

Coalition integrating
newcomers

CITY BINGO

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M2.1 Intern & Design Project

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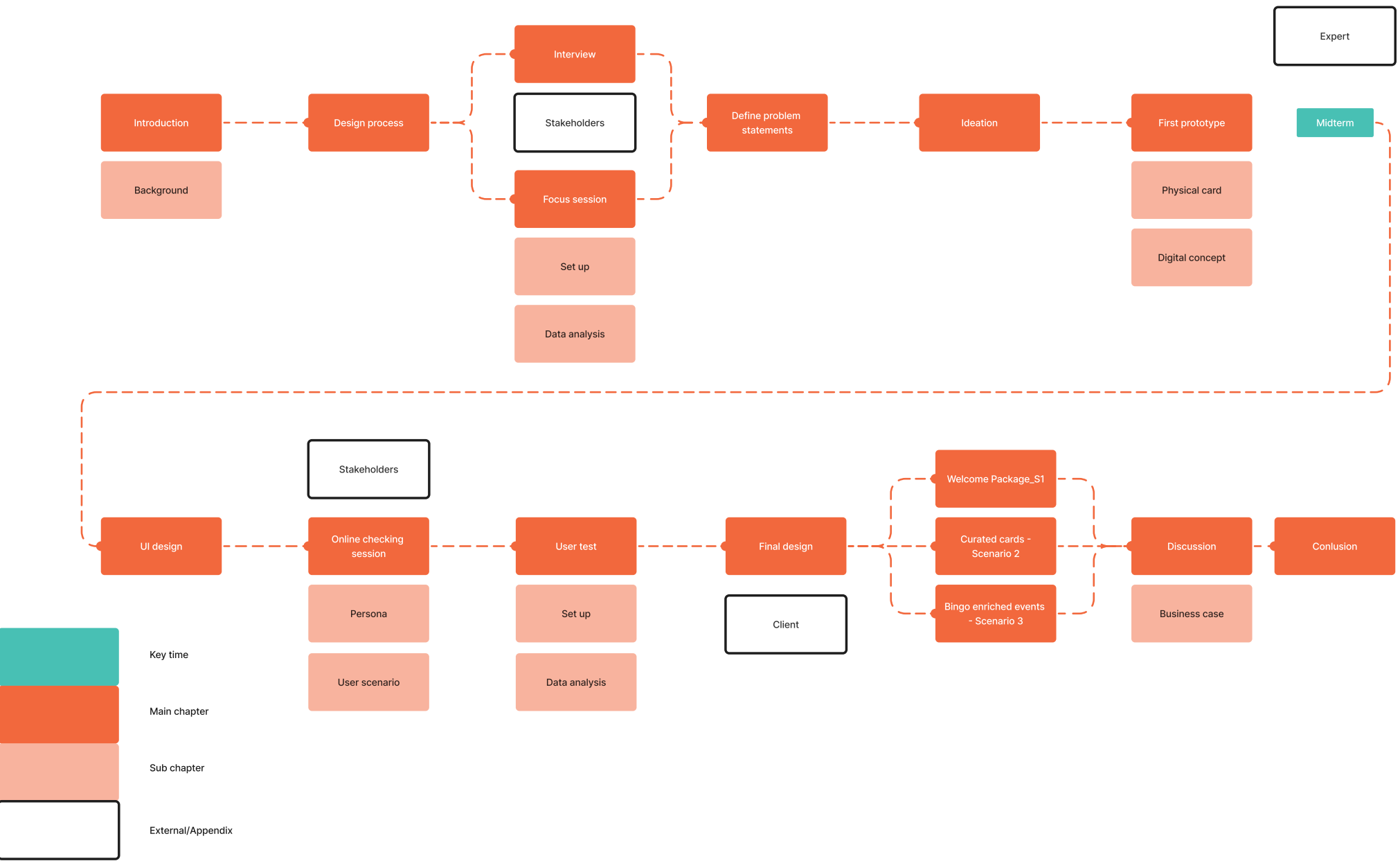
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Introduction

This design went through based on my vision and identity, I will further explain my vision and identity in a reflection document. In a word, this project was done with three main objects in my mind: social connection, interaction, and gamification.

This project is a deliverable of my internship at Studio Tast and a collaboration with Eindhoven 365. Eindhoven 365, as a marketing company, is located in Eindhoven and aims to attract people to the city and to ensure them a good living time. Studio Tast, as a design company, designs theory by learning experience, through the designing, developing, and producing of interactive products, systems, and platforms that facilitate enriching learning experiences.

Background

The Netherlands has become a dynamic migration society that has a great attraction for migrants from all parts of the world. As of 2010, the Netherlands received more than 150,000 migrants annually and more than 200,000 as of 2015. This increases the diversity of origin in this country. In addition, the Netherlands is experiencing much more “fluidity”: amounts of migrants today are passers-by and leave our country again after some time. [6]

There were 235,691 people living in Eindhoven in 2021, among which 90,788 (38.5%) were of foreign ancestry [12]. The group of internationals is generally classified into five groups: (1) students, (2) international economically active, (3) income-dependent partners (4) international children, and (5) stakeholders [13].

All of them will go through a process to become used to their new identities and living arrangements. Initially, they might move to Eindhoven for a variety of reasons, including work, family, or personal achievements. As a result, the initial journey for each one might be unique. However, people need an approach to gather information and develop connections with others after settling down. A game as a trigger and platform where locals and newcomers may meet and get to know each other could be a solution.

Based on the Eindhoven 365 strategy book, they have 5 target groups they are trying to touch and arrive [19]. Through the qualitative target group research, three important things are summarized.

- An important reason for expat families leaving prematurely is that the spouse is unhappy. This often happens as a consequence of a lack of self-development and no social connection, resulting in isolation and homesickness.
- Identity is partly formed by friendships, work, and family-based and related. In a new place, that identity needs to reform itself. This takes time and it can be a lonely process.
- Internationals miss a place in Eindhoven to meet other internationals. But even more than just getting to know other expats, newcomers long for contact with other residents. Spouses certainly do not want to be seen as needing help but would like to contribute.

According to TINA’s research, there are five steps to attract newcomers to stay for a longer and happier life, the municipal government, and several other individuals and organizations, have centered on five areas: 1) creating a welcoming community; 2) drawing same language speakers immigrants to the city; 3) expanding employment opportunities; 4) working with children and youth; and 5) stimulating diversity through arts and culture [20].

The goal of this project is to inspire newcomers to develop a connection with the city and people. The design also needs to bring entertainment and knowledge, as well as to create a platform for users to interact and communicate with others. Aiming to help users better understand the new city, and let them feel the city’s energy, the concrete start points as well as the design challenge is to design a product that helps newcomers feel connected to Eindhoven and the people in the city.

To get data for the real newcomers, the literature research, stakeholders’ interview and focus session, and target user check session was conducted. A user test was done to get more realistic feedback. These procedures were carried out throughout the project, and the result was a physical gamified City Bingo game with an online application.

Benchmark

There are numerous events planned for internationals. The Holland Expatriate Center will host a welcoming night for foreigners as an introductory event in Lab-1 in Eindhoven [14]. Additionally, there are presentations at TU/e that concentrate on Dutch customs, and immigrant employees should make conversation with the human resources back office.

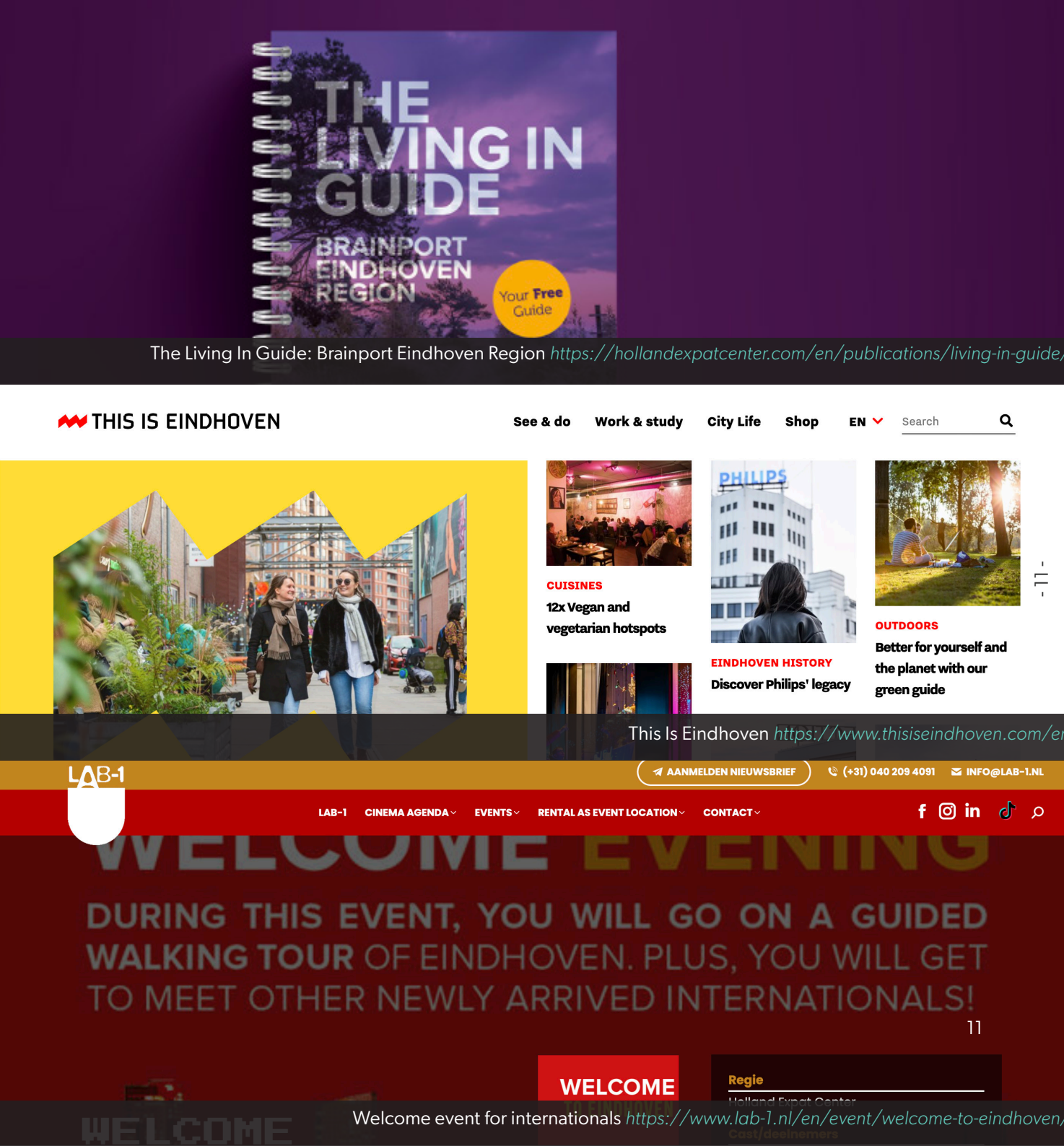
For expats, a booklet will be introduced and given by the Holland expat center. Moreover, most of the exploration information can be checked on the thisiseindhoven.com [15]. There are also platforms and cultural organizations that have different target users to help, for example, the international women in Eindhoven create many opportunities to create a community with all the international women in Eindhoven [16].

For people who want to learn more about the city, people and culture, there are many cities that have city applications that intergrade all the information that people can use with it. Such as the Breda city app, the I am Amsterdam city card app, and so on [17,18].

To determine the present stage of projects, related to newcomers, marketing research is conducted in Figure 1. This is Eindhoven, as it demonstrates, has a wealth of valuable information as well as AR technology to encourage people to explore the city. Also, the energy of this city can spread because of the Eindhoven Vibe branding. However, the exist city AR exploration app is not advertised popularly for citizens.



Figure 1 Marketing research



Interview

Aiming to treat the problems from perspectives, the interview with expert is prepared and done at the first stage.(Figure 2) [Appendix I]

Goal: To give people space for their own talk

Purpose: framing of issue

To gather information so that we can propose delineation from different perspectives

- Research beforehand:
- general experience/knowledge/ coming into contact with expats
 - what are they doing themselves?
 - thresholds and successes?
 - Top 3 of what needs to be tackled
 - Card sorting assignment
 - Have own design question defined
 - What are the expectations what it means to be part of this coalition
 - Latest additions
 - Who is the main target audience?
 - Brief introduction
 - Thinking about how to keep it short

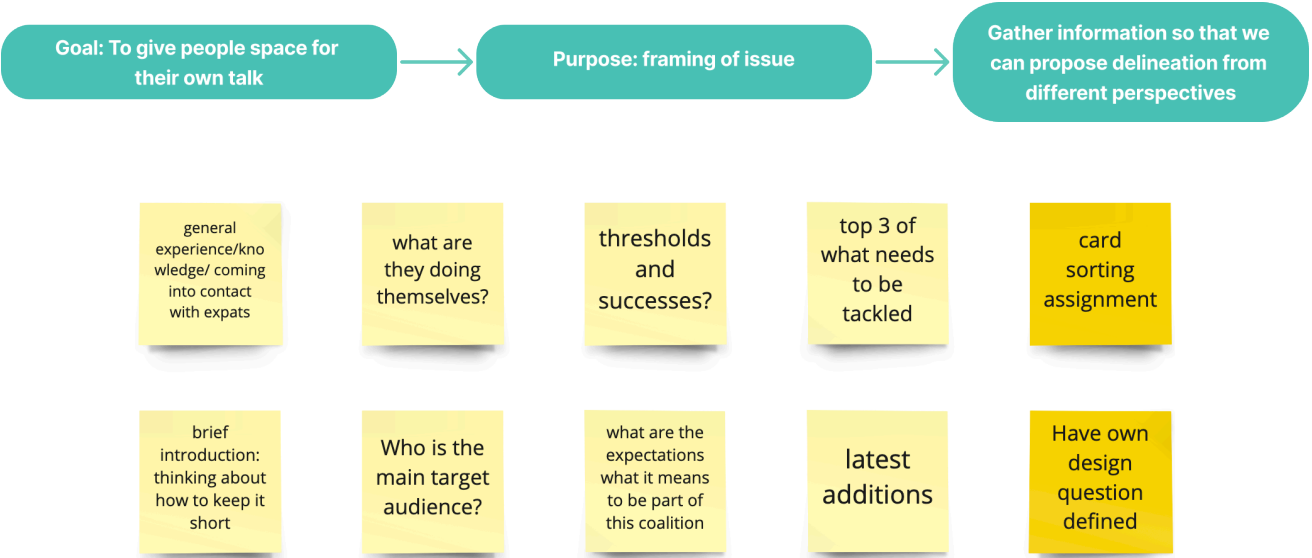


Figure 2 Preparation of the interview

Findings are summarized after the interview.

	Familiar faces in the coalition		Eindhoven is putting their best foot forward
	“Je hoort erbij en je doet ertoe”		Obstacles: long waiting times and companies not taking responsibility

Foucus Session

Focus session set up

A focus session is created based on the literature study [10]. The session aims to:

- gather various viewpoints from different stakeholders on the design challenge;
- engage in dialogue with the organization and experts who work with the target group; and
- encourage experts to empathize with the issue and jointly come up with a more specific target audience and design challenge.

I approached the design process with an open and receptive mindset. Aiming to prepare the focus session and try to get more insight from experts and stakeholders, the program and start point was discussed [Appendix II]. The first start point that we discussed was: ‘How can we better connect newcomers to Eindhoven residents?’, and the endpoint is: ‘Develop a tool that helps increase the number of connections between Eindhoven residents and Newcomers.’

In addition, twelve personas [21] with character and background are chosen and designed with

content. There are twelve role cards with the designed persona that stakeholders should act as, to let specialists truly empathize with the character. [Appendix II]

Proposition for making the persona more ‘user-centered’ and not about the organizations

- Knowledge worker
- Migrant worker
- International student
- Expat Spouse
- Refugee
- A worker at SME/volunteering at the football club
- Student (not from Eindhoven, working at the cultural institute (lab-1)
- The hiring manager at BC
- Owner SME, born and raised in EHV
- Civil servant gemeente Eindhoven (communication)
- Customer service Trudo
- Teacher at primary school

Based on the research, a flexible journey map [1] was created, although it depended on complex circumstances for many personas. The step tiles were autonomous and can be flexibly organized and rearranged, as shown in Figure 3. All designers and stakeholders could move the step tiles easily to figure out what they thought the target user would feel and experience. There are also blank step tiles for stakeholders to write on extra or missing points.



Figure 3 Step tiles

Aiming to motivate experts to dive into the design problem and think of the challenge from both the third perspective and the first perspective, the personas [7] are designed as role-play cards as shown in Figure 4.

After each expert has their “new identity” through given personas, they write down

what was the biggest challenge in the journey map where they carried out. The common design challenges are shown in Appendix II.

Moreover, the SMART goals model [9] is made to motivate experts to narrow down the design challenge and make the design question more “smart”. [Appendix II]

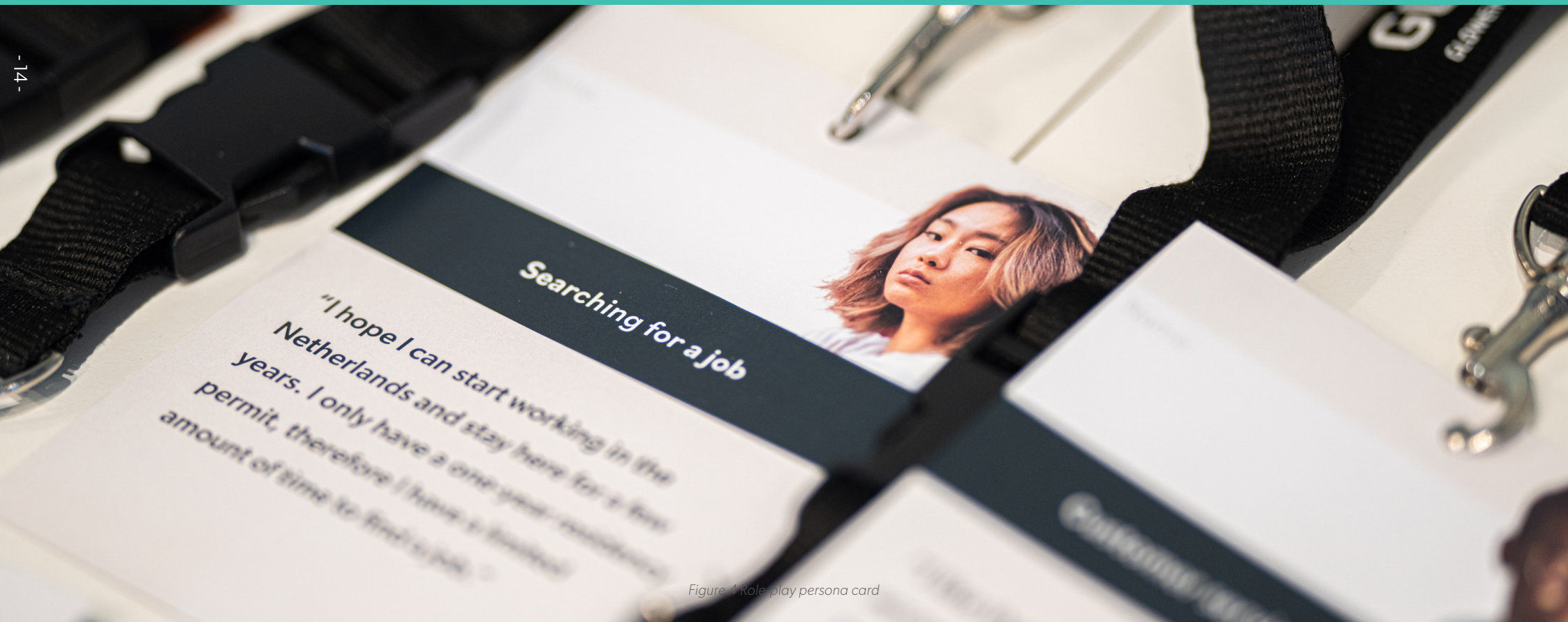


Figure 4 Role-play persona card

Feedback and analysis

According to the program of a co-design journey map (Figure 5), 4 insights are summarized:

1) The tension between feeling at home/local & missing home country

2) Internationals that come to Eindhoven alone are missing from the personas

3) In general, the personas were perceived as being a bit too optimistic. For example, a lot of families that come here need two incomes and struggle with finding suitable accommodation.

