

Design a tool to help users manager heat parameters at home

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Project overview



The product:

The users needs the app and responsive website that help them to set and manager warm parameters at home - the temperature for hot water, heating and warm floor. These tools allows them to control heat consumption and cost, choose the time period and look at charts. The target users are the busy people that needs to set and manager warm parameters using phone, tablet or desktop.



Project duration:

December 2022



Project overview



The problem:

Users needs to set and manager warm parametres remote (hot water, heating and warm, floor), control their consumption and cost.



The goal:

Design the app and responsive website that allows users set and manager heat parameters at home using phone, tablet or desktop.

Project overview



My role:

Junior UX Designer



Responsibilities:

Paper and digital wireframing, low and high-fidelity prototyping, accounting for accessibility, iterating for designing, determining information architecture and responsive design.

Understanding the user

- User research
- Personas
- Problem statements
- Competitive audit
- Ideation

User research: summary



I created empathy maps and personas to understand the users i'm designing for and their needs.

I discovered that the first group the users wants to set and manager warm parametres remote (hot water, heating and warm, floor), control their consumption and cost, using mobile application at any place and time.

The second group the users wants to set and manager warm parametres by hand (hot water, heating and warm, floor), but needs to control their consumption and cost using website at home on desktop computers, tablets or phones.

Persona 1: Name

Problem statement:

John is a businessman who needs to use Mobile App for managing warm parameters at home because he doesn't have time to do it by hand.



John Blackpool

Age: 50

Education: Degree in Economics

Hometown: London

Family: Married, 2 sons

Occupation: Businessmen

"I would like to manage warm parameters at my home and control cost of these services"

Goals

- Use Mobile App for manage warm parameters at home (hot water, warm floor and heating)
- To have opportunity to manage warm parameters on mobile APP
- To control cost of services on mobile APP

Frustrations

- Has difficulties to manage warm parameters by hand at home, because he often come back to home late
- Has frustrations at the end of the month about cost of the services
- Has frustrations about the temperature at home in the morning after the night

John is a successful businessman, lives with the family outside the London. He doesn't have much time to manage warm parameters at home by hand. He needs to use Mobile App for managing warm parameters at home (hot water, warm floor and heating) and control cost of the services each day.

Persona 2: Name

Problem statement:

Jeremy is elderly person who needs to monitor warm parametres on website, using computers or phone, because he has difficulties with using Mobile Apps.



Jeremy Crown

Age: 70

Education: Degree in Finance

Hometown: London

Family: Married, 3 sons

Occupation: Retired

"I would like to control cost of my home services on website, using computer or mobile phone"

Goals

- Wants to control cost of services at my home on website, using computer or mobile phone
- Needs to manager parametres of hot water, warm floor and heating by hand
- Needs the monitoring on website

Frustrations

- Has difficulties to use Mobile Apps
- Has frustrations with navigation of websites
- Has vision disability

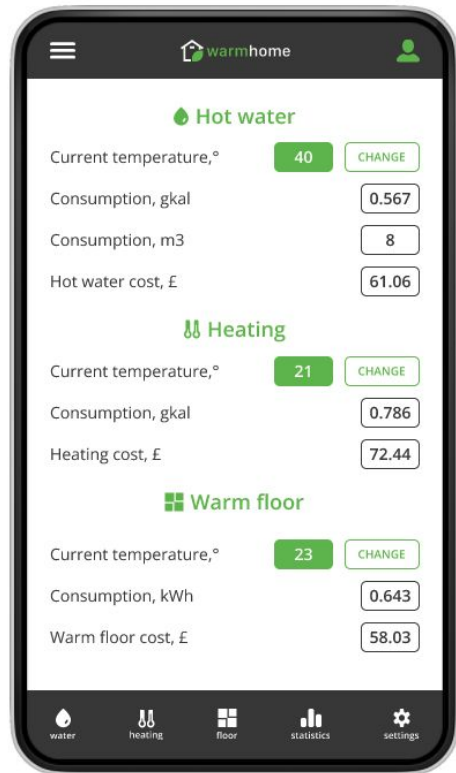
Jeremy is an elderly person. Who has difficulties with using Mobile apps and frustration with navigation of websites. Needs to manager warm parameters at home by hand, but wants to monitor parameters on website, using computer or mobile phone. Has vision disability.

