Design Report

Project Studio 1

THUAS Atrium - Innovating the way people share public spaces

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Introduction

Students from the Hague University collaborated with UrbanUX to discover some of the improvements that could be made in the Atrium of the Hague University in terms of shared space to make students, employees and other visitors of the university have an opportunity to share the space in meaningful ways and meet new people.

This problem has been approached through primary and secondary research in which qualitative data has been collected. From the analysis that has been acquired in terms of the current situation in the Atrium of The Hague University, that *shared identity/shared ownership of space can promote human interaction, and is something that is currently lacking within the Atrium.*

The team defined user needs, ideated on how to solve these problems, and prototyped our solutions.

Defining and ideating

From the conducted research activities, the team could start defining the users' needs. To do so, the team wrote the most important gathered insights on post-its and clustered them according to the main topic they were referring to.

That helped the team visualise the most important needs.
Once clarity on our clients' needs was achieved, the ideation for solutions started by defining some of the requirements.

Initial Clustering
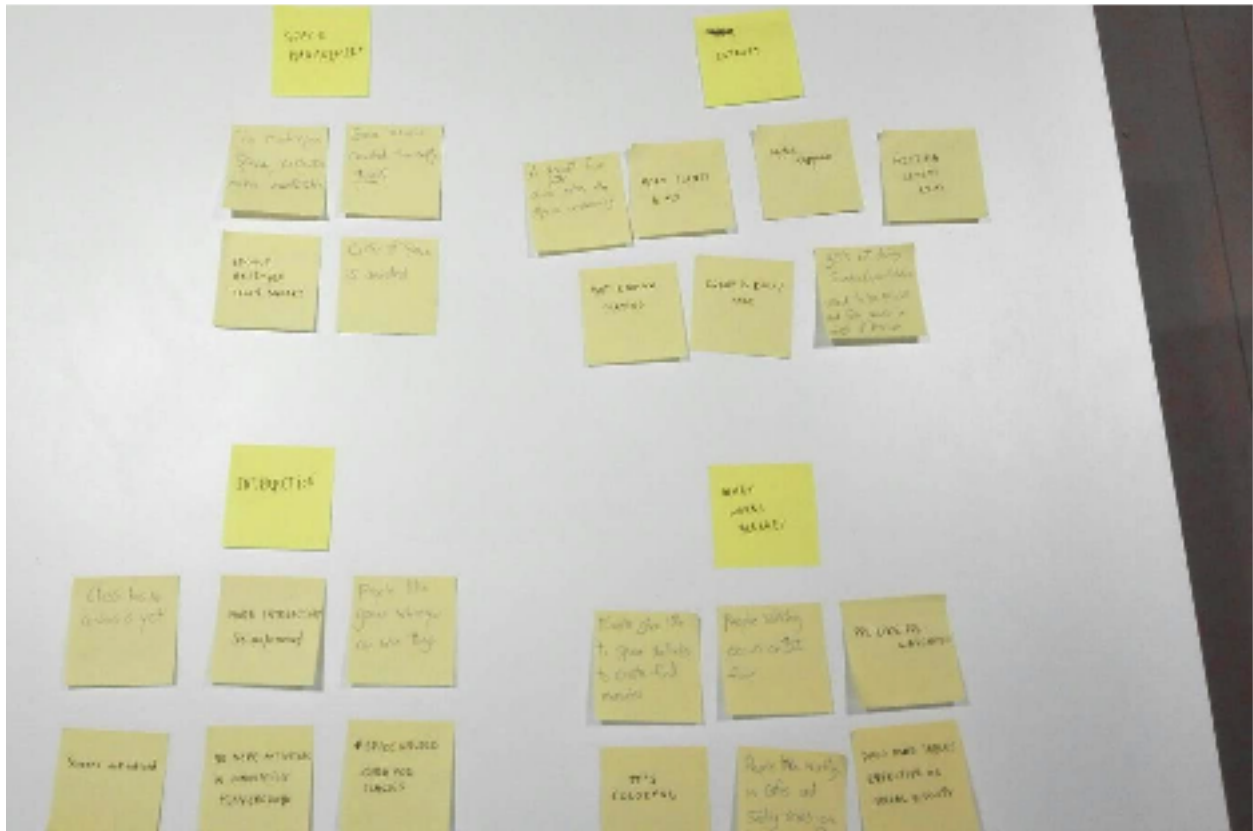
Link to photos:
https://drive.google.com/drive/folders/19_kjDz4AyKnNsrB_VeKrmb6UgrFHh-uC?usp=sharing

Primary Concepts

After completing the requirements forms, the team diverged and created ten initial concepts to answer each of the main research insights. From this point, the team converged by utilizing the design thinking method of dot-voting.

Here is the list of primary concepts with the amount of votes they each received during the dot-voting session. (for more details, see A4 concepts and requirement forms in Appendix A)

