of installation placed along the waterside. When people pass the "lotus", they can speak to it and the sound will transmit in space to the other "lotus" in a distance. In this way people can hear from each other in space in real time.



THIRD ITERATION

Concept 2: Kaleidoscope circle

The concept is that two people pass by an particular busy area in the neighborhood, when they come close to each other, a cycle pattern will be projected on the ground. And it can create the pattern of Kaleidoscope according to the distance and position of two people. If more people come to the area, the pattern on the ground can also change or grow bigger circle.(figure 1)

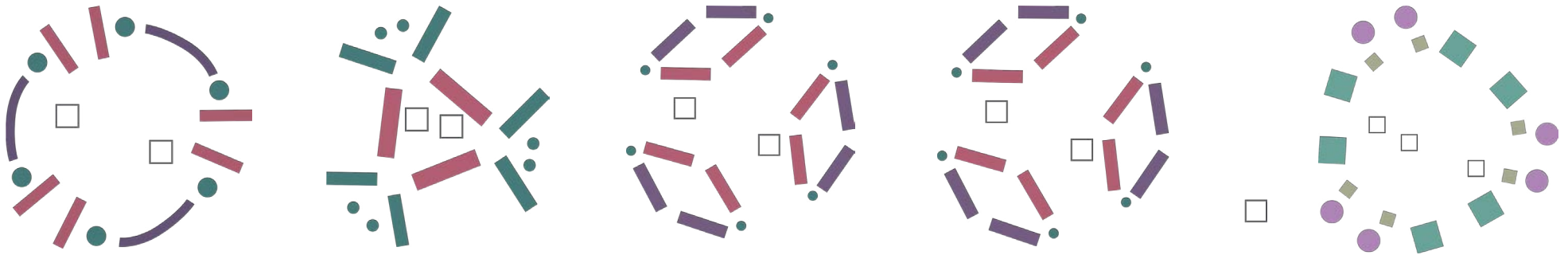


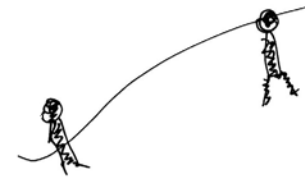
figure 1: the pattern will change according to the distance bewteen people

THIRD ITERATION

Concept 3: Trees can talk

When people walk around the lake area, they can pass some trees and leave messages on the tree by using mobile phone. He/she can also decide where to put the messages.

The message can be reminded on some one's phone, showing that "some one has sent you a message around that area, and you can decide whether you are going to search for it. When the person hang around the area, he/she can find the messages on the tree.



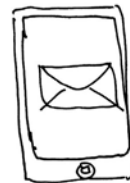
people walk around
the lake area.



when they pass
a tree (or other)
they can leave a
message on the tree.
by using mobile phone.
He/she can decide
where to put the message.



THEY CAN
EITHER
RECORD THE SOUND
OR SEND A TEXT
MESSAGE TO THEIR
FRIEND



NO NAME
MESSAGE.
ARE YOU GOING
TO SEARCH
FOR IT?

THE MESSAGE CAN BE
REMINDED ON SOMEONE'S
PHONE, showing that
"Some one has sent you
a message around this area,
are you willing to go
and search for it?"



WHEN HE/SHE
hang around the
area, she/he
can find the
message.



next question will
be: Who sent me the
message?

THIRD ITERATION

Concept 4: Kaleidoscope swing

It's a multi-person swing, which can project different vivid kaleidoscope patterns when people move up and down on the swing.



Feedback

People give more comments on the first and the third concept. I was recommended to create a clear storyboard to illustrate the concept, which can make the process of interaction and design intentions more clear to the user. Also, a evaluation of concept decisions should be made in the following session.