Starting the design

- Digital wireframes
- Low-fidelity prototype
- Usability studies

Digital wireframes

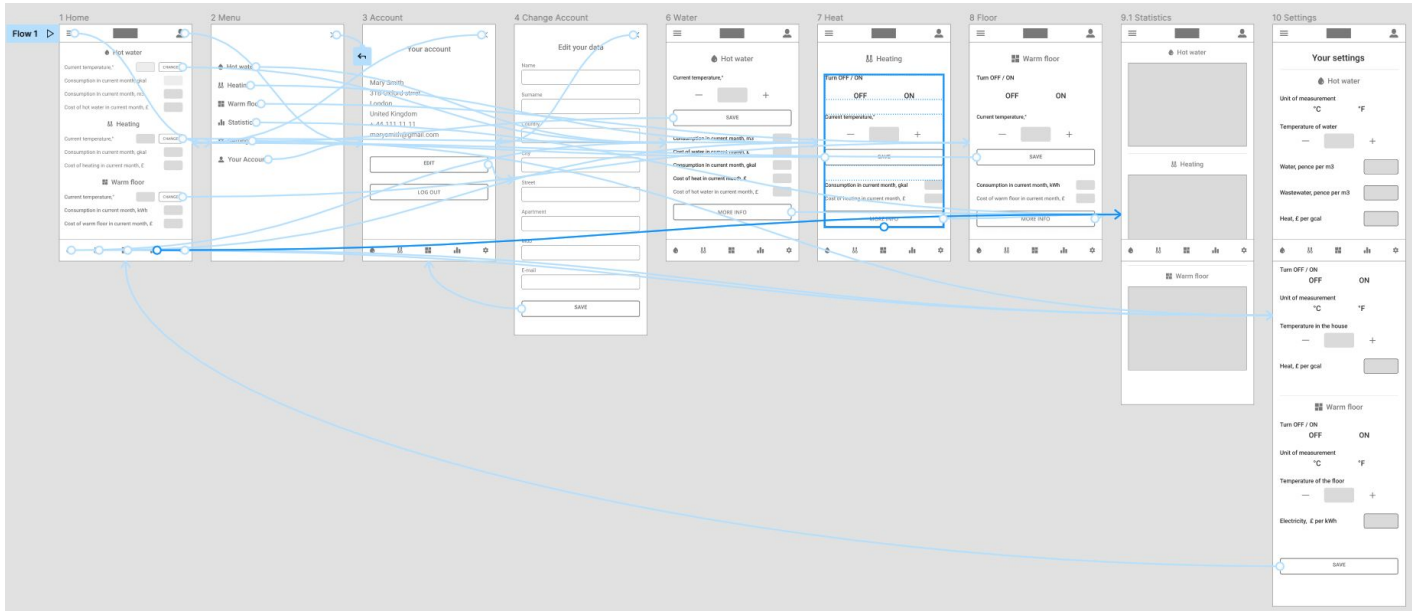
After ideating and drafting some paper wireframes, I created initial designs for the Warm Home App. The designs focused on set and manager personal settings for warm services at home, control their consumption and cost.



Change button allows users to set their personal settings for temperature of hot water, heating and floor.

Bottom navigation bar helps users to move through the app screens - choose hot water, heating, floor, statistics or settings.

Low-fidelity prototype



Low-fidelity digital prototype for Warm Home App is created in Figma. It displays the complete user flow - from the Sign Up / Log in Screen to the Statistics Screen (for watching consumption of the warm services and the cost charts). All buttons are interactive and show the connections between screen. **Look at [Low-fidelity prototype for arm Home App](#)**

Usability study: findings

These were the main findings uncovered by the usability study:

1

Easy navigation

Elderly people have some difficulties with using navigation

2

Color contrast

Users with vision disability and all users in some conditions need to use website with good color contrast ratio

3

Statistics

Users need to set time period for charts to analyze consumption and cost of the warm services

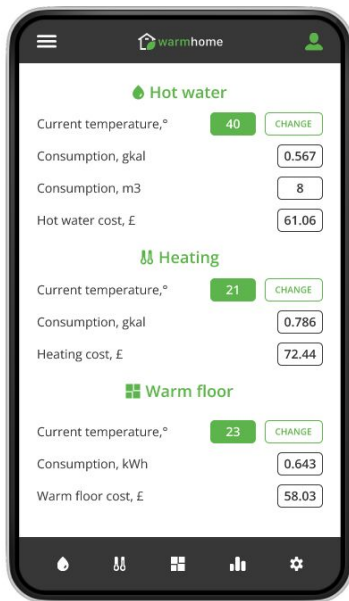
Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