4) The definition of what it means to call yourself ‘Eindhovenaar’ was a returning subject.

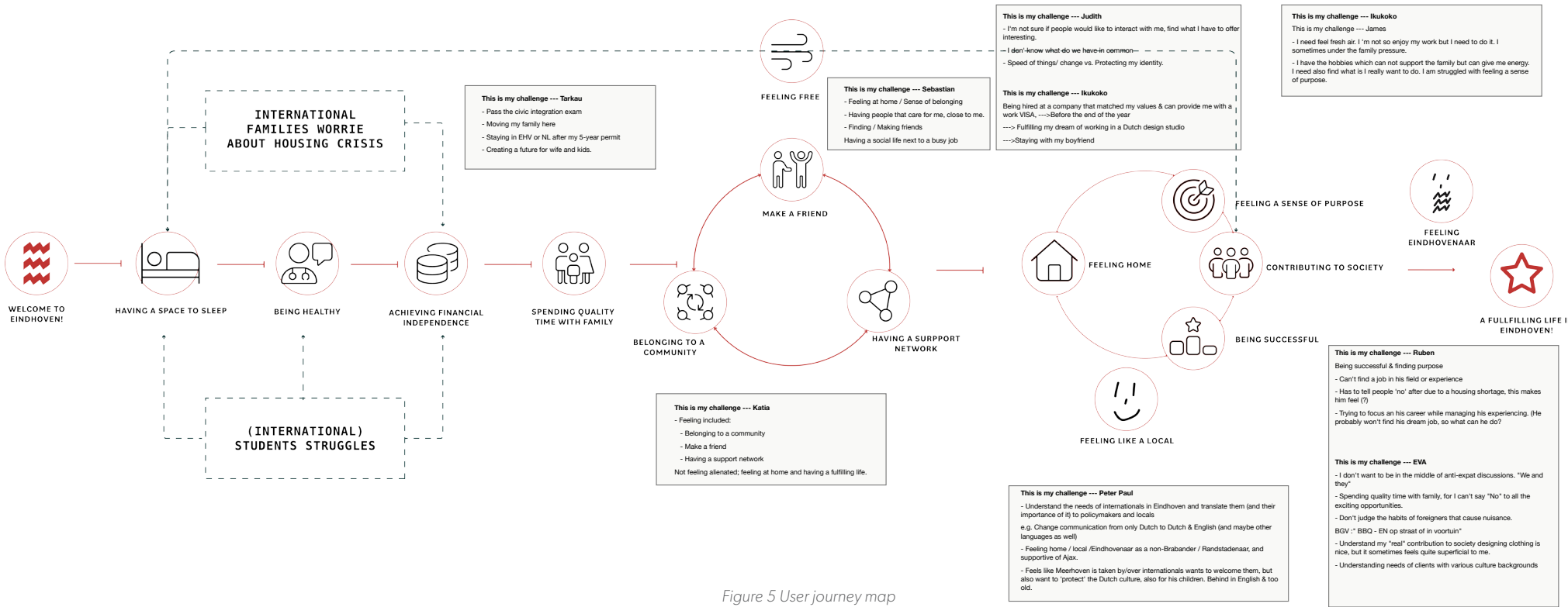


Figure 5 User journey map

Peoblem Statements

Five “How can we challenge” are summarized based on “How can we ...” chanllenge [Appendix II] and content in Figure 6.

- 1. How can we casually connect people and motivate them to have more empathy for each other?
- 2. How can we relieve the pressure of proudly defining ourselves as an Eindhovenenaar?
- 3. How can we show locals the benefits and fun of connecting with internationals, motivating them to do so?
- 4. How can we as a city/region guide internationals even better by providing an overview of information + inspiration?
- 5. How can we create more opportunities to encourage internationals to have more ways to connect with others?

According to the analyzed data, the design challenge as the design start point is narrowed down to: *How can we help newcomers feel connected to the city and people of Eindhoven?*

In order to not separate residents and people and treated them as one group, the “newcomers” is used to summarize the target group in general. However, the target group also has narrow details which are

- Came here in the **last three years**
- Feel an urgency to connect with others
- Have (some) intention to stay in Eindhoven
- A mix of Dutch and international newcomers
- And the endpoint is summarized as an ecosystem of tools that spark new encounters and conversations related to your connection to Eindhoven.

And more concrete is this ecosystem also with the intention of facilitating a learning experience about (re)defining the identity in relation to the city and the people of Eindhoven.

S	Specific	• Help all residents of Eindhoven redefine their identity and relationship with the city	• Better connect newcomers and Eindhovenenaar and make it easier to call yourself 'Eindhovenenaar'.	• (Native) Eindhovenenaar realises the benefits of activity connecting with expats. • Expats feel more welcome	• Providing information and inspiration for internationals in EHV and position EHV as welcoming city for internationals.	• Reach and influence those internationals without a social network
M	Measurable	• If you feel nice as an 'Eindhovenenaar', even if you stayed stayed for a while X% of people feel like 'Eindhoven is my city'.	• Less "as them" feeling • Less pre-assumptions	• Self-sustaining & growing a movement. • Number or variety of larger groups • Internationals in bodies • Volunteering by expats.	• Contact + published on This is eindhoven.com +@Eindhovencity • Target group published through own + 3rd	• Start & end with a survey—basic questions • For internationals • For locals
A	Attainable	• Help people become part of a historical narrative to which they can hook their experience in the present.	• Make the name "Eindhovenenaar" less loaded, and let people tell why they feel Eindhovenenaar no matter how long they live in the city (region).	• Showcase goal examples • Convince Eindhovenenaar • Organise fun mixed events • A inspire like sparks & social clubs	• It is part of our strategy • We have the support of the community	• Explain the importance of it first
R	Relevant	• The goal builds a foundation for common identify. Making it welcoming for internationals.	• Feeling at home, feeling like a local. • Belonging to a community. • Fulfilling life Leave as an ambassador.	• Create movement from both directions & meet in the middle • Contributing to social cohesion, without loss of identity. • Native Eindhoven successful key	• It is a continuation to the goal of motivate people look at / Like a local	• With the coalition we want to connect newcomers & locals, with this, we are exactly achieving this.
T	Time bound	• 4-5 years (Once you start, know what to do)	• As a person: 5 years • As a city: 10 years	• There's quite a bit of low-hanging point we can start with asap, but for the biggest goal, we are looking at 5+ years to see a real change.	• End of 2022: Start / Launch • Everybody knows TIE as a source of information + Inspiration	• 1 year (at least)

Figure 6 Make the challenges SMART

Ideation

The focus session yielded a variety of findings.

In order to systematize and concretize all the findings, a mind map and discussion are created.

The problem can be handled in a variety of ways.

[Appendix III] There are primarily two ways to move forward: one involves a physical tool, and the other a digital system.

Conceptual sketch

The concept should balance between three different values: trigger reflection on identity, spark energy through fun interaction and provide options for utility. (Figure 7)

The concept should balance between three different values: trigger reflection on identity, spark energy through fun interaction and provide options for utility.

The end result should not be a standalone product. It should consist of multiple touch points that all build toward the previously mentioned goals. The visual representation below is a starting point of what that might look

like. Ideally, this ecosystem connects existing touchpoints and allows for expansion of the ecosystem in the future.

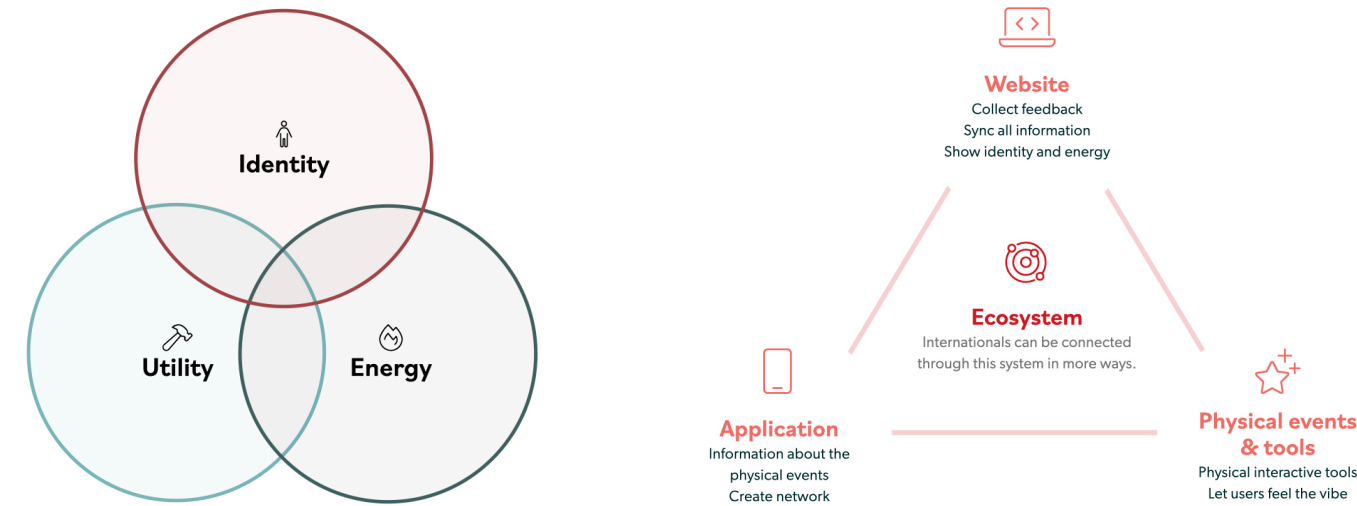


Figure 7 Concept values

Sketches are drawn to further think of the possibilities of the three values. (Figure 8)

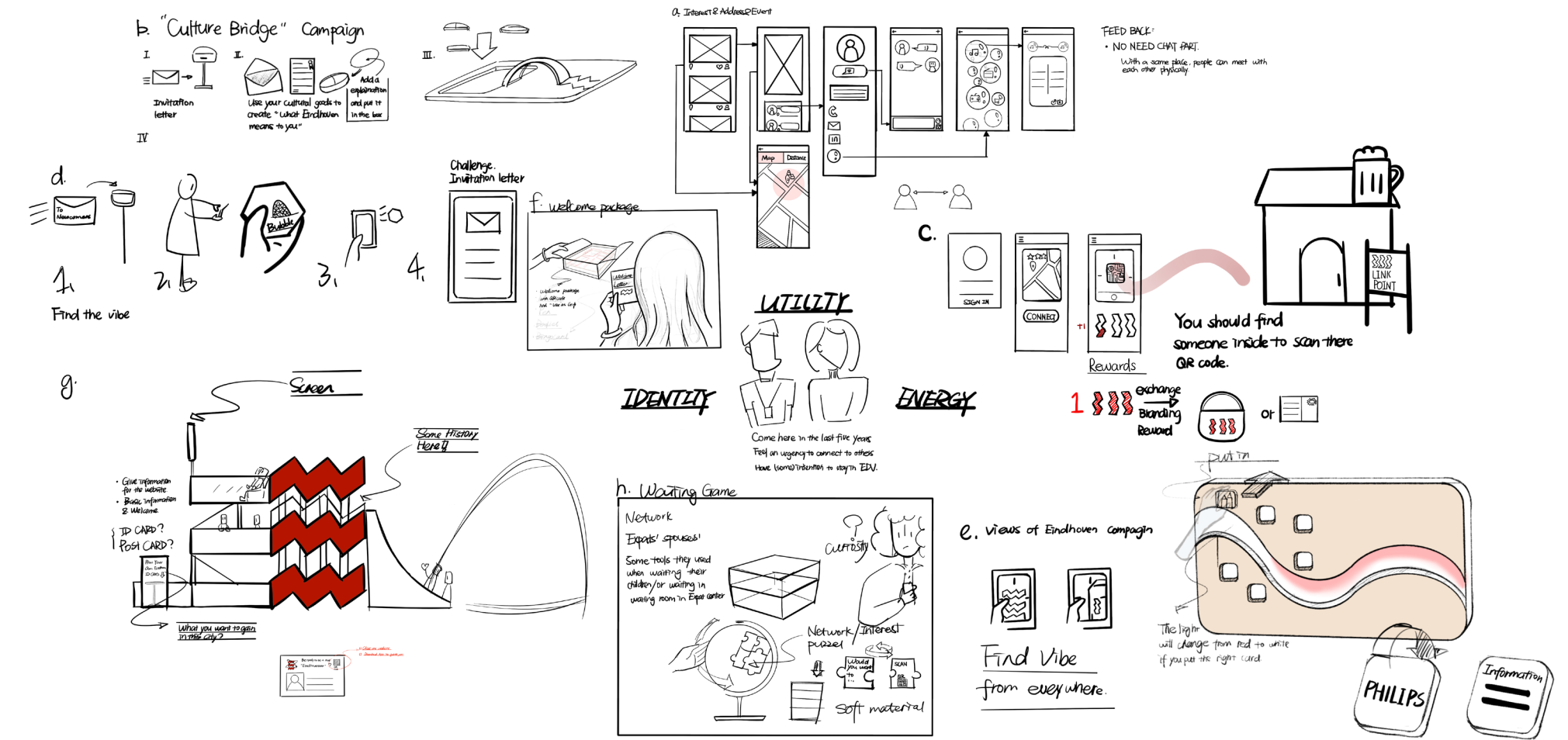


Figure 8 Concept sketches

First Prototype

After research through the landmarks and co-design with local designers [Appendix III], the first concept is designed as shown in followings.

Along with the first bingo card, players can have choice to play with the physical cards.

Access the online platform’s detailed information. As a social sharing feature, everyone who starts playing this game can make their own theme Bingo card online.

The content is designed based on the research through the Eindhoven open data¹.

¹<https://data.eindhoven.nl/pages/home/?flg=nl>

Physical bingo card

The first concept is chosen using the mind map and co-design with other designers at the company. The idea revolves around a card game like traditional bingo. Various themed cards can be chose through playing, which help people feel more like a part of the city’s identity and its residents. (Figure 9)

For instance, starting conversations with other newcomers by using their bingo cards as a trigger. Then users can further explore the new environment and people they meet.

In order to change newcomers’ behavior from avoiding or being afraid of connection to feeling more at comfortable and keen to investigate the connection, rewards should be provided as part of the bingo game, the gamified factor will add more fun. [2,3]

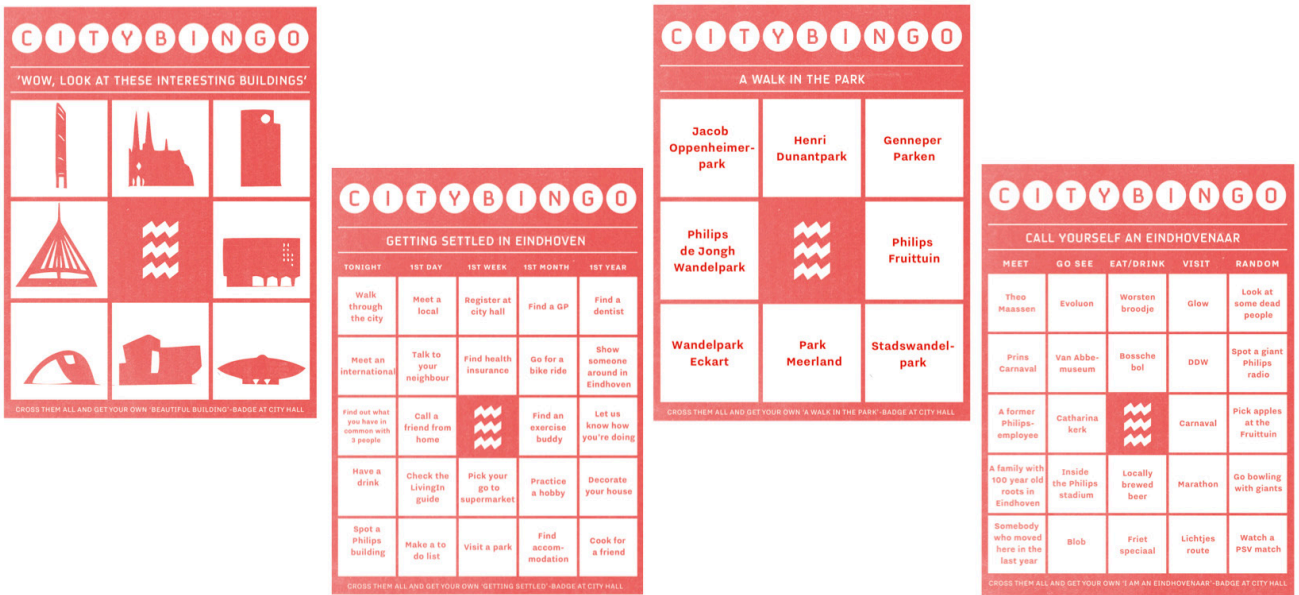


Figure 9 Physical card first concept

Additionally, there are numerous opportunities for development, including VR upload and recognition, map search, and AR scan, among others.

