

CS-E5250 Data-Driven Concept Design

Low-Fidelity Concept Visualizations: Examples

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Agenda

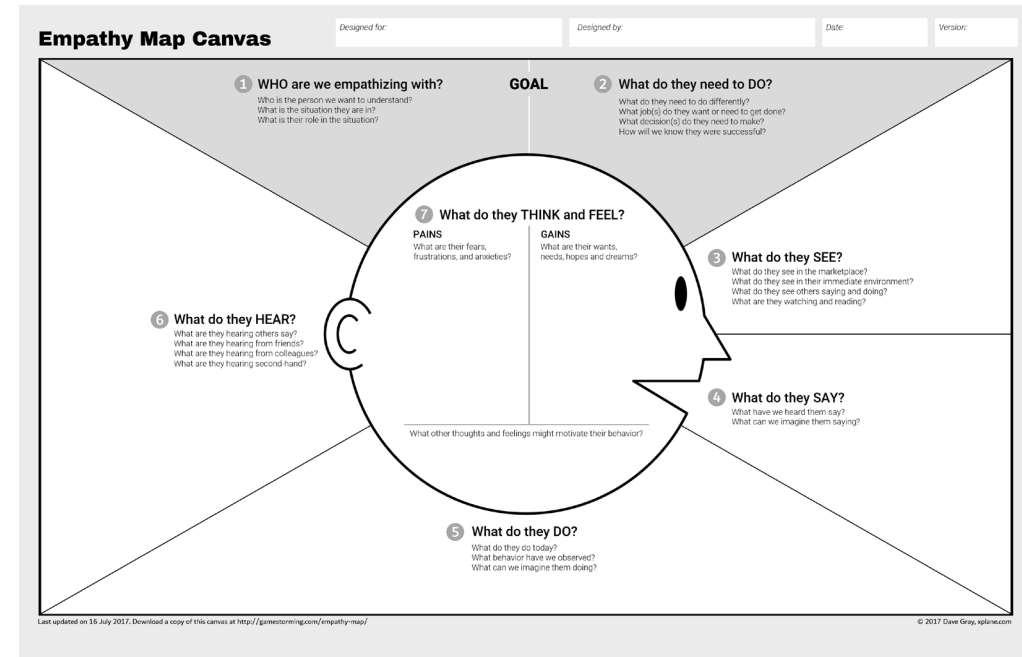
- Considerations lo-fi Concept Visualizations
- Examples from
 - Moodboards
 - Sketches
 - Mappings (system map, journey map, user flow map, etc)
 - Wireframing
 - Storytelling
 - Storyboarding
 - Storyplaying

When creating a concept visualization consider audience, touchpoints, purpose, and contents

Audience – who are you communicating to?

Questions to consider

- Who is your audience?
- What is their role?
- What situation are they in?
- What do they already know?
- What should they take away?

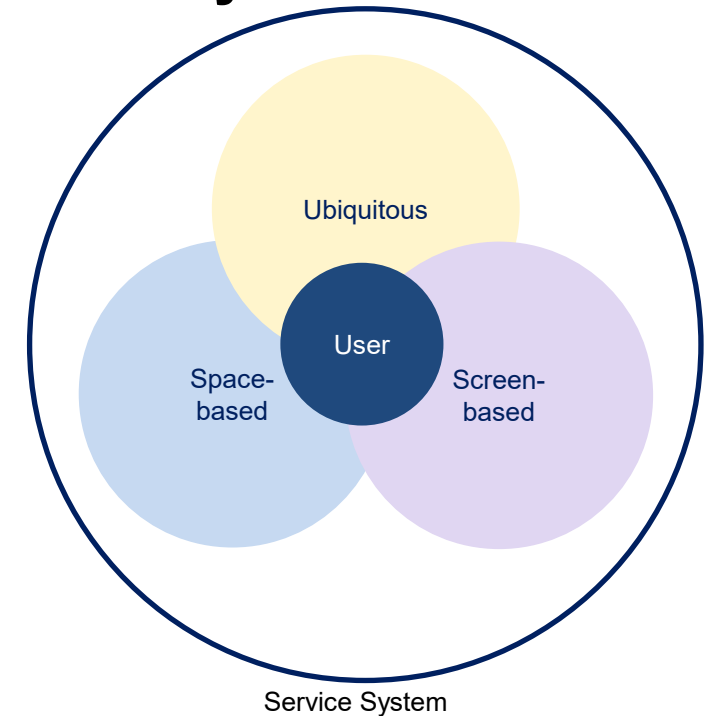


Updated Empathy Map Canvas ©2017 David Grey
Photo credit: David Gray, Gamestorming, Empathy Map Canvas,
<http://gamestorming.com/wp-content/uploads/2017/07/Empathy-Map-006-PNG.png>

Touchpoints are where users meet your product or service

Touchpoints can be divided into screen-based media, space-based media and ubiquitous objects that interact directly or indirectly

- Interactive Installations
- Interactive Spaces
- Interactive Architecture
- Interactive Out-of-Home-Media
- Augmented Reality
- Desktop, mobile apps
- Websites, email, ...
- Portables, wearables, ...



Purpose & Contents are the WHY, HOW and WHAT of your lo-fi visualization

Purpose

- What is the purpose of your concept visualization?
- At what stage of your project are you in right now? (context)
- What is the right type of visualization for the stage of your project?

Contents

- What is the message your visualization needs to communicate?
- How will you achieve communicating this message?
- What is the level of detail or perspective you highlight?
- Anything that needs specific explanation > how would you do that?

Examples of (lo-fi) visualization

Moodboard

Sketch

Mappings (system map, journey map, user flow map, etc)

Wireframing

Storytelling

Storyboarding

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Moodboard can play different roles in early stages of the design process

1. *Framing*: define limits of task, problem framing and solving
2. *Aligning*: transmitting a mindset or vision
3. *Paradoxing*: visual research of apparent conflicts
4. *Abstracting*: juxtaposing concrete and abstract imagery
5. *Directing*: set a trajectory for design

Nadieh Bremer creates a client mood board and adds everything that could be relevant for the project



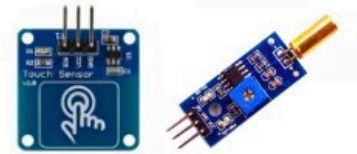
Excerpt from Nadieh Bremers Pinterest:
<https://nl.pinterest.com/nadiebremers/>

Moodboard: Second Life

Audience: me

Touchpoint: Interactive Object

Purpose: to explore shapes of current remote controllers and to communicate components, minimalist language, and shapes at the beginning of the project



Inspired by moving to a new place and spending a lot of time at the recycling center