1. Campus social media (4)
2. Themed cozy areas
3. Interesting screens
4. Atrium runner (1)
5. Thinking chair (1)
6. Comfortable seating (1)
7. Pop up Bar (4)
8. IoT Job Board (1)
9. Ping Pong Tournament (2)
10. Media Discussion about interesting topics (1)
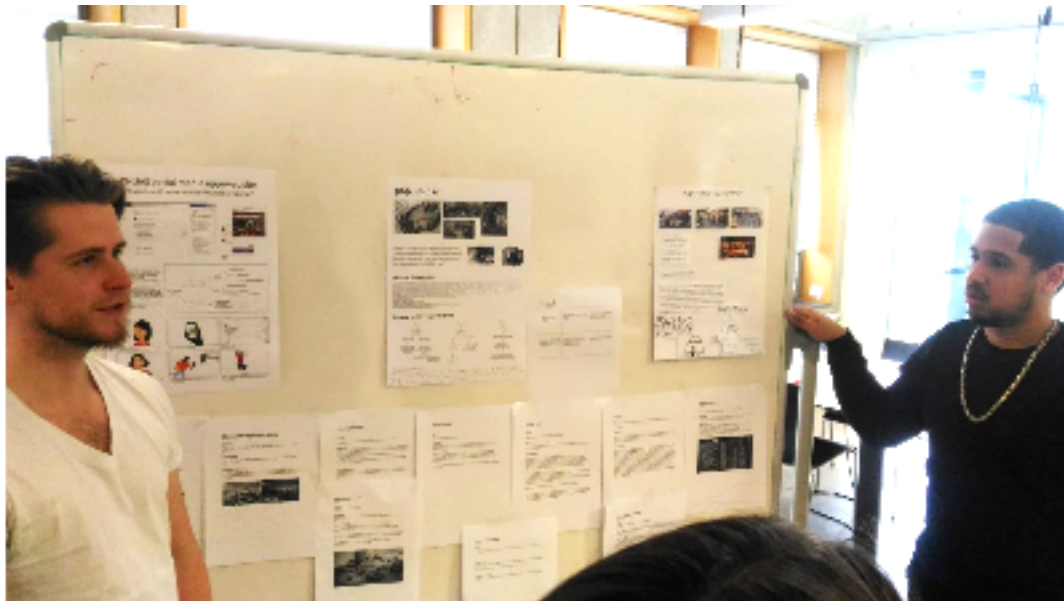
Three chosen concepts

After the concepts were presented to the lecturers, only the best three were selected to be developed further and presented to the client. A3 posters were made illustrating and detailing each concept in more depth (see below).
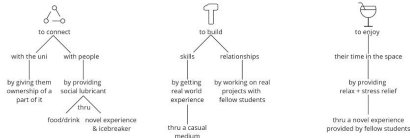
pop up bar

"there's a bar at school where students work...
people hang out [there] more
and feel connected to it because
everyone has to work there in the first year."

concept description

The Popup Bar is an easily-assembled structure that students/student organizations can set up to sell beer and snacks within the Atrium. Students create a theme for the bar utilizing whatever crafts they may need, and they choose the drinks that get sold. They provide the "goods to be sold", leaving less responsibility on the school. The pop-up bar is a casual and dynamic venue that lets students **connect**, **build**, and **enjoy** the Atrium in a novel way while also feeling like they are taking more **ownership** of the space. Customers gain a sense of ownership because they are participating in a school 'event' that is wholly student run. Those running the popup bar gain a sense of ownership by being able to temporarily 'run' a part of the university. The pop up bar also provides opportunities for students from different disciplines to get **relevant experience** in their craft while also keeping things casual which will make students more willing to participate. Beyond that, it provides opportunities for people to socialize in an unconventional school setting.

the pop-up bar helps students...
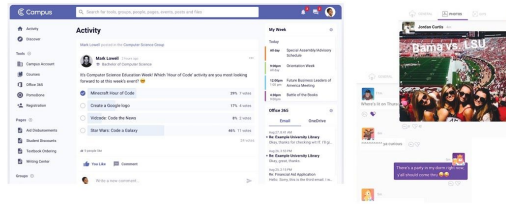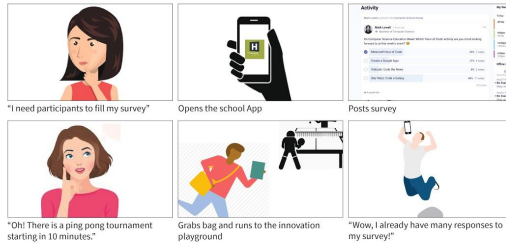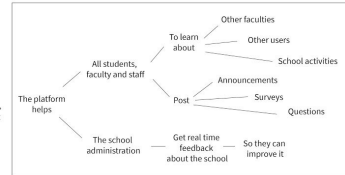

storyboard
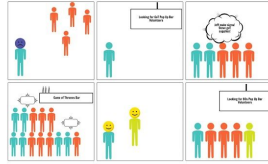
touchpoints

- Stools and Tables
- The physical bar
- Screens for Advertising
- IoT Job Board
- Pop up Bar Assembly
- Bartender

THUAS social media app/website

" I wish I could see what other faculties are doing."

Our concept is a social media platform on which students and faculty can chat, post annoucements, create channels/ groups and so much more.
A main thread and/or a calendar of all activities happening on campus would be visible from the atrium screens.
This platform can be a non-threatening way for users to interact with each other, plan activities and learn about THUAS. It can also be an easy way for the administration to get quick feedback on how to improve the school.

"I need participants to fill my survey"

Opens the school App

Posts survey

"Oh! There is a ping pong tournament starting in 10 minutes."

Grabs bag and runs to the innovation playground

"Wow, I already have many responses to my survey!"
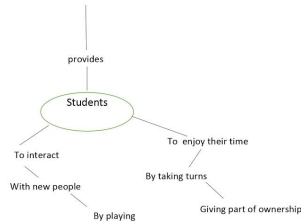

THUAS Madness

"I play ping pong sometimes and with new people"

"...it's usually occupied by the same people, so I have to wait."

Description of the Concept

A way where the atrium can hold 2-4 ping pong tournaments a day where any participant would have to sign up themselves in order to be able to participate. This allows for more and other students to join the activity that provides social interactions, competitive atmosphere and active lifestyles within the university.

