# Portfolio

## Selected work







Stefan Mol UX Designer



**Stefan Mol** UX Designer

## Helping aid workers communicate in conflict zones with Whiteflag

As a UX designer, Stefan was responsible for designing the front-end application end-to-end. Activities included user research, interface design and user validation.

Apr – Jun 2023 • Capgemini & Save the Children Fund

## 2 Playfully introducing people to quantum computing

Designing a mobile game in a limited time frame focused on quantum computing to showcase at tech evens and inspire dialogue.

Dec 2023 • Quantum lab (Capgemini)



## Helping aid workers communicate in conflict zones with Whiteflag

## Whiteflag

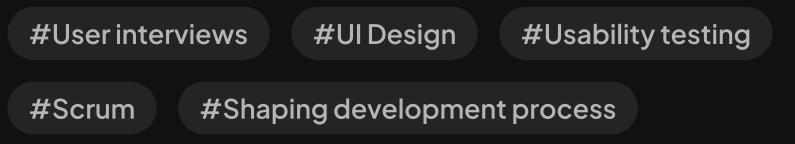
Capgemini set out to make a front-end application for the Whiteflag protocol. The protocol and associated technology enable combatant and neutral parties to communicate predefined signals to prevent collateral damage and casualties in conflict zones.

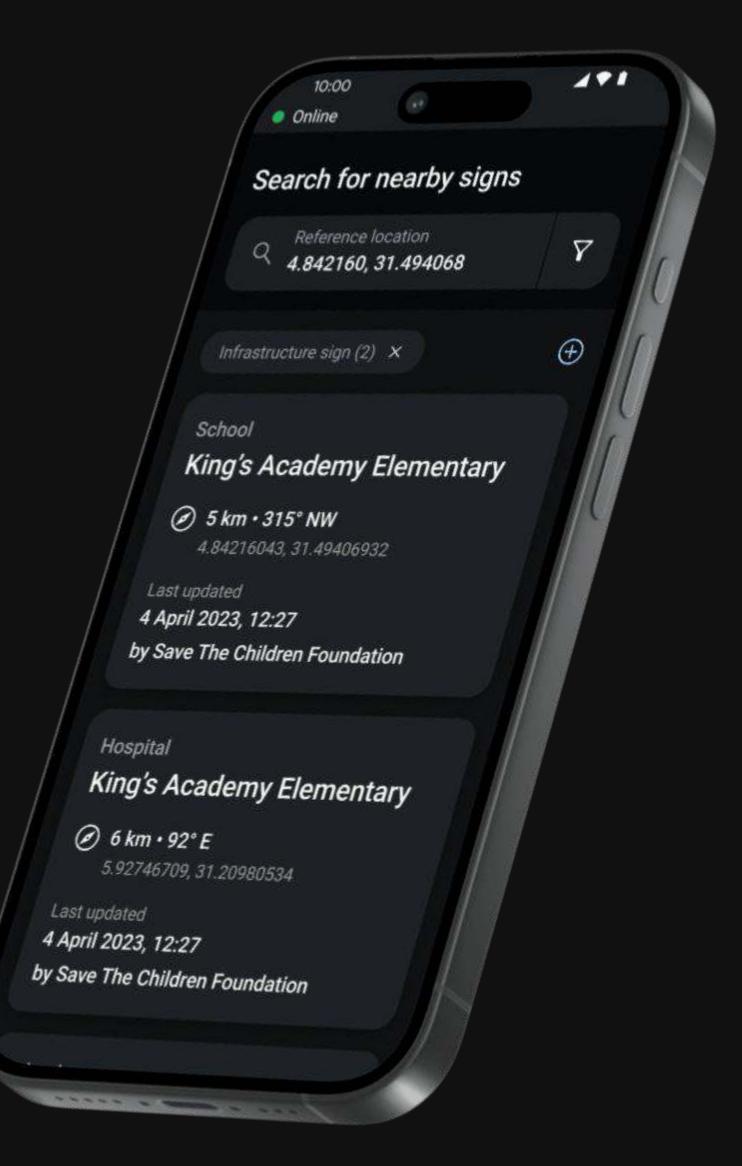
The goal of the project was to showcase the technology by creating a minimum viable product (MVP) which is to be used in South-Sudan by aid workers of Save the Children.

### Client

Capgemini & Save the Children Foundation

### Expertise





## Challenge

I was responsible for designing the front-end application. Activities included user research, interface design and user validation.