THIRD ITERATION

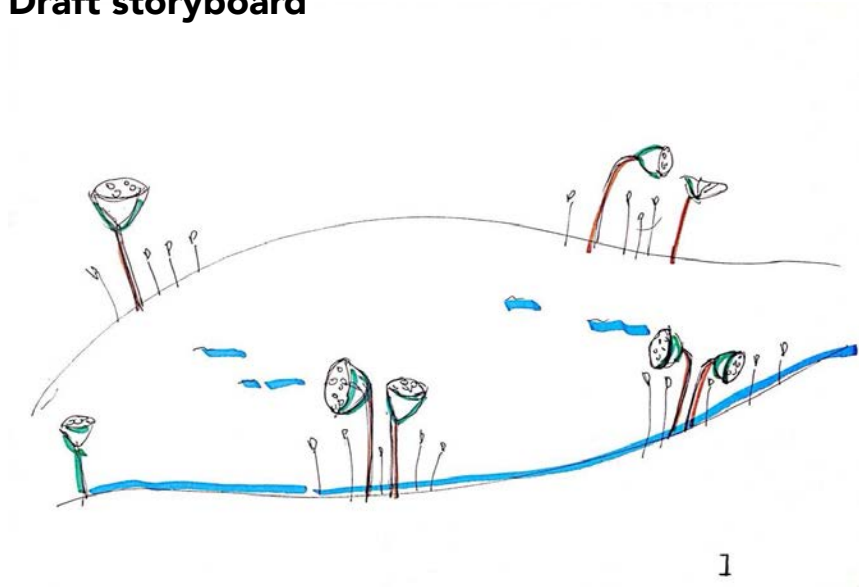
Concept choice

I have a meeting with the Phd student Xu Lin to discuss my generated concepts and we make a form to rank each ideas. I have chosen 4 elements which I think are necessary to include in my design: social communication(0.7), sense of connect edness(0.7),joy(0.5),healthy lifestyle(0.5), and used "+" to mark the degree of the elements. We find the first concept "lotus wall" has highest potential to fit the four elements. So finally choose the first concept.

	0.7	0.7	0.5	0.5	
	Social communica- tion	Sense of connect- edness	Joy	Healthy lifestyle	
Lotus wall	+++	++	++	+	5
Kaleidoscope circle	+	++	+++	+	4.1
Swing	+	+	+++	++	3.9
Message on the tree	++	+++	+		4

THIRD ITERATION

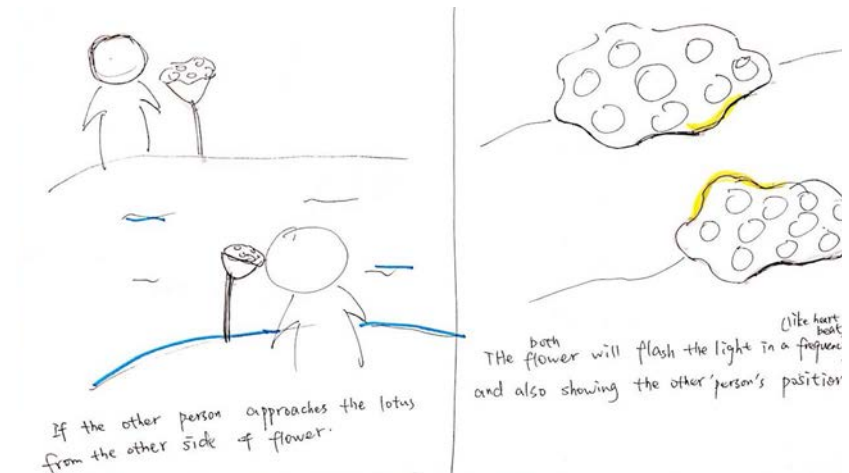
Draft storyboard



1) There are groups of objects resembling lotus, which will be set along the lake in the neighborhood Eckart-Vartbroek.