Examples of (lo-fi) visualization

Moodboard

Sketch

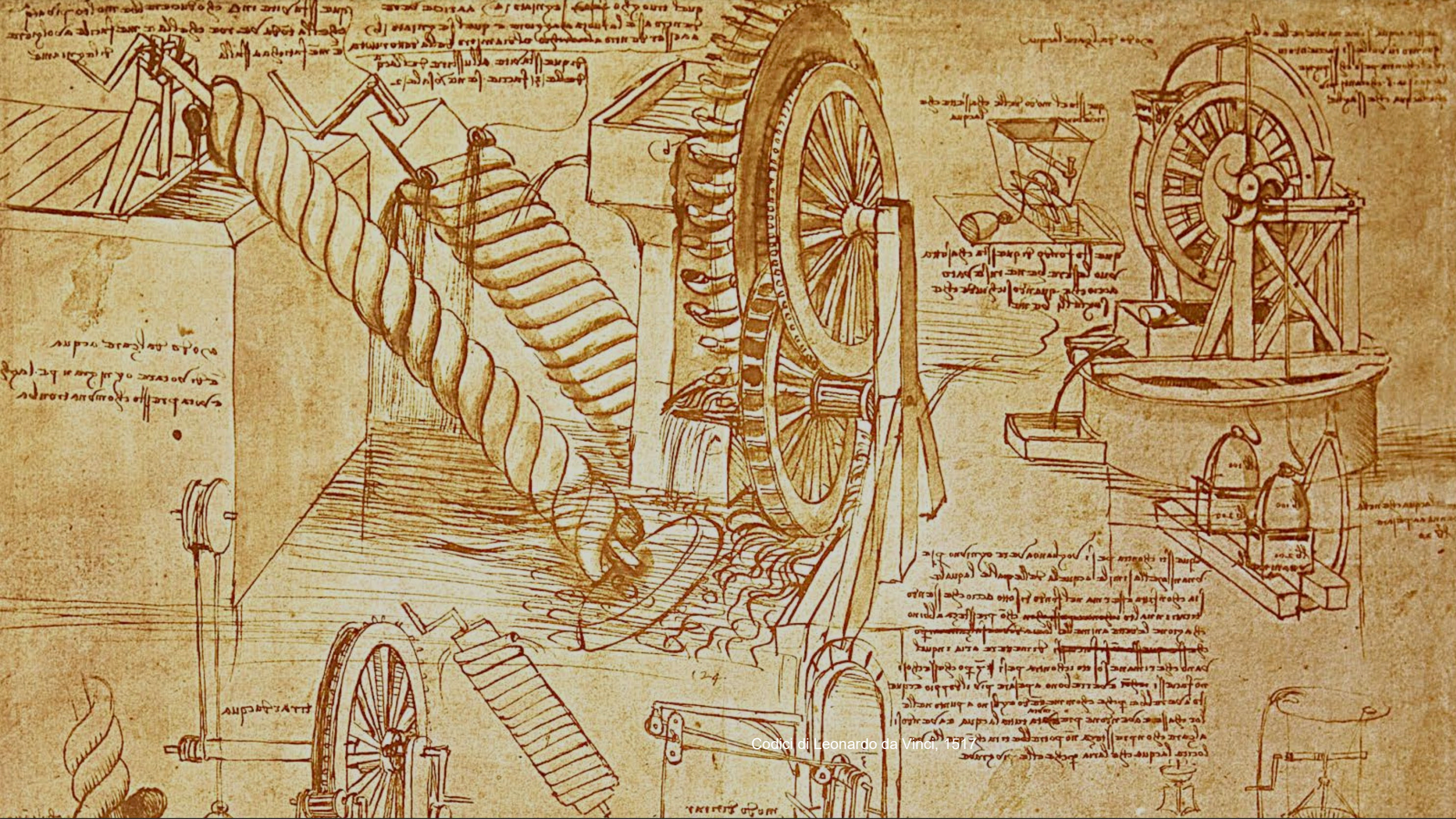
Mappings (system map, journey map, user flow map, etc)

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Storyplaying



על שם המלך המשיח
הוא יבנה בית המקדש
השלישי ויבנה את ירושלים
ויהיו שם כל העמים
ויהיו שם כל המלכים
ויהיו שם כל המלכות
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Sketches: Invisible Lines

Audience: project group members

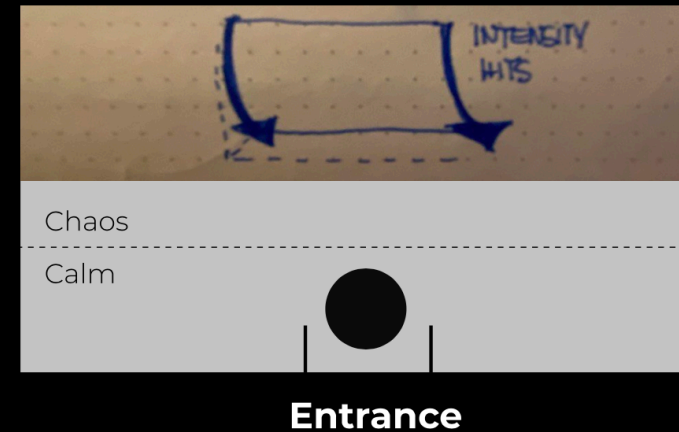
Touchpoint: Interactive Spatial installation

Purpose: to catch how users experience the changing mood of the room and as a base for upcoming discussion with set designers

QUESTIONS TO DISCUSS

- Placement of projectors
- How do we project onto 4 walls and the person
- How do we trace the person

SPACE





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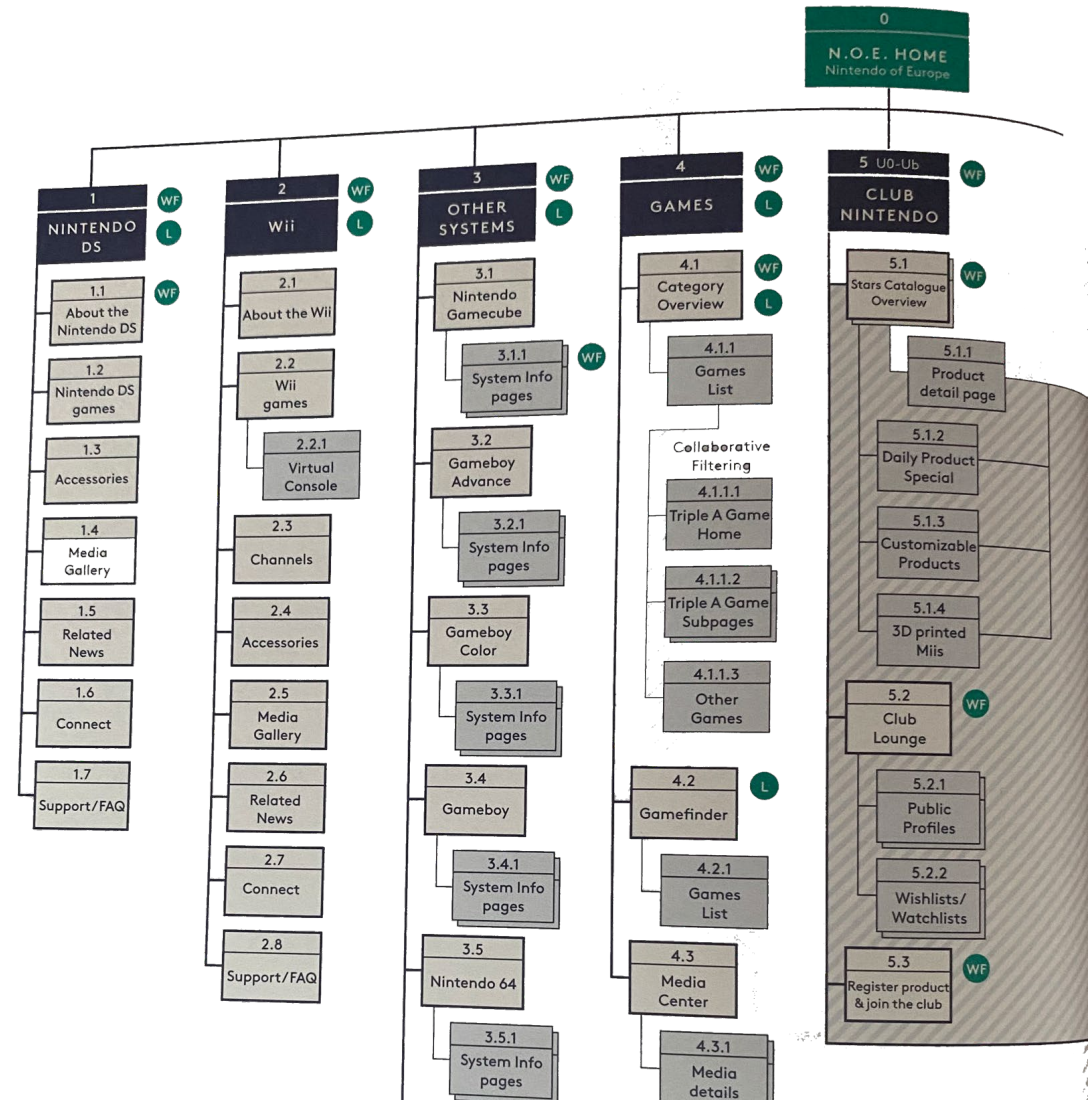
Storytelling