THUAS Madness helps:

Concept #1 - THUAS Madness

Quote

"It's usually occupied by the same people, so i have to wait."
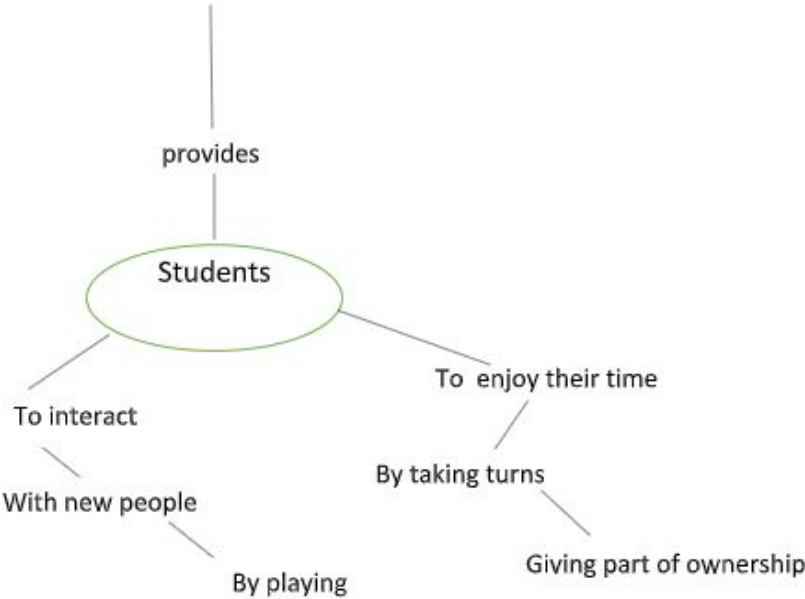
Description of concept

Design an every day tournament (3 tournaments a day) where students can sign up and participate to complete, play and interact with other students, who they might not know. It allows more students to compete for the tournament. This can be implemented in the atrium where they are able to play and watch other students.

Touchpoints

- Screens

Map

THUAS Madness helps:

Concept #2 - THUAS Social Media App

Quote

"I wish I could see what other faculties are doing."

Description of concept

This concept is a social media platform on which students and faculty can chat, post announcements, create channels/groups and so much more. A main thread and/or a calendar of all activities happening on campus would be visible from the atrium screens. This platform can be a non-threatening way for users to interact with each other, plan activities and learn about THUAS. It can also be an easy way for the administration to get quick feedback on how to improve the school.

Touchpoints

- the main thread
- the chat
- Screens

Map
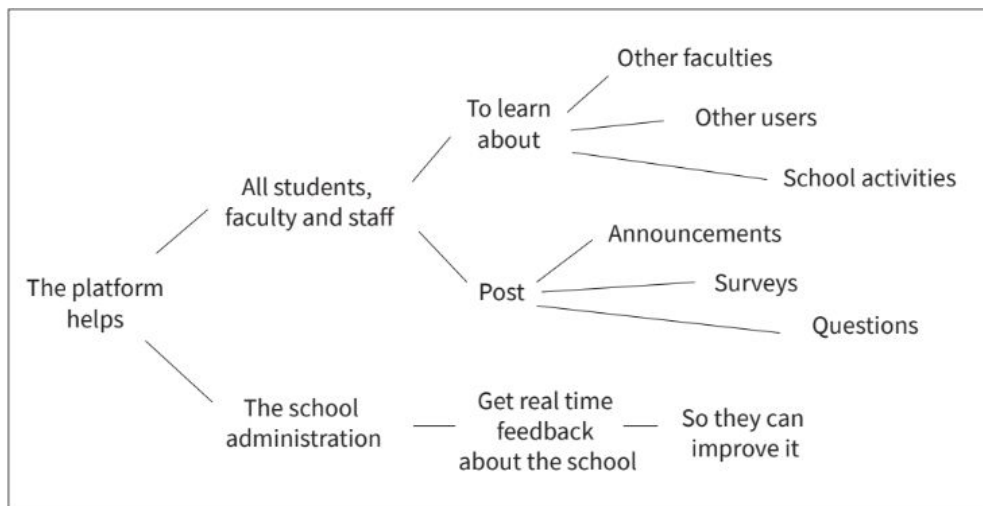
Concept #3 - The pop up bar

Quote

"There's a bar at my school where students work...people hang out there and really like it because everyone has to work there in the first year."
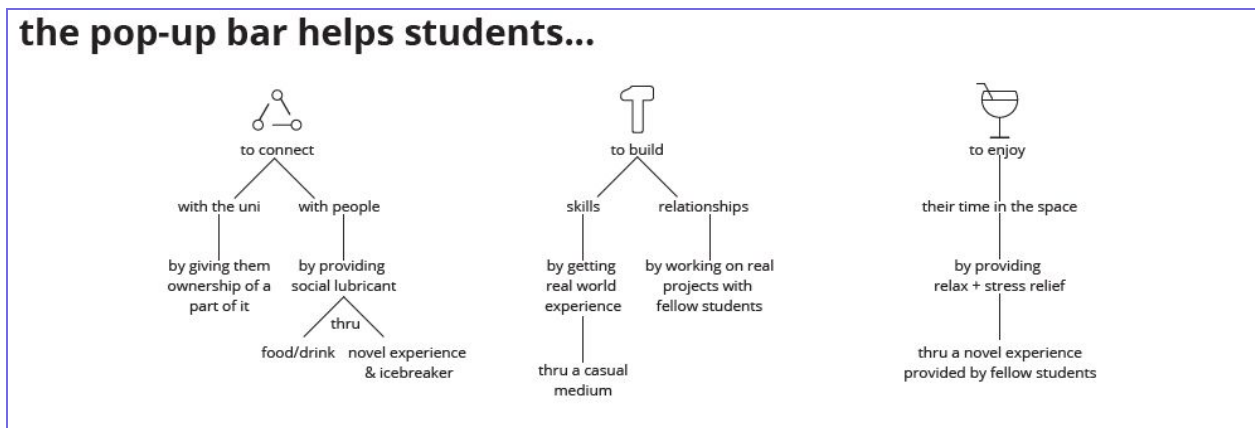
Description of concept