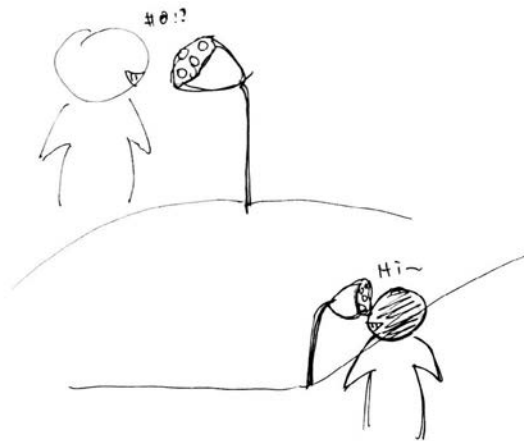


2) When someone comes closer to the "lotus", the lotus will provide the signal for people to talk to them. (Like the light or the movement)



3) If the other one approaches the lotus from the other side, the both flower will be connected, and they will flash the light showing the other's direction.

THIRD ITERATION



THEY ARE ABLE TO TALK TO
EACH OTHER IN LONG DISTANCE.

1) They are able to talk to each other in long distance along the lake.



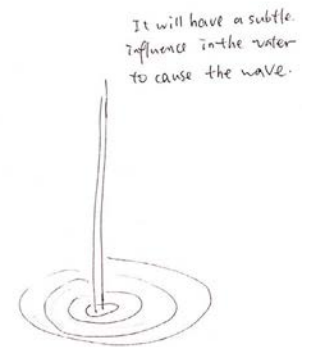
If more people approach different Lotus,
they will be connected.

2) If more people approach different lotus, they will be connected, which enables them to talk to each other.



When it senses the voice,
the light will go down to
the bottom.

3) When the lotus senses the voice, the light will go down to the bottom to cause the wave.



It will have a subtle
influence in the water
to cause the wave.

THIRD ITERATION

Rough Prototyping

Test on sound transmission

Inspired by the traditional technique of land phone to talk within a distance, I make five long stick stands, use five plastic cups and use the strings to connect with each other.(figure 1) I find the old way of sound transmit can be interesting and interactive among the people. But still some instability will occur.(like the sound hearing from the other people can be very light) I made a tool to transmit the sound by the traditional technic of land phone. By cutting five sticks and put them in the different positions, I would like to mimic the function of sound transmitter.

Reflection: This prototype illustrates how the function of sound transmitter works and

I also find that it can work well when there are just 2-3 stand points, but when it comes to five, we will have difficulty in hearing from each other because of the stability. Also, there are still some lines in the air due to the technique itself.