Digital concept

Online concepts (Figure 10) are sketched at first, including playing around with cards, social sharing, exploration, and rewards. Paper sketch were done first. [Appendix III]

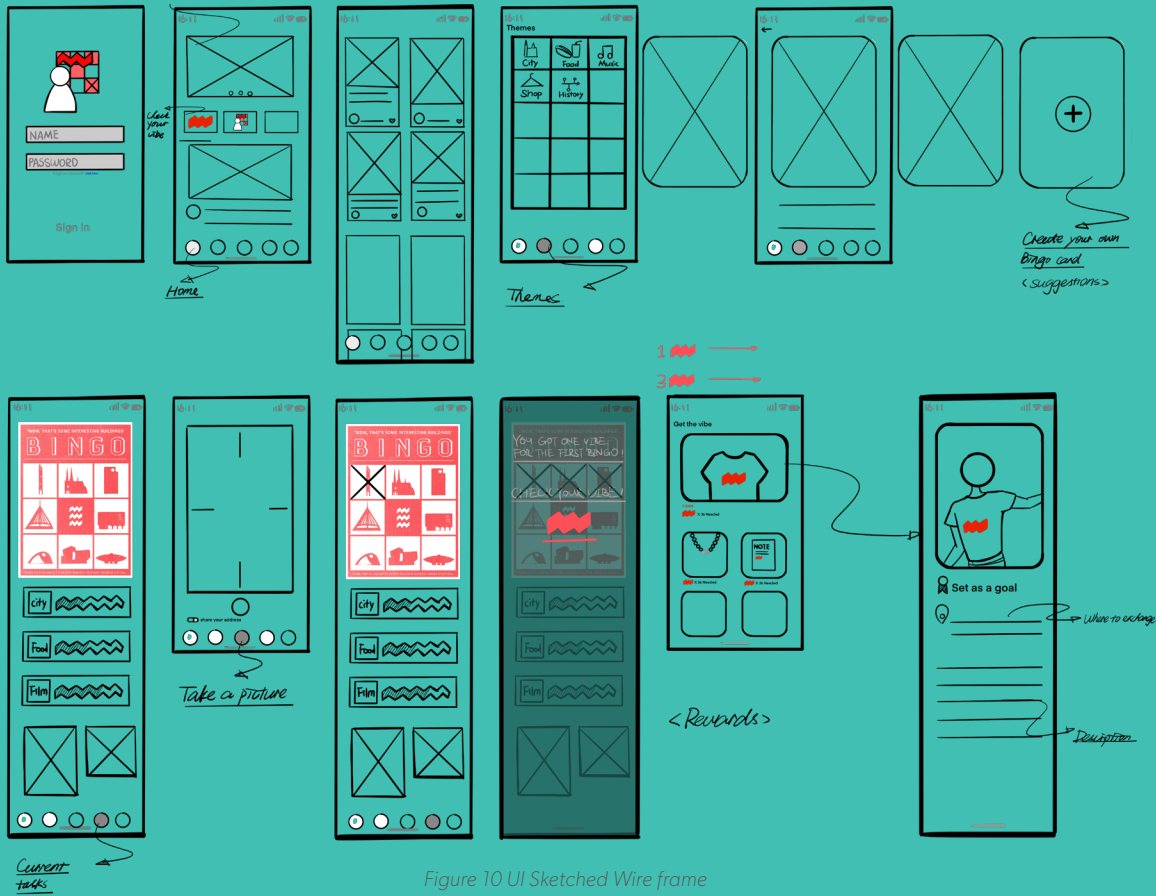


Figure 10 UI Sketched Wire frame

UI design

Information Architecture

- Features Digital mockup
- Making a bingo card
- Library of bingo cards - (Combined with map)
- Growing map of points of interests
- Citywide bingo challenge
- Small group challenge around a theme
- Digitally filling out a bingo card
- Using AR to make physical bingo card digital

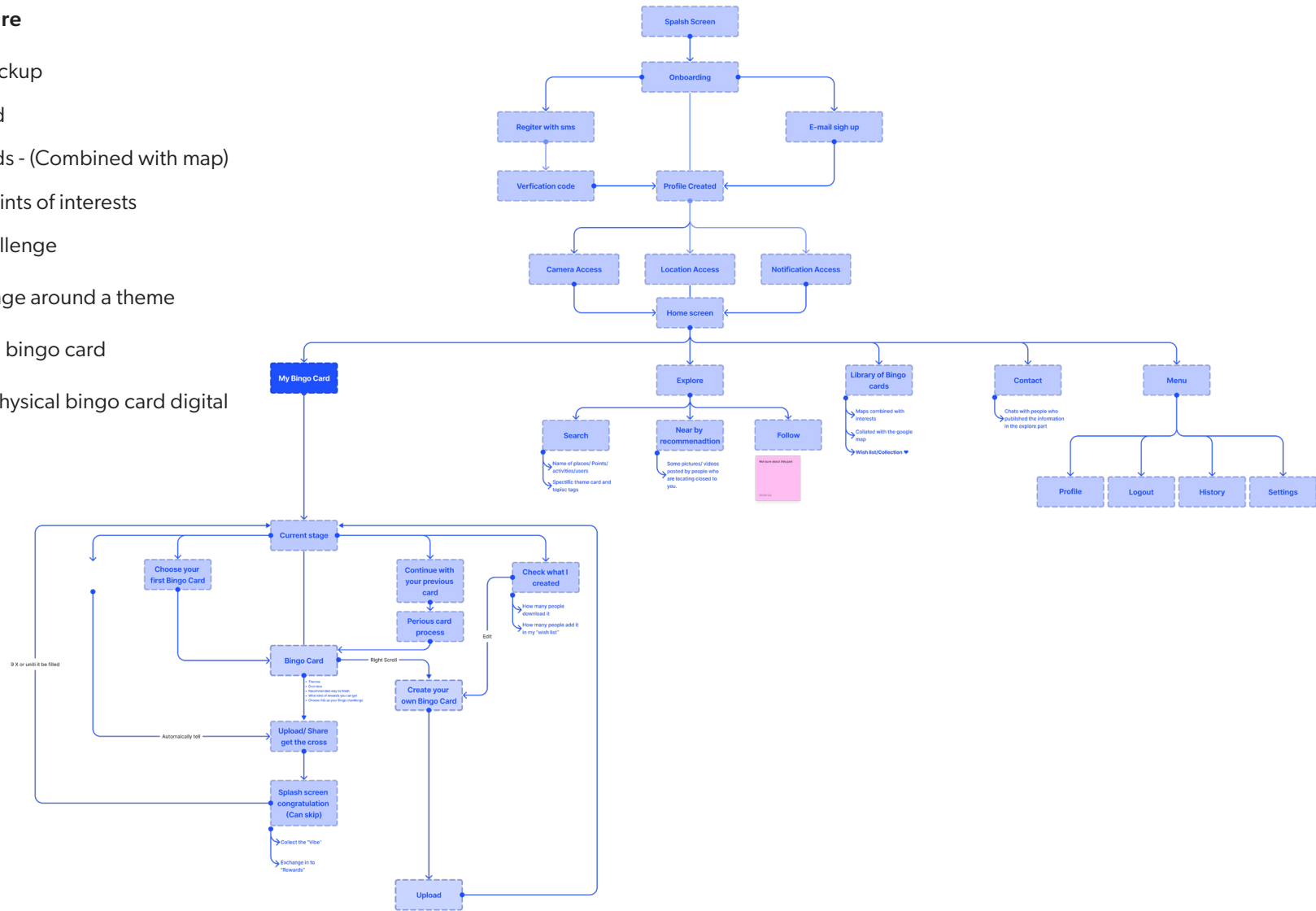


Figure 11 Information Architecture

User flow chart

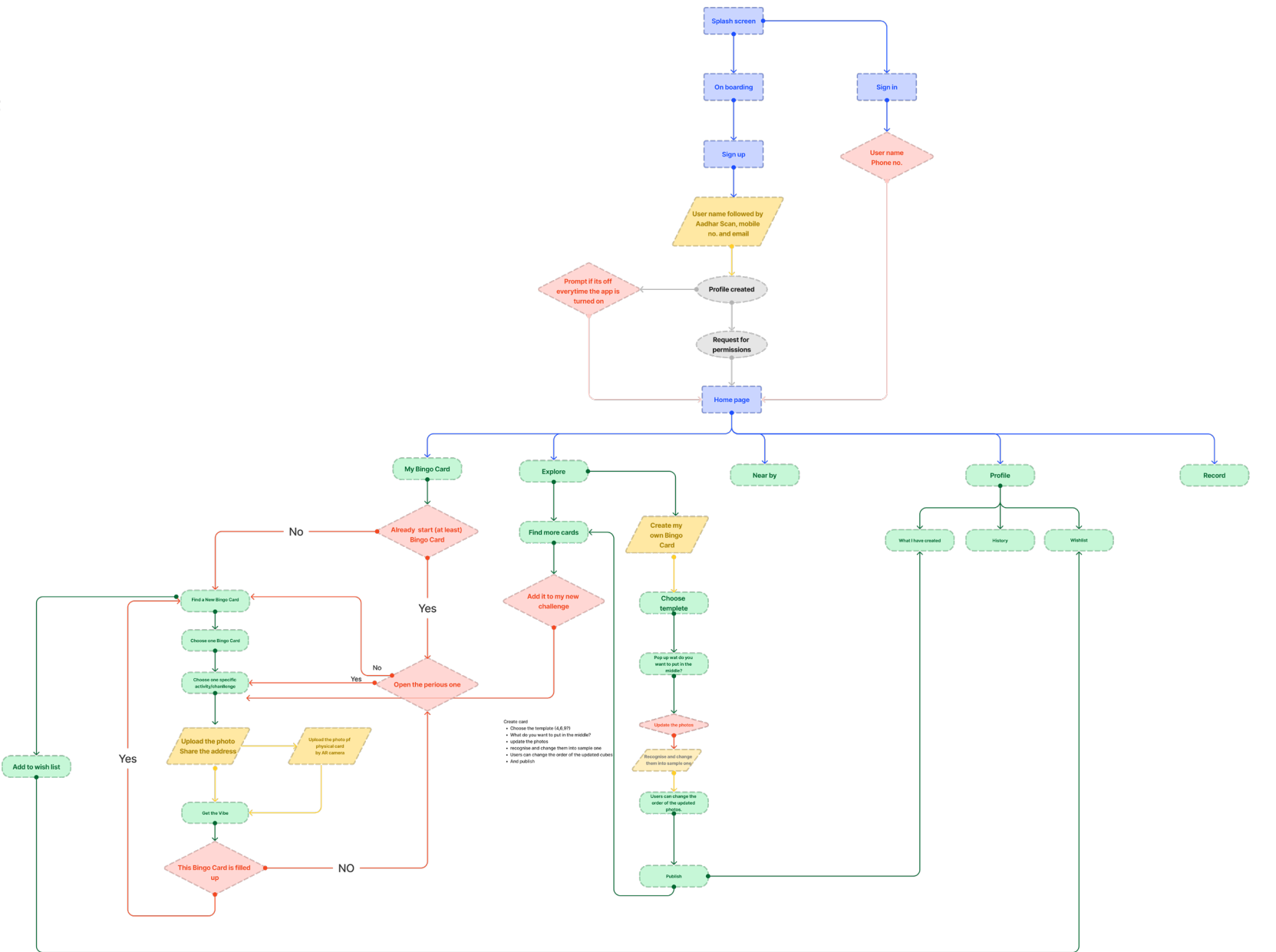


Figure 12 User task flow

- 24 -

Figure 13 Low-fi prototype



Figure 14 Persona

- gather feedback about the concept from target users.
- check about the real persona and user scenario.

Figure 14 Persona

Figure 14 Persona

feels out of place.



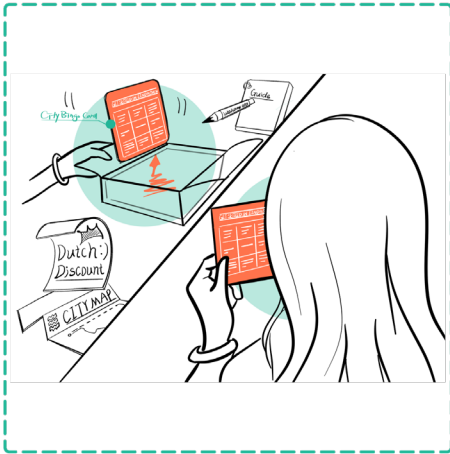
User scenario

With the prototype, a user scenario is made, the content is written first [Appendix. IV], and a storyboard is designed with the intention of encouraging online checkers to get involved in the story.

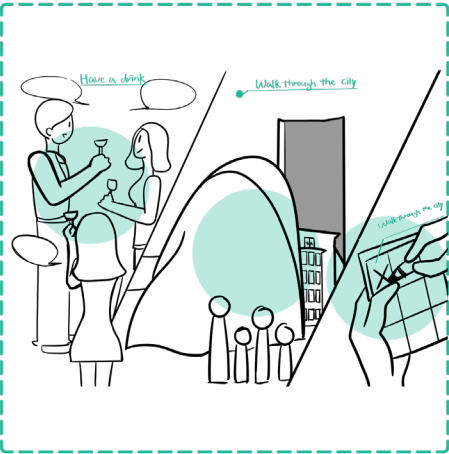
In conclusion, the feedback is got from the real target users and are classified as

- The details of the persona need to be improved, there are many different situations related to various personal information.
- Like the paper& digital aspect, there is an opportunity to connect.
- It is a gamification of life, wants to try it out, and sounds fun and interesting.
- The main problem for newcomers is too much information, so this concept’s social part can narrow it into themes which is very useful.

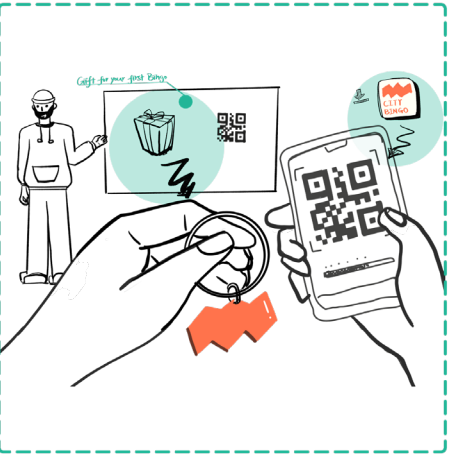
International wecoming night



Sara has a welcome bag with living - in guide, city map, a flyer of dutch lessons , a booklet, a Eindhoven pencil and a “Card” which printed the title “Getting settled in Eindhoven”



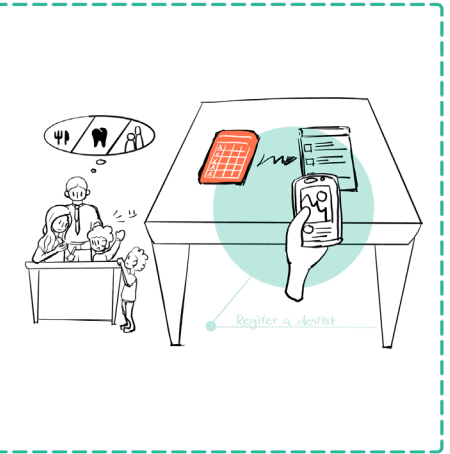
All international newcomers have a great conversation there, and go for a walk aim to finish the first column of Bingo card.



The host explain how to play around with the Bingo card, and show a QR code that they can get detailed information. Sara downloaded it.

Every have a gift for finish the first Bingo column and get their first bingo. (An Eindhoven key chain.)

The first week Bingo card



Sara begin to make a to - do list and also put some cross on the first bingo card

She also together with family to discuss the to do list together, such as register a dentist, inviting neighbourhood for dinner..... They are very excited for the new life here.

Family visiting and searching for a themed Bingo Card

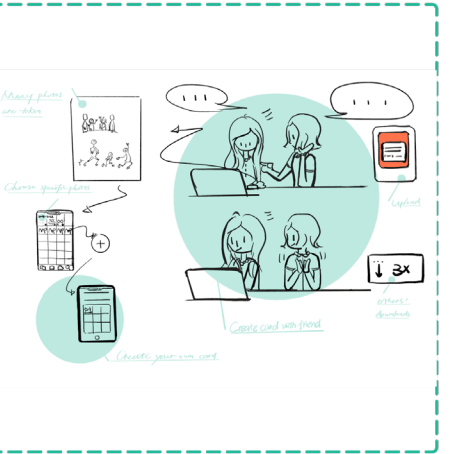


Sara begin to search for a Park themed Bingo card with kids.They enjoy the park and have a good time

Sara took many photos and upload it to the APP.

Score, comment and the mood sharing.

Creating my own Bingo card



A year after... Sara with her friends went to many restanuants after the whole year, and they together created their first card about “ the best restaurants for family to visit in Bingo game!” by using their photos. It also excited to see many people download the card and begin to pay around with it.

Organizing an event with the big bingo wheel



Everyone can play the City bingo game in city center physically.



Figure 15 User test set up

User test

Set up and preparation

Aiming to have a user test for real target users, the test environment is set in Eindhoven winter market in evoluon. The winter market is held on 10th, December by the holland expat center south, there are many cultural organizations there. 100 pieces of winter market-themed cards are prepared for the user test. (Figure 15) The participants are introduced to join in the activity, and all the participants anonymously join in the user test. Participants receive a prize for each bingo card they complete and return.

They also do a brief user experience interview and provide feedback. The researcher recorded feedback by taking notes. [Appendix V].

The goal of this user test ls

- Will users be motivated by the bingo card?
- Will they feel more collected with the event and people?
- Does the bingo card provide enough information and context?
- How do we deal with “proof”?
- Does the bingo card spark interactions and conversations?

In conclusion, the final goal is to test if participants feel connected with the event and others during the user test.

Data anlysis

Through the whole user test, the quality data and quantity data are collected. The quality data are recorded through interviews and observation [5], and the results are classified and digitalized in Figure 15. Also, the quantity data are counted.

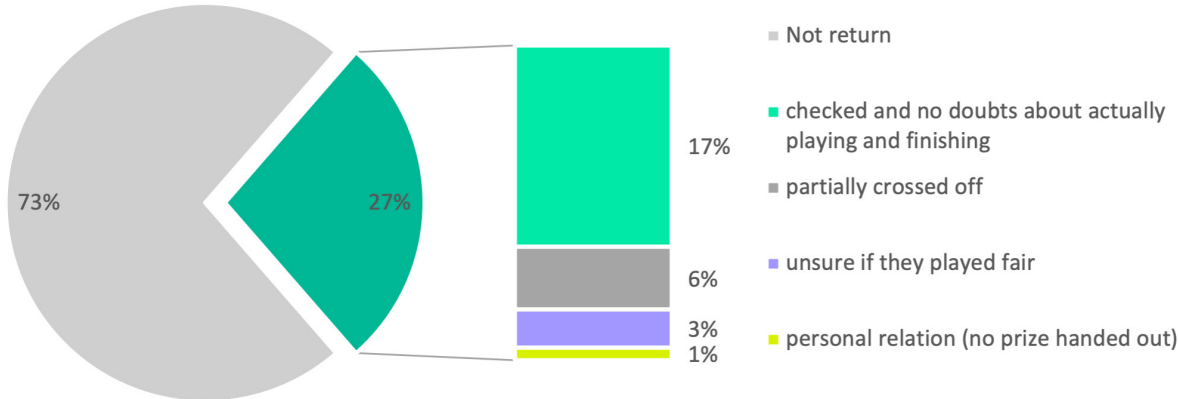


Figure 15 User test statistics

Winter market user test statistics

At the conclusion of the user test, 99 bingo cards were distributed, and 92 of them contained actual testing, making up 93 percent of the total. 25 parts of the cards are given back, while 67 pieces are tested but not given back.

As can be seen in Figure 17, over one out of four cards are returned in actually tested cards, which is a high percentage of the result. A notable result and visualized percentage are also shown in the right part of figure x as a column. There is recorded by 17% of people checked and have no doubts about playing and finishing the cards, which can represent most of the returned users, while 3% people the researchers are unsure if they played fair since they cannot answer the question related to the content of the cards. Another valuable data is 6% of users who partially crossed off the cards also return the cards, they cannot finish all the tasks but still share the using experience with researchers.

Interview quality data analysis

According to Figure 16, the results are classified to match the user text goals. As the researchers spend the whole day in the winter market and introduce to more and more visitors. Some participants are attracted by the visual at first and feel interested to use it as a guide game.

“More interest I guide is useful to have a look, but hard to have a deeper connection”
“Was fun, still did some things we wouldn’t normally do. Even did a “collaboration” during a workshop”

There is, however, a lot more input about feeling involved with the attendees and the entire event.
“It was interactive. It motivates you to talk to organizations. You look more closely. You meet more people”
“This keeps us engaged. We tried different things and talked to people, so good job!”

Furthermore, some participants believe that in addition to fostering greater connections, this also helps people understand the identity and energy of Eindhoven and that the idea may be used for other occasions.

“Normally I wouldn’t have asked for the pitch. I talked with the theatre. In Mexico I used to do stage design. Now I signed up to do that again here in Eindhoven!”
“I love it! We should do this at German Christmas markets. They are pretty and have great food, but nobody talks to each other!”

In a word, the feedback is divided into three circumstances and is described as the cards do produce more connections than usual, more interaction, and more fun in relation to three factors: identity, utility, and energy. The idea is intriguing and can be tied to other events, however, it needs a greater connection to the detailed program of the event. The overall idea can keep players interested, and it is a more engaging guide game that is worthwhile to take a look at what the card is related to.