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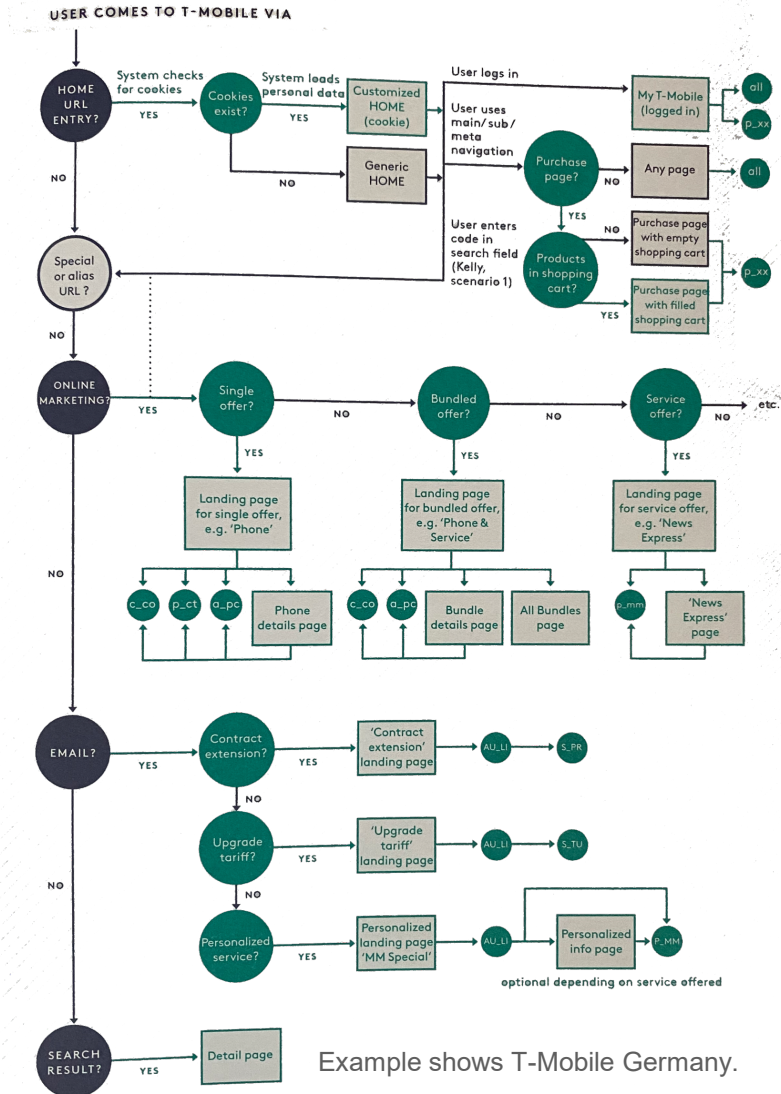
Mapping tools
sitemap, task flow,
system map, journey map, ...

A sitemap is useful for displaying a lot of information at a glance.



Example shows subdomains of the Nintendo of Europe website, highlighting the areas where the site can be personalized by users.

A task flow diagram represents the central processes as a sequence of user and system interactions



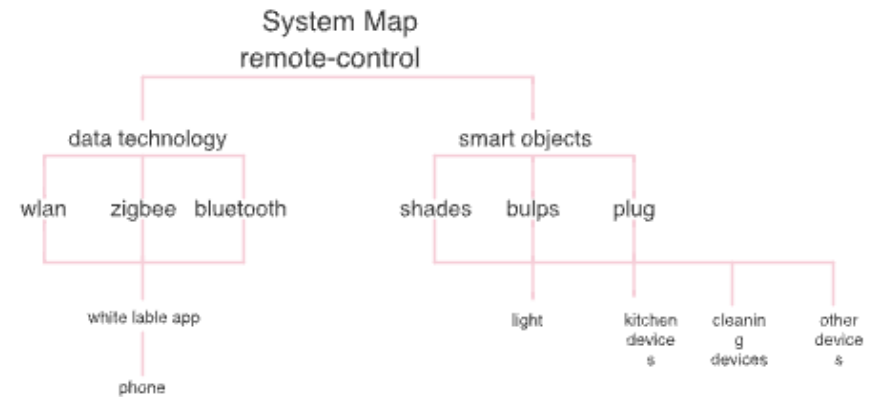
Example shows T-Mobile Germany.