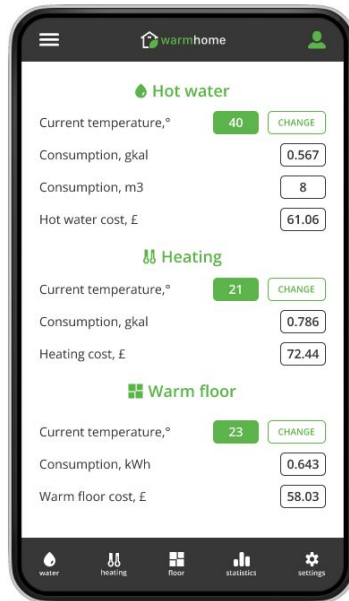
Mockups

Maked icons on bottom navigation bar with more accessibility - added text below the icons.

Before usability study



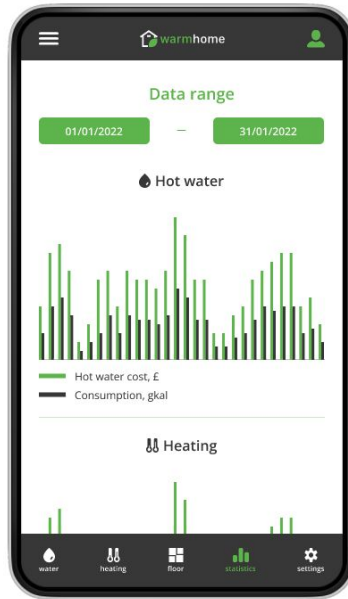
After usability study



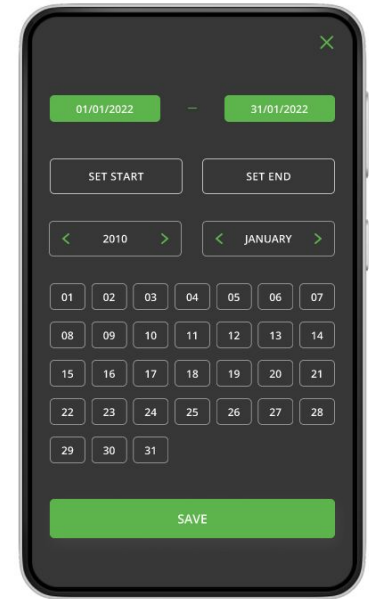
Mockups

Added new screen with calendar to set by users time period for creating chart for consumption and cost of warm services *hot water, heating and warm floor).