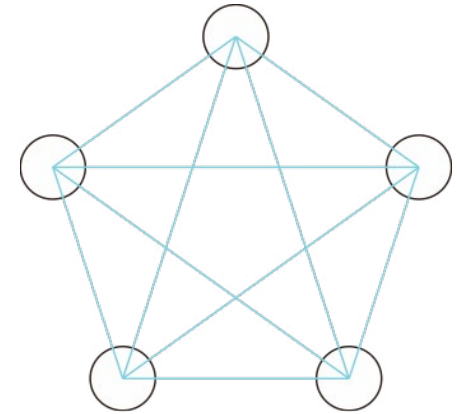


figure 1: five stick stands

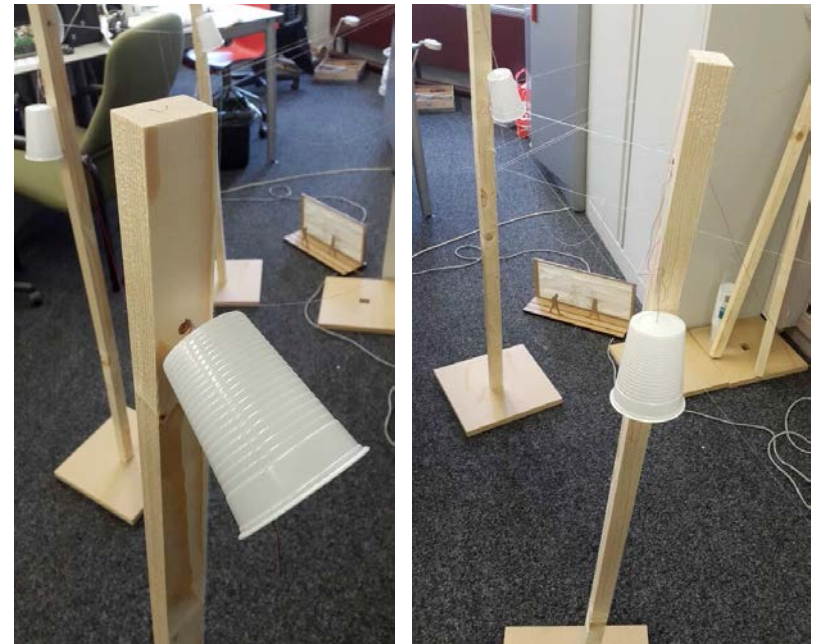


figure 2: use the technique of sand phone

THIRD ITERATION



figure 1: clay model

Making the model of "lotus"

I explore different potential shape of the concept "lotus" with clay and laser cutting wood, from the feedback I learn the shapes don't need to be too concrete, so I would like to pick some abstract element to stand for the lotus in the following session. (figure 1,2)



