

**GAMES FOR HEALTH EUROPE**  
**2025**



# Design Rationales in E-Health Junior

## Navigating the Playground of Design

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**GAMES FOR HEALTH**  
EUROPE  
2025



**GAMEPLAY**

**Sirmizzalot**



Health Innovation

Design  
Research



**Bard  
Wartena**

Healthcare



**INNOVEREN DOE JE SAMEN**  
"Het gaat er om met 'co-creatie' met mensen met een visuele beperking"

**Innoveren doe je samen**

**PRINCIPES**

- Deel documenten vooraf
- Besluit afstemmingen
- Gebruik toegankelijke tools
- Voer testen met ervaringsdeskundigen
- Gebruik toegankelijke nummers

**RANDVOORWAARDEN**

Voor de bijeenkomst:

- Start met bijonderwerpen
- Kennismaken
- Opname maken
- Samenrollen
- Ervarend taalgebruik
- Besluit afstemmingen en afstemmingen

**MEER INZICHTEN CHECK QR CODE**

**STAPPENPLAN**

1. Ontwerpdoel
2. Methode
3. Randvoorwaarden
4. Draaiboek
5. Uitvoeren
6. Napraten

**1. Bepaal je ontwerpdoel**

**2. Kies een methode**

**3. Check de randvoorwaarden**

**4. Maak een draaiboek**

**5. Uitvoeren**

**6. Napraten**

Visio



university of  
applied sciences



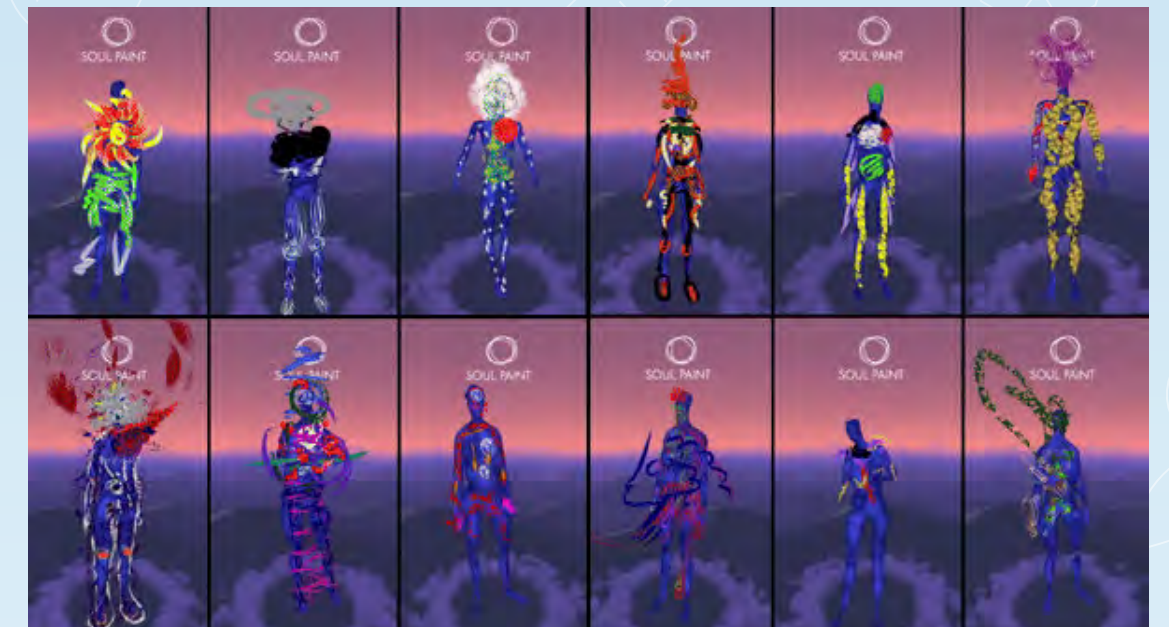
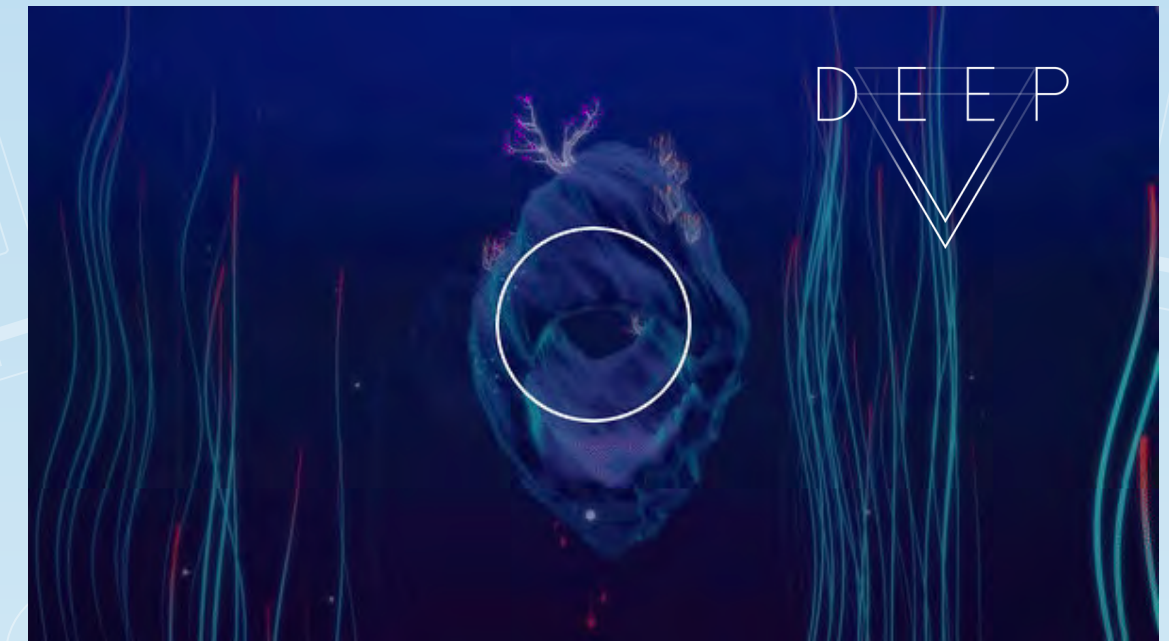
XR design