The pop up bar is an experience that starts with an easily assembled structure that students can set up and sell beer/snacks within the Atrium. Students create a theme for the bar utilizing whatever crafts they choose. The pop up bar is a casual and dynamic experience that lets students connect, build, and enjoy their time in the THUAS building while also feeling like they are taking ownership of the space. Customers gain a sense of ownership by participating in an event that is by students and for students. Those running the pop up bar gain a sense of ownership by being able to temporarily 'run' a part of their Uni. The pop up bar also provides students with an opportunity to gain relevant experience in a variety of fields while also keeping things casual which will make students more willing to participate. Beyond that, it provides opportunities for students to socialize in school through an unconventional manner.

Touchpoints

- ❖ Posters
- ❖ Pop up app
- ❖ Bar
- ❖ SIM
- ❖ Degrees of Separation

Concept Map

the pop-up bar helps students...

to connect — with the uni — by giving them ownership of a part of it; with people — by providing social lubricant — thru food/drink, novel experience & icebreaker

to build — skills — by getting real world experience; relationships — by working on real projects with fellow students — thru a casual medium

to enjoy — their time in the space — by providing relax + stress relief — thru a novel experience provided by fellow students

Converging to one concept

After discussion between the team and the client, the consensus was to go for the **pop up bar** idea.

The client indicated that the Pop up bar concept and the Social media concept were promising, but there was an agreement that the THUAS madness idea was not rich enough to continue with it. It lacked an IoT component and there was still confusion about aspect such as the management, broadcast, price, etc. For the social media concept, the client mentioned that there needs to be more link to the physical world. Moreover, for the pop up bar it was said that there is a nice aspect of social interaction and innovation within the pop up bar which is helped by the digital and physical connection. Beyond that, there is a strong link between research insights and the concept. The pop up bar concept attempts to resolve the user need of feeling ownership, which comes from the research insight that *shared identity/shared ownership of space can promote human interaction, and is something that is currently lacking within the Atrium.*

First Iteration

The first iteration of the pop up bar was barebones and lacked any form of tech integration. At this point it was just an initial concept with no prototype to show. Nonetheless, we spoke about the concept with our client in order to receive feedback. The first round of feedback from the client came at the meeting in which we presented our three main concepts, and most of the content shown revolved around the Concept Map.

Concept Map
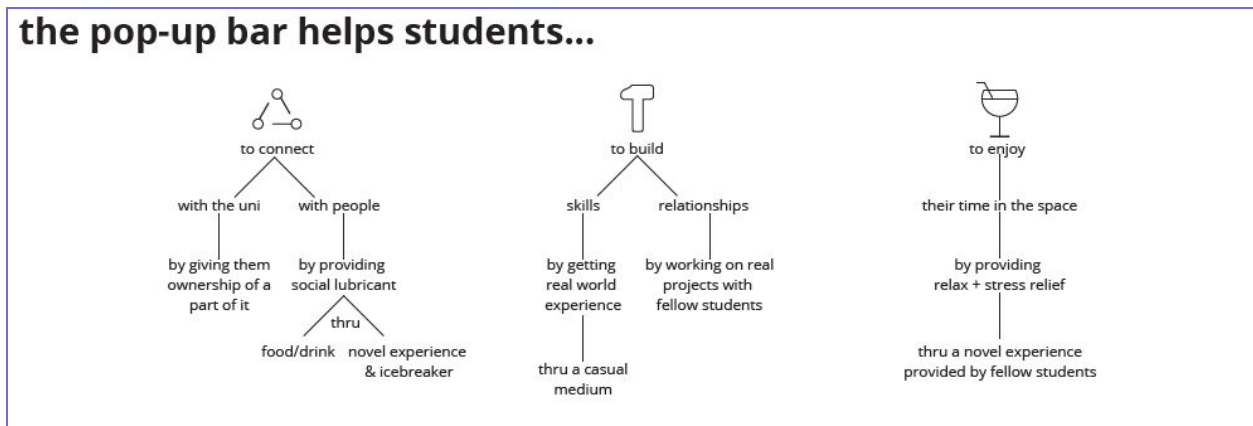
Feedback from Stakeholders

- ❖ Make the pop up bar more valuable. How can we make it more than just a school event?
- ❖ Integrate technology within the concept, this is an important aspect from the design brief that is not currently being addressed.
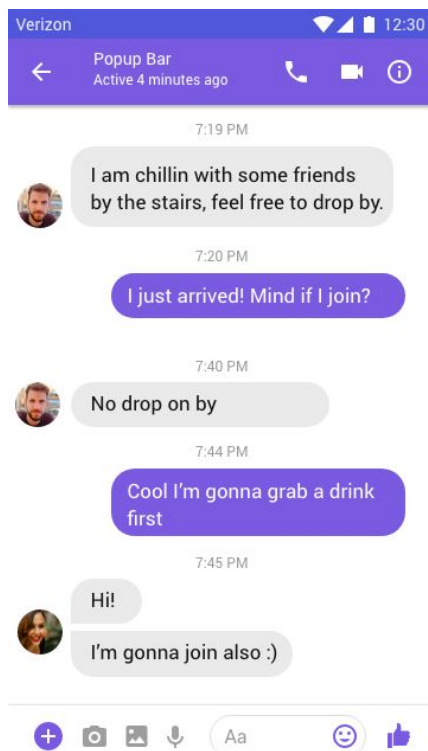- ❖ How will social interaction be promoted?