System Map: Second Life

Audience: me

Touchpoint: Interactive Object

Purpose: to summarize research in a visual manner and to map the environment which the designed object will inhabit



A customer journey map shows the customer life cycle along all interactions and touchpoints



Development stages of physical object



Img_1: stages of approaching the physical object



Img_2: final physical object

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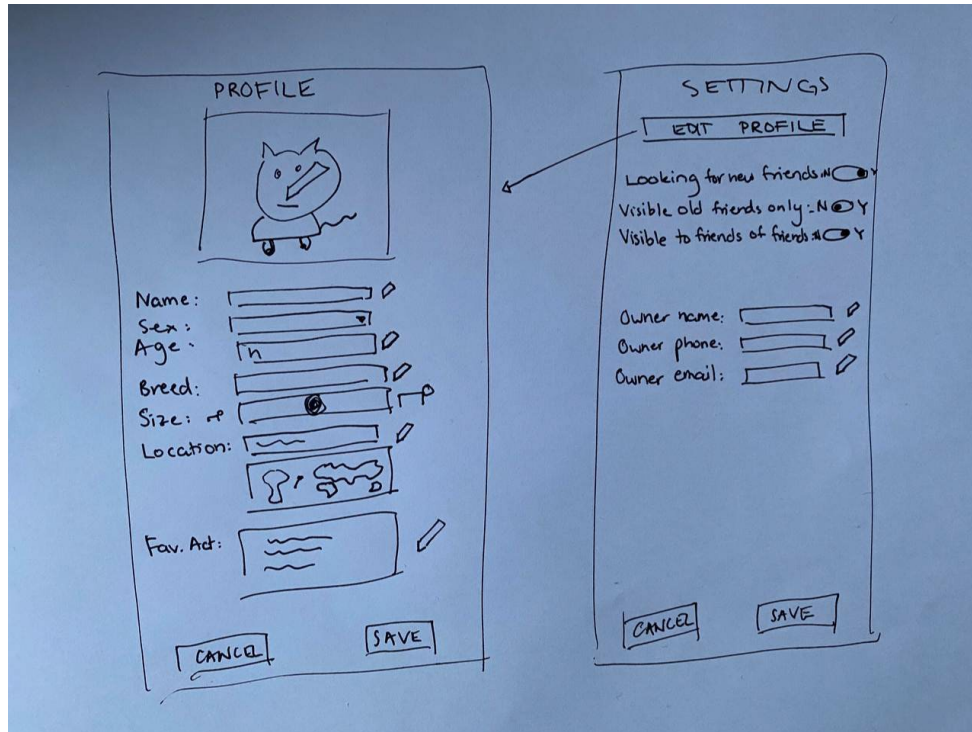
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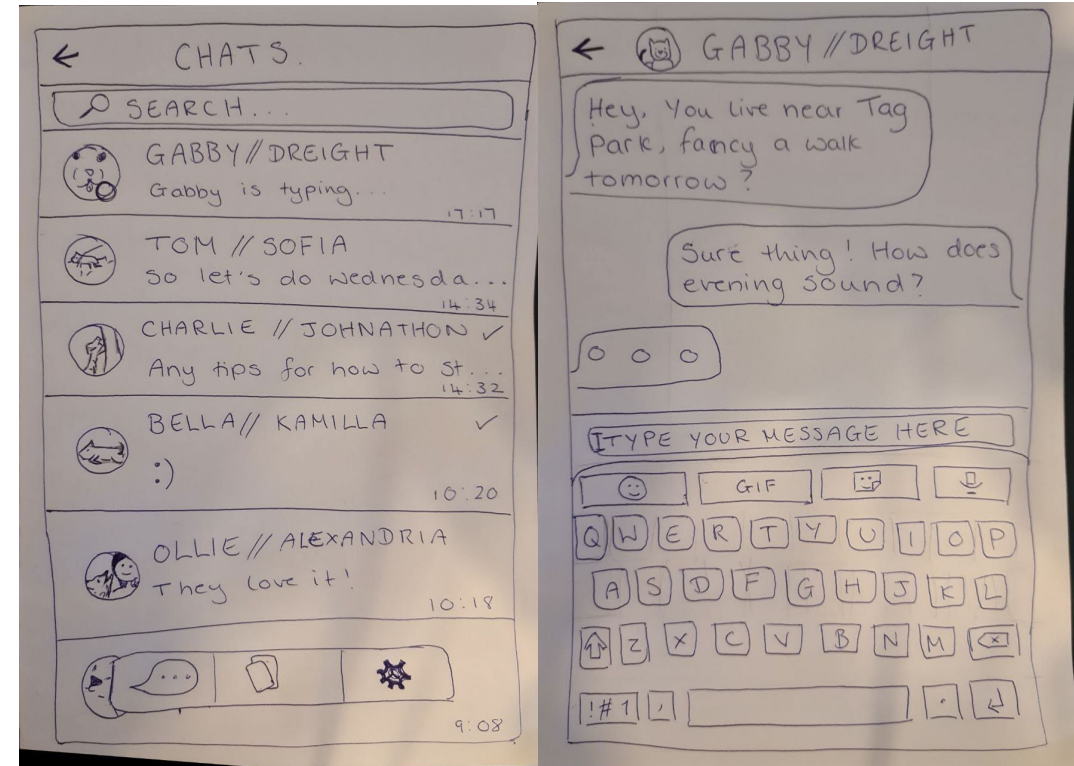
Storyplaying

Wireframing

Wireframing: PawPal

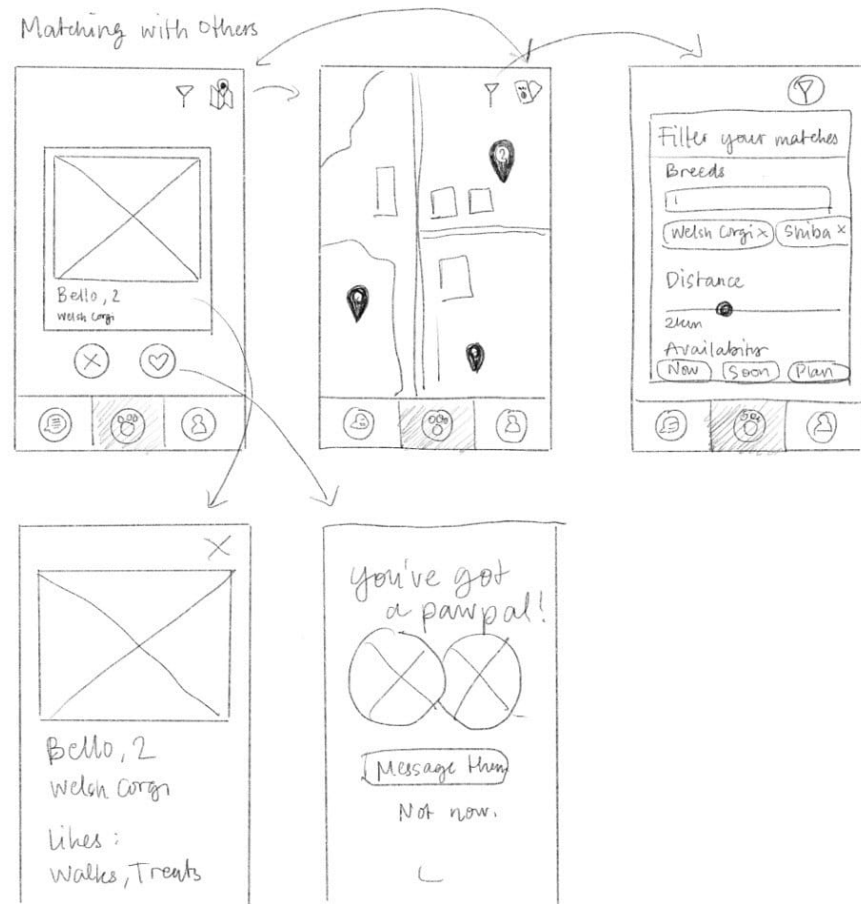


Pen & Paper sketch.