Joanneke Weerdmeester

Science

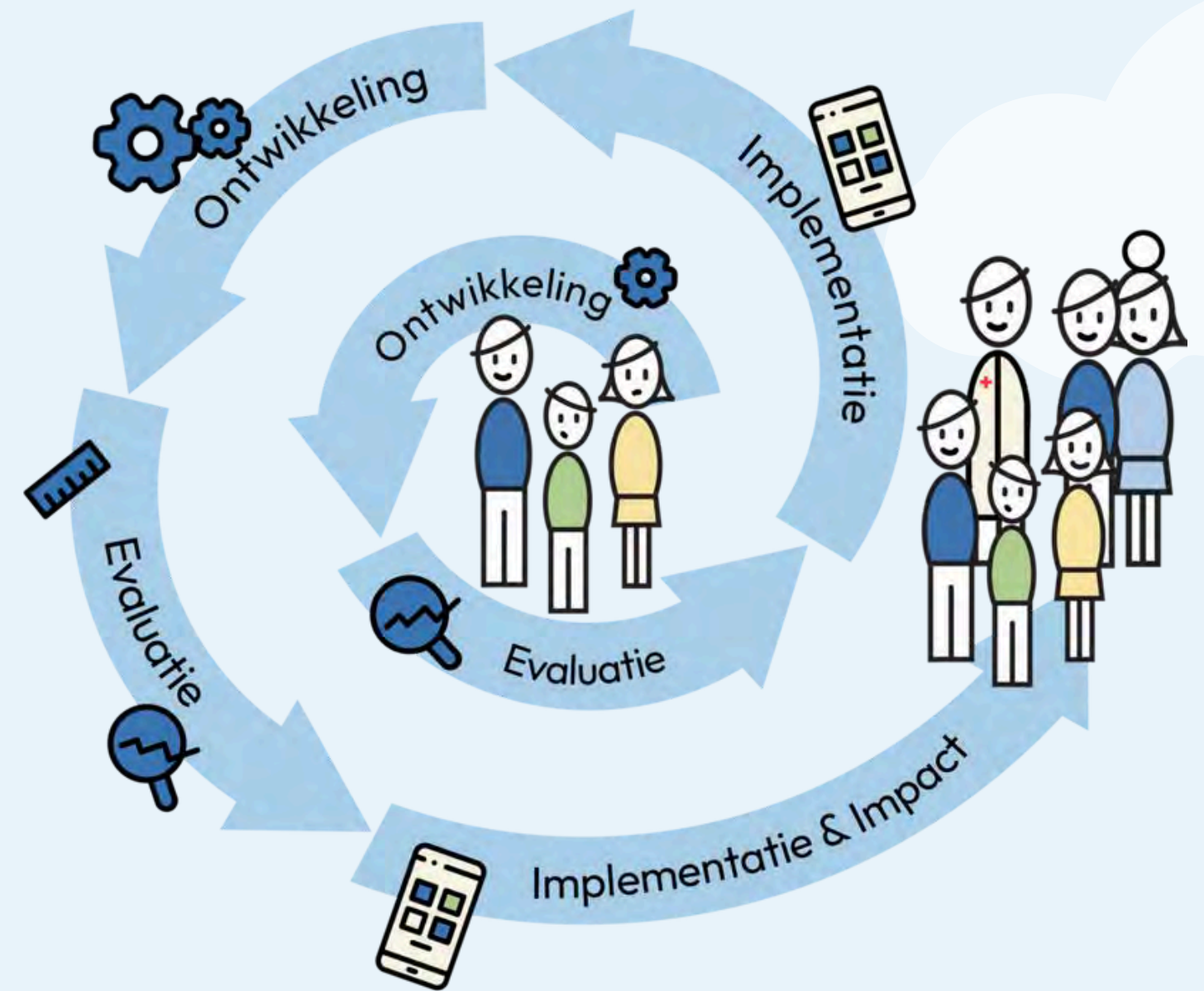
Healthcare



# E-Health Junior

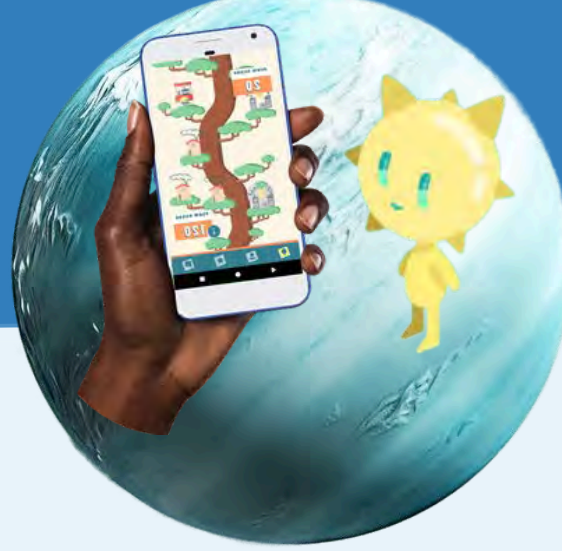
**Who?** A consortium of researchers, healthcare professionals, child welfare organizations, patient associations, and (game) design experts.

**Mission:** prevent psychological problems with scientifically validated, accessible, safe and user-friendly eHealth tools for vulnerable youth and chronically ill children.



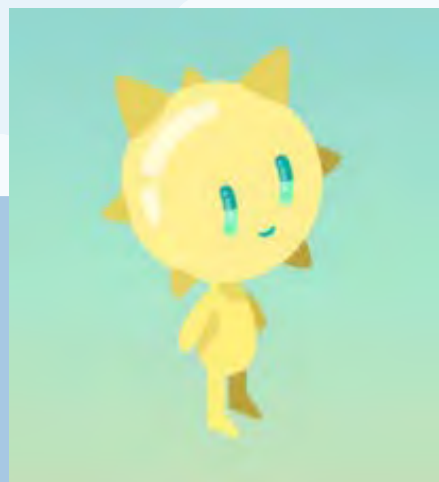


# Applications



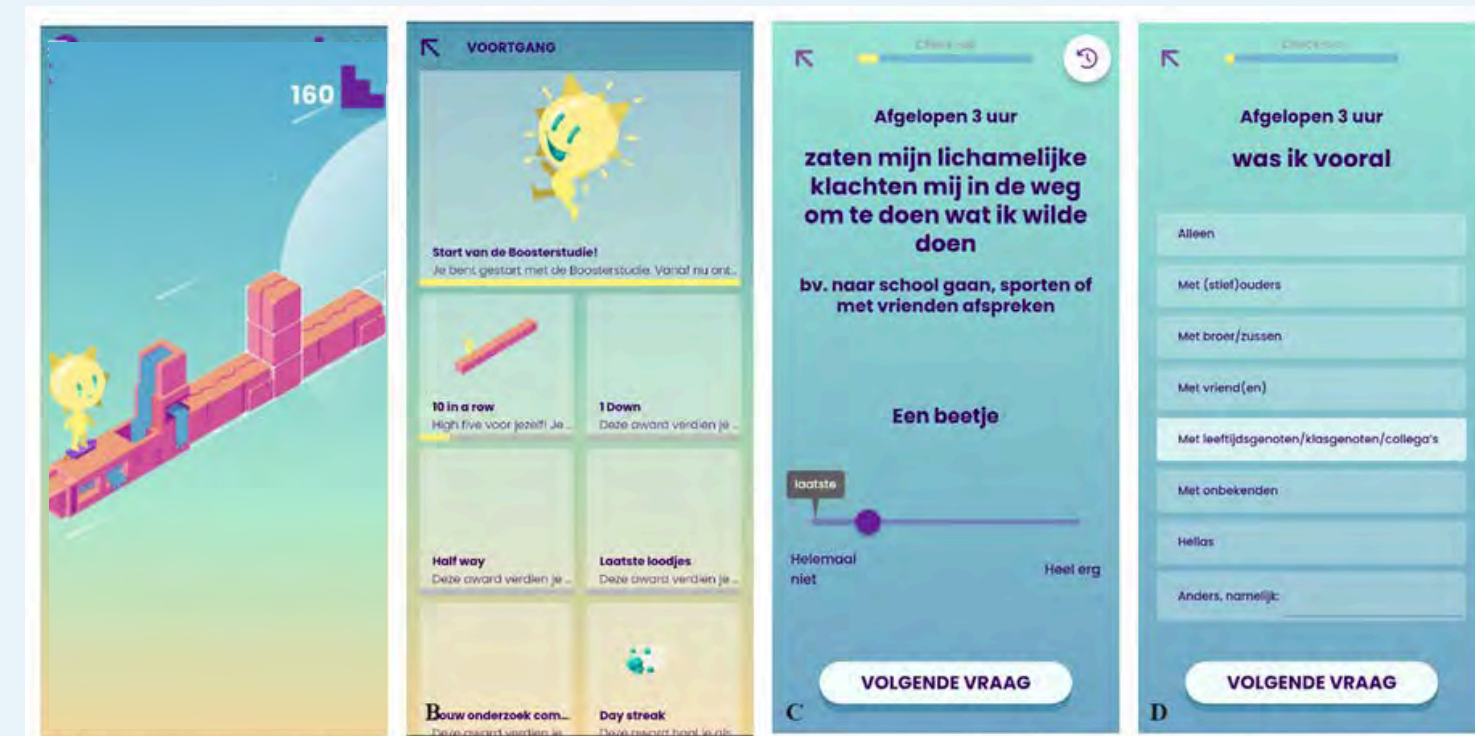
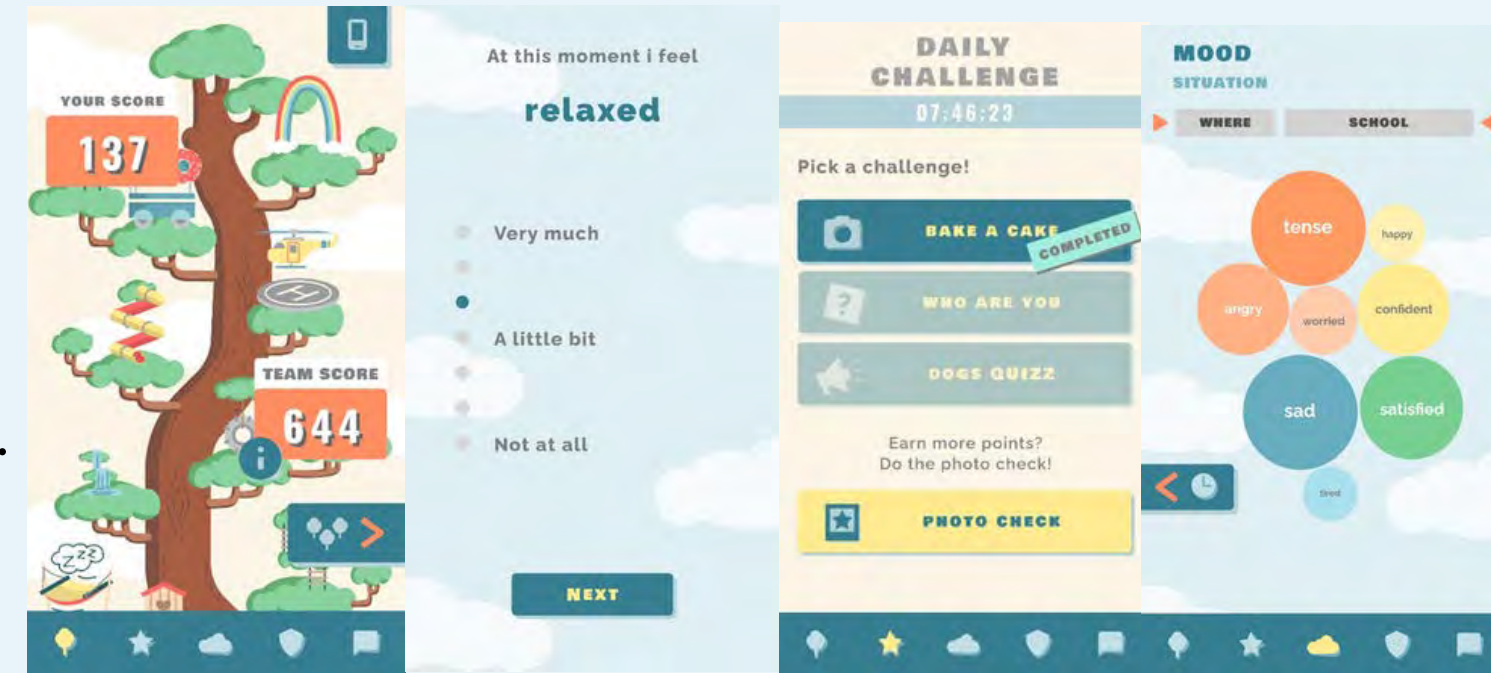
GROW-IT