Second Iteration

The second iteration of the pop up bar integrated some technology, but feedback from stakeholders informed us that the tech felt shoe-horned, or prohibitive. This iteration of the popup bar was shown in the form of a **desktop walkthrough**. Video: https://drive.google.com/file/d/1HSoSfnKSfbiV0UoCBCys2a_qE_nGROct/view?usp=sharing

This iteration of the pop up bar was the first to introduce the pop up bar application which at that point had a few key features including a Chat function and a Request to Host the pop up bar function.

Screens for Chat Function   Request to Host Function
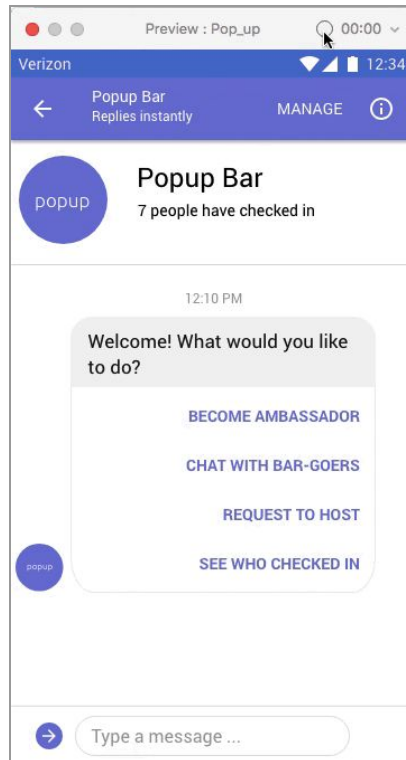
Another piece of technology that was added in this iteration was QR codes which were added to the promotional materials, like posters. These QR codes automatically add the pop up bar event details into the user's device, reducing the barrier of entry and promoting the ability to efficiently share the event with friends; thus adding a potential for virality. The QR code also prompts the user to download the pop up bar application which is an important aspect of the experience.

Poster with QR Code

The team arranged a meeting with the client in which we showed the desktop walkthrough. The client was generally positive towards it, but did have some questions and some possible additions.

Feedback from Stakeholders

- ❖ Make sharing QR code effectively also without a Google Calendar.
- ❖ Facilitate sharing the event and getting people for the new event.
- ❖ Think of tools for ambassadors to promote the bar.
- ❖ Look at possible interactions within the bar.
- ❖ Think of digital ways of connecting other phones.
- ❖ Think of ways of linking people through other networks.
- ❖ Physical interaction in the space.
- ❖ Look at group dynamics and behaviors to get a better understanding of people joining groups.
- ❖ Make a closed physical space, open up to other people.

Ideas: place digital hotspots on the floor that are close; connecting people through their playlists; using an existing app to create strong connections; allow users to connect to their interest about the event.

Final prototype

The final prototype is a tech-integrated Pop up Bar. The team incorporated a substantial amount of the feedback received from the final client meeting. Changes were made to the application, to the general experience of the pop up bar, and how sharing the event will happen.

In terms of the application, a new game was added called Degrees of Separation which utilizes the Facebook integration of the application alongside NFC technology. The goal of this game is to find the person who you are least connected to on Facebook. The two people who are least connected get a free drink. Users tap their phones together and their phones display information about how connected they are to the other person including how many friends in common they have. Degrees of separation provides an opportunity for people to interact with others who they don't know and can lead to longer term social interaction between these strangers by providing them with a shared positive experience in the form of a free drink. This stems from the feedback we received about looking at group dynamics and behaviors. The team realized that people would form groups with people they already know. There was a desire within the team and from the client to promote social interaction outside of this, so Degrees of Separation was created to foster these new social interactions.

Degrees of Separation Screens

Another update to the application stemming from feedback was the ability for users to become an Ambassador for the pop up bar event. By pressing "Become an Ambassador" on the home screen of the app, the user is provided with tools in the form of digital posters and promotional materials. After this, the user is prompted to share the promotional materials with friends and colleagues. For their efforts, they get a closer tie to the pop up community as well as a free drink if they bring 3 people.