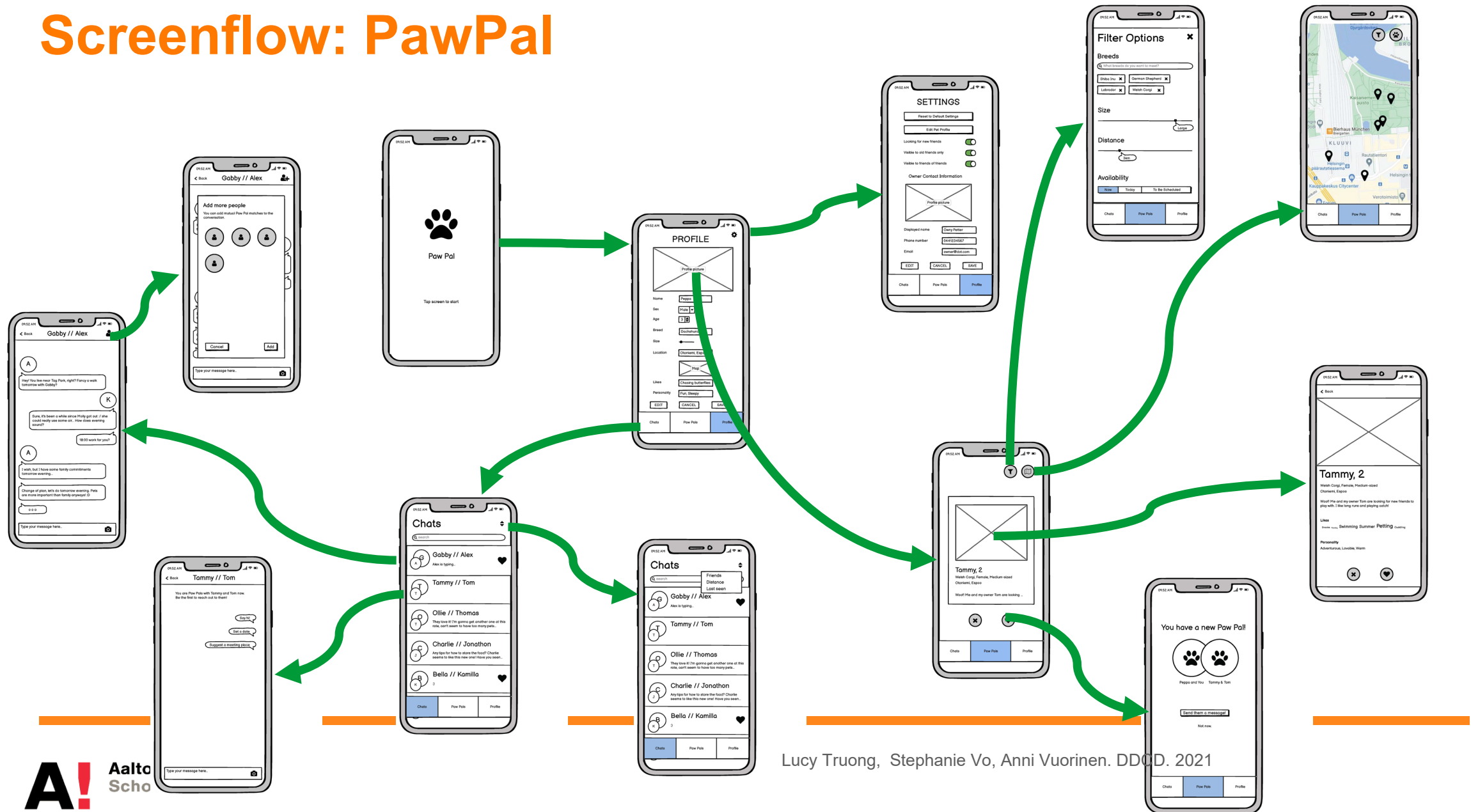
Pen & Paper Features sketch.

Wireframing: PawPal



Pen & Paper Screen Flow.

Screenflow: PawPal



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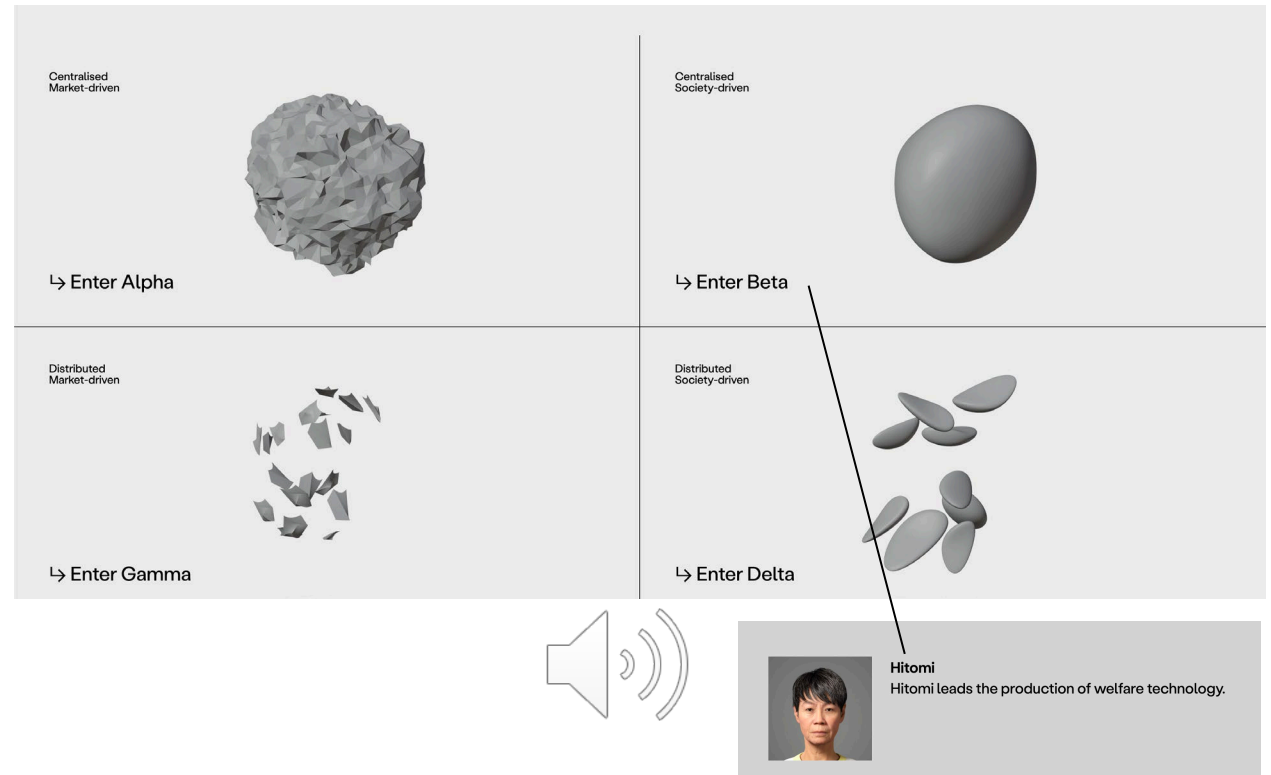
Storyplaying

Storytelling: Danish Design Centre, Living Future

Living Futures is a one part evocative listening experience and one part toolkit. It provides a thrilling yet safe space for you to understand, discuss, and shape the future together.