- Strengthens self-insight and coping with negative feelings.
- Youth keep track of how they're feeling throughout the day.
- App gives challenges that explore different forms of coping.
- Tree grows when questions and challenges are completed.



BOOSTER

- Helps track mental and somatic symptoms.
- Encourages personal goal-setting and monitoring.
- Completing questions gives blocks for a runner-track.
- Insights are evaluated with a care professional.



# Applied design is complex



**OPPORTUNISTIC**  
**ITERATIVE, FOCUSES ON PURPOSE**  
**END USERS AS EXPERTS**  
**FOCUSES ON DEVELOPING**  
**ADAPTED FROM MANY DISCIPLINES**  
**INDIVIDUALS' RIGHTS**  
**DIFFICULT TO PUBLISH OTHER THAN BASIC**

**DESIGN**

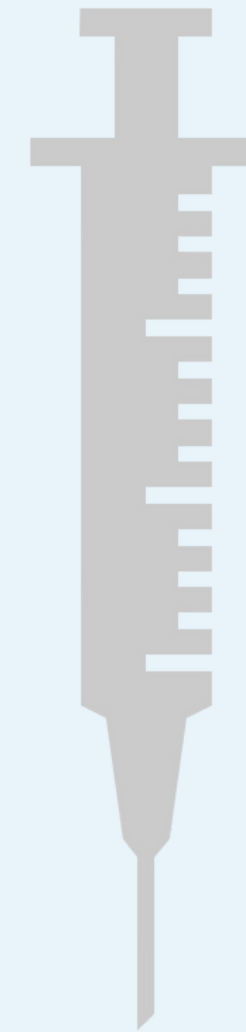
topic

**ESTABLISHING THE STATE OF THE ART**  
**LIFECYCLES**  
**REQUIREMENTS AND DESIGN METHODS**  
**IMPLEMENTATION**  
**EVALUATION METHODOLOGIES**  
**ETHICS**  
**PUBLICATIONS**

Blandford et al., 2018

**SYSTEMATIC**  
**ITERATIVE, FOCUSES ON IMPACT**  
**PROFESSIONALS AS EXPERTS**  
**FOCUSES ON ROLL-OUT**  
**RCT DOMINATES**  
**HIGHLY REGULATED**  
**VARIETY OF PAPER TYPES**

**HEALTH**





# Design rationale

## Why is the design the way it is?

- What decisions are made during the design process
- What alternatives were considered
- Why were certain choices made over others
- What trade-offs were involved



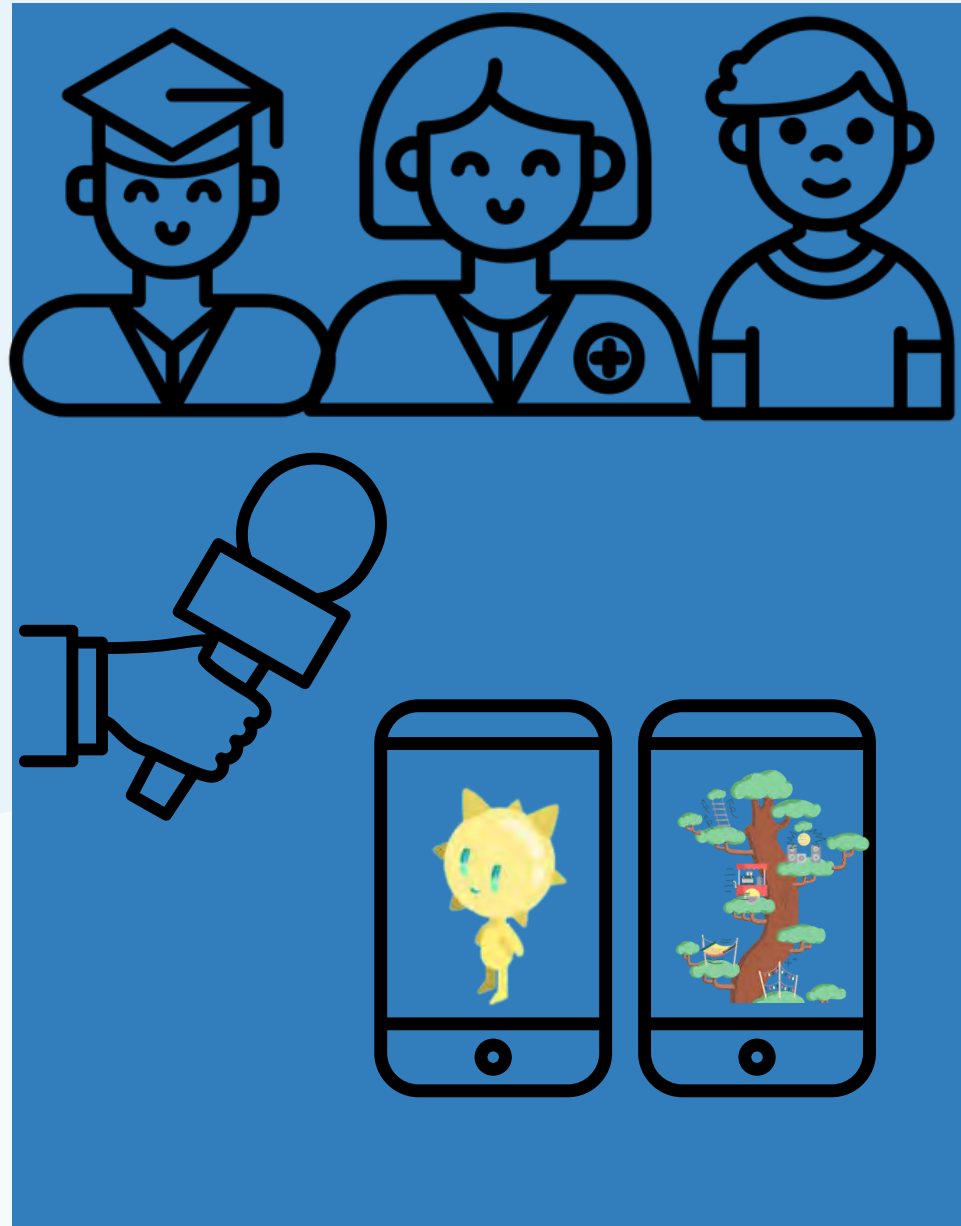
Design isn't just about solutions, it's about the "why" behind the "what."