Challenges included:

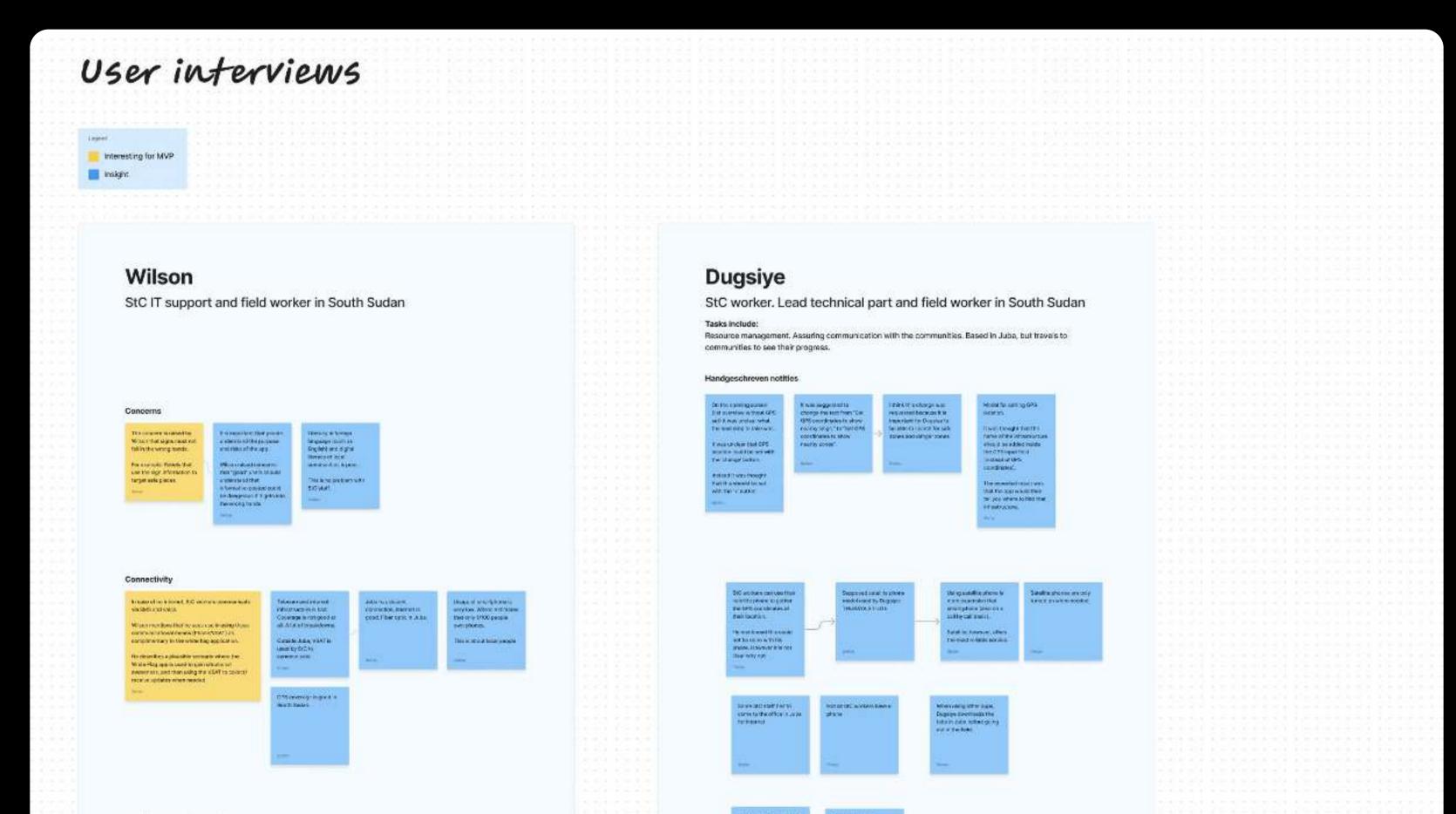
- Gathering insights about users and their environment while being a continent apart.
- Designing for poor internet connectivity.

## MyApproach

### **User research**

The project knew many stakeholders with different visions. To make sure the MVP would not deviate from its goal, I thought it was extra important to conduct user research with aid workers in South Sudan. (They were the target audience in the chosen use case for the MVP). This way, assumptions could be verified or invalidated and the team could confidently make informed decisions.