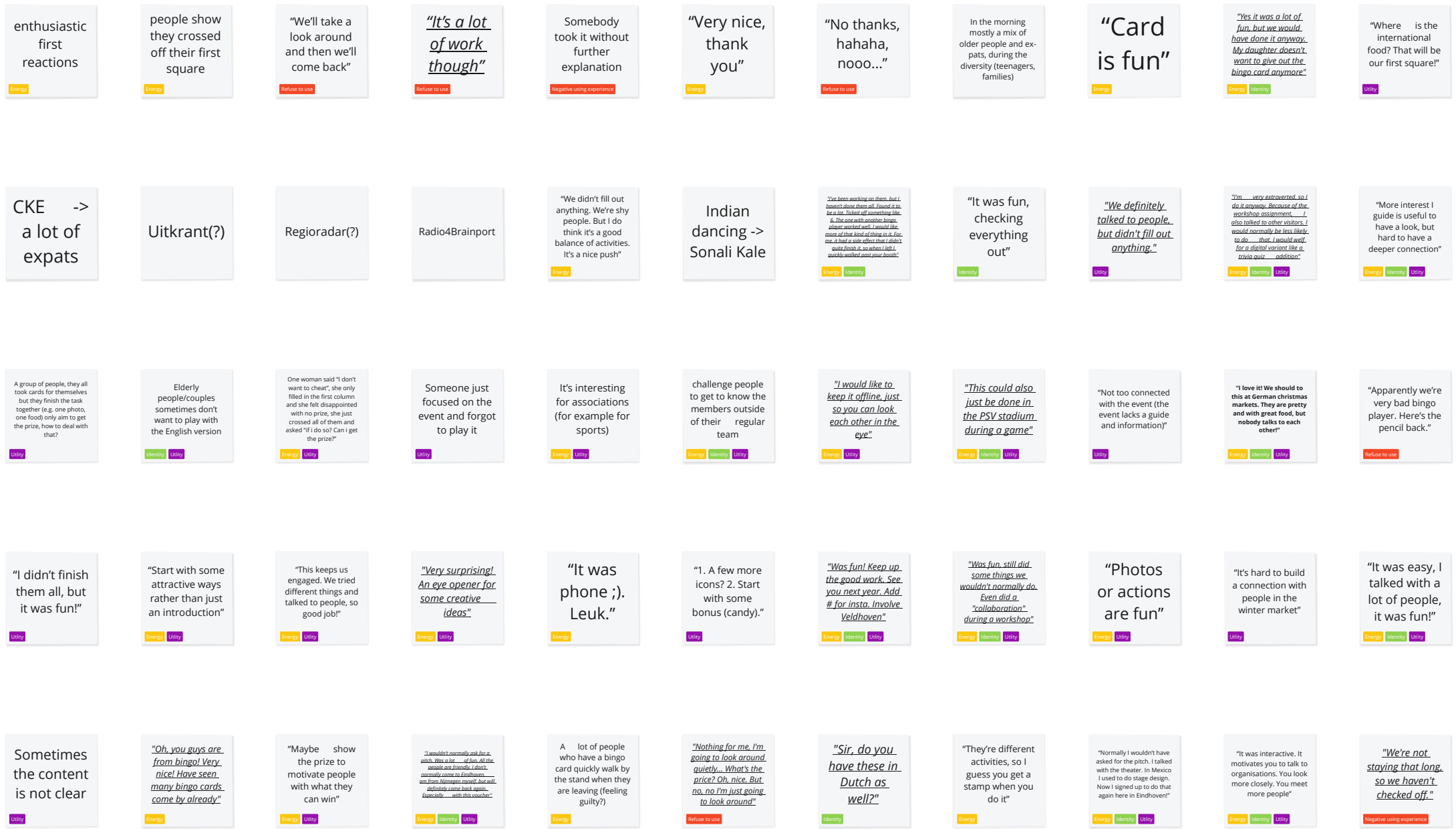


Figure 16 Feedback of using experience

Welcome Package - Scenario 1

Providing newcomers with a gamified arrival experience in Eindhoven

Value Proposition



Putting the fun in functionality

The bingo card can be a filter for the information overload newcomers experience, the clear overview of 24 tasks provides a nice overview and can be a combination of fun and functional tasks.



Fits all kinds of communities

Applicable to both Eindhoven-wide onboarding (Holland expat centre South, Student Intro Week) and integrating in smaller communities (ASML, CKE, sports association).



Bonding through a shared arrival experience:

Being newcomers together is a good starting point for connecting and conversing. Enriching the experience by gamifying it with an Eindhoven twist can strengthen both relations between newcomers and with Eindhoven.

Journey map



Sara

Step

1 Be welcomed

2 Playing

3 Get rewards

4 Online group

5 Sharing

Behavior

- Get the physical game card in welcome package, do not know what it is.
- There are some introductions on it, and each square has certain assignments.

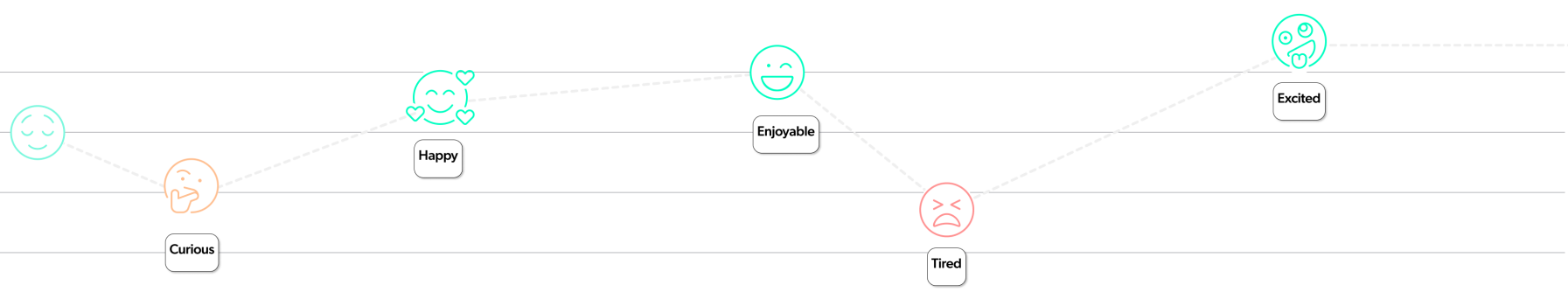
- After receiving an introduction from the host, Sara and the other attendees begin to play with the physical card.
- Together, they complete the assignments, such as walking around the city.
- Every time they finish an assignment, they will put a cross on it. "That is much more fun than just have a guide introduction."

- Everyone get the first rewards for crossed their first line on the Bingo card.
- The host show the QR code, that everyone can download it and get their digital vibe on it. The host also explain the rewards system.
- There are many information can be checked on the online platform.

- Sara meet some interesting people, and they create a newcomers group face to face after downloading the app, they are excited to share some useful tips they already know in group chat.
- They find there are many recommended places to go, also some people pot nice photos in the social sharing platform.

- Sara takes cards back home and also share it with her family members, she is surprised about the flexible and creative welcoming way, she feels the welcome feeling from this city.

Emotion



Final Design

As shown in Figure 17, the bingo card functions as a guide game and a trigger for communication possibilities in the welcoming situation. The content is useful and appropriate for newbies seeking introduction information. Boost offline engagement as well to encourage people to socialize.

During welcoming scenerio, people can join online small groups to chat and manage and finish all the tasks to get the bingo. They can start the weloming bingo game offline, also can play with it in groups. (Figure 18)

As shown in Figure 19, users can choose different theme cards according to their interests and also get detailed information through the bingo card introduction page.

Besides, the rewards can be viewed on the My Bingo page. Due to goal setting theory for behavior change [4], a suitable reward can motivate users to use the product more often. (Figure 19)



Figure 17 S1_Welcome info cards

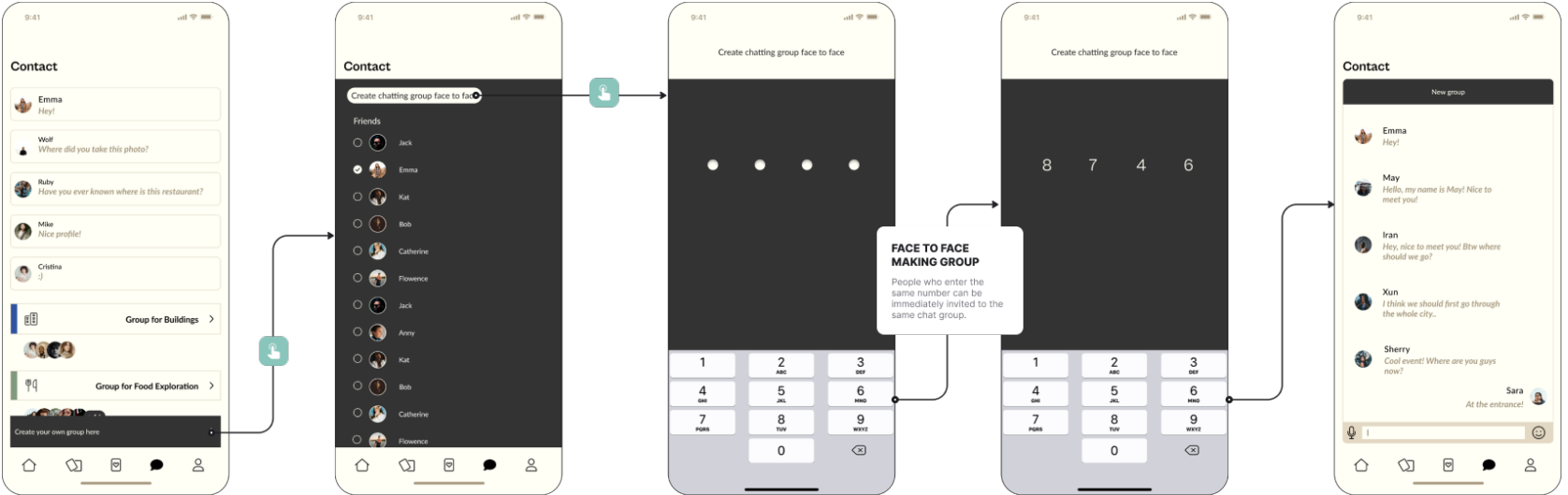


Figure 18 Finish the card in small group

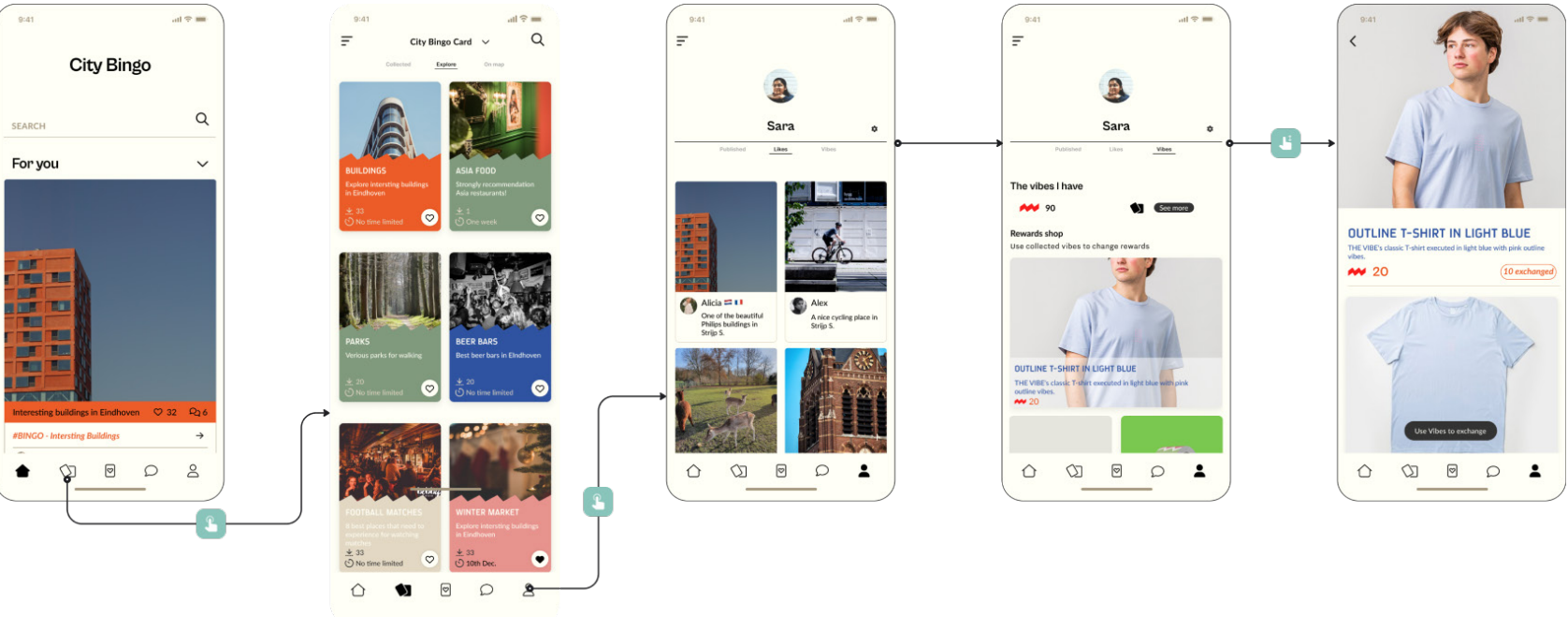


Figure 19 Explore the different themes of cards and rewards

SWOT



Strengths

- Filters information overload
- Utilizes a shared arrival experience
- Explicitly focused on newcomers in Eindhoven



Weaknesses

- Not specifically tailored to 'expat spouses'
- Creating custom welcome bingo cards requires a careful editorial process (can be time-consuming)
- Only works if users actually make the jump from the physical to the digital 'bingo card'



Opportunities

- TU/e has expressed interest applying the concept to the Introduction week
- Concrete value proposition (better student/employee onboarding) can help get funding from partners



Threats

- Bingo card in a welcome package can be seen as a useless flyer
- A special arrival experience might alienate newcomers more in certain communities

Curated cards -Scenario 2

Providing Eindhovenaren with the opportunity to take part in interactive themed scavenger hunts (and curate one themselves)

Value Proposition



Everybody's welcome

This scenario focuses on connecting Eindhovenaren based on their passions. Everybody's welcome to join in on the fun.



Collaboration with third parties

Cultural organizations, bars, restaurants and other venues that want visitors can be interesting for a paid collaboration, they could either sponsor (part of) a bingo card or sponsor a reward for a bingo card.



Endless possibilities

The only fixed part of the bingo card is the structure, the medium of a digital interface allows for a wide array of interesting and engaging gamified interactions.

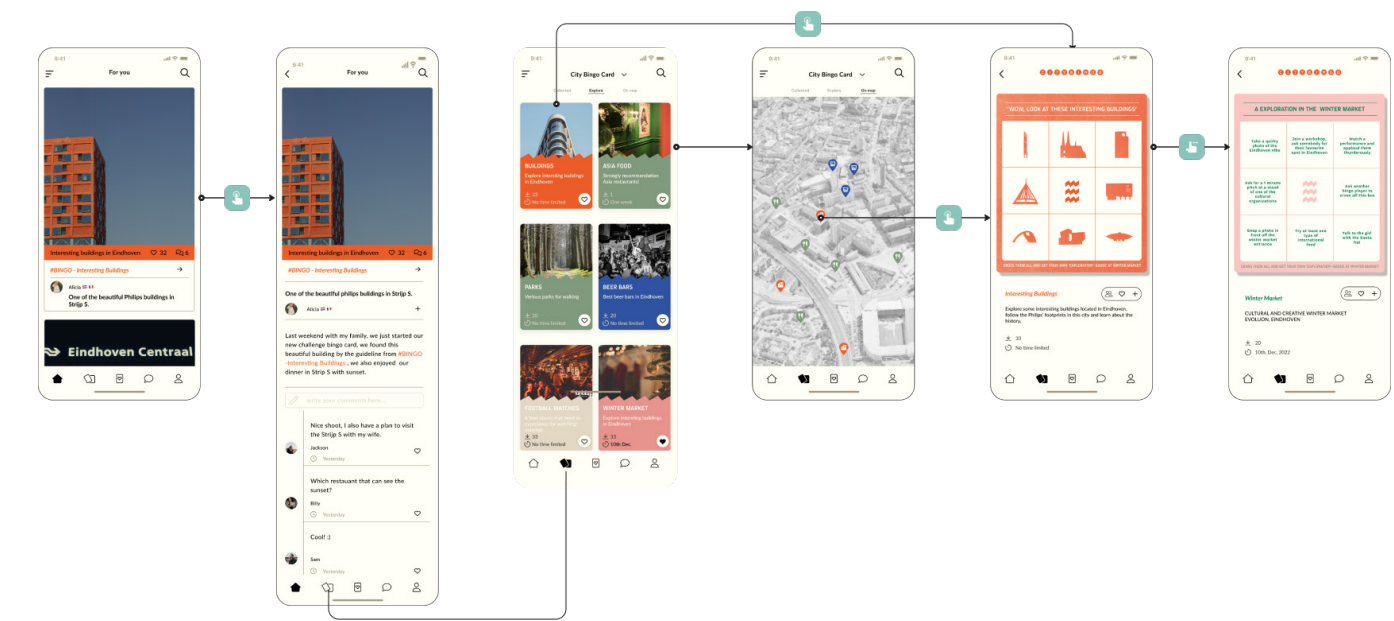


Figure 20 Explore the different themes of bingo cards

Final Design

As Figure 20 shows, with the homepage, users can find various information with pictures can descriptions. The users can check the information also related to themed bingo cards directly.

Except for the physical card, users can play around with cards online with various interactions. (Figure 21)

Every time users finish one line, they will get one EINDHOVEN VIBE as a reward. Users can collect EINDHOVEN VIBE to exchange rewards in my bingo shop.

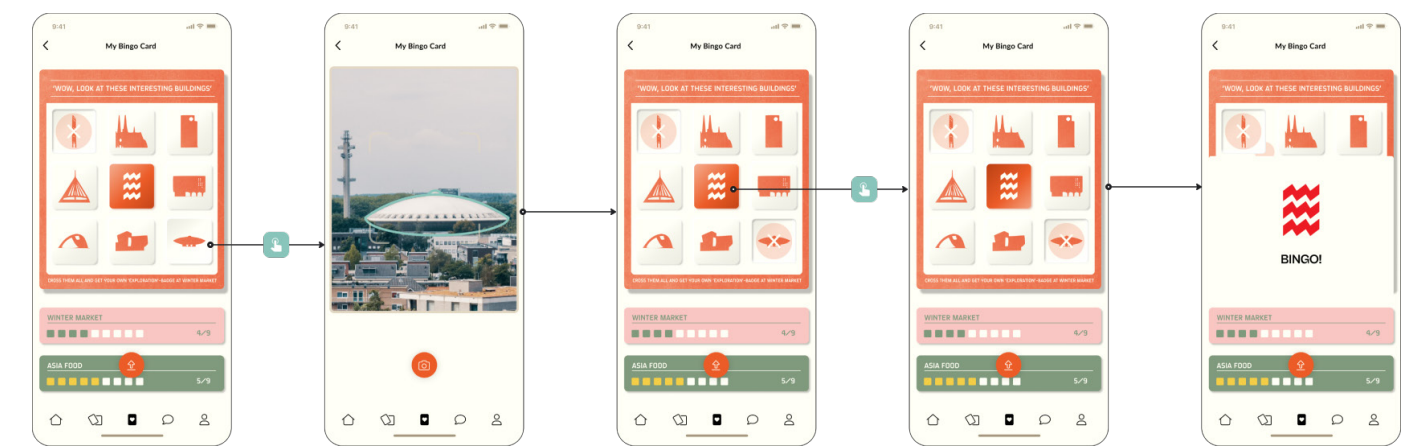


Figure 21 Play bingo cards online

As shown in Figure 22, as users finish amounts of bingo cards, they can unlock the creating functions. This is a concept that enables users to share the city from their own perspective. Photos may be turned into brand-new themed bingo card by uploading them and selecting the template, title, color, and description. The new themed bingo card is published and made available for usage by other users after the audit is authorized.