Become Ambassador Screens
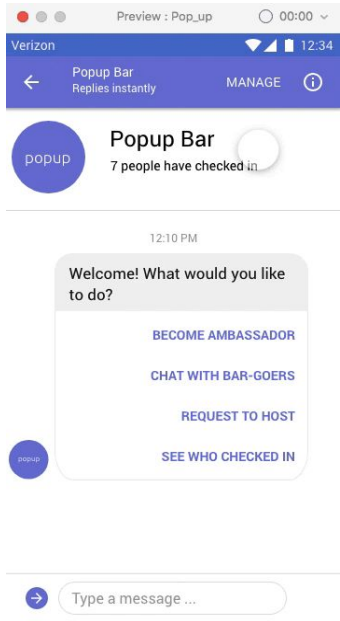
Experience Prototype

After making these updates to our concept, we shot our final experience prototype video. This video incorporates all of the additions that have been made to the concept, and explains the experience in a cohesive manner. The video can be watched here:

https://drive.google.com/file/d/1F-CnA-xANlzFU2AMkRBZLbUU25m-ZTpJ/view?usp=sharing
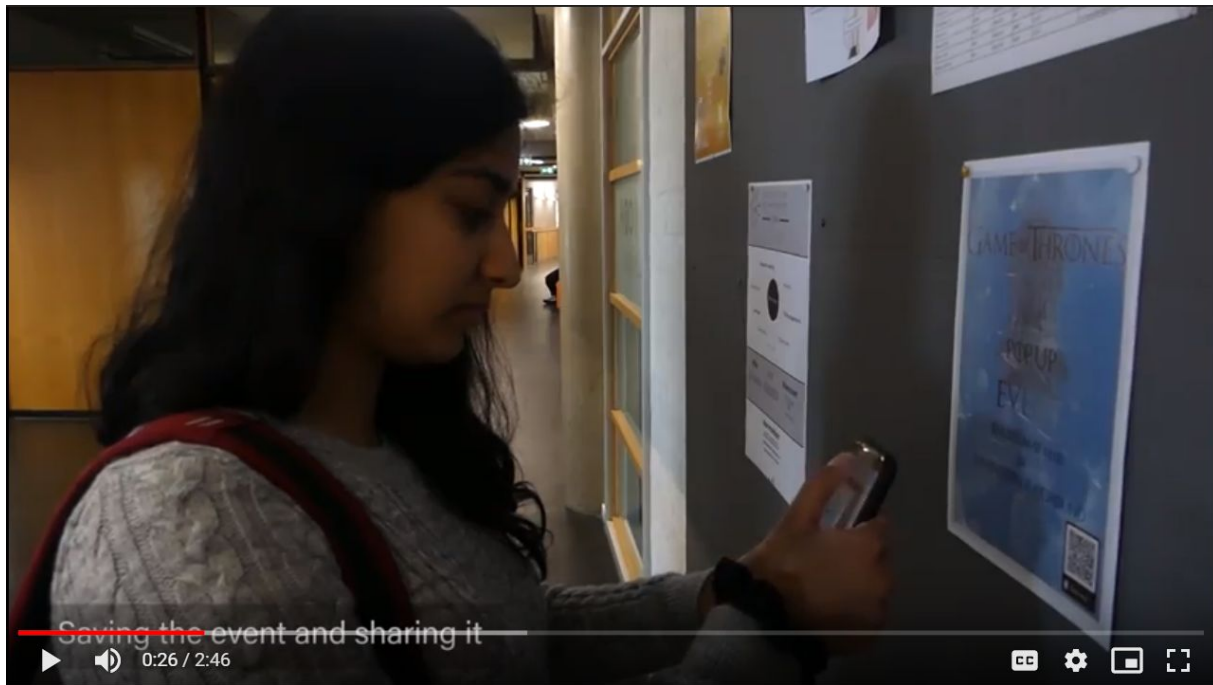
Feedback from Stakeholders

- ❖ Being in the same room motivates people to connect with new people.
- ❖ Face to face and interactive concept with phone makes the pop up bar a social meeting point.
- ❖ This concept could be perfectly implemented in the University. It's viable.

2-Dimensional Map

The pop up bar

The innovation playground

Bar

Interaction areas

Poster

Entrance

Touchpoints
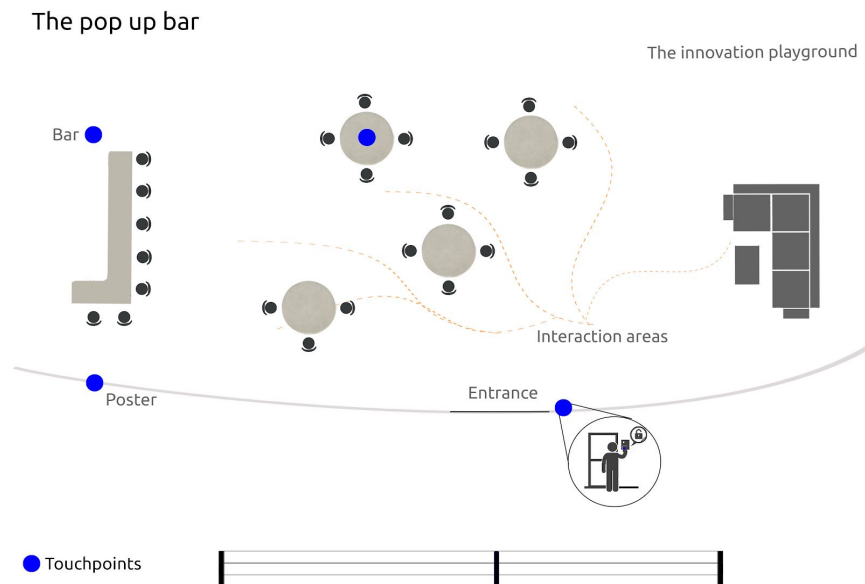
Logistics

Beyond the design, the team also focused on hammering out the logistical challenges that will arise from the pop up bar concept. These include necessary partnerships within THUAS and a design for the physical structure of the pop up bar.

Partnerships

In order to create a foundation and support for the pop up bar, the team would approach the student organization, SIM. SIM would store the pop up bar supplies and mobile bar. Alongside that, they would sell the *starter pack*[1] to the groups of students who are hosting the pop up event for a minimal profit. After a brief explanation by SIM of how to operate the keg and general ground rules, and after the exchange of these materials, the student group hosting the pop up event would have sole control and responsibility.