After conducting remote interviews with aid workers in South Sudan, I visualized insights to present them to the team and stakeholders. Visualizing the insights helped me to engage individuals who were not present during the interviews, enabling collaborative efforts.



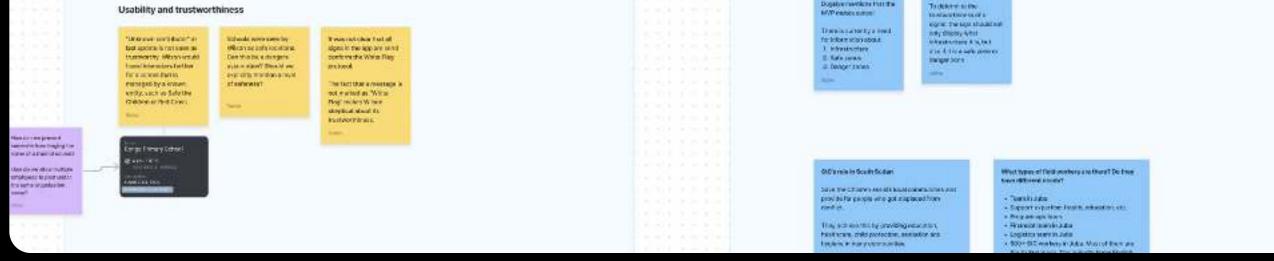


Fig1 Clustering user research results

### Interface design

Development was done using the Ant Design System. When designing the interface, lincluded the components available in the system and mirrored my designs to them. When customization was needed, I had close contact with our developer.



### **Organizing refinements**

I organized refinements with the team to discuss technical possibilities, development impact and to assist with implementing designs. By connecting often with the developer, I aimed to collaboratively come up with new solutions to make designs fit within the capabilities and time frame of the project. It also helped us decide together which trade-offs we wanted to make, in cases where this was necessary.

Furthermore, I organized refinements with the product owner (from Save the Children Foundation) to tweak designs and manage expectations when needed.