figure 2: wood model

THIRD ITERATION

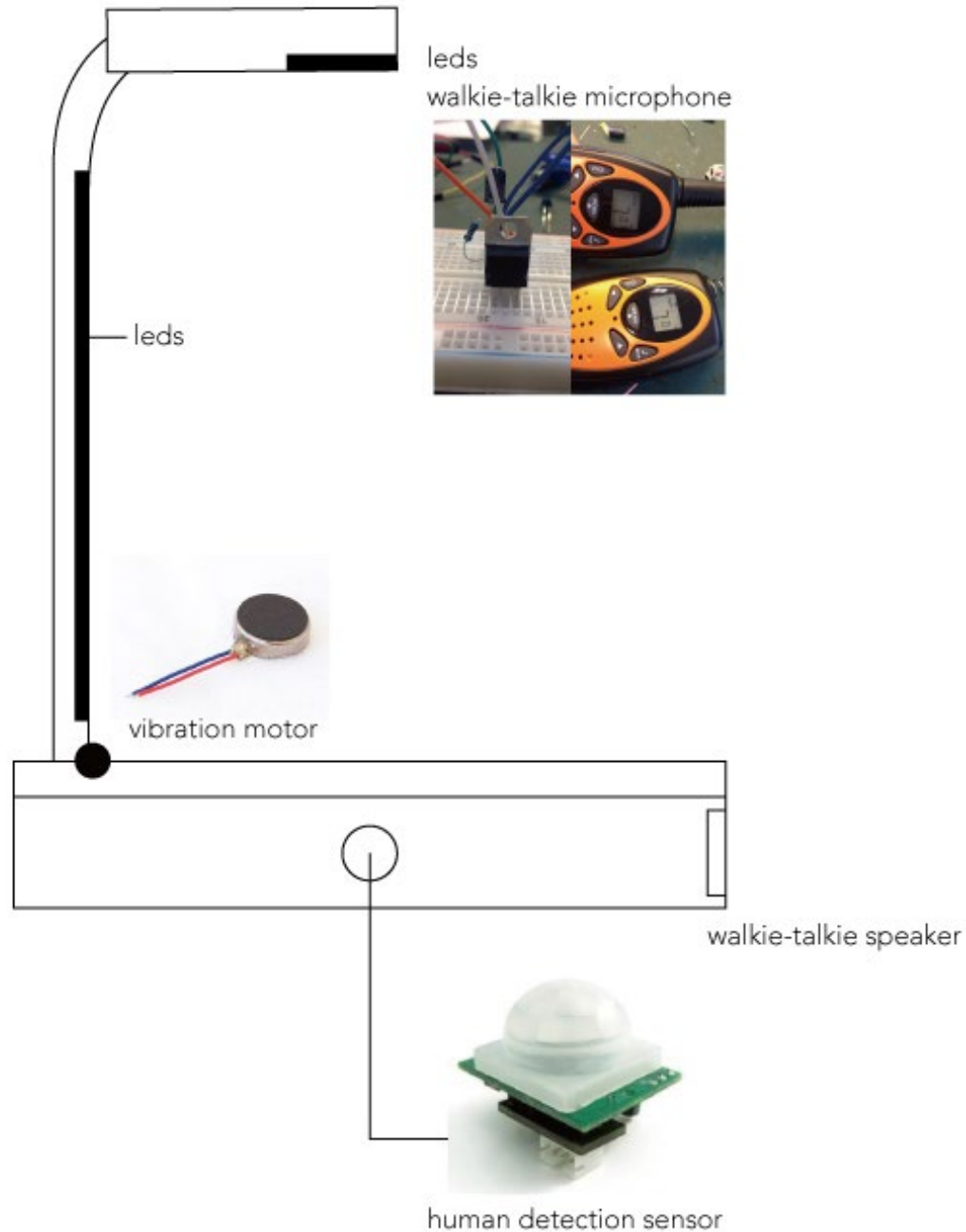
Final concept

ichi-go ichi-e/one chance in lifetime

Ichigo-ichi-e is an interactive installation set along the waterside, which is inspired by Japanese tea ceremony. "I don't know whether there is another chance to drink tea with you, so I will be grateful for every moment we spend time together.", Through such occasional lucky chance of "meeting", to build interactions between people, and to create empathies and collaborations., so that people can truly enjoy "this moment", which also triggers contemplation of the meaning of life.



THIRD ITERATION



Technical solvement

The human detection sensor is used to detect the distance of the person. NFET is used to open and close the curcuit. I hide the leds in the wood stand, which I have polished a few days in Vertigle. There is a vibration motor to cause the water wave at the end of the wood stand. And for sound connection, I dismantled four walkie-talkie (Since one can only function as a talker or a speaker at a time).

A vibrant, miniature scene set on a circular base. In the center is a bright blue pond. To the left of the pond stands a white, mushroom-shaped figure with a red cap and white spots. To the right of the pond is a green, stylized tree. A small figure in a red and yellow outfit with a crown stands near the tree. Another small figure, possibly a rabbit, is on the right side of the pond. The entire scene is surrounded by a colorful, patterned border. The word "EVALUATION" is written in large, white, sans-serif capital letters across the center of the image, flanked by two horizontal white lines.

EVALUATION

EVALUATION

For the final evaluation, I make a paper context model and use the storyboard and the prototype video demo to illustrate the concept. And I make the evaluation with 3 TU/e students who live in Cederlaan. I ask them to mark 4 key features(social communication, sense of connectedness, joy and healthy lifestyle) with scores ranging from 0-5.