Structure

The team focused primarily on the experience of the pop up bar, but the physical pop up bar is important as well. The pop up bar needs to be mobile, easily assembled, and relatively compact. After conducting research, the team discovered an existing product that

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[1] The starter pack would include 50 reusable cups, 2 mini kegs of Heineken, and 4 bags of borrelnotjes. Cost estimate: 40 euros based on Albert Heijn prices.

the pop up bar could be modeled after. This design comes from Portabar, a UK company which can be found at https://portabar.co.uk/options.[2] The cost of this structure is steep, so purchasing and using this would not be a viable solution. Rather, the team would create a similar structure using wood which will be much more cost effective than the high-grade steel used by Portabar.
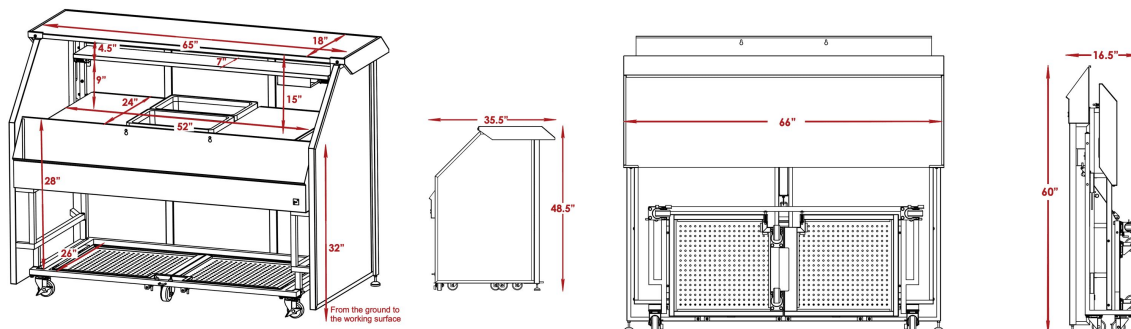
Future Iterations

- ❖ Think about the person hosting the events:
  How does (s)he reach their goal.
  Think of games that could help the host(s) reach their goals.
- ❖ Define the role of the university administration when setting up the bar.
- ❖ Find alternatives for phones without NFC.

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[2] Portabar, a portable/mobile bar, options for Indoor & Outdoor. (n.d.). Retrieved from https://portabar.co.uk/options

Links for Files

Final Presentation
https://docs.google.com/presentation/d/1aGomCTtUeACHg4ltePtdOr-NDHDxZZXcjI1ox9ED17I/edit?usp=sharing

2D Map
https://drive.google.com/file/d/1BKYQOpf2QnjSFgf9VD0hhw8xv0f_v-ov/view?usp=sharing

Adobe XD Prototype
https://xd.adobe.com/spec/4d3fbbce-b30d-4549-664b-78b265c3c5d9-3b0e/

Desktop Walkthrough Prototype Video
https://drive.google.com/open?id=1HSoSfnKSfbiV0UoCBCys2a_qE_nGROct

Experience Prototype Video
https://drive.google.com/file/d/1F-CnA-xANlzFU2AMkRBZLbUU25m-ZTpJ/view?usp=sharing

Conclusion

The utilization of design thinking methods such as brainstorming helped the team diverge, then dot-voting helped the team converge. The generation of the initial ideas happened through requirements writing which assures that these ideas come from fundamental needs discovered during research.

This design process required the creation of ten initial ideas based on research insights. A discussions between the team members but also with stakeholders led to the selection of three concepts which were developed further. Finally one final concept, the best one, was selected and prototyped. Once converged onto one concept, feedback from our client became invaluable. These sessions allowed us to align our vision with the needs of users and the needs of our client.

The end result of the pop up bar molds together the digital and physical worlds in a way that helps users to socialize in new ways within the university while also feeling a sense of ownership of their university. This was a key user need identified by the team, so fulfilling it was a major accomplishment.

If the team was to develop this concept further, the design would have maybe evolved to help bar hosts and users set up goals such as how many people they interact with and how much they spend or contribute more to the experience by, for example, taking on the role of the DJ.

Appendix A - Some of our initial ideas and the requirement forms which led to them

From Data to requirements:

1
Fill your wall with every relevant thing you recorded during your research.
Make chunks of your data and Explode your research into a non-linear form
highlight everything that stands out

Screens could be a possible touchpoint but are currently going unnoticed and are not useful to users.
"Screens are only in Dutch"

2
Identify Patterns and name Patterns
Example:
"People seem to ignore the screens"

3
Choose Patterns and turn them into short observational statements:
Example:
"People would pay more attention to screens if they would display more useful information, and in English."

4
Extract Insights, start with asking "why"?
This will produce inferences:
Example:
Insight/Inference:
"People are aware of screens, *but they don't find the displayed information useful for them. So they just ignore them.*"

5
Formulate Requirements

Requirement:
"There should be a way to make people more interested in screens. If only the content was relevant for them(class schedules, events...).
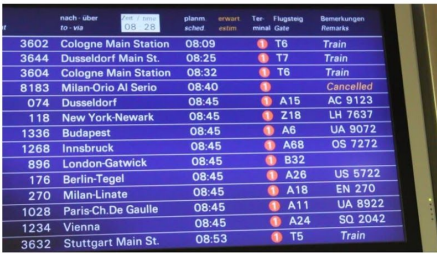

Interesting screens
Curiosity

Quote
"The screens *are currently going unnoticed and are not useful to users.*"

Challenge
The screens are ignored by passers-by. The information currently displayed is in Dutch (not everyone can understand it) and not relevant enough for most of the users.