Figuring out the design rationale helps communication, consistency, and further development or reuse of design ideas, especially in complicated design spaces!





# Our journey



Consortium interviews+  
Analysis into the spaces



Student hackathons

**Mission brief**

In deze cursus leer je:

- 👁️ Kritisch kijken naar games en ontwerpprocessen
- 👥 De dynamiek van multidisciplinaire samenwerking
- 🔍 De invloed van onderzoek en gebruikerstests
- 🔄 Reflecteren op je rol als ontwerper

**Space Exploration**

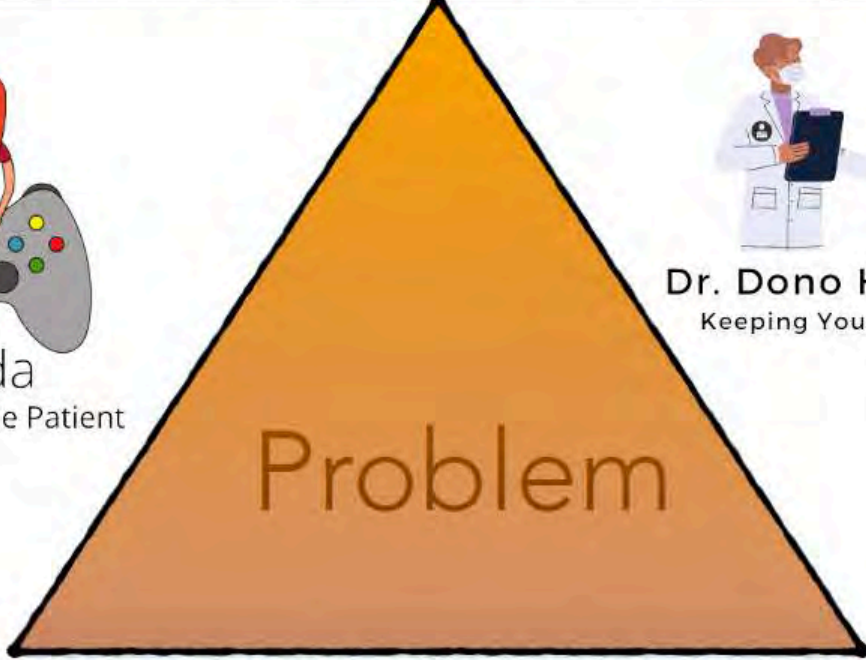
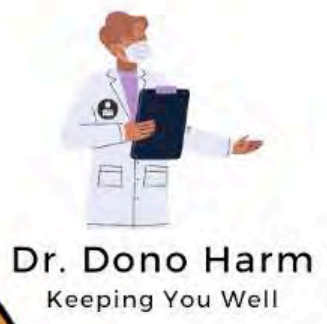
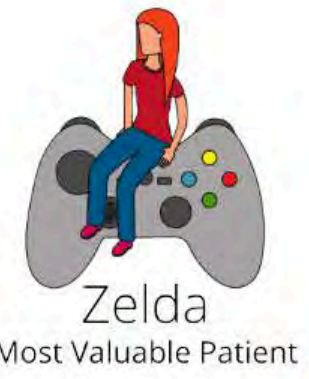
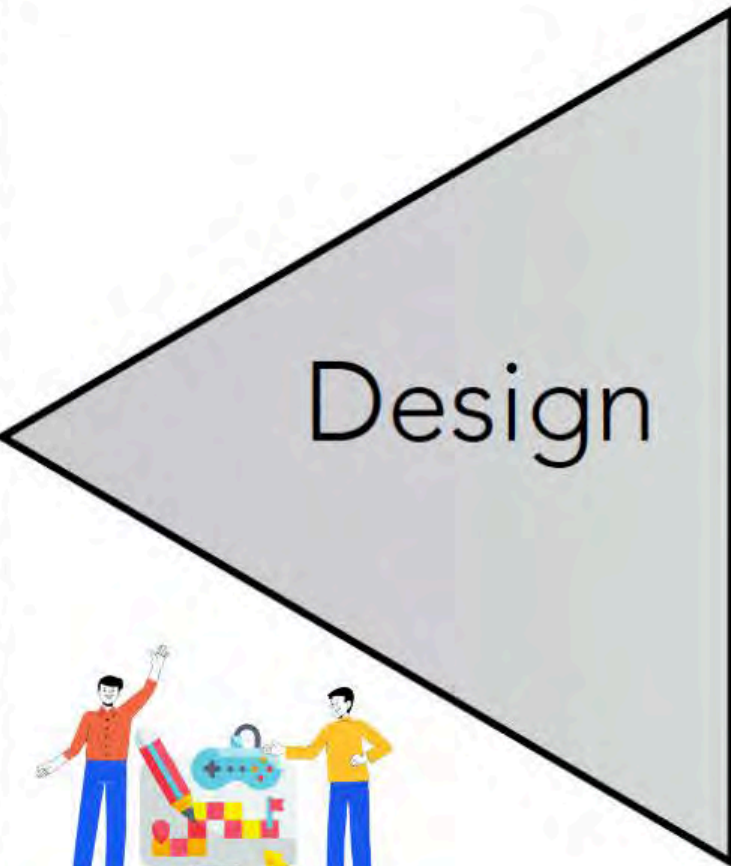
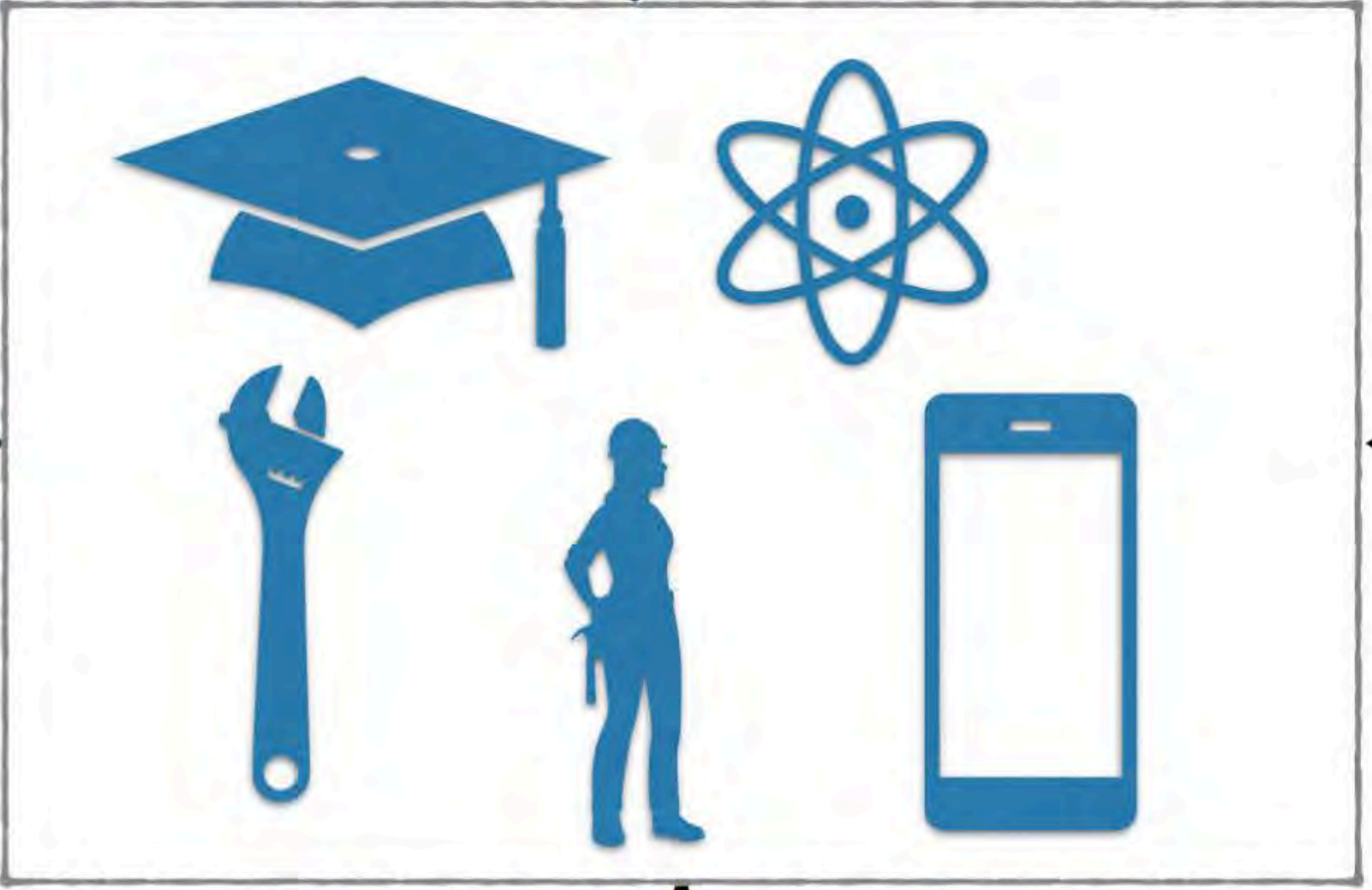
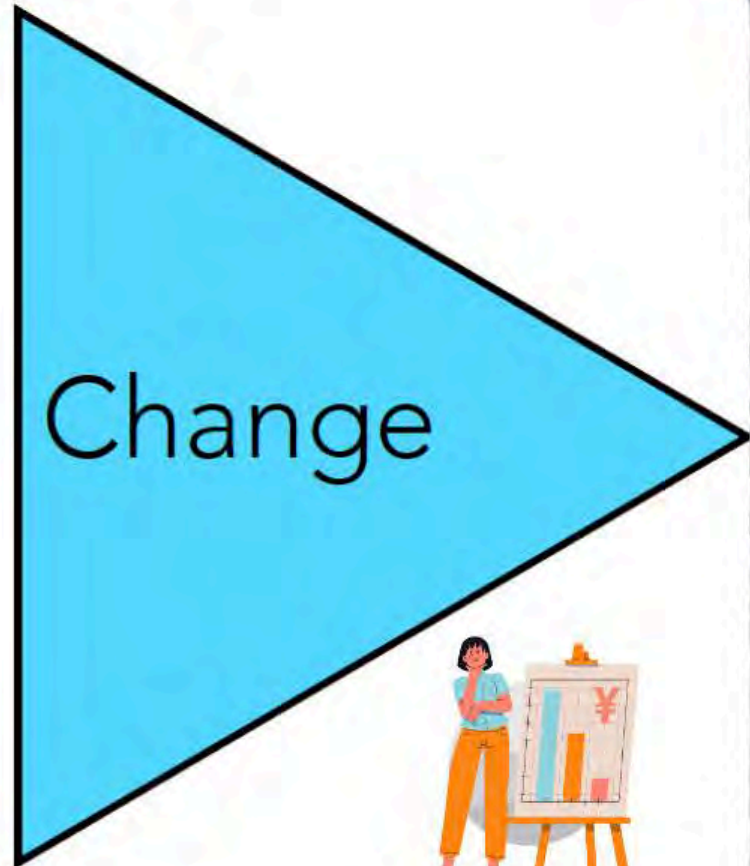
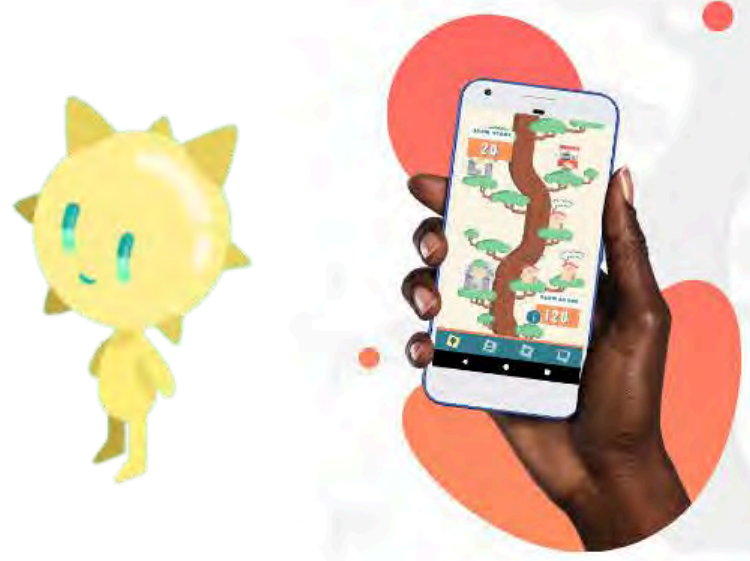
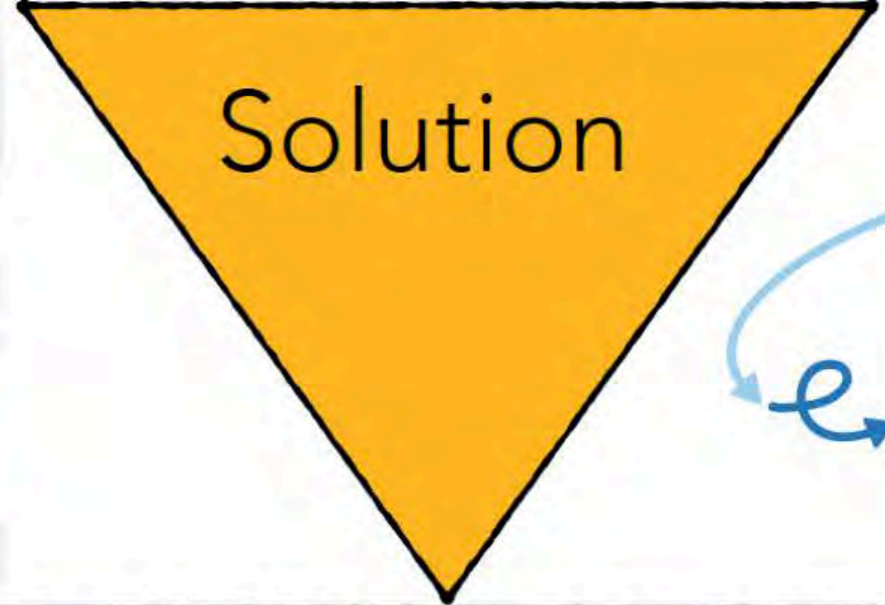
In deze cursus ga je binnen één use-case van een applied game verschillende change spaces ontdekken:

- 🔍 Problem space
- 🎨 Design space
- 💡 Change space
- 🌱 Solution space.