Social communication	3
Sense of connectedness	4
Joy	4
Healthy lifestyle	3



figure 1: paper context model

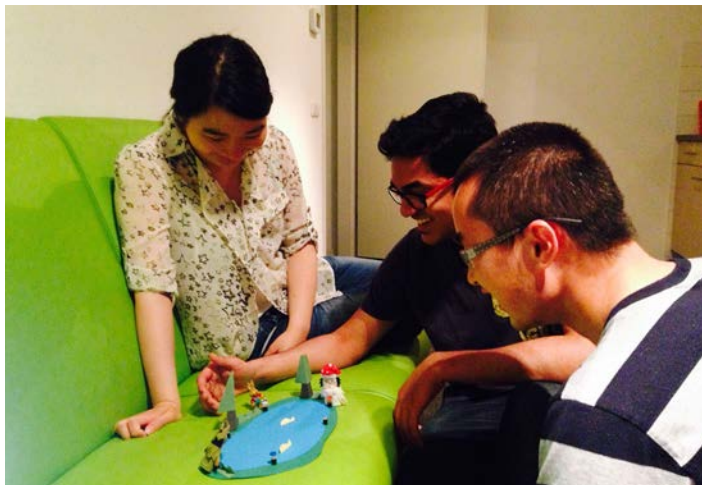


figure 2: video demo



REFLECTIONS

New challenge

Actually this semester was a quite unexpected process for me. I suffered a lot but finally survived and finished the whole design process successfully. To some degree I regard the whole semester as a new challenge for me. At the earlier stage of this semester, I was told that this project was under a project from the municipality, aiming at enhancing the cooperation among three universities(Summa College, Fontys and TU/e) and I found most of students there didn't speak English. Since the arrangement came a bit late and I experienced the "impossibility" in communication, I struggled to continue the research and stepped into the neighborhood to get a deeper understanding of the different organizations, stakeholders and residents' wishes. Also, during my bachelor, most of the work were group work and it was easier to communicate and share different ideas and values with each other. Here I learned how to finish a complete design process by myself under a totally different language background. I lacked practically technical knowledge before entering this university, and this semester I also had to consult different people and solve the technical problems by myself.

New development

During this semester the main development are in integrating technology and design and research processes. I was not a technical person, so this semester I spent a lot of time trying to choose the right electronics and connecting the circuit by myself. Also, when conducting a complete design and research process, I met with many hardships and challenges, and finally learned lessons and tried to push things forward from it.

Also I have learned how to conduct a self-directed and continuous learning process, and for the design, I have developed my skills in ideas and concept, form and senses; by comprehending the interaction in a societal background and putting the cultural element into my design, I gained deeper understanding in social cultural awareness. By stepping into the real context, I develop my competency in user focus and perspective.

ACKNOWLEDGMENT

First of all, great thanks to my coach Jun Hu, who provided me with valuable advices on my project and technical issues, also pushed me go on my design process. I really appreciate the sincere discussion with him during the process of this semester.

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Last but not least, I would like to thank all the people who have offered me help in this semester. I really appreciate the encouragement and endeavor they make during my hard time in the process of this semester.