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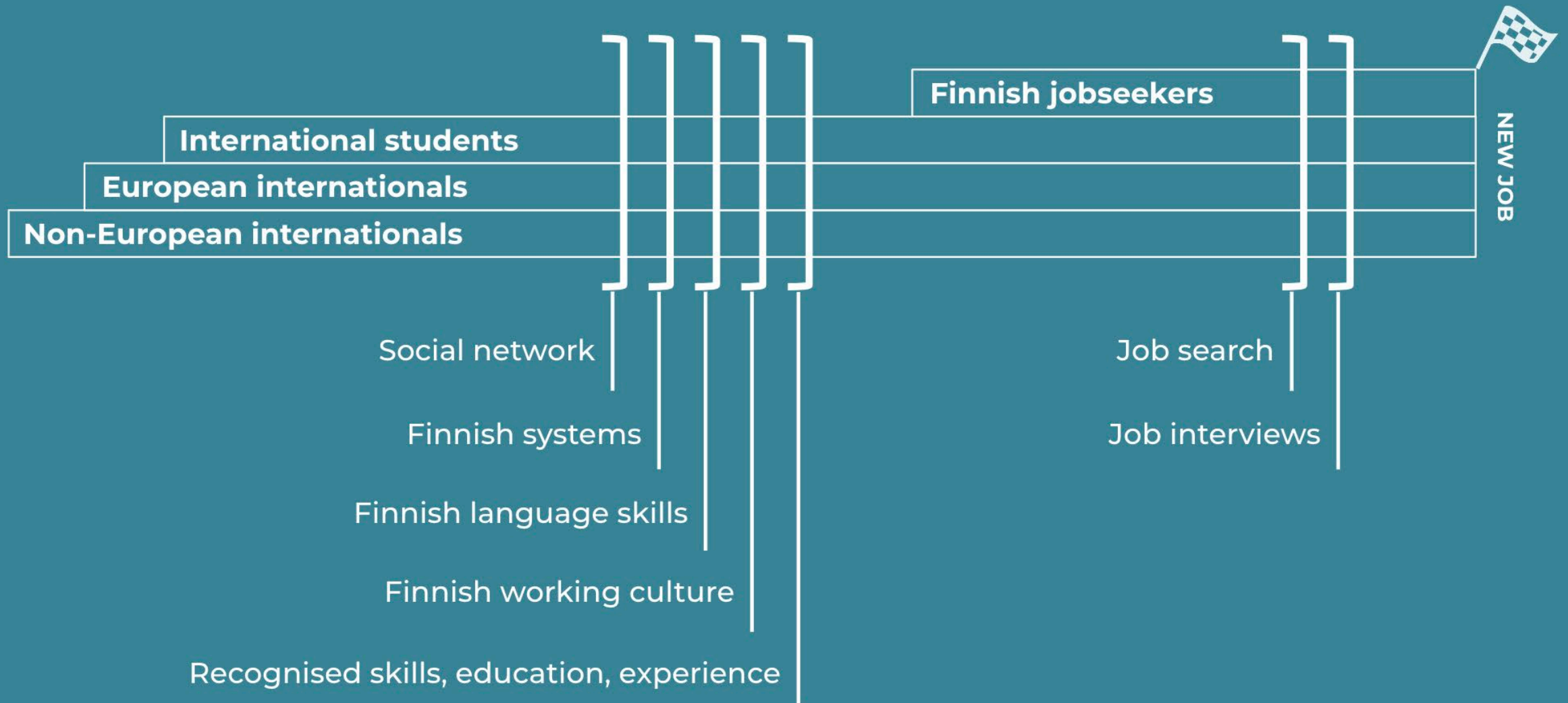
Storytelling: Design for Government – TE2024

Audience: Stakeholders from Ministry of Finance, Kela and TE Services in a 20 min pitch

Touchpoint: a digital service and process change

Purpose: to communicate obstacles in the current system and propose alternative solutions through a story based on research insights and to highlight service opportunities

Different jobseekers face specific obstacles



The current employment services

Stability of being
student/employed

Finding a job

Becoming
unemployed

Registering as
unemployed

Preparing for
a job

Looking for
a job

Kela website

TE website

TE application

Integration/
Employment plan

Kela application

Language courses

Shortcut, Ohjaamo,
Startup refugees...