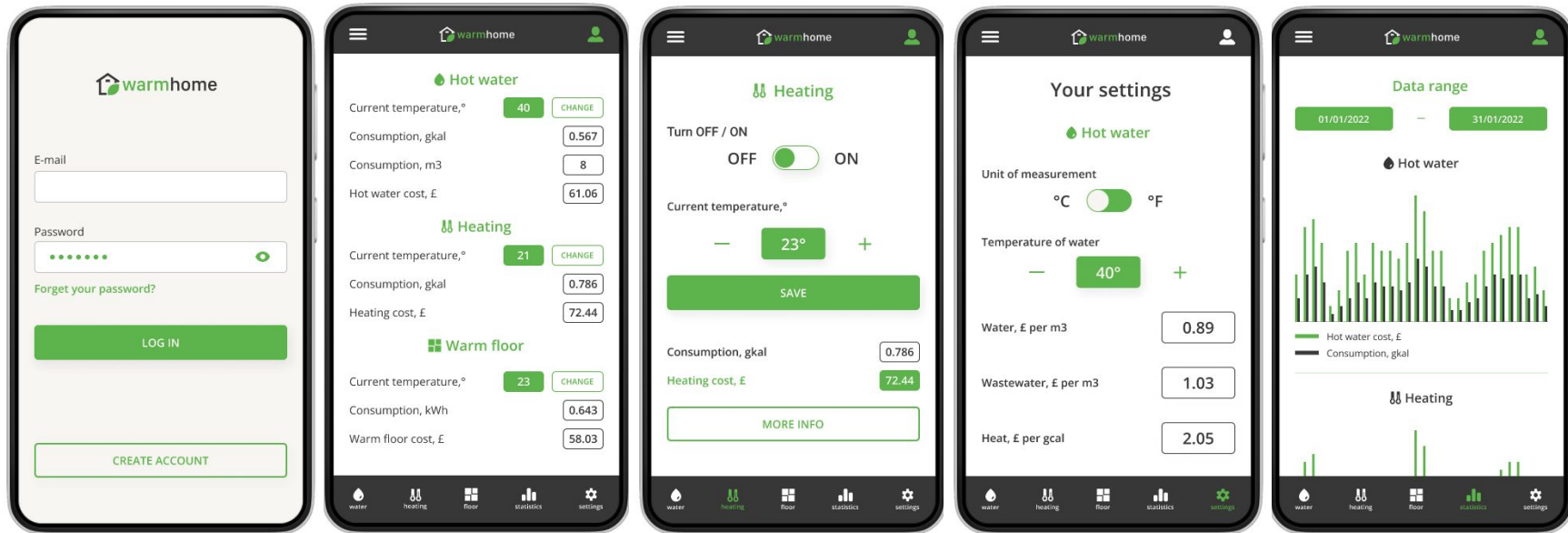
Before usability study



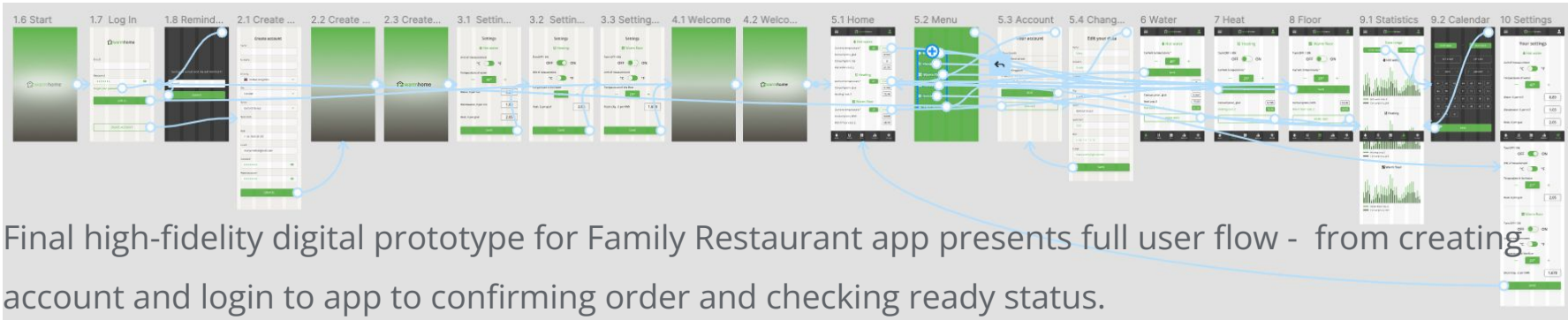
After usability study



Mockups



High-fidelity prototype



App also meets user needs for a ordering food from Menu takeaway or favourite list, repeating last order, choosing date and time for picking up, payment and checking ready status.

Look at [high-fidelity prototype for Family Restaurant app in Figma](#)

Accessibility considerations

1

App design has good color contrast ratio. It helps visually impaired users (as well as users with low-light settings)

2

App design has readable typography. I used headings with different sized text for clear visual hierarchy signs.

3

The icons on bottom navigation bar have text labels below. It makes the app more usable and accessible (the text labels could be read by screen reader)

Responsive Design

- Information architecture
- Responsive design

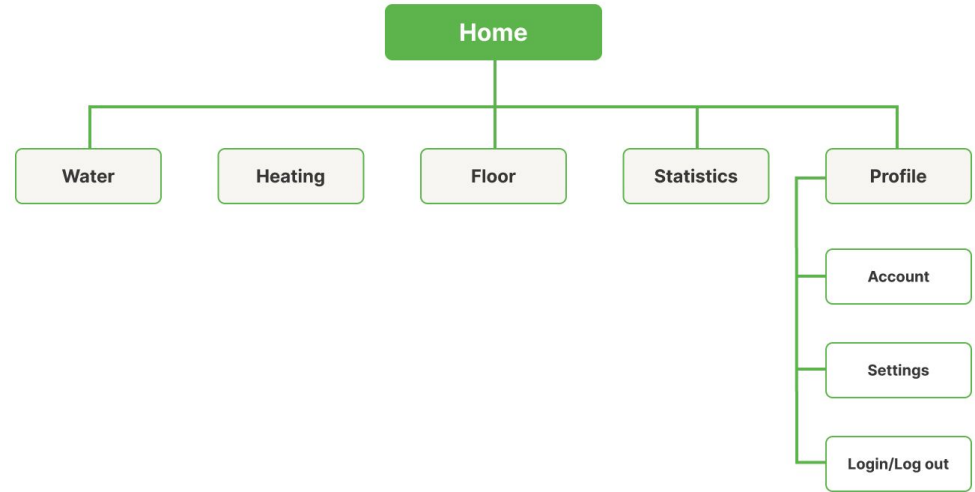
Sitemap

Difficulty with navigation was a one of the pain points for users, so I used that knowledge to create a sitemap.