Additionally, the online platform can be combined with the current thisiseindhoven.com website to provide a comprehensive system for collaboration. (Figure 23)

There are many interesting interactions and ways that can be designed in the future, a brainstorm is done to explore all the possibilities. [Appendix VI]

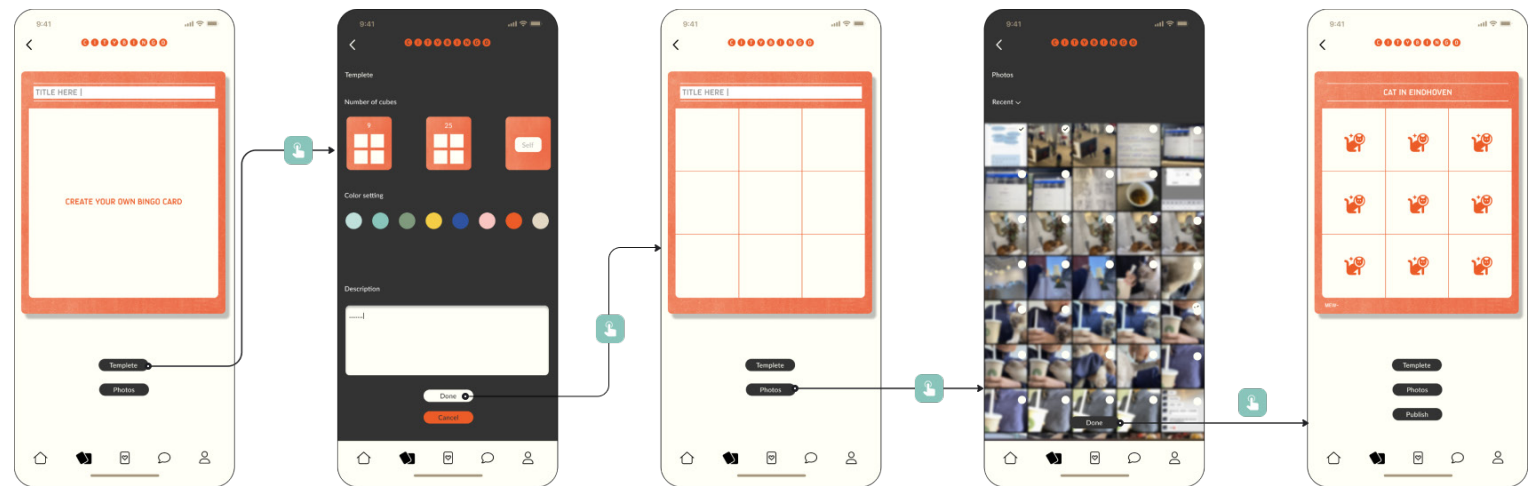


Figure 22 Create a different themed bingo card

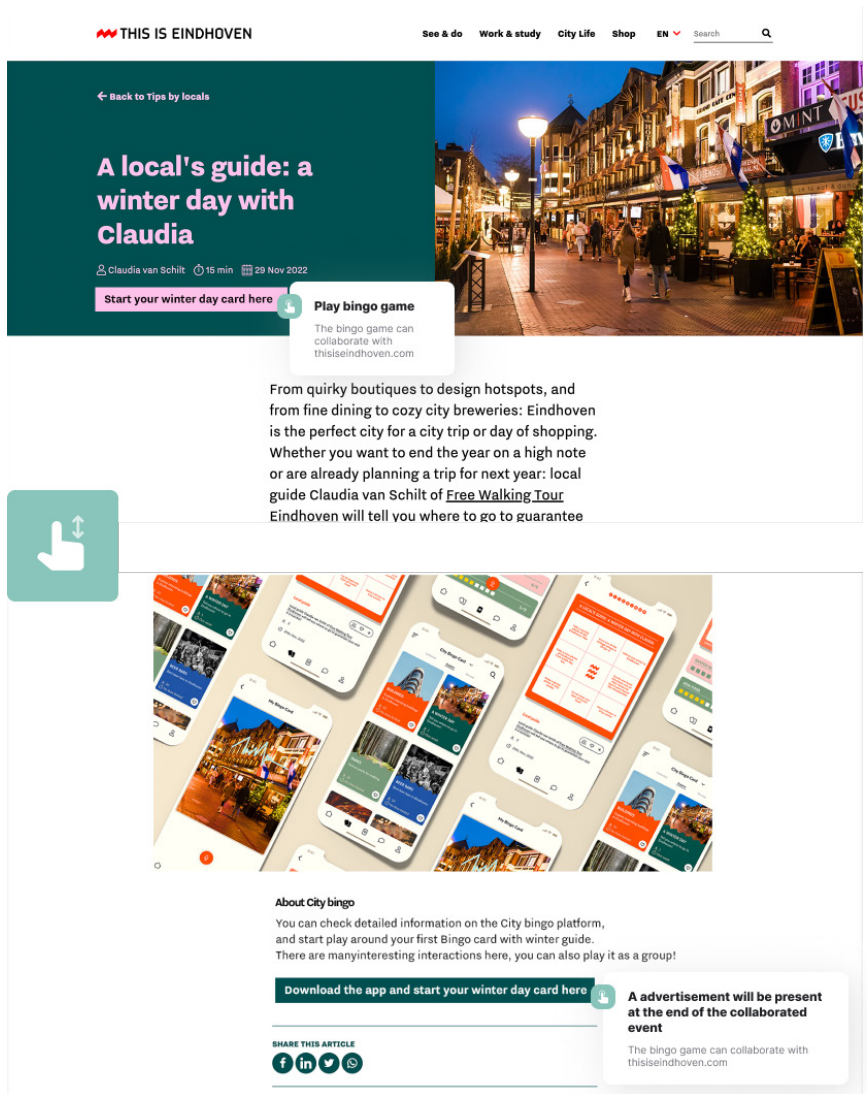


Figure 23 Intergrade with THIS IS EINDHOVEN website

SWOT



- Strengths**
- Empowers Eindhovenaren to share their passion
 - Open to everyone



- Weaknesses**
- Not directly targeted to newcomers or internationals
 - No plan for getting users to use the app



- Opportunities**
- Potential business model involving small business
 - Uitkrant might be interested in curating cards
 - The content of thisiseindhoven.com is very suitable for being bingo-ified
 - Bingo card-widget on thisiseindhoven.com



- Threats**
- The library might get polluted with nonsense and/or offensive bingo cards
 - Getting to critical mass might be a challenge

Bingo enriched events - Scenario 3

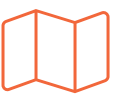
Providing event organizers with an easy way to incorporate the Eindhoven signature into their events

Value Proposition



Challenging people to interact more

With the event, with the staff, with other visitors and with the environment. Stepping outside their comfort zone and perhaps stumbling upon surprising interactions.



An event guide with a little extra

A bingo card can provide a quick overview of what there is to do at an event, including some unexpected activities with a fun twist



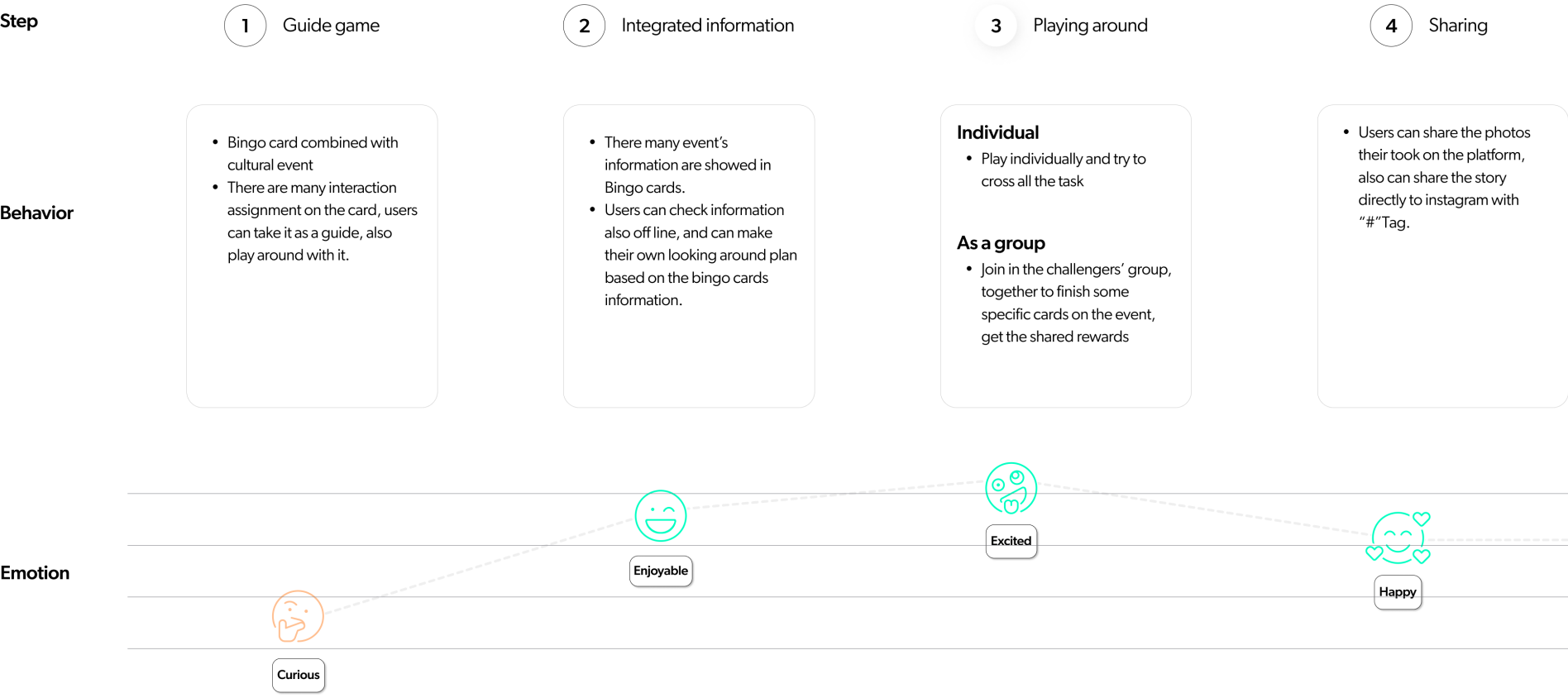
Physical experience, digitally enriched

The event experience will mostly revolve around the physical interactions of getting the card, filling it out and interacting with other. Digital addons can consist of extra information in an app, filling out the bingo card as a group and sharing you experience on social media.

Journey map



Sara



Final Design

In Figure 24, which is also tested in the user test, City Bingo can be related to specific events.

Interactive tasks were designed to be combined with information about a specific event. Everyone who wants to participate in a specific event can view the information online (Figure 25) and can choose to join the event game or play cards offline.

Users can play physical cards or apply online for details and meet new people there. It depends on whether the user is playing the cards online or offline. Everyone who participates in the event can share their experience through the online platform. In this way, there will also be a lot of communities created related to the event.



Figure 24 Event-related bingo card

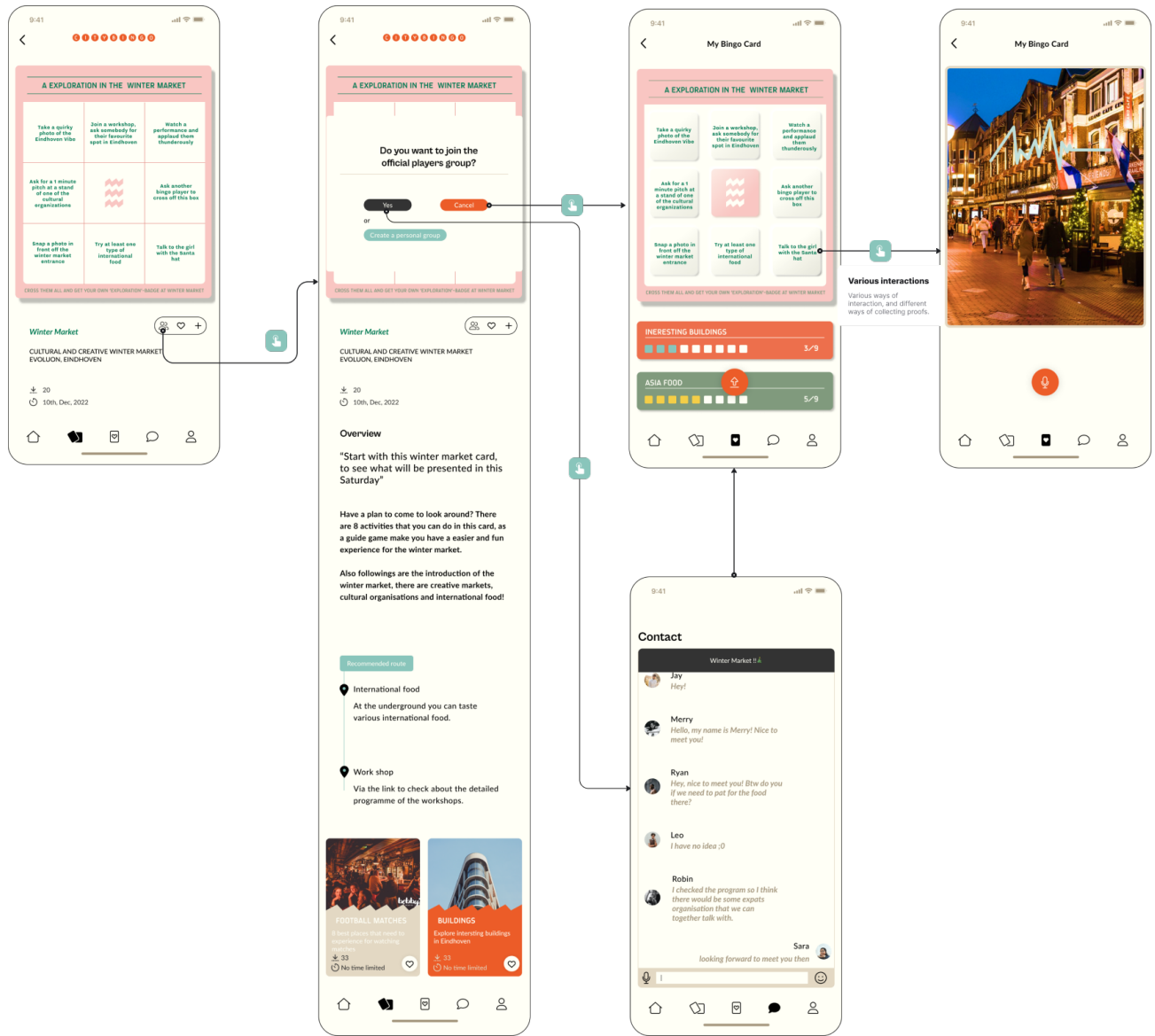


Figure 25 Online- Event-related bingo card

SWOT



Strengths

- User test was a successful dry run of this scenario
- Easy MVP with quick iterations to improve it
- Utilizing the audience of the event
- Can become Eindhoven signature for people visiting Eindhoven for events



Weaknesses

- Not specifically aimed at newcomers
- When combined with rewards it might prove difficult to check for cheating
- Requires editorial work for every even



Opportunities

- Carnivals Vereniging and municipality want to make Carnaval more open for newcomers
- Big events (Glow, DDW, marathon, Koningsdag) can catalyze adoption of the bingo concept



Threats

- As a paid service it might spawn copycats if events don't want to pay
- Value proposition might not be attractive enough for event organizers to pay for it

Discussion

In this chapter, the discussion, limitations and further work on this project will be presented.

They are based on feedback from each design step and in-depth self-reflection.

Discussion

This project was executed to close the gap between city newcomers and locals. The City Bingo game acts as a catalyst and a good place to meet new people. Even though the newcomers may be from the Netherlands and share a similar cultural background or they may be foreigners from very different backgrounds, they all have unique perspectives on the city and a willingness to share, play, learn, and interact with others.

And the City Bingo game provides a platform for all the newcomers to learn about the new culture and information of this region in a more interesting approach.

Instead of separating the people into “expats,” “locals,” and “internationals,” “newcomers” regard them as a new group, giving the notion additional value. This transfer is an improvement for both clients and designers throughout the entire design process.

After the concept presentation, the feedback was also given by local people who have lived in Eindhoven for decades and years and who also expressed their desire to play the game and get to know the city.

Limitation

A lot of feedback is supplied to inspire and drive the design process through stakeholder engagement sessions, talking to experts, interviews, and user tests. A bunch of limits is also taken into consideration. For example, there should be restrictions on how users can interact with the curated cards, as well as guidelines on who can post what. A clearer rule could limit the quality of creating specific cards and prevent some worthless information from being created.

The target audience has currently been narrowed to people who want to remain in Eindhoven, giving them the incentive to network and learn about their new environment.

For sustainable waste problems, the recycling point can be settled in some hot point shop or welcome place.

Due to time constraints, the online platform will be further developed and tested in the next step.

Future work

City Bingo game has the potential to further develop, except different interaction ways to play around with [Appendix VI], many organizations also give feedback that can be used for their introduction events and would be helpful. For example, TU/e student introduction week, brain port introduction events and so on. It makes people feel the energy of Eindhoven but also creates a link between people.

Physical City Bingo cards are easier to gather after usage and can be more intricately created for various themes. Should improve the reward exchange service, and there should be a stricter means to verify that users actually complete all the jobs. There is still room for improvement in the evidence system.

Additionally, the idea behind the City Bingo game can be applied across a wide area and promoted in various cities and nations.

Business case

Combining utility, energy, and identity makes the City Bingo game stand out. According to Bartle’s taxonomy of player types, City Bingo game players can be socializers through social sharing functionality, explorers to explore new stuff, and achievers, for achieving experience, rewards, and enjoyment [11].

Firstly, since the information on various web platforms is too broad and fragmented, Eindhoven presently lacks a product that includes all the information on a mobile device.

Secondly, the physical product as a trigger lowers the joining barriers, and people are easier to accept and play with a new game. Learning about knowledge and playing with others is easier and more enjoyable when done through a game or online application rather than a webpage.

Furthermore, the internet platform extends the product’s service life, and the idea of rewards might spur economic growth.

To explore the business aspects in more depth, a business model was used (Figure 26).