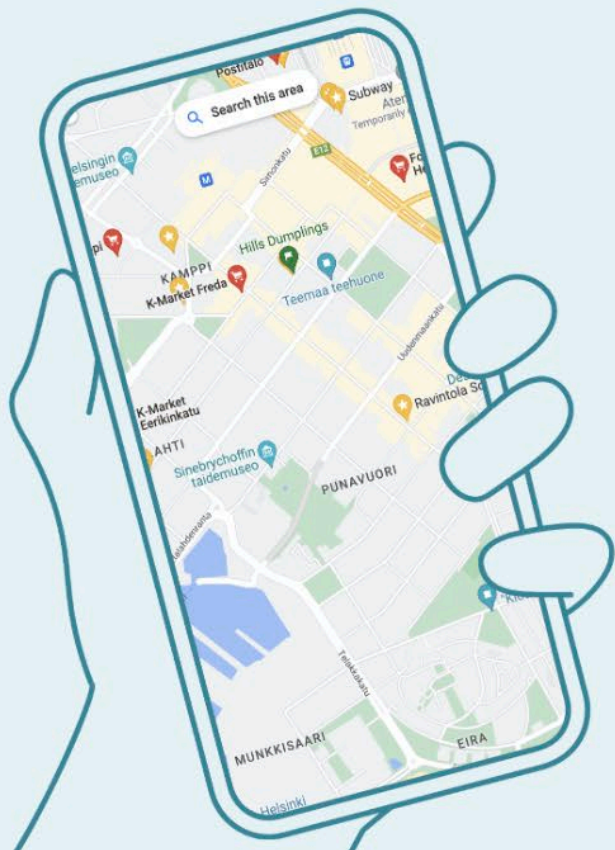
Job application
support

Job boards

Events

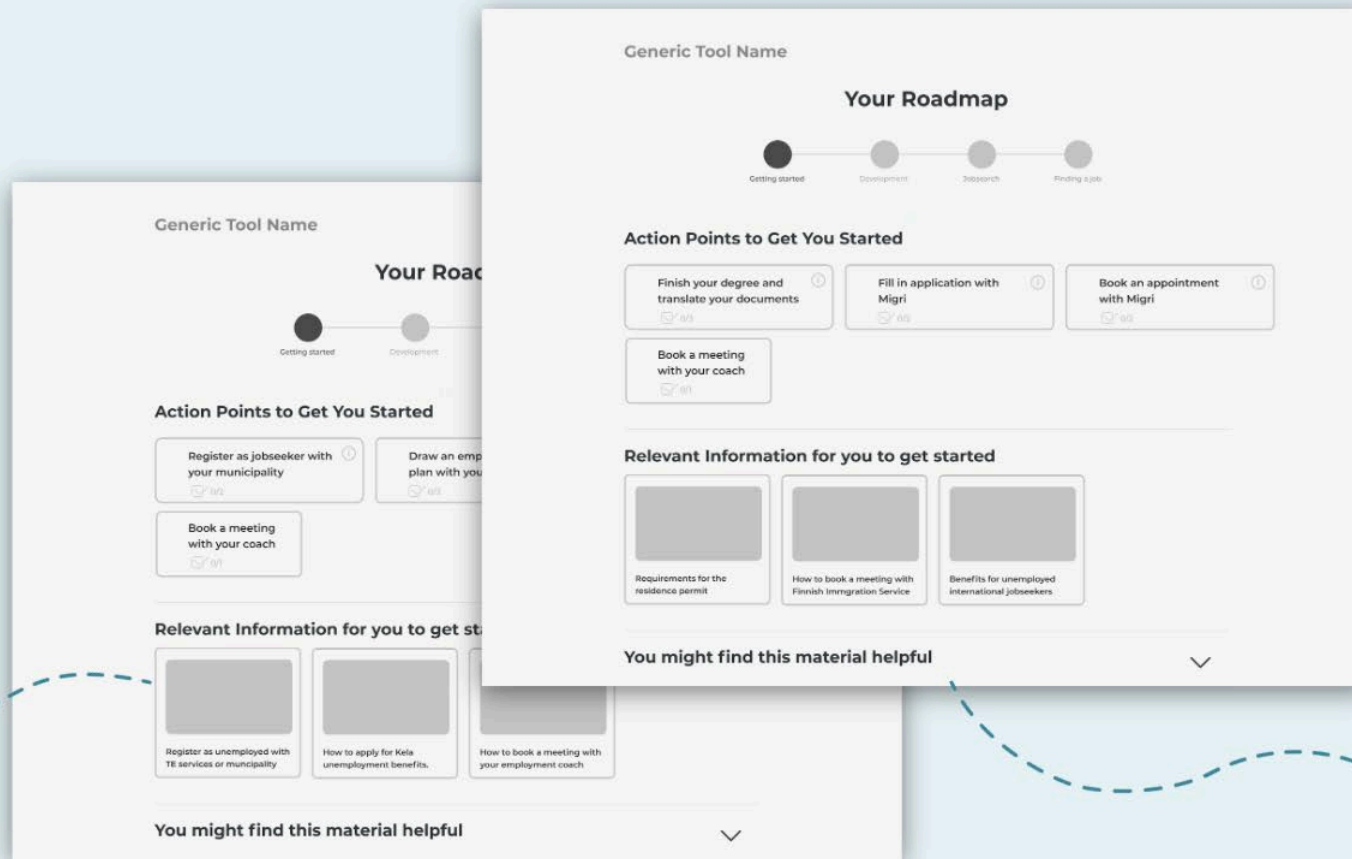
LinkedIn

When we are lost, we use a map to find our way



To get on track we use a map, most likely a digital map that **locates our position** and enables us to **filter information** for us.

Despite the same phase, each roadmap is curated according to individual needs



screen 7 & 8: roadmap overview with different tasks and content



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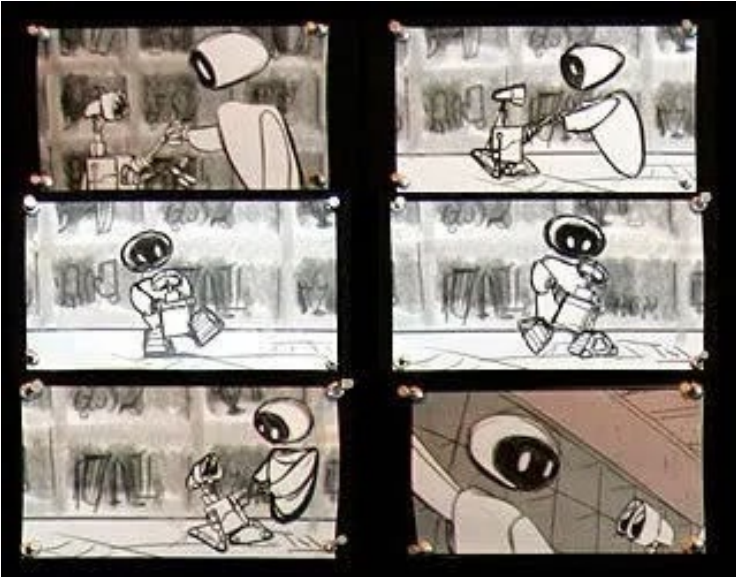
Storyboarding

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Storyboards are suitable for describing a chain of interactions with a system or product

1. Think about the steps or sequence of steps necessary
2. Consider the timeline, e.g. before using, during and after use
3. Combine textual and visual elements

Storyboarding: Disney WALL-E



Storyboard: Moi Helsinki

Audience: DDCD lecturers

Touchpoint: Interactive Spatial Experience

Purpose: to communicate a digital spatial experience / non-profit product that decreases the stigma of loneliness, and increase people's opportunities to be interact

Req.Type	Priority	Requirement	Source
User Requirements	1	After visiting the space the person should feel less lonely.	Hawkley, 2010
User Requirements	1	The place should be easily accessible to anyone – especially lonely people.	Poldma, et al., 2014
User Requirements	1	The person should be encouraged to interact with others in the space	Holt Skov, M., 2016, Activating Public Spaces
User Requirements	1	The interaction should be possible in the physical space.	O'Malley et al., 1996
User Requirements	1	People should have different ways or senses (sight, scent, touch, sound and taste) to interact.	Landscape - Key Requirements Essex Design Guide
User Requirements	1	People from different backgrounds could share the common space	Wood, 2015
Quality-of-service (non-functional) requirements	1	The space should enable people to reflect and build an opinion before sharing it with others.	Greene, 2003
User Requirements	1	People need feedback channels	Church, et al. 1995
Business Requirement	1	The space should increase the opportunities for social interaction	Hawkley, 2010
Quality-of-service (non-functional) requirements	1	The space should be secure.	The Key Principles of Public Open Space Essex Design Guide
Functional Requirement	1	The space should have video screens that encourage you to be social	Hawkley, 2010
Regulatory Requirement	1	The space should fulfill Finnish legal requirements.	https://tem.fi/en/spacelaw
Implementation (transition) requirements	1	The space is self-explanatory.	Sanei, et al. 2017
Implementation (transition) requirements	1	The interaction should happen seamlessly.	Hawkley, 2010
Implementation (transition) requirements	1	In the beginning, there should be a few people gathering feedback and observing how the space works or doesn't	Church, et al. 1995