My goal here was to make strategic information architecture decisions that would improve overall website navigation.

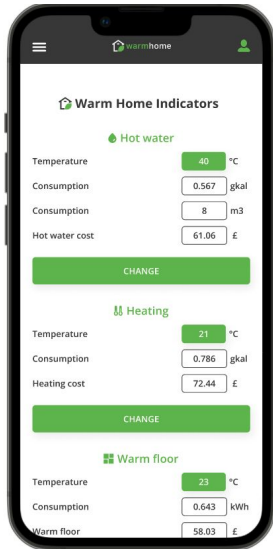
The structure I choose was designed to make things simple and easy.

Sitemap for Responsive Warm Home Website

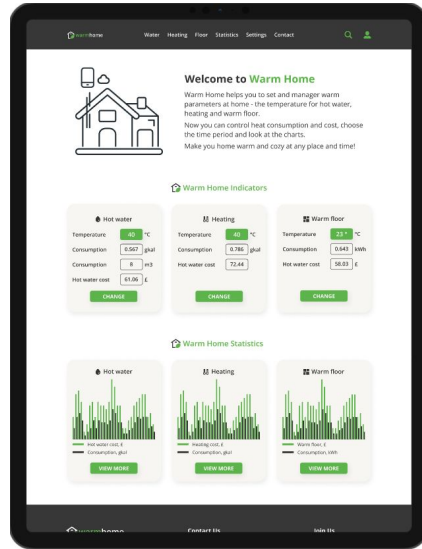


Responsive designs

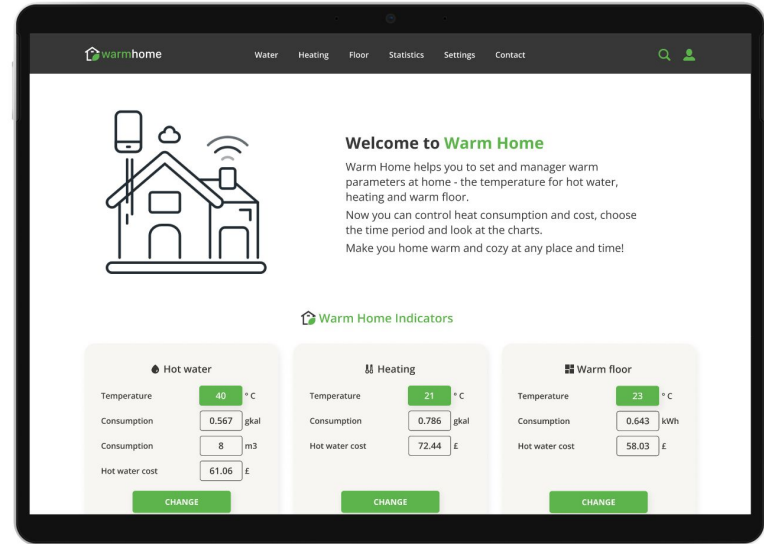
Mobile



Tablet



Desktop



The designs for screen variation included mobile, tablet and desktop. I created the mobile web design as the first. I optimized the designs for fit specific user needs of each device and screen size.

Going forward

- Takeaways
- Next steps

Takeaways



Impact:

Warm Home App and Website designs solve the main users' problem - to set and manager warm parametres remote (hot water, heating and warm, floor), control their consumption and cost.

Designs also solve users' pain points like as time, accessibility and usability.



What I learned:

I learned that even a small design change can have a huge impact on the user experience. The most important takeaway for me is to always focus on the real needs of the user when coming up with design ideas and solutions.

Next steps

1

Conduct another round of usability study of high-fidelity prototype and make a decision about hand-off design to the engineers.

2

Launch the product - Warm Home app and responsive website

3

Conduct usability study after launching and make list of the insights for improving the product.

Let's connect!



Thank you for your time reviewing my work on Warm Home App and Website!
If you would like to get more information or get in touch, my contact information is provided below.

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