Design direction
Display useful information, such as class schedules in both English and Dutch, for passers-by (mainly students) in the screens at the main hall.
This could make users spend more time looking at them in the atrium.
The schedule could have a simple design similar to the ones displayed in airports or train stations. The functionality could be extended with giving information about other events and free time activities.

From Data to requirements:

1
Fill your wall with every relevant thing you recorded during your research.
Make chunks of your data and Explode your research into a non-linear form
highlight everything that stands out.

2
Identify Patterns and name Patterns
"General feeling of lack of seats at the main hall"

3
Choose Patterns and turn them into short observational statements:
Example:
"People seem concerned by the lack of comfortable seating at the main hall, but they don't complain to the staff or do anything about it"

4
Extract Insights, start with asking "why"?
This will produce inferences:
"People are aware of the lack of seats at the main hall, but they don't complain to the staff or do anything about it, they just avoid spending time on that space.

5
Formulate Requirements

Requirement:
"There should be a way of motivating users to spend more time in the atrium, maybe by increasing the number of comfortable seating that invites people to stay "

Comfortable seating
Relax

Quote
"There is no comfortable seating"

Challenge
The lack of comfortable seating prevents passers-by from spending more time in the main hall.

Design direction
Create playful spaces that invite students to stay and relax in the atrium.
This can create meaningful moments and nice memories among students in between classes.

The seating would be something like a "bean bag chair" or "lounge pug", because they are easy to move and inspire welcoming vibes. They could have a simple but modern design.

The functionality could be extended incorporating sockets to the seating. A lot of users would be there with their computers and phones.

Atrium runner

Quote

"Only parts of the space in the atrium is occupied"

Challenge

The atrium lacks activities that is intriguing for the people who pass by so here should be a way where people stay in the atrium while going towards their classrooms.

Design direction

Create a projecting game that plays on the ground like a maze in a certain area on the ground in the atrium where people can play on with other people. This can create moments when people pass by they are intrigued to play the game and also interact with other people in the atrium.

(the maze can also be controlled by a screen on one side while a bunch of people are playing in the atrium.)

Thinking benches
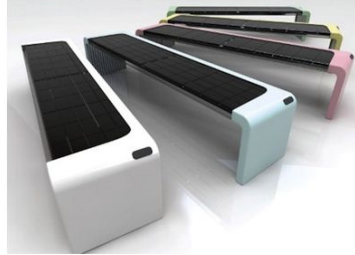
Quote

"the area in the atrium doesn't have sitting places and it is not comfortable"

Challenge

The atrium lacks sitting places for people to interact, so there should be a way where people have a comfortable sitting area in the atrium. So that people spend more time and the space int eh atrium is utilized properly.

- There should be a way where the middle area in the atrium is made comfortable, so people occupy the whole space.
- There should be a way to make the atrium give a pleasant vibe by placing different activities in the right place.

Design direction

Create different tables in the atrium which have different activities and there is a limit to how long they can sit there. Like a gaming table which has a board game and one bench is just to sit down.

From Data to requirements:

1 Fill your wall with every relevant thing you recorded during your research. Make chunks of your data and explode your research into a non-linear form. Highlight everything that stands out

2 Identify Patterns and name Patterns
Example:
"general feeling of stress on the work floor"
"people seem to get lost in the museum"
"students don't like to do a warming up session"

- "Some spaces are overused and some underused."
- "People complain about not talking to and meeting people outside their class or faculty."

3 Choose Patterns and turn them into short observational statements.
Example:
" People seem concerned by their stressful jobs, but they don't seem to do anything to fix their situations"

1. "People gather in the middle of the Atrium which makes it hard to walk quickly to class, makes the space noisy and overwhelming, even though there are a lot of spaces that are underused."
2. "People complain about not talking to and meeting people outside their class or faculty."

4 Extract Insights, start with asking "why"? This will produce inferences.
Example:
"People are aware of stress, but aren't aware of stress at any given moment or day. So it builds up till it is too late to do something about it "

1. "People gather in the center of the Atrium because there are not enough cozy hangout places anywhere else (so they just stand there)."
2. "People don't talk with one another because they feel intimidated, they don't speak the right language or they are afraid of rejection. Also there are not enough meeting places for where everyone can meet especially people from different faculties or students, professors and staff. There is currently no communication platform/place for the whole campus."

5 Formulate Requirements
Example:
"There should be a way for people to see day to day changes in their stress, so they can constantly adjust their behaviour in a ongoing fashion "

1. "There should be more cozy places near the Atrium where people can hangout."
2. "There should be a way for people to communicate with each other and make announcements in an easy and non-threatening way."


Themed hangout sections

Quote
"I don't know where to sit.", "The ping pong tables shouldn't be the first thing you see when you come in."

Challenge
There should be cozy spaces where people can hangout and take part in different activities.

Design direction
Use all the underused spaces (innovation playground, cafeteria, first floor) and give them themed ambiances so people can meet based on their activities and mood.
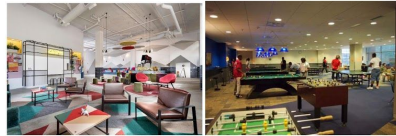
A campus-wide messaging app or website with physical message boards in strategic places

Quote
" I wish I could see what other faculties are doing."

Challenge
There should be a way for people to communicate with each other and make announcements in an easy and non-threatening way.

Design direction
Create a social platform (or use existing ones)