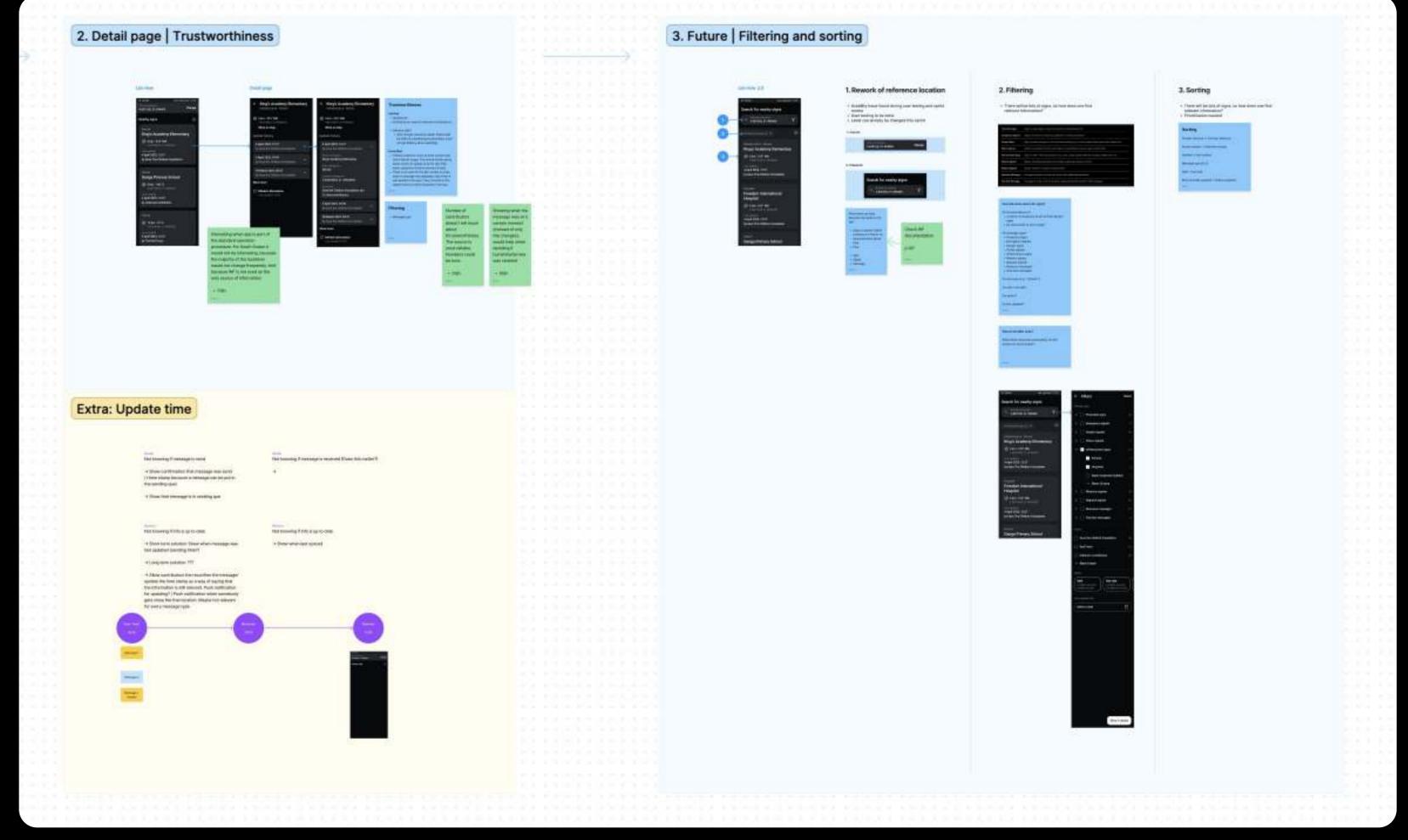


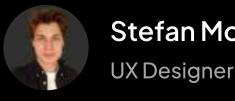
Fig 2 Collaboration board I made to record comments during refinements

### Making UX part of the DoD

During the project, I noticed that the development team and I had different expectations about the extent to which the designs should be implemented in the final build. As a result, important UX decisions where not making it to the final product. To address this issue, I called the team together to define a definition of done where UX was also included.

### Lessons learned

Being a UX designer doesn't mean your role should end at designing. I learned that, as a designer, I can assist many parts of the project, especially within a small team. At Whiteflag, I helped shape our strategy and processes.



## Playfully introducing people to quantum computing

## Mobile game

Quantum Apocalypse is a mobile game with the goal to educate people and to spark conversation about quantum computing.

#Refinements

### Client

Quantum lab (Capgemini)

Expertise

# UI Design

#Design handover

#User testing

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## Challenge

When I joined the team, Quantum Apocalypse already had a functioning interface. The team had asked me to improve its user experience. I was responsible for designing the user interface in a way that:

• conveyed the game's learning objectives to the player;

- looked and felt fun, like a game;
- optimized the game's user experience; and
- took into account the tight deadline.

## **My Approach**

### Analysis

I conducted a (UX) analysis with two goals in mind:

- 1. To understand the game's mechanics and its current interface, so I could iterate further on it (I explicitly asked my team not to explain the game to me, so I could already start on goal #2);
- 2. To uncover usability issues by playing the game as a first time player.

Quantum Apocalypse	A. Goal	B. Events	C. Dashboard	D. Play controls	E. Action controls
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Fig1 Visualization of my analysis. I described the UI elements and game mechanics. Later I confirmed them with the team.

### Interface design & collaboration

I organized a session with the team to make an overview of tasks and to break them down into manageable pieces.

By breaking up the design into small pieces, I created the possibility for the developer and myself to work in parallel without having to wait for each other.

By making agreements with the developer, I learned to fit the design within the technical possibilities and deadline.