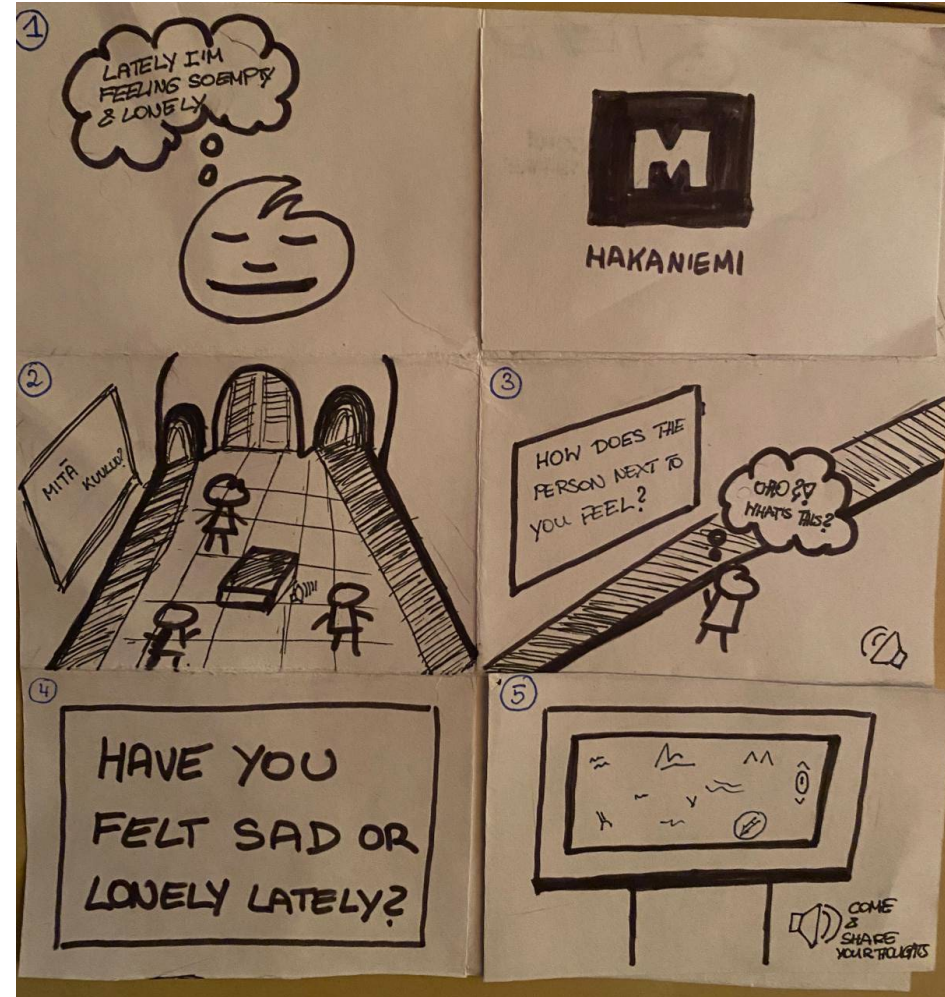
List of Requirements. Vuorjoki, lines. Hoerlesberger, Mathias. Wang, Yajing. DDCD 2022.

Storyboard: Moi Helsinki

Audience: DDCD lecturers

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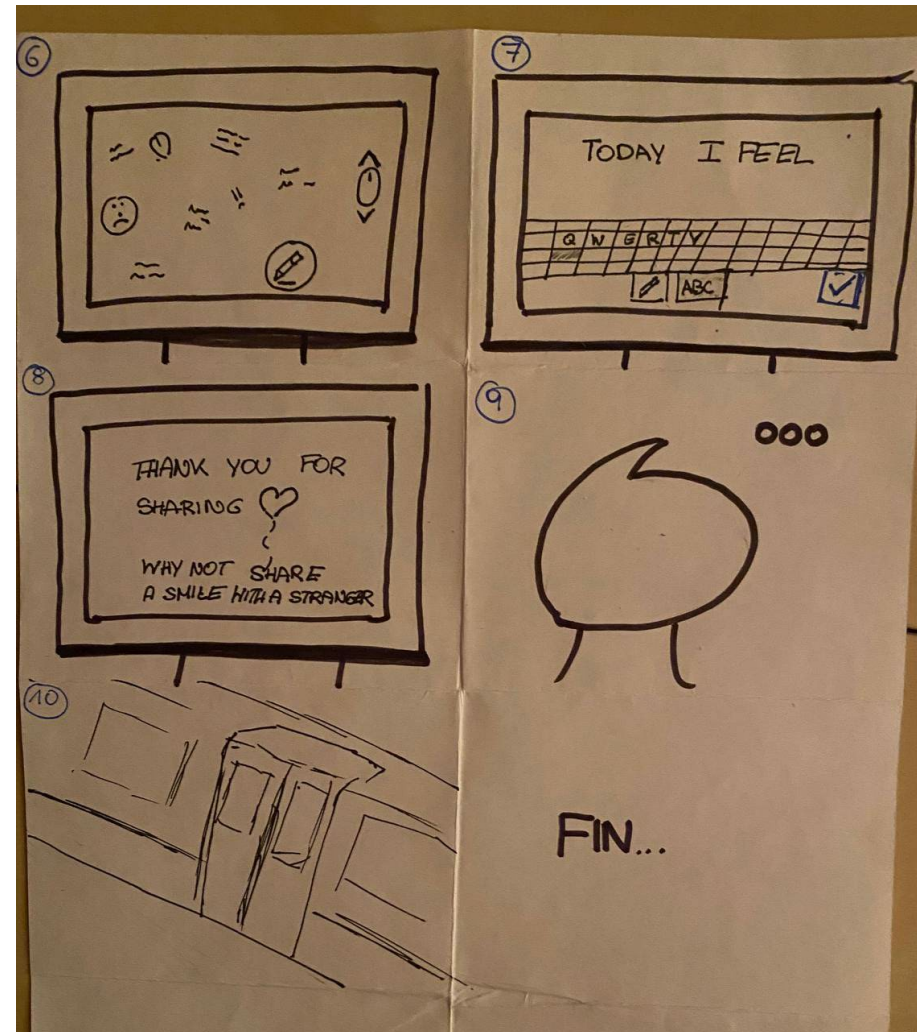
Storyboard 1/2. Vuorjoki, lines. Hoerlesberger, Mathias. Wang, Yajing. DDCD 2022.

Storyboard: Moi Helsinki

Audience: DDCD lecturers

Touchpoint: Interactive Spatial Experience

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Storyboard 2/2. Vuorjoki, lines. Hoerlesberger, Mathias. Wang, Yajing. DDCD 2022.

Storboard: Moi Helsinki

Audience: DDCD lecturers

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Hoerlesberger, Mathias. DDCD 2022.

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Storyplaying: Cardboard Hospital, Juha Kronqvist

A documentation of the "cardboard hospital" prototyping workshops held at Aalto University School of Arts, Design and Architecture.

In the workshops, patients, hospital staff and architects were creating ideas for the future hospital environment through physical 1:1 prototyping.



Frens JJ (2016) Cardboard Modeling: Exploring, Experiencing and Communicating. Collaboration in Creative Design, 149-177.

Fin