online course material







# The Playground of Design

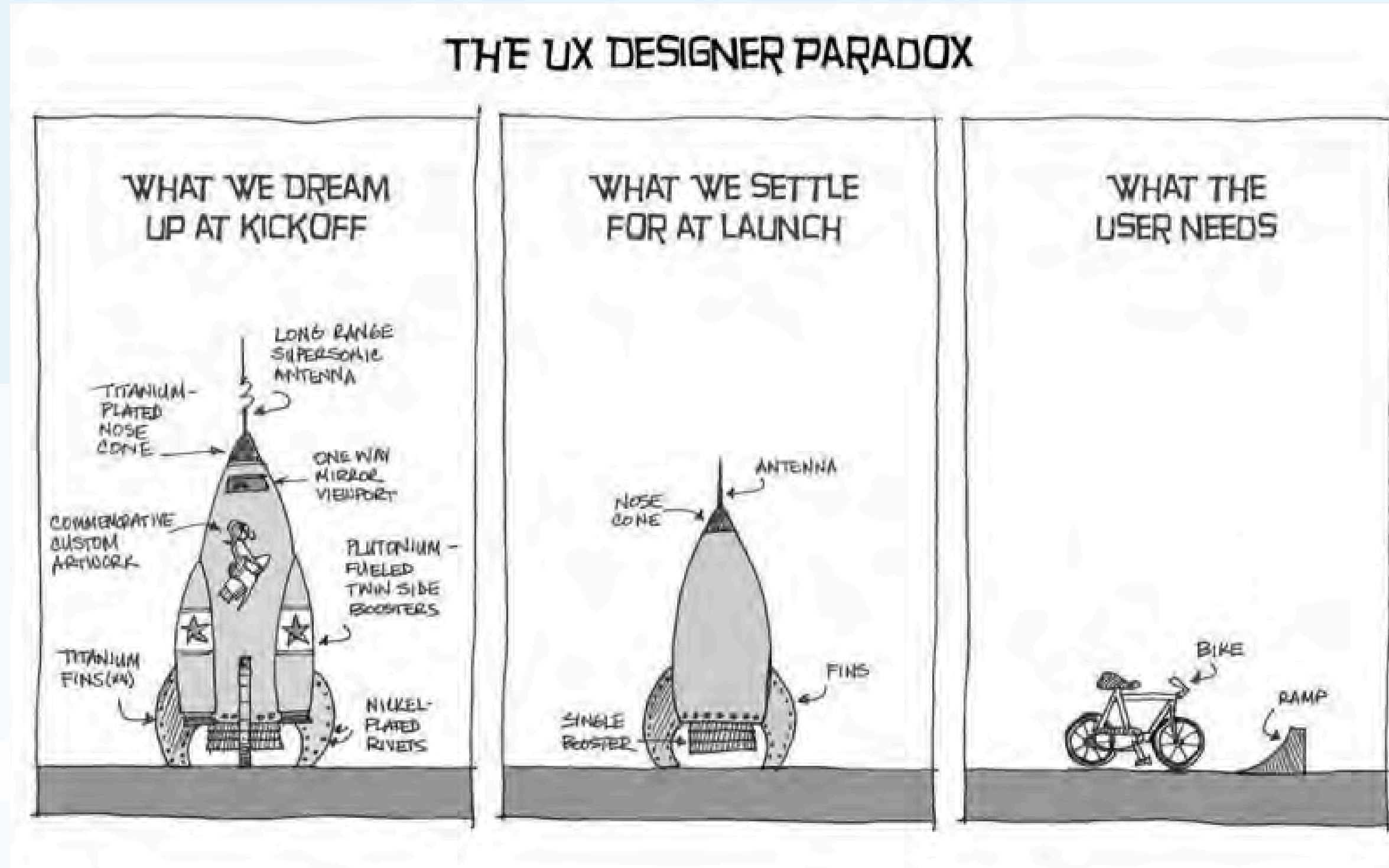
**Problem Space:** This is where you explore and define the challenge. It involves understanding the context, identifying needs, and reframing the problem. The goal is to uncover the real issues beneath the surface.

**Design Space:** Here you generate and develop ideas. It's a space for creativity, sketching possibilities, and exploring multiple directions. The emphasis is on imagination and iteration.

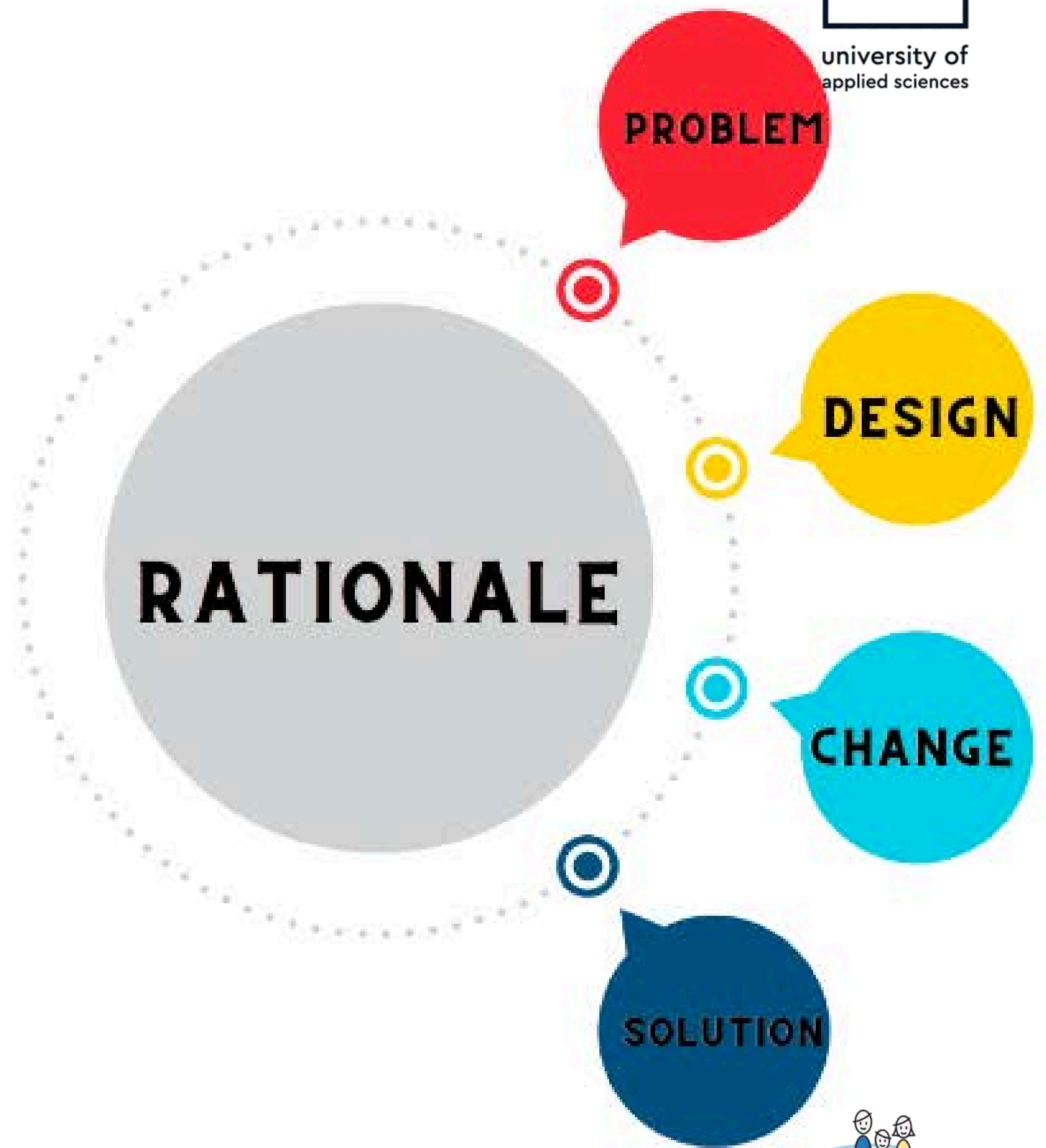
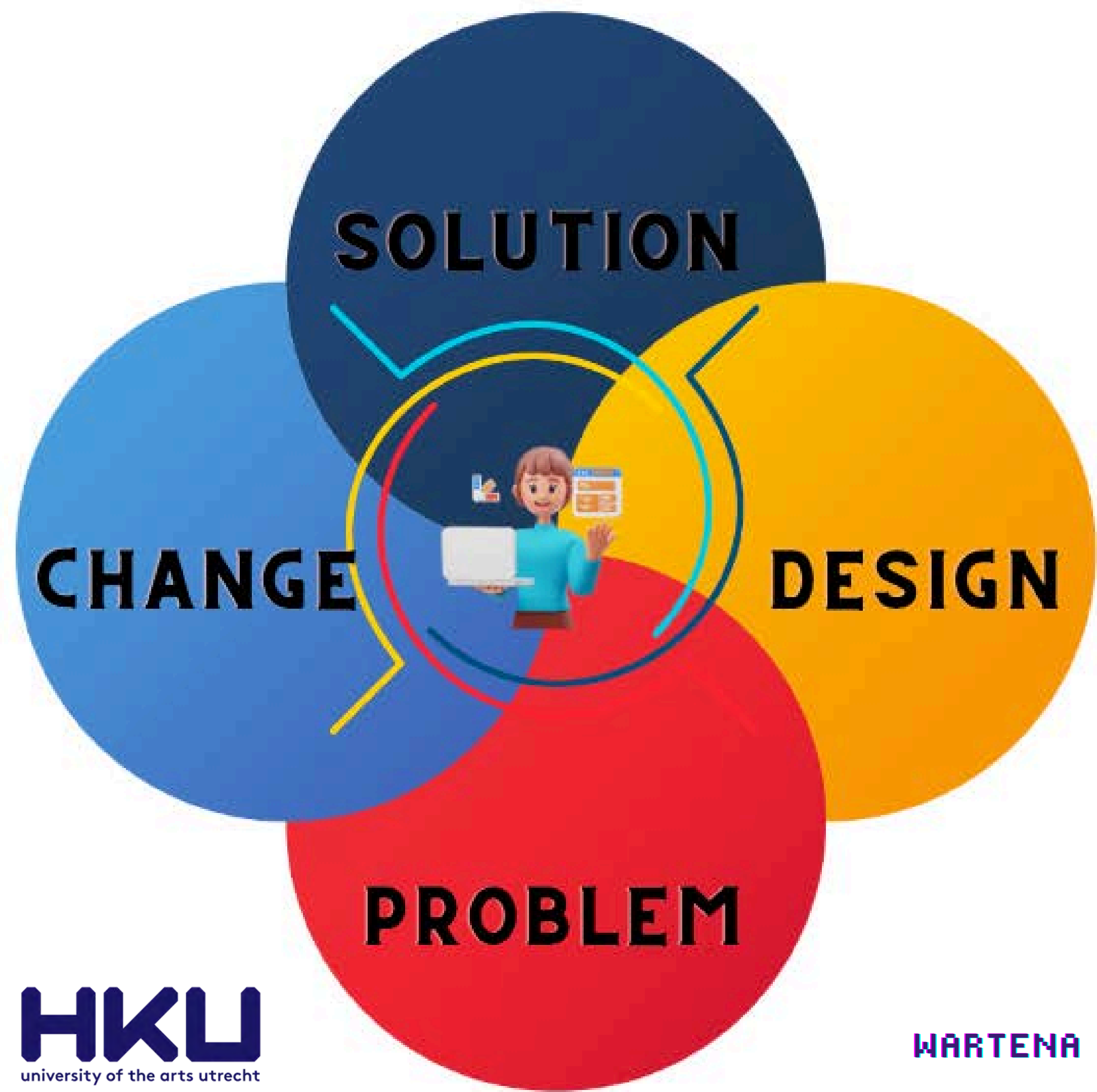
**Solution Space:** This is where ideas are tested, refined, and turned into tangible outcomes. You evaluate what works, what doesn't, and adapt accordingly. It focuses on feasibility, usability, and impact.