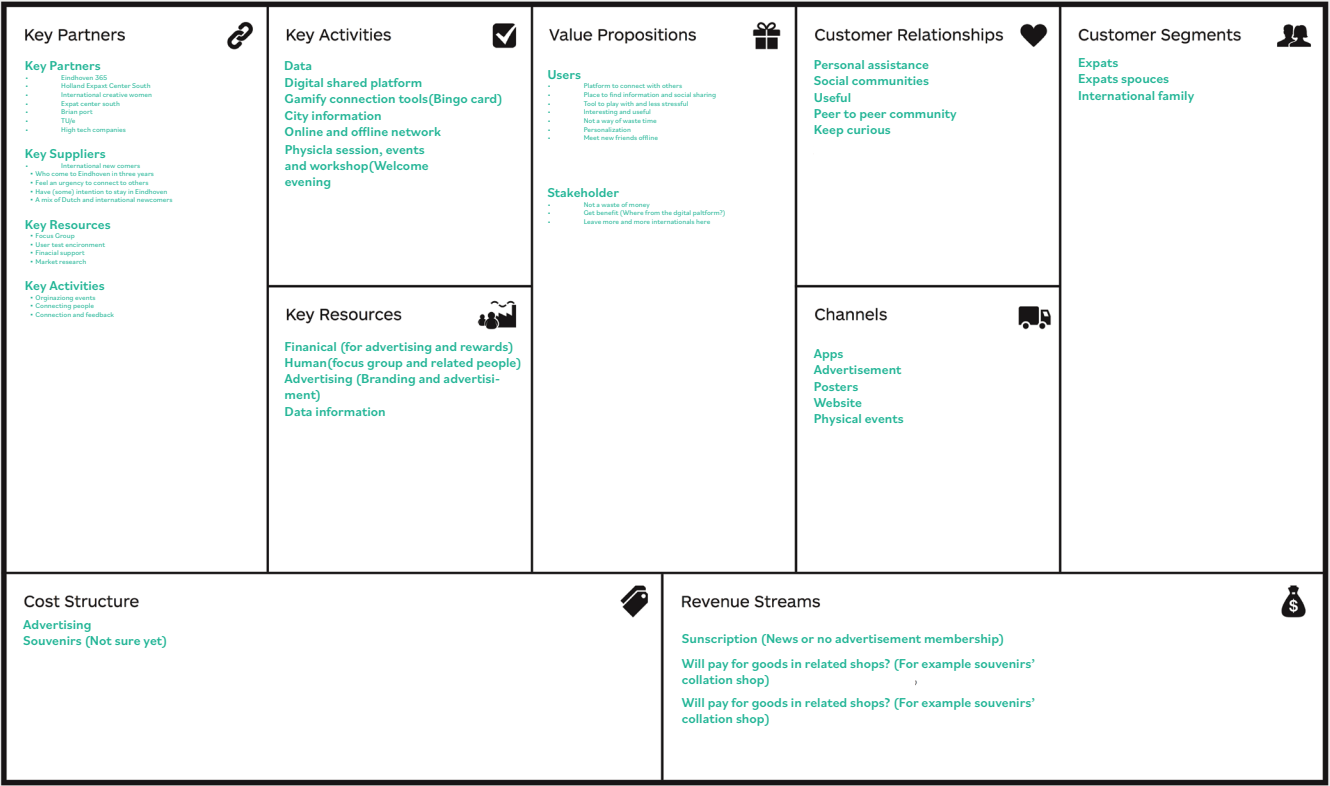


Figure 26 Business model

When playing City Bingo, people inadvertently generate the following data: What task takes users more time, which park do they most wish to visit, and what point is the most popular area that can be acquired when players use a City Bingo card? The pictures they snap, the addresses they share, and even the group they are in, all show how the new-comers’ situations. This data can be gathered and used to improve the information and experience but can also inform the previously mentioned business partner of the players’ choices.

How can it be used?

The hot points that people want to go to several times and make comments for that specific photos can let business partners gather the data or interview the reasons. Business partners also can unite and create their own bingo cards to advertise specific topics or events.

The data shows where newcomers prefer to visit or play frequently, which might be advantageous to Eindhoven 365 and other business partners in advertising this city to attract people there and enhance its energy. However, since this will only be relevant if the player base is very large, this is not something that has to be taken into account right away.

Conclusion

The project’s objective is to encourage people to develop more relationships with others, enable newcomers to experience a sense of belonging to the city and its residents, and learn more about the local way of life. A game can help newcomers learn about the region, its residents, and its culture more quickly and easily. Reduce the barriers to feeling included. City Bingo games can be played solo or in groups using both real City Bingo cards and online City Bingo.

Through the playing process, newcomers’ lives will be introduced to new people, new cultures, and new ways of living in a more engaging manner. The residents also can be inspired by the different perspectives of this city, and both the residents and newcomers can feel and bring energy to the city through the City Bingo game.

This design concept fulfills the connectivity requirements, receives praise, disseminates knowledge, and serves as an example for other towns and countries.

City Bingo game and the online city application make people feel connected and live a better life here!

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Erik van der Spek – coaching, guidance, expert feedback & connections

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Martijn Veenstra – design direction, design management feedback & guidance

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Appendix

Appendix I ----- Interview Script

Appendix II ----- Focus session

Appendix III ----- Design

Appendix IV ----- Written scenario

Appendix V ----- User test

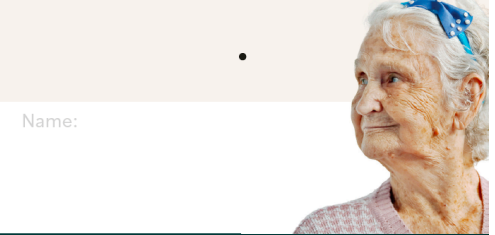
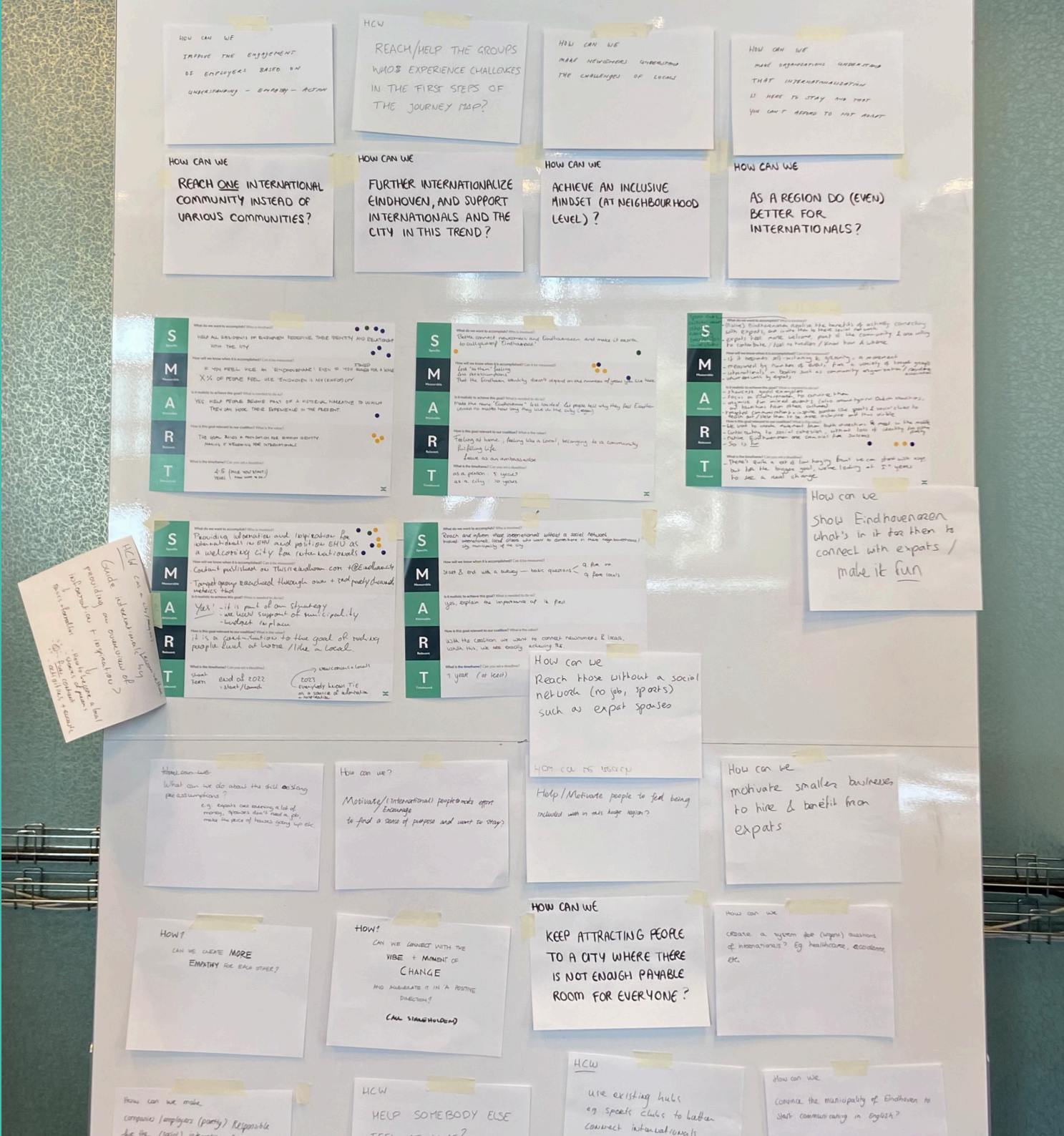
Appendix VI ----- Interaction ways

Part of the design process can be checked in the Miro Board.

https://miro.com/app/board/uXjVPZENyzw=?share_link_id=862272509573

II Focus Session

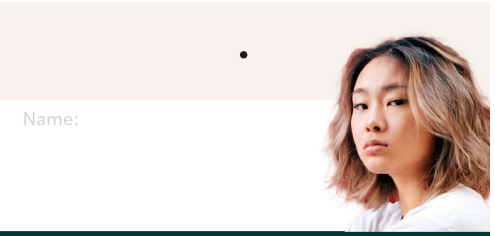
The focus session was held on September 22nd, 2022. Many stakeholders were invited to participate in order to conduct a compelling focus session. The following design is a tool to guide them to delve into the problem statement.



Name:

Retired, used to work as an engineer

“My street is changing. I want to communicate with my new international neighbors but I’m worried I’ll annoy them. By the way, I enjoy meeting new people. To be honest though, I don’t always embrace new ideas very fast.”



Name:

Searching for a job

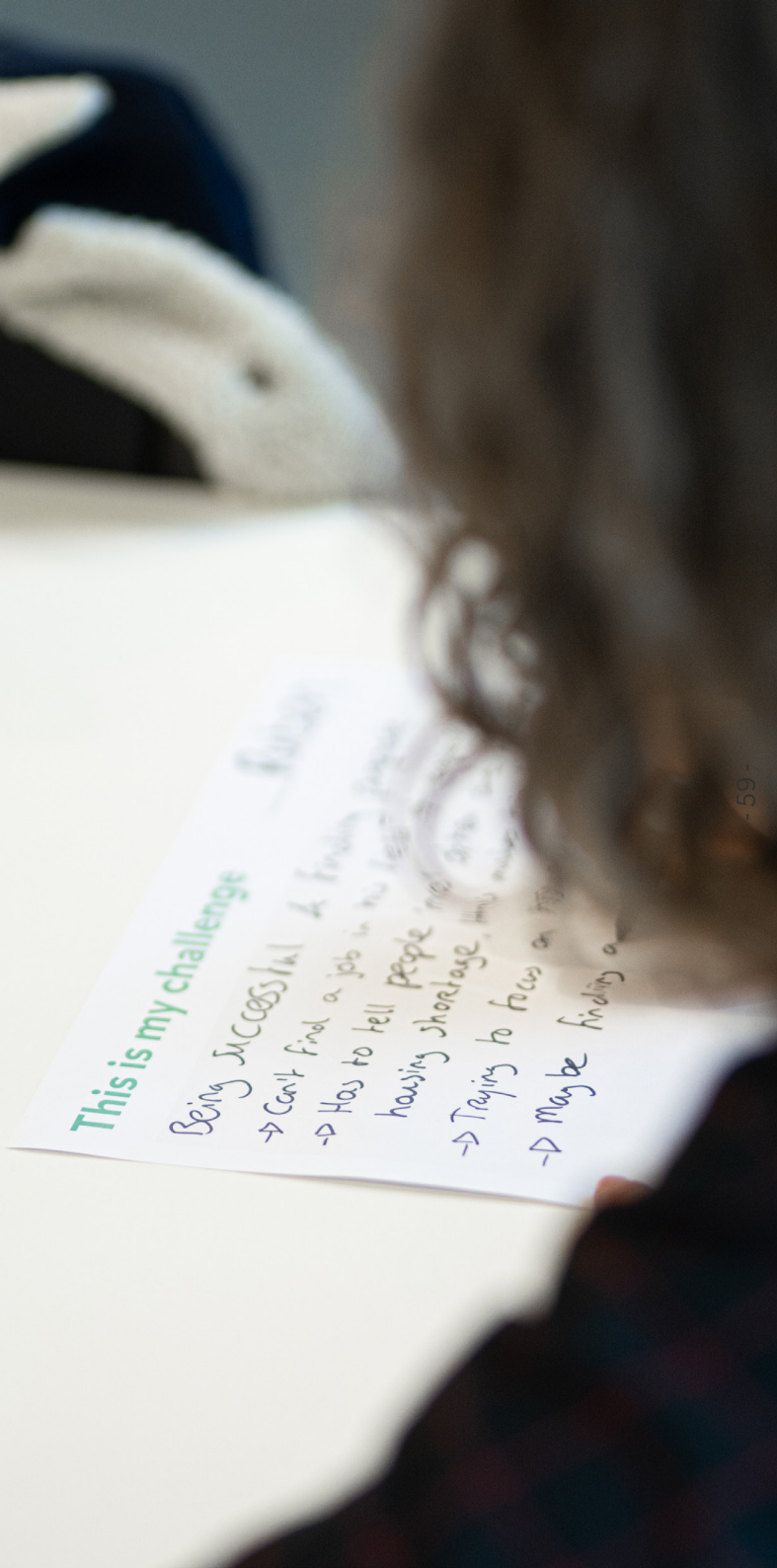
“I expect to start work in the Netherlands and stay there for a few years. I only have a one-year residency permit, therefore I have a limited amount of time to look for work.”



Age	74
Gender	Female
Nationality	Dutch
Family	Living together with husband
Hobbies	Gardening, watching TV
Skills	Technical insight, historical knowledge about Eindhoven
Language	Dutch (fluent), English (basic)
Values	Being able to do what I want without being disturbed
Fears	Not feeling at home in my street



Age	25
Gender	Female
Nationality	Japanese
Family	Living together with boyfriend
Hobbies	Traveling, music and movies
Skills	Design strategy, product design
Language	Japanese (fluent), English (fluent), Dutch (basic)
Values	Seeing the world, finding a fulfilling job
Fears	Not finding a job in time

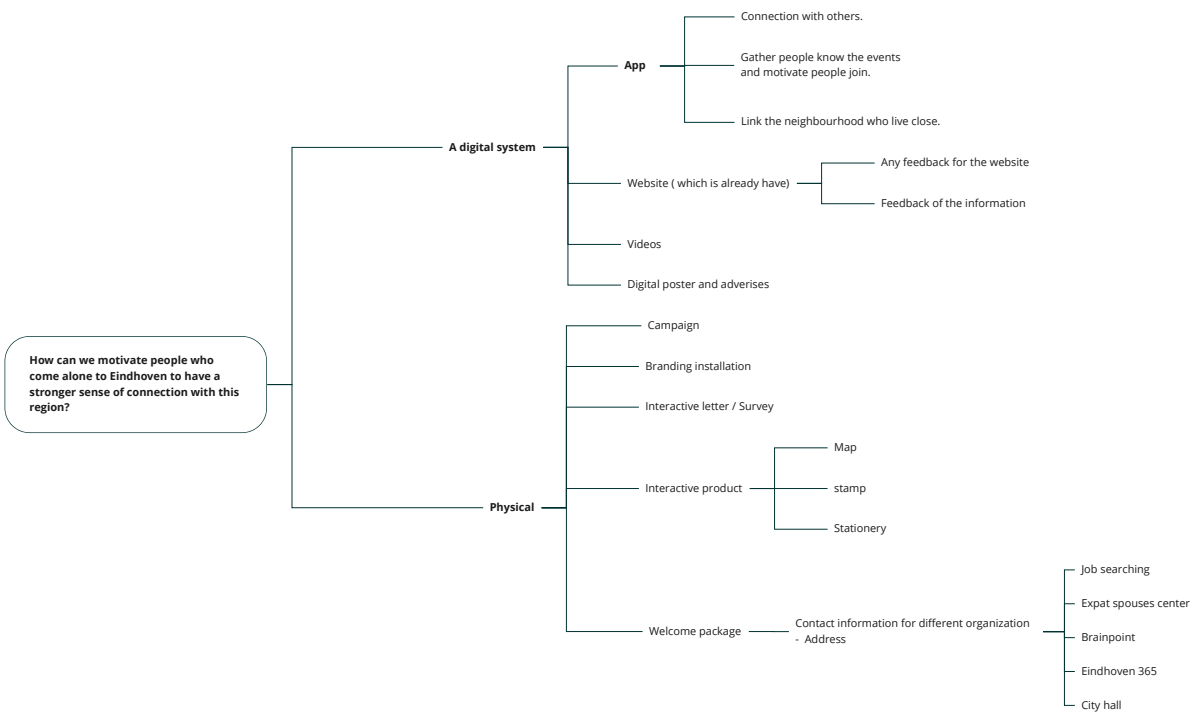


This is my challenge

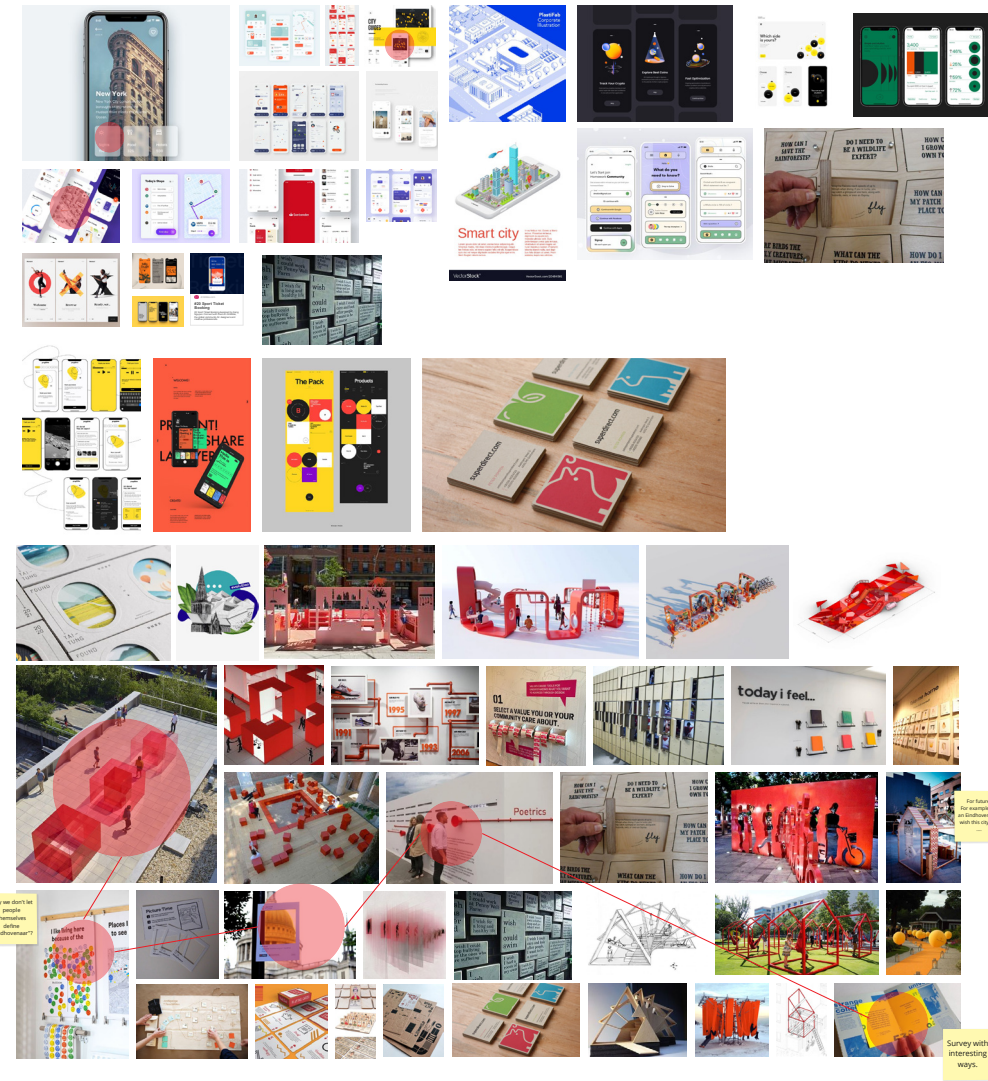
Being Successful & finding a job
→ Can't find a job in my field
→ Has to tell people we are having shortage
→ Trying to focus on the
→ maybe finding a