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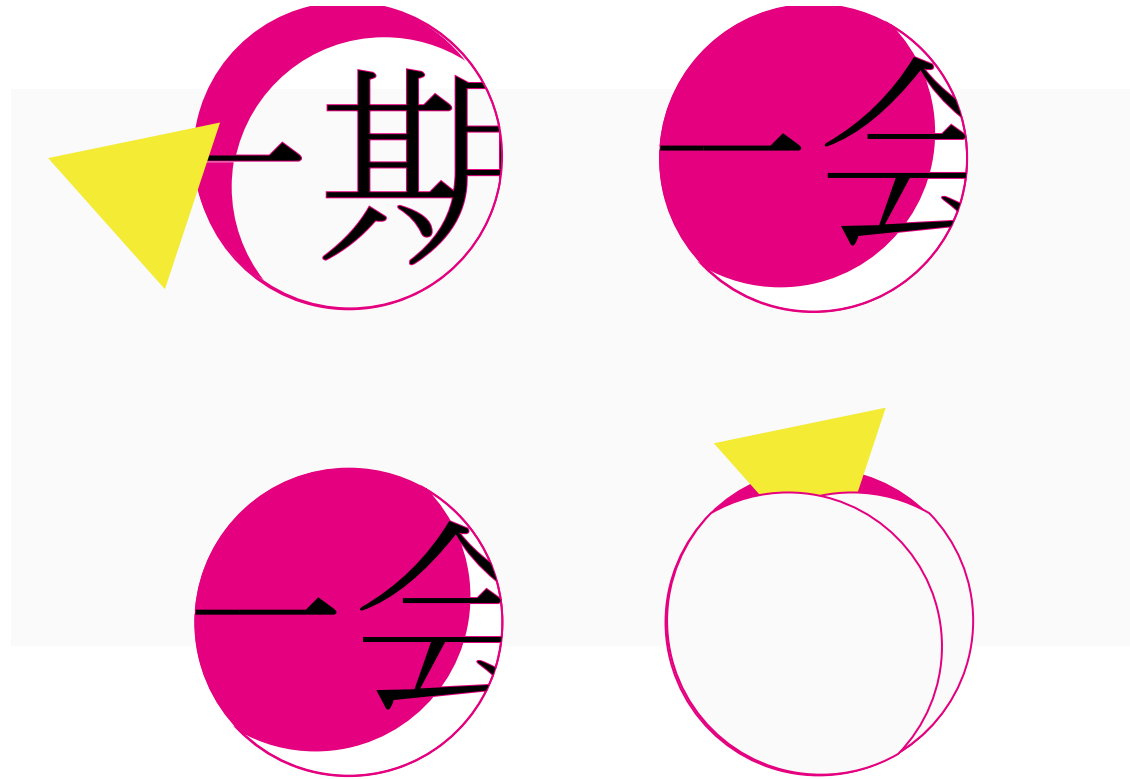
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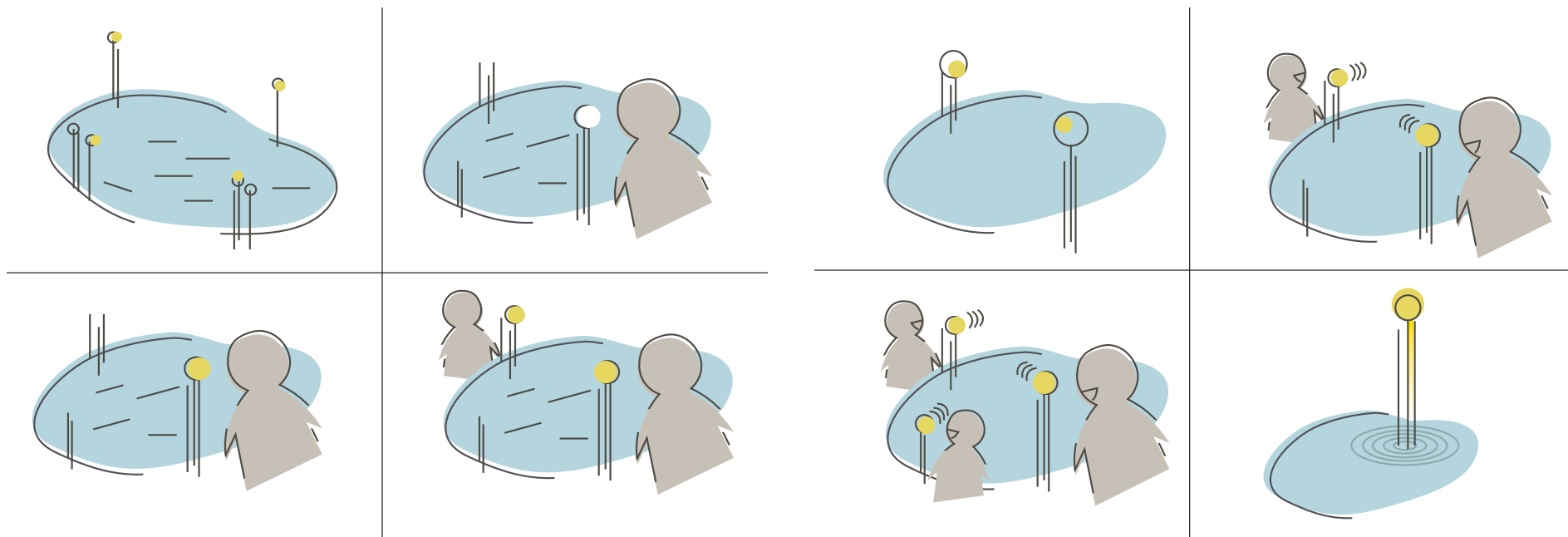
APPENDIX



ICHI-GO ICHI-E
one chance in a lifetime

Student: Yijun Yu
Coach: Jun Hu
Project: Social interaction in neighborhood

Poster at the final exhibition



Adapted storyboard

THANKS