**Change Space:** This space looks beyond the design itself to how the design process and the design will create change in the world. It involves, social system alignment/development, implementation, adoption, and the broader societal, ethical, and systemic implications of your solution.

# The Designer's paradox







# The Playground of Design

"The most important thing is that young people gain autonomy, sense of control, and insight into how emotional well-being impacts their behavior and disease burden." – Child physician



"What I heard from children in co-design sessions is that rewards and personalisation are important. They also need a tool that doesn't place too much burden on them." – PhD student



"Questionnaires are important for data collection, but how do you make them fun and relevant for the user?" – Game Designer



"I thought it was fun to have a voice in the design process, whatever i can do to help" – Adolescent



"No this is not the kind of game i usually like to play, but it's interesting to report the bugs in the app" – Child

"You need to consider real-life implementation— what will be needed beyond the development and validation phase."

– Implementation researcher



"I've found it's crucial to align from the start. Researchers focus on theoretical mechanisms, while designers prioritize user needs—which don't always align. But you can't ignore the theory, or you risk losing the foundation of the intervention."

– Lead researcher



" We know from a research/clinical standpoint what is healthy but youth may not even know why certain things (e.g. insight in emotion) are important. Thus, onboardig is important. –

UX researcher



# RRRR's (Space Pirates)



**Rigor:** A disciplined, *evidence-based* approach that provides the backbone for all design decisions.

*Researching, testing, and validating*, ensures the quality and reliability of the process and solution.

**Relevance:** Design must address *genuine needs* and priorities in the *real world*. Staying attentive to users, stakeholders, and contexts ensures the work remains meaningful, grounded, and genuinely beneficial.

**Rapidness:** An agile, quick-turnaround mindset encourages *fast prototyping*, swift feedback loops, and iterative improvements. Helps teams adapt to changes and maintain momentum without sacrificing quality.

**Resonance:** *Beyond simply "fitting"* user requirements, resonance means achieving a *deeper emotional, cultural, or systemic connection*. It involves a design process that resonates with all participants—*fostering understanding, shared ownership, and lasting engagement* among team members and stakeholders.



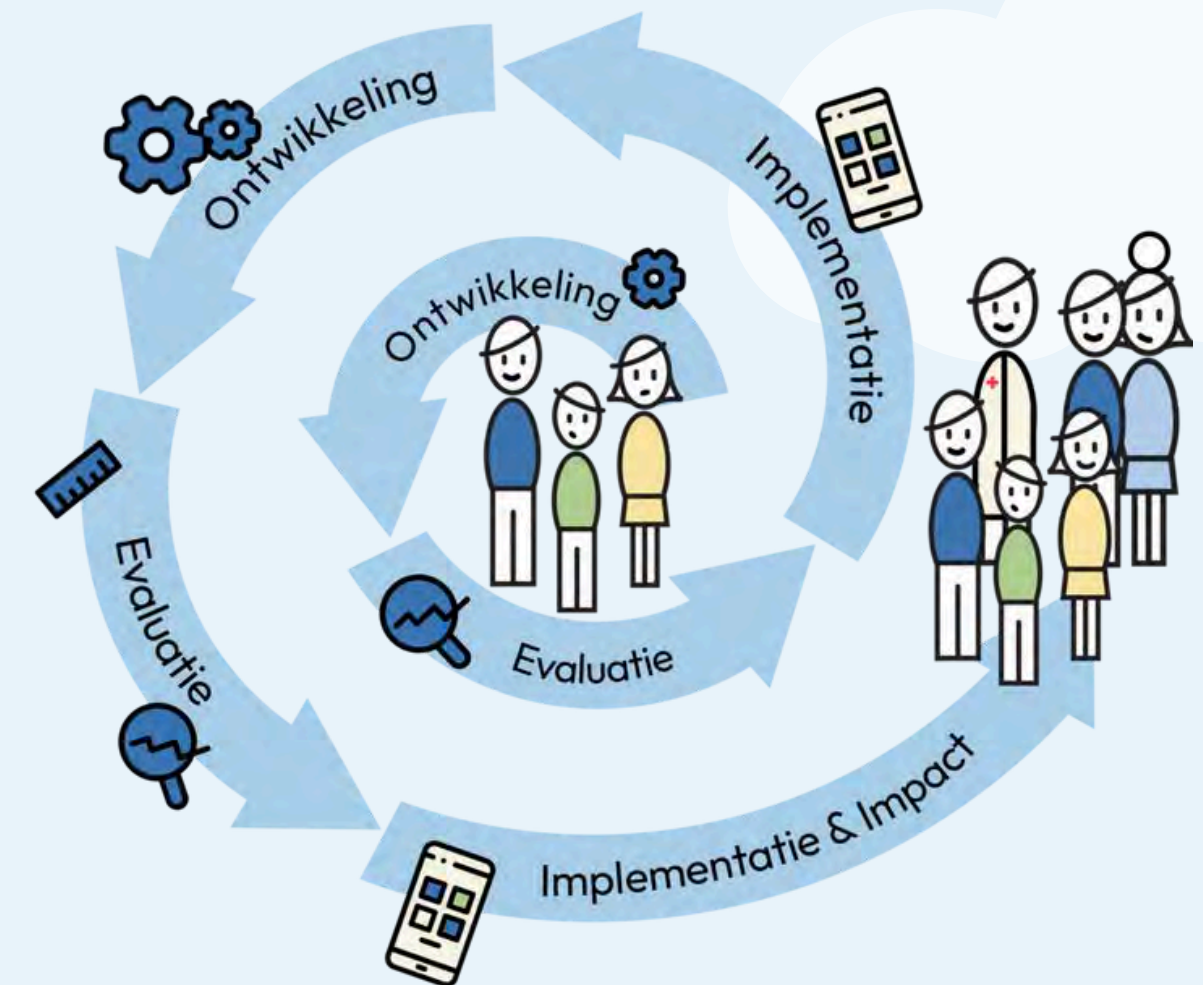
# Strengths and challenges

## Where lie the strengths?

- Broad consortium which encompasses multiple stakeholders and perspectives!
- Developed two extensively researched working products