III Design

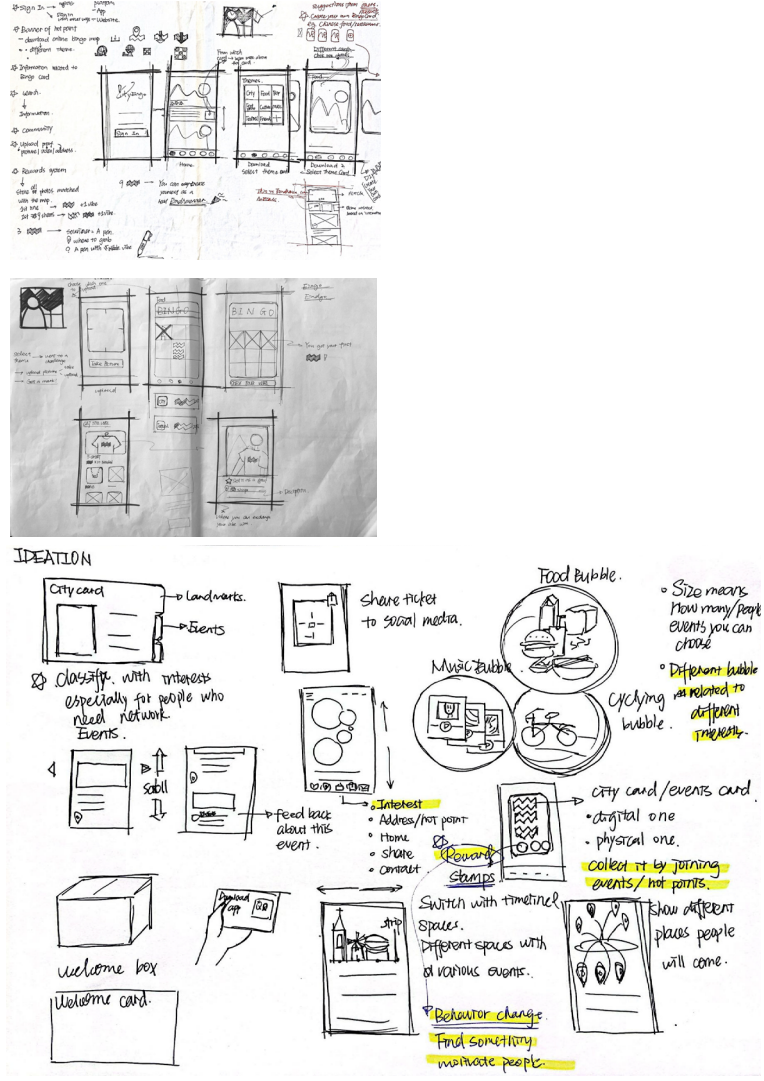
First mind map



Moodboard



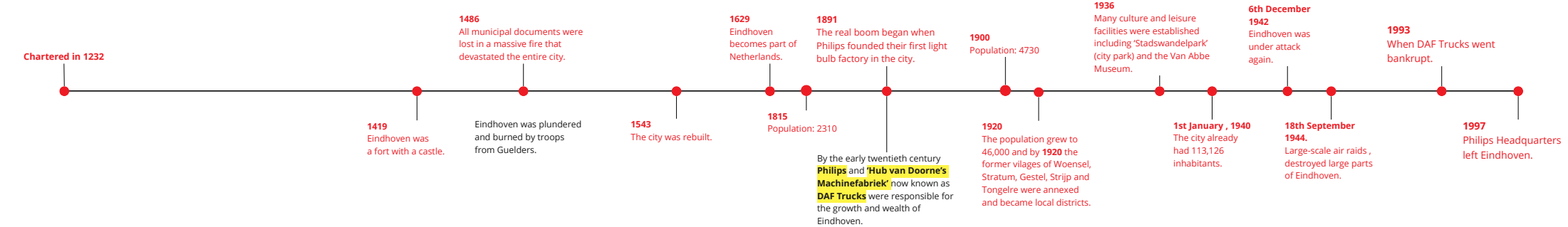
Paper wireframe sketch



	St. Catharinakerk	Attractive St. Catherine's Church (St. Catharinakerk) was built in Neo-Gothic style in 1867. The original building – dedicated to St. Catherine of Alexandria – was consecrated in the 13th century and was many times severely damaged by war and fire, even spending part of the 18th-century as a stables and weapons store. Now fully restored, the current structure incorporates a number of symbolic references to the work of Joseph Thijm, one of the country's best-known writers. Highlights include its twin French Gothic towers, each 73 meters tall and known respectively as David and Maria. Interior highlights include its stained-glass windows and its two organs, one of them with 5,723 pipes. Address: Catharinaplein 1, 5611 DE Eindhoven
	De Bubble & de Blob	Together with De Blob and bicycle parking De Tube, De Bubble forms an urban ensemble on the 18 Septemberplein in Eindhoven. The Italian architect Massimiliano Fuksas designed the square. The Bubble consists of a bubble of glass and steel, which Houta Bouw has masterfully designed after a design by Tarra architecture and urban planning. The building serves as the new flagship of the Dutch fashion store America Today. Blob style as an unique building design style.
	Flying Pins	The Flying Pins is a large public image in Eindhoven . It was designed by the sculptors Claes Oldenburg and Coosje van Bruggen and unveiled on May 31, 2000. The <i>Flying Pins</i> is located at the head of John F. Kennedylaan on the south side of the street, corner Feilenoord. It is a depiction of a bowling ball with ten flying pins. The artists saw a bowling alley (bowling lane) in Kennedylaan and that is how they came up with the idea. In the vision of the artists: the dynamics of the sinking bowling ball with the flying and sinking pins fits well with this busy point in Eindhoven. The yellow color of the cones was chosen by Van Bruggen and refers to the yellow daffodils that brighten up Kennedylaan every spring. The highest point of the artwork is approximately 8.5 meters. The ball has a diameter of approximately 6.7 meters. The statue is made of steel and reinforced plastic with a polyester - polyurethane coating . The costs amounted to approximately (converted) € 1.1 million and were mainly paid by the business community of Eindhoven.
	Evoluo	The Evoluo was built in 1966 as a technology and science museum on behalf of Frits Philips to celebrate the 75th anniversary of the Philips company. From its opening the museum was extremely popular, attracting over 500,000 visitors by 1970 with its educational and interactive exhibits on science and technology. It functioned as a museum until it—despite many protests—was withdrawn from operation in 1989. Working with the unique ecosystem of technology and design in Eindhoven, we can't wait to reopen the Evoluo as a place of wonder, inspiration, knowledge transfer and education; an experience for young and old. It will become a future lab for the wonderful world of technology, design and innovation.
	Anton Frederik Philips	At first it was on the corner of Volderstraat and Vestdijk. In 1956 it moved to the north side of 18 Septemberplein to eventually end up on Stationsplein . During the Philips festivities on the occasion of the 60th anniversary, the statue was unveiled in 1950 by his grandchildren.
	De Oude Toren	The Oude Toren is a late - medieval brick church tower on the Oude Torenstraat in the Eindhoven district of Woensel . The tower is the only surviving part of a church dedicated to St. Peter , which was probably founded in the 11th or 12th century in the then independent settlement of Woensel. The tower dates from the 14th or 15th century, when the entire church building was replaced by a brick building in the Lampine Gothic style. For a long time the tower stood in the middle of the Woenselse arable fields, but from the second half of the last century it was surrounded by newly built houses and flats. The Old Tower is a national monument. The current residential area in which the tower is located, Oude Toren , is named after the building.

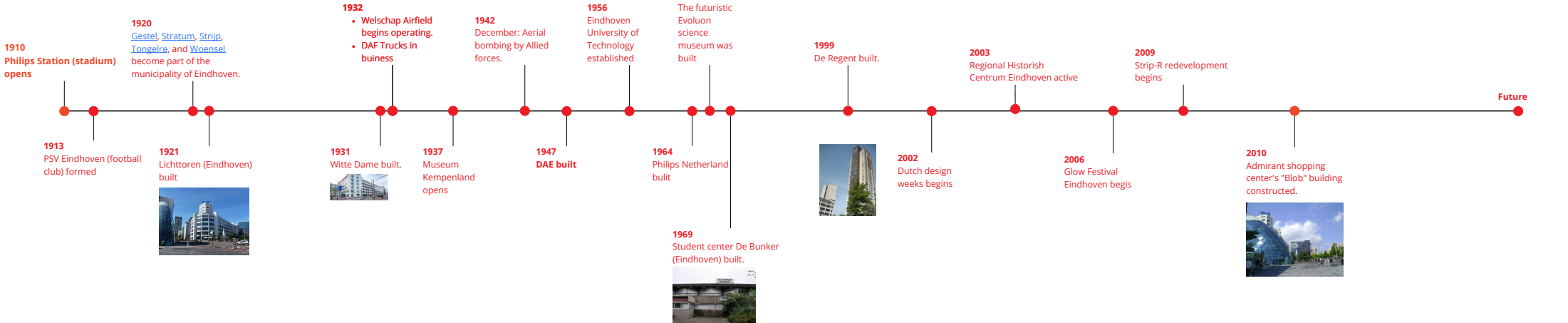
	The Van Abbemuseum	he Van Abbemuseum is one of the most important galleries of modern art in the Netherlands. Highlights of its more than 2,700 artworks include pieces by modern painters such as Marc Chagall and Pablo Picasso. It's also home to the world's largest collection of material by El Lissitzky. Other notable collections include numerous sculptures and art installations, video works, and posters, including a large Paris collection from Jacqueline de Jong, as well as examples from the USA, Germany, and Eastern Europe. A gift shop and café are located on-site. Address: Bilderdijklaan 10, 5611 NH Eindhoven
	The DAF Museum	Eindhoven has been home to DAF, one of Europe's largest truck manufacturers (and, at one time, cars), since the company's founding in 1928. Started by brothers Hub and Wim Van Doorne in a small blacksmith's shop, the company – short for Van Doorne's Aanhangwagen Fabriek – started off making simple engineering products, gradually progressing from trailers to cars and trucks. One of the most popular museums in the southern Netherlands, the DAF Museum is a testament to the company's success and includes a replica of the original workshops and offices, along with samples of its vehicles throughout the decades, including a number of prototypes. A shop and restaurant are located on the premises. Address: Tongelreestraat 27, 5613 DA Eindhoven
	The PSV Eindhoven Museum	Calling Eindhoven football-obsessed is an understatement. But such claims seem reasonable when you're home to Philips Sport Vereniging (PSV), one of the most successful football (soccer) franchises in Europe. And with the club having celebrated its 100th anniversary in 2014, there's plenty of history on display at the PSV Eindhoven Museum (PSV Musée). Highlights include historic outfits to photos and film footage of career highlights. English language guided tours of the team's Philips Stadium are also available and include packages that take in team practices, so you can see the players in action. Address: Stadionplein 4, 5616 RX Eindhoven
	The Philips Museum & Collection	Housed near the factory where Gerard Philips made his first incandescent light bulbs in the 1890s, the Philips Museum shows how this once small enterprise has grown to become one of the world's largest electronics companies. A visit to the ultra-modern Philips Museum gives visitors an excellent overview of the company's success, as well as the workings of its most memorable products. One of the museum's most popular features is Mission Eureka, an interactive game involving digital quizzes and puzzles. There are also many other fun interactive exhibits that children enjoy. English language guided tours of the museum and Philips-related city landmarks are available. Art fans will also want to include the top-notch Phillips Collection on their list of must-visits in Eindhoven. Established in 1921, the museum houses a large contemporary art collection of some 3,000 works from around the world. A café and shop are located on-site. Address: Emmasingel 31, 5611 AZ Eindhoven
	Van Gogh Village, Nuenen	Just eight kilometers northeast of Eindhoven is the picture-perfect village of Nuenen, famous the world over for its inclusion in the art of Vincent Van Gogh, who lived here from 1883 to 1885. His temporary home was in the pastor's house, which has been completely restored to its original style. A highlight of a visit is the <i>Vincent</i>, an excellent new attraction dedicated to the artist and his time in Nuenen, and the focal point of many great walks following in Van Gogh's footsteps. These self-guided tours through what's referred to as The Outdoor Museum lead you to more than 20 different locations spread around the village that relate to the artist (some with audio commentary). Address: 5671 CA Nuenen
	VAN GOGH PATH	VAN GOGH PATH is the light-emitting bicycle path that glows at night, made of thousands of twinkling stones inspired by Vincent Van Gogh's <i>Starry Night</i>. VAN GOGH PATH is a part of the SMART HIGHWAY project. Winner of Best Future Concept, Dutch Design Award, Accenture Innovation Award, and INDEX Award Denmark. https://www.studioorosegaarde.net/project/van-gogh-path/intro

History time line



For History

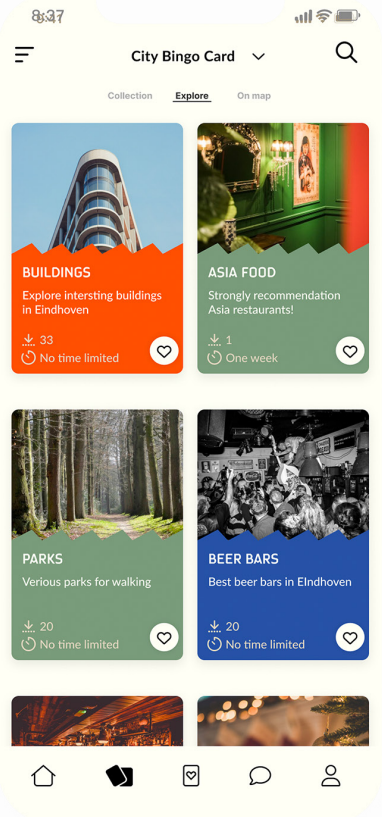
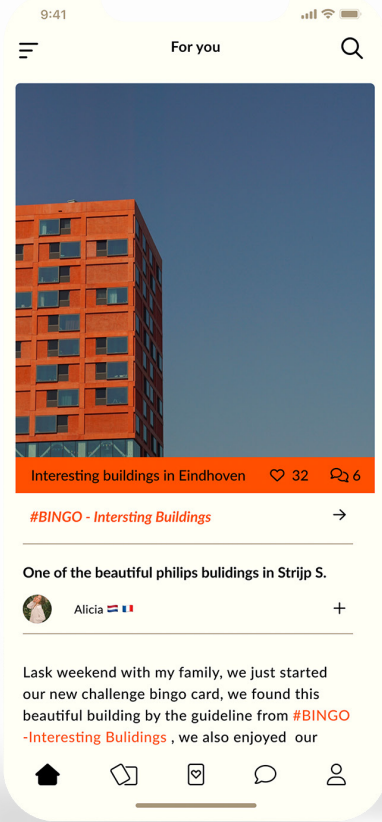
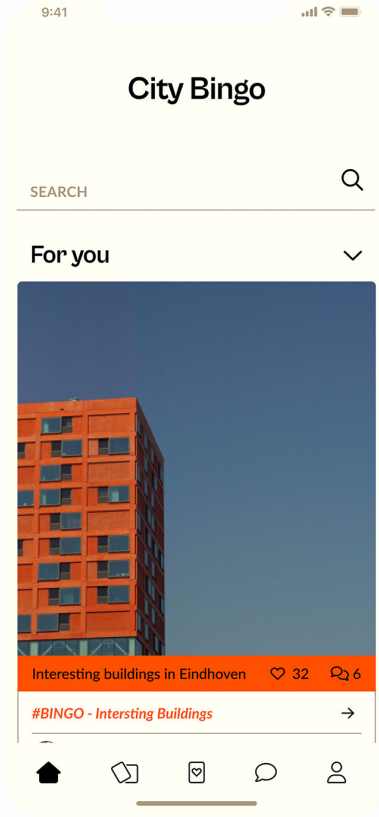
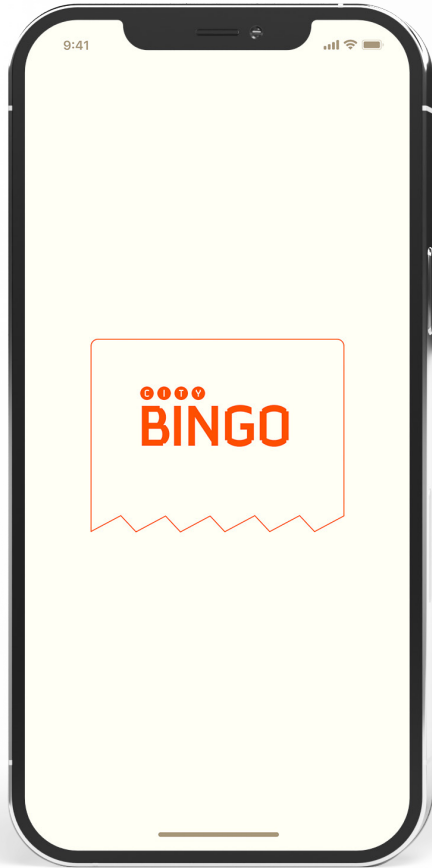
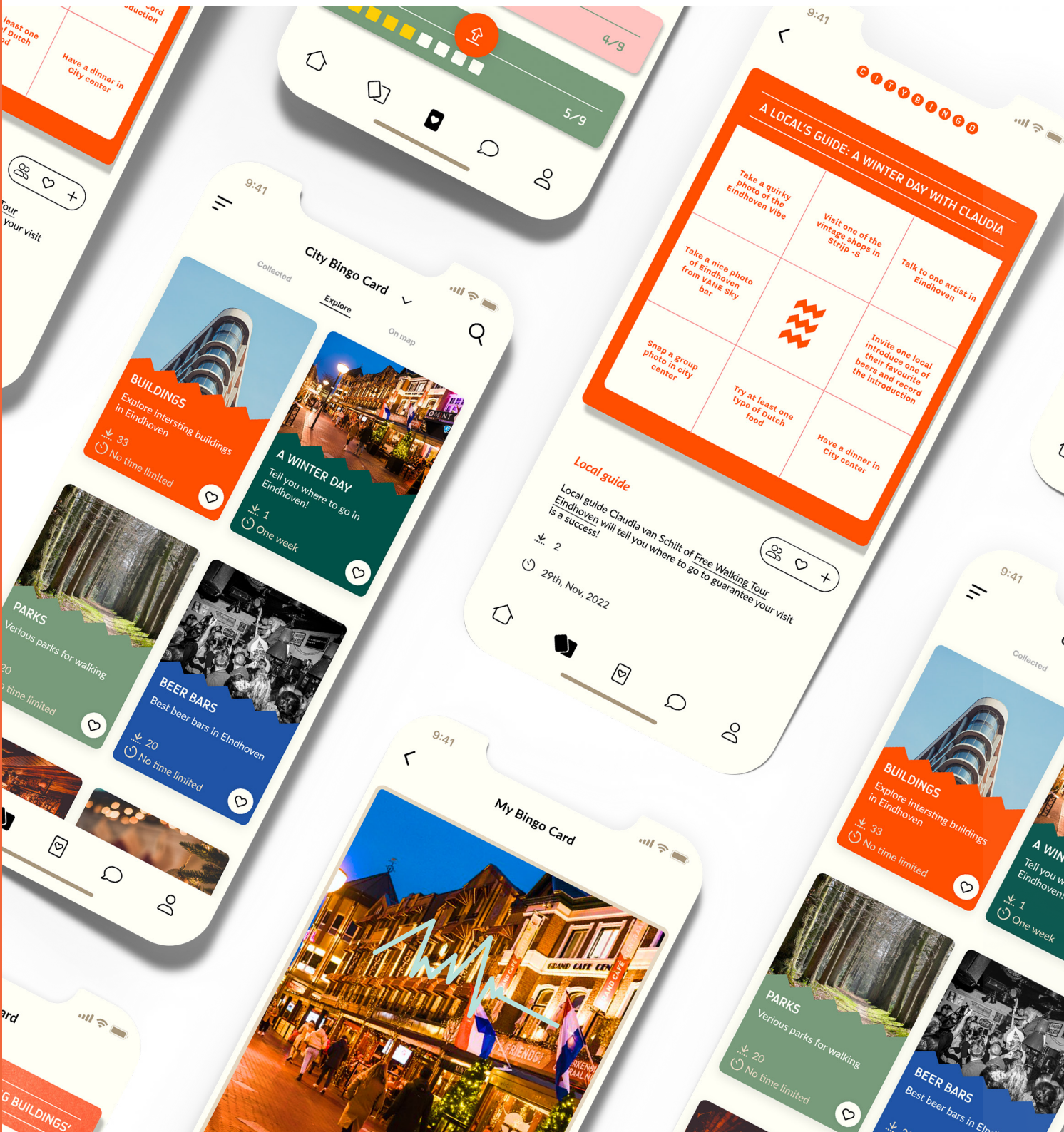
20-21 Centry