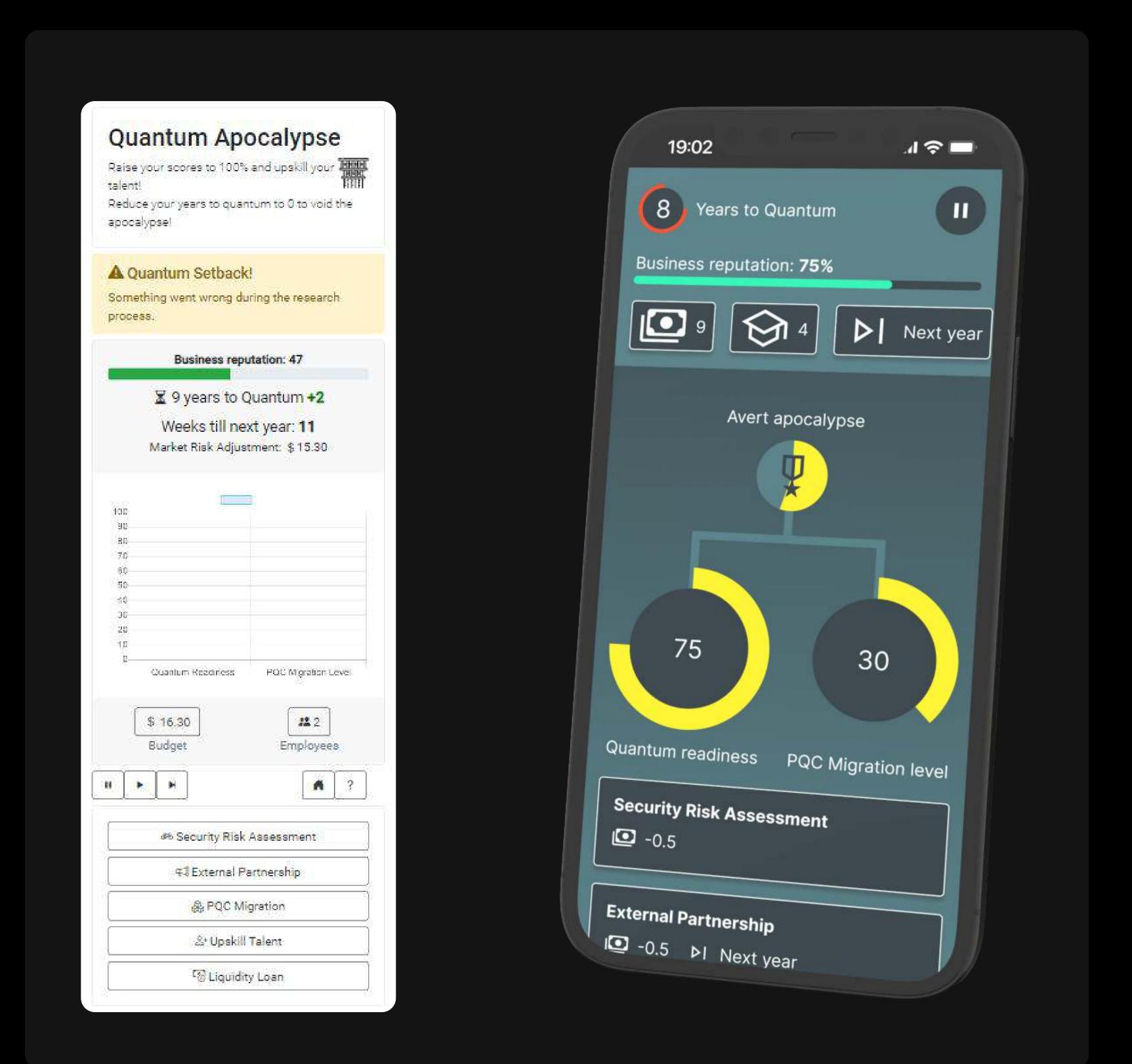


Fig 2 Before (left) and my design iteration (right)

### **Design handover**

The design was not static; Elements could move and change based on the player's input and state of the game.

To communicate these 'invisible' behaviours, I wrote functional descriptions for and with the developer. Furthermore, I created clickable prototypes that showed how different screens where connected and how elements where animated.



Business reputation: 75%

### **Functional description**

This box is part of the Game screen UI. It's purpose is to let the player know when they are at risk of losing the game.

• The component is sticky to the top of the screen.

The component consists of:

A "Years to Quantum" count down timer
Business reputation

#### Years to Quantum

- The number inside represents the years left.
- The red circle indicates the weeks left in the current year.
- The red circle starts full each year and counts down (clockwise or
- counterclockwise) until it is invisible.
- When the red countdown is over, a new year starts and the red count down is fully visible again.

#### **Business reputation**

A bar graph represents the percentage of business reputation. In addition to the visual bar, a percentage is represented underneath it for better precision.

The bar changes color based on the percentage: • 0 - 25 = Red • 26 - 50 = Yellow • 51 - 100 = Green

Business reputation

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Fig 3 Example of functional description for one of the interface components

### **User tests**

To validate whether the design had achieved its goals, I prepared and performed user tests. I adapted my design based on the results and consultation with the team.

### Result