## What are main (design) challenges?

- Rigor-heavy but other R's (e.g. rapidness) less represented.
- Articulation of design rationale's.
- Balancing of needs from various research groups and other stakeholders





# Main take-aways

- Designing e-health tools with multiple stakeholders is challenging
- Keep questioning the **why** behind the **what**
- Keep prioritising the end-user's needs in their daily life
- Document rationale and decisions to navigate (future) design processes
- Mapping with spaces (problem, design, change, solution) can help you traverse the complex playground of design
- Focus on sense-making(not sanewashing)
- Perspective-taking and making, help in forming design rationales



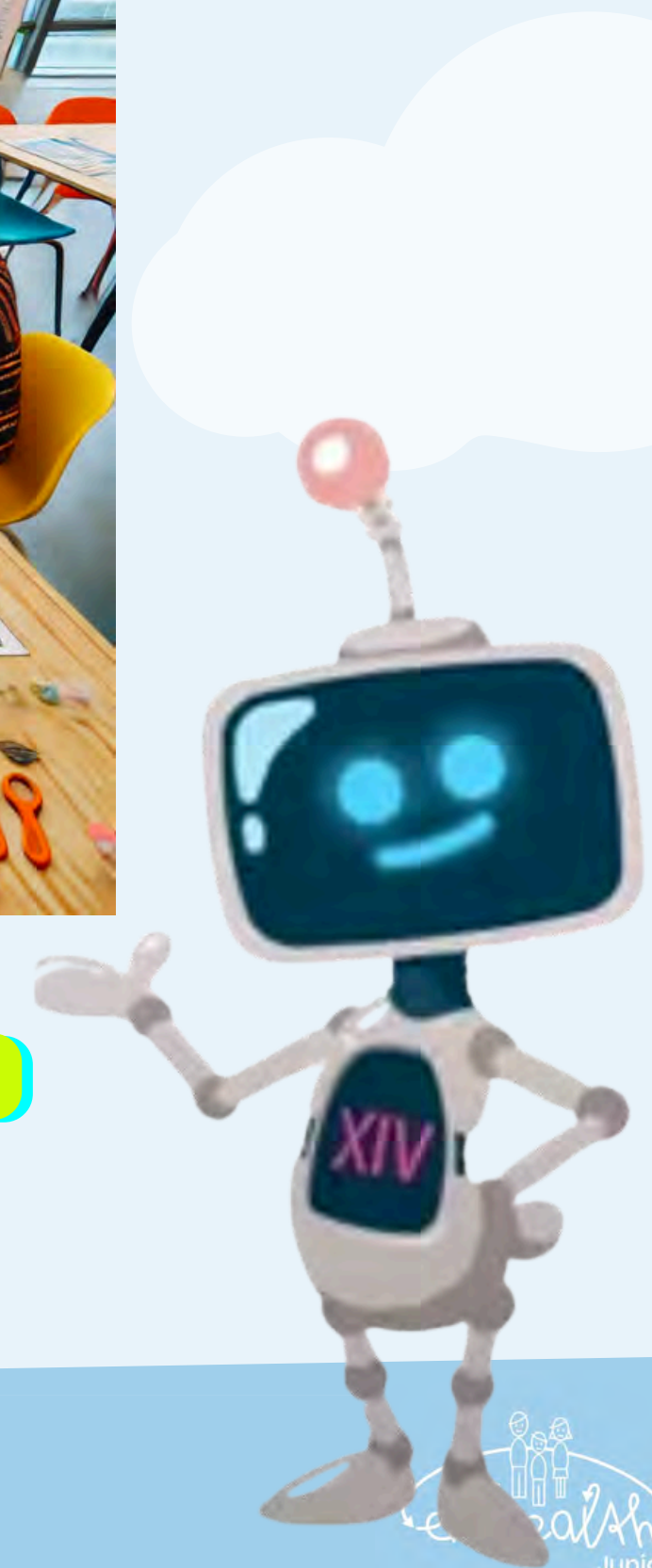


# Coming Soon !



# IMIOOC

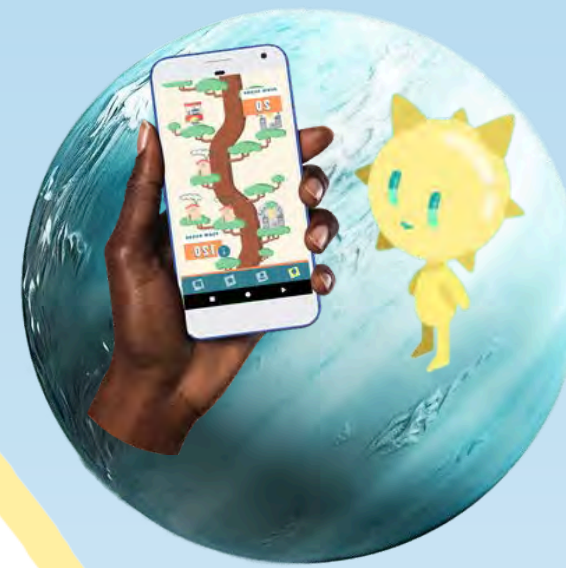
# WORKSHOP





# Acknowledgements





# Let's connect!

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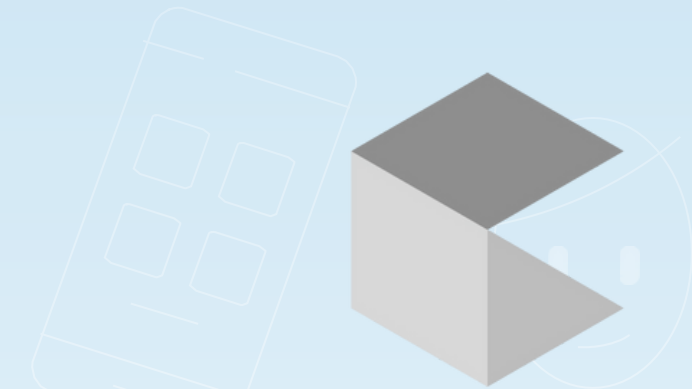
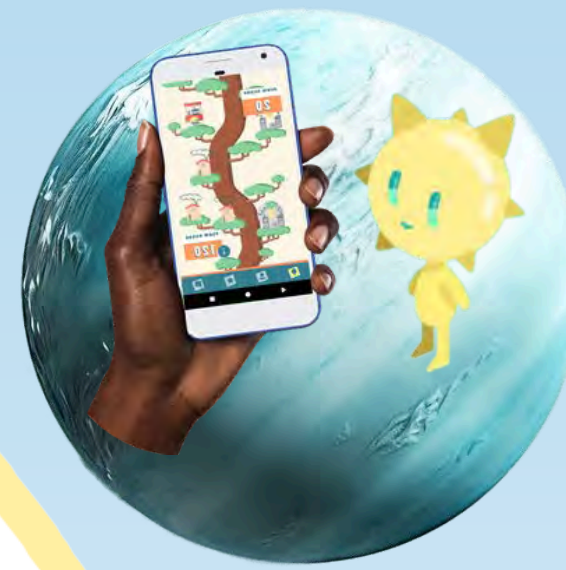
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