UI mock up

The City Bingo mockup are designed, the high-fi prototype can be check through:

<https://www.figma.com/file/WvPYT8Byok1muitLcrdDnx/Mock-up---Eindhoven?node-id=73%3A2812&t=PvFlwxLS2j9izQnH-1>



IV Written scenrio

First draft scenario:

Chapters in the scenario:

- 1. Just arrived
 - 2. The welcome internationals evening
 - 3. The first week bingo card
 - 4. Family visiting and searching for a themed bingo card
 - 5. Creating own bingo card around theme
 - 6. Organizing an event with the big bingo wheel
- Contents with Underline related to functionalities and key points need to be detailed.

Just arrived.

Sara came to Eindhoven with her husband and kids two weeks ago. Her husband found a job with ASML through a targeted campaign from Brainport. Through ASML they found a house to live in and they just settled into their new home. Sara took the responsibility of a lot of the arrangements that had to be made.

She made the LivingIn website her second home the last few days and tore through the paper LivingIn guide. She went to the one stop shop for registering herself and her family and is now looking for her first social contacts.

She found a Facebook-group for other expats in Eindhoven from their home country.

She also found out about the ‘Welcome internationals’-evening at Lab-1. Which is this Thursday.

She’s excited but also anxious to go.

Welcome internationals.

Thursday arrives and after dinner, Sara prepares for the Welcome evening. Het husband watches the kids while she freshens up, puts on the clothes she picked

out, fixes her hair and puts on her favourite hairpin: a family heirloom that was left to her by her grandma.

She takes the bus from Meerhoven to The Keizersgracht, and pulls out her umbrella so she can cross the road without getting wet. On the bus, she double-checks the address numerous times to make sure she won’t get lost. And enters into Lab-1 where she sees a few people having a drink at the bar. Somebody approaches her and welcomes her to the venue and indicates she can get something to drink at the bar.

She’s a bit early, the program starts in half an hour. She orders tea at the bar and introduces herself to somebody who was on the same bus and came in just after her. Half an hour later the man who welcomed her takes the stage and gets into his talk about what they’re are doing here.

Sara’s a bit tired, her understanding of English gets a lot harder when she’s tired. So she doesn’t understand everything. She sort of missed some fascinating introductions, but she finds it difficult to concentrate on what is being spoken. After a while it seems that

they are going on a walk of the city and everybody gets handed a bag with something in it.

Sara opens the bag and notices the living-in guide, which she already has, a map of the city, a flyer for a discount on Dutch lessons, a booklet with events in the city and a small pencil and something that looks like a bingo card. Sara feels curious and opens the bingo card. She pulls out the four cards and discovers that each of the themes on the bingo cards is unique. “Is this a game? Or perhaps a memento of this place?” She wonders.

The host says, “We’re going to wrap up tonight’s column of the Getting established in Eindhoven.” They complete the first column together, break the ice, take a drink, go through the city, where Sara meets a variety of interesting people, go to the de Witte Dame (one of the Philips buildings), and discover the history of Philips there. Sara and the others mark a cross on the card after completing each task.

With the first column’s completion, the wonderful night came to an end. For their first bingo, every one of them has a gift! The host also says that they can

upload and share their own bingo game challenges on a digital platform. Sara downloads it and discovers that the platform has a lot more information shared.

After returning home, Sara downloads the app and wants to learn more. She also wants to ask her husband and children to help her complete the first Bingo card.

The first week bingo card

One weekend with nice weather, Sara decides to visit the whole city. She thinks of the City Bingo Game and wants to continue finishing the first card with her family.

Surprisingly, she finds something for the 1st-day recommendation has been done before (Such as check the living-in guide). She begins to make a to-do list, about where they want to visit, and when she are going to invite their neighbour to have dinner together. “It is a really good opportunity to talk with my neighbour”, she thinks. She knows their neighbour is a young dutch couple. “They are locals, and also our neighbours!” she considers as she looks at the bingo card.

“Lots of things need to be done...Many plans need to be made.” There is a quiet reminder for Sara especially she saw something like Find Health Insurance.

Family visiting and searching for a themed bingo card.

Every weekend, Sara wants to go walking in nature with her family. Sara considers the available parks in Eindhoven as well as the Bingo Game. Sara asks her husband, “Should we look on the Bingo card for a park? Let’s open the platform to search a spot together! ”

They discover a bingo card labelled “A walk in the park” and are intrigued by it because they are unfamiliar with each of these parks. The address and comment can be checked on the platform. What makes Sara and her husband happy is that compared with visiting the park, the kids usually prefer to stay at home and play computer games. While kids see the rewards and the bingo challenge, they are interested to explore nature and curious to see what will happen after they finish the task.

After they choose the park together, Sara checks about

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the address and how long it will take to there. They set off with fruits and drinks.

The whole family spent a wonderful day there. Kids meet some friends there, and Sara and her husband also meet new people who also come from the same place as them. There are some families who also take their kids there, and they have a good talk about life, work, and kids ‘education, etc.... Sara realizes there are many ways to explore life here.

At the end of the day, Sara takes a photo of the sunset and uploads it to the Bingo platform, gives a score and comment to this park, and writes down the mood she has this day.

Creating her own bingo card around the theme.

Sara has been in Eindhoven for one year, and she gets increasingly used to using the Bingo card and begins to share this interesting game with some newcomers in her block. She met Nina, who is one of her best friends here through the bingo platform. Both Nina and Sara like cooking and exploring food in their free time. They always try new recipes and share them with each other. One of their common interests is trying different dishes

from various places in the world.

Nina also has two cute kids, so the two families can spend time together during the weekend. They usually have a nice Saturday and have dinner together in a new restaurant. Once when Sara is having dinner, she realizes why not create a bingo card based on their experience. “We can create a Bingo card as ‘the best places for family to visit in Bingo game!” Sara says excitedly to Nina. They all feel like it would be an interesting idea. Every time they spend time together and have family time together, Sara and Nina take many photos and write notes about where they go, and what they see and experience. As this not only help them record the exciting time but share their life experience with the whole network in Eindhoven. They begin to upload and edit their own Bingo cards sha share it on the platform, it is so exciting to see how many people have seen and downloaded their Bingo cards, and how many people have begun their new bingo challenge.

Organizing an event with the big bingo wheel (?)

There is a big Bingo wheel located in the city centre, people feel curious and scan the QR code to get information about the Bingo game itself.

Sara notices that the home page’s banner advertises a city bingo night with the intriguing-sounding topic of “Call yourself an Eindhovenaar.” What exactly is an Eindhovenaar? Sara considers and registers herself.

The fact that it has been a while since Sara visited Lab-1 makes her reflect on her first day there and her first experience playing bingo as the night approaches. The day is coming, she feels excited and chill, and she dresses up in her favourite perfume.

This time, Sara is still a little early, but she is used to getting a drink and waiting. There are also some old acquaintances present, some of whom Sara has not seen in a while. They have wonderful small talk.

As the evening gets started, the host did a welcome presentation, and then Sara and the others are invited to go for a walk. They are then led to the city centre, where there is a glass house with a large bingo wheel. As soon as Sara and the others have found a seat, the

presenter announces, “Let us start the Bingo night!” and hands out Eindhovenaar Bingo cards to each person. The host announces, “I’ll roll this enormous wheel and you can cross off what you’ve done, the first bingo player will have a prize!”

Everyone has a chance to manage a rolling once the host rolls for the first time. They converse while drinking and discussing their unique experiences. It was a great night, and Sara played some excellent bingo and met many new friends from different countries, but she still left something out. This time, there are going to be some brand-new plans that I’ve never tried before, thought Sara with excitement.

Combine the just arrived and organized an event

Sara feels curious and opens the bingo card.

She pulls out the four cards and discovers that each of the themes on the bingo cards is unique. “Is this a game? Or perhaps a memento of this place?” She wonders. The man then leads them to the city’s centre, where a big Bingo wheel installation is located. The guide man takes one bingo card he has, and he explains “ Today, everyone can roll the wheel to

manage a Bingo!” There is someone going forward to roll it, a bingo ball came out with a number on it. “That would be the first place we are going to visit. You can also download the application ‘City bingo game’, there is some more information about Catharina kerk”. Sara realise that is like a city adventure game, she select one from all the bingo cards which seems a lot of buildings on it, but she have no idea which building is Catharina kerk, which made her more curious about the next step, so she begins to download the application.

“After we visit the Catharina Kerk, you can take a picture and (upload it in the City Bingo Game application to see what will happen.” the guider says/ put a cross on the matched building’s picture)” the guider says so.

It is a nice experience, she takes lots of photos. Although, she can not follow up on all the introduction parts, but through the platform, she gets more detailed information about Catharina kerk. After they visit the first point, Sara puts a cross on the card and also uploads one photo on the platform, and she gets a digital vibe in her digital collections.

After the evening they really visit many places, and at the end of the day, each of them gets a gift for the first “bingo” they do. It is a great night, Sara learned about more this city, and also met some interesting people.

After the welcome night, Sara goes home and begins to explore the digital application because she finds there quite interesting shared photos and hot points in the platform. Also, she wants to finish the first bingo card with her husband.

V User Test

The set up and proceture of user test are token by Eindhoven 365's phototgrapher.



VI Interaction Ways

A brain storming of different possible interaction ways.

ideas for finishing bingo cards

- photograph
- wipeout yoga pose
- collect letters in the city
- buildings that look like letters
- photograph different colours (colors of the city)
- pantone
- fill camera half with a color and photograph to match the color
- scavenger hunt of finding specific **photos**
- collect all the tunnel art
- collect graffiti
- applausemeter
- go to a location
- audiorecording
- ask somebody to say you finished the square
- record the piano in the trainstation
- clap meter (who did the best)
- dynamic bingo squares (the best 10 have it crossed off)

- do something together with another player (phones have to be close together)
- video
- geocaching
- go to a specific coordinate
- draw a shape on a map (strava)
- writing
- get a signature
- draw a building
- make a big art piece (cadavre excquis)
- make a big mosaic/puzzle of all the drawings
- write with light
- finish a card together
- how do you do it with
- bingocards
- with prize
- collect vibes
- just for fun as group activity
- collecting stamps
- photographing something specific in a store
- NFC

- QR-code
- time
- specific times
- you have to be somewhere at a specific time
- you have to be with 10 other bingo players at the same spot
- you should be in the city center in 20 minutes and sing a christmas song
- dressed as a santa claus
- assignments
- take different decorations to the christmas tree
- paste eindhoven stickers
- chalk art/stoepkrijt painting
- stoeptegels everyone paints one swuare one color you can coordinate giant pixel art
- tunnel with “I wish i did this before i die”
- leave something somewhere and have somebody else collect it
- write something with the daan roosegaarde artpiece
- cook a recipe with ingredients

- cook some thing with specific dutch food
- hang out food with other people
- try 8 different types of food in the food marke

Reflection

The reflection is about why I chose this internship and project, and what I have learned through this semester.

With the rapid growth of the economy and technology, people are feeling more and more stressed in their busy life and lacking connection with others. In the quick work-life environment, all the products are being iterated faster and faster. As a UX designer and researcher, my vision is to use gamified ways to solve problems and design a better user experience and help people to live a better life and have a strong bond with others. Also, I want to design long-life products.

Vision

As a designer, I want to be able to influence behavior change while also bringing interesting facts and satisfying the emotional value of the user's [3]. Behavior can be changed and influenced in more interesting ways. As Guhl, A., & Cordeiro, C. M. claims, the connection between this theory and gamification is made by the paradox between gamification's goal of fostering intrinsic motivation, or "internalized processes with long-term positive effects," in order to engage the target [2].

Thus, Gamification design, which I want to further explore, is not only about creating user learning motivation but also about applying a technique to keep a user engaged with the product in a long-term [5][4]. The research of Koivisto and Hamari defines gamification as "designing information systems to afford similar experiences and motivations as games do, and consequently, attempting to affect user behavior." Social integration can be influenced through gamified design solutions, and the City

bingo game is one of the solutions to close the gap among newcomers.

The goal of the City Bingo project were in line with my vision and provided a platform to present the design concept to stakeholders. Designing with stakeholders and experts with various expertise and involving them in the whole design working flow also can bring inspiration to my design process. I will obey the design principles, learn to become more open-minded, keep hungry, and keep curious. For my future career, find various approaches and keep making further research about users' deep insight, and how to engage design into the market needs.

Professional identity

As a user experience (UX) designer and researcher, I view myself as a designer who designs for social interaction and behavior change [1]. I am constantly looking for new ways to improve human connections and ties. As a designer, my primary goal is to improve people's quality of life. I place a particular emphasis on their mental needs and health, and I enjoy understanding and investigating people's innermost thoughts.

I also have hard skills in prototyping and design process, which help me to use design thinking more effectively as a designer. During the first year of my master's program, because of my interests and engineering background, I persisted in researching ways to enhance the integration and social interaction of virtual environments. I worked as a game designer to motivate people to socialize and improve their learning experience. During my research through game design, I learned a lot of new technologies. Meanwhile, the learning process also helps me

to provide more ways of thinking about different ways of solving problems when I encounter challenging design challenges.

Although I enjoy design and research methodologies, it is still difficult for me to combine them with real marketing and real value. The internship in Studio Tast provided me with an opportunity to create a more realistic design with tangible and digital outcomes. Core courses in user experience, behavior change learning, and methodologies that I have learned have been well utilized in my design process. In addition, relative knowledge of the User and Society (U&S) expertise area are well learned and improved through the learning and design process. Creativity and Aesthetics (C&A) always play a role as my most interesting area, where I have been practicing in the past year. I will keep practicing and designing with C&A in my future career.

What I have learned

Engaging people in a more social environment and creating more connections is always the area that I am keeping explore. Besides, motivating people to learn something new also is a direction I want to further study. How to motivate people to learn in a more interesting way? How can I, as a designer, contribute to society in a more realistic way?

TU/e and Studio Tast give me the opportunity to challenge myself. Because the first semester, when I came to the Netherlands, I learned about and join the Game & Play squad, I am thinking game and playful design could also be one of the solutions for learning and facing social changes. I kept trying different ways to spread new knowledge, to motivate users' mind change and behavior changes in a totally virtual world. Thus, I learned the different technologies which support various outcomes forms.

However, after COVID-19, people need a process to reconnect with the real world and real people. Studio Tast, which designs tangible tools and integrated learning systems, inspires me to find a more tangible way to encourage people to interact with others. Combined with the virtual world, people may feel a lower barrier to starting a relationship, and the physical design can provide more fun and challenges.

Through this internship project, what I learned most important is to research logically, present confidently, keep an open mind and be confident of the design choices. I had some lessons and grew a lot.

- Designers are good at using various design methodologies to research and analysis the design challenge. However, during the design process, amounts of stakeholders, and experts will join in the workflow. At this stage, the extra responsibility of designers is added, that is, how to teach stakeholders to understand what designers have done and why they do like this, make this decision.

- In the beginning, I did all research logically as usual and present the summaries to the stakeholder with an amount of “designer language” that make them hard to understand the working steps. When I got the feedback, I felt frustrated about not being a successful storyteller. However, the difficulties also make me realize the importance of design tools and present form (Storyboard, persona, user journey map, SWOT, etc.), that is why designers need these tools to help the product become more understood by other stakeholders so that designers can get more valuable feedback.
- The whole design procedure also is the users, market, and stakeholders’ learning process. When I took the responsibility to decide on the key point, I felt nervous and was afraid of choosing the wrong design direction. However, with the iteration, and stakeholders’ session collaboration and discussion, a process of confidence was built. The design process also teaches me to tell myself, never to be afraid of making mistakes, do not to think too much but just do it first.

Reflect on expertise area

U&S

For design skills, first I improved a lot in my expertise area: User and Society. To explore more the target users, I used a persona, journey map, and storyboard to tell the whole user story and motivate users to empathize with the persona. The feedback is valuable for each step to push the whole design process. The online checking session and some networking talk with the target group also widened my mind and gave me a lot of inspiration about what the users really faced. The event-related user test helps me to gather more feedback not only from target users but also from experts with different backgrounds. Deep talking, connection and thinking of the users and society is what I enjoyed and what I do want to keep working on.

C&A

Creativity and aesthetics is the area that I am most interested in but also need to present and practice. Many works on C&A can be seen in

this M21 project. A lot of work about how to make the visual and product more professional, pretty, suitable, and fit the specific scenario went through the whole design process. Because each design decision needs to be decided on the feedback from milestones. Therefore, each session, and meeting need to be well-designed. Aiming to show the work from a more professional, and present view, the aesthetics shown of each detail is important.

The creativity is more focused on ideation and concept design part, compared to the more mature designer, I find creativity can be trained through long-term aesthetic accumulation and connection. The other I learned through this project was when I designed the application individually, there were many problems I first met, for example, information architecture, design aesthetics styles, and so on. Learning how to solve new problems and difficulties myself can make me feel rapid growth as a designer.

Conclusion

In a word, the M21 internship project brings me many new perspectives on thinking and designing, broadened my horizon, and motivate me to make my vision more solid. How to make people feel connected and satisfy users’ experience is what I will further explore. The design skills I learned must be supported for my FMP project and my future career.

Reference

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