

EnerGo 1

Experience Principles

The app delivers the user experience of feeling empowered, knowledgeable, energy conscious and financially responsible.

Key Features

Compiling appliance listings and their energy use to allow user to filter and compare before purchase. Comparing usage data with others' after purchase.

Bodystorming

Bodystorming revealed several insights:

- Initial app discovery and download:** Apart from word of mouth, where could the app be promoted? It's likely not in appliance retailers' interest to promote (but may be if the app includes links to buy from them...). Maybe comparison websites, money saving forums, energy companies or even estate agents. The app needs a large network to provide Emily with the sense of community she wants.

- Comparing to similar users:**

There's little value in comparing usage between a large family and an individual, or someone who works from home vs. in the office. An app to connect users with similar characteristics or lifestyles would help them feel informed and empowered.

- Continuous engagement:** The post-purchase stage felt forced and redundant in the bodystorming, however Emily is motivated by sustainability and saving money, so information on appliance use would ensure Emily engages with the app once she's bought the appliance.

- Data collection:** The time period over which data is gathered and analysed, and consent for this, need consideration. What frequency would make her feel informed yet empowered and in control of her data?

Resolving Issues

The main challenge identified was ensuring continuous use after purchase. Are personalised data and money-saving recommendations enough of an incentive for Emily?

Another area for development is in the personalised community of the app, to allow for direct, meaningful comparisons to encourage sustainable behaviours and healthy competition within the community.



Emily, aged 23

A marketing graduate who has just bought a flat in Manchester. Emily is environmentally conscious and wants to implement this in her new stage of life.

Experience Goals

- Independent:** To feel like a 'proper adult'.
- Reassured:** To feel good about her spending and environmental impact.
- Part of a community:** To feel less alone whilst achieving her goals.

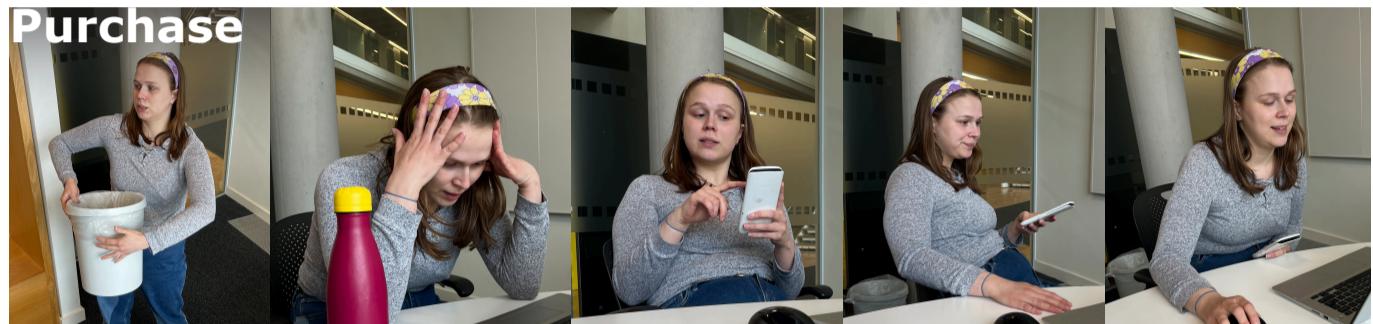
Task Goals

- Understand:** To better understand personal energy usage.
- Save:** To save money in the long run.
- Be a role model:** To set a good example.

Pain Points

- Urgency:** She needs to get appliances for her flat quickly but she has to balance upfront cost and long-term efficiency.
- Lack of time:** She's overwhelmed by all the options. She doesn't want to buy the first item she sees, but can't spend hours researching different appliances.
- Uncertainty:** She finds energy labels confusing, and isn't sure how to relate their information to something tangible.

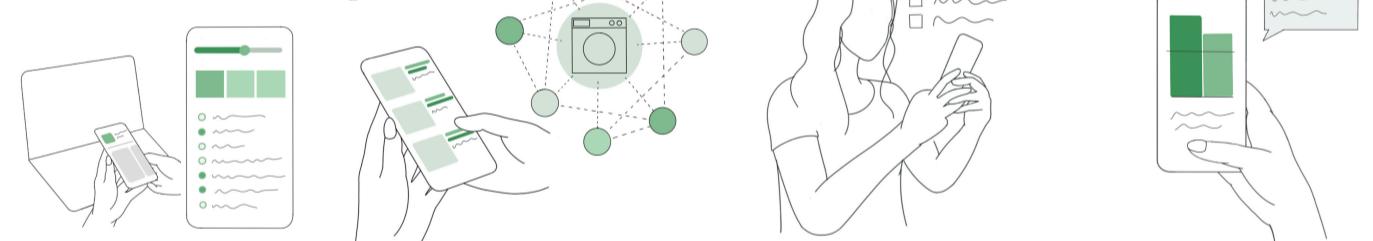
Purchase



Use



Iterated Storyboard



Having discovered the app online, Emily downloads EnerGo and sets it up.

She filters by appliance sets her budget. She chooses a unit in which to display running cost and has the option to answer questions about her lifestyle and habits.

EnerGo shows her appliances that meet her criteria. It compares energy usage data from users with similar lifestyles so Emily feels knowledgeable about the large purchase she's about to make, and confident that it will be a financially responsible one.

Post-purchase, Emily sets up regular updates on her appliance's energy consumption and running cost.

She consents to monthly updates on how efficiently her appliance is running, informed by user data from people with similar lifestyles to her. This network allows users to share tips that are personalised and relevant.

Emily can set a good example and review her new appliance in the app. She ranks its compatibility with her lifestyle, and any associated trade-offs in aesthetics or experience. This helps build the network to inform others in the purchase of household appliances.

Iteration

The new storyboard hones in on the 'community' aspect of the app, by using additional data to create networks of people with similar lifestyles.

The questions asked to determine the user's lifestyle and values need some practical and ethical consideration, so Emily feels knowledgeable about how her data is being used and why.

Regular usage updates and personalised comparisons should address the issue of continuous engagement.

Critical Reflection

Finalised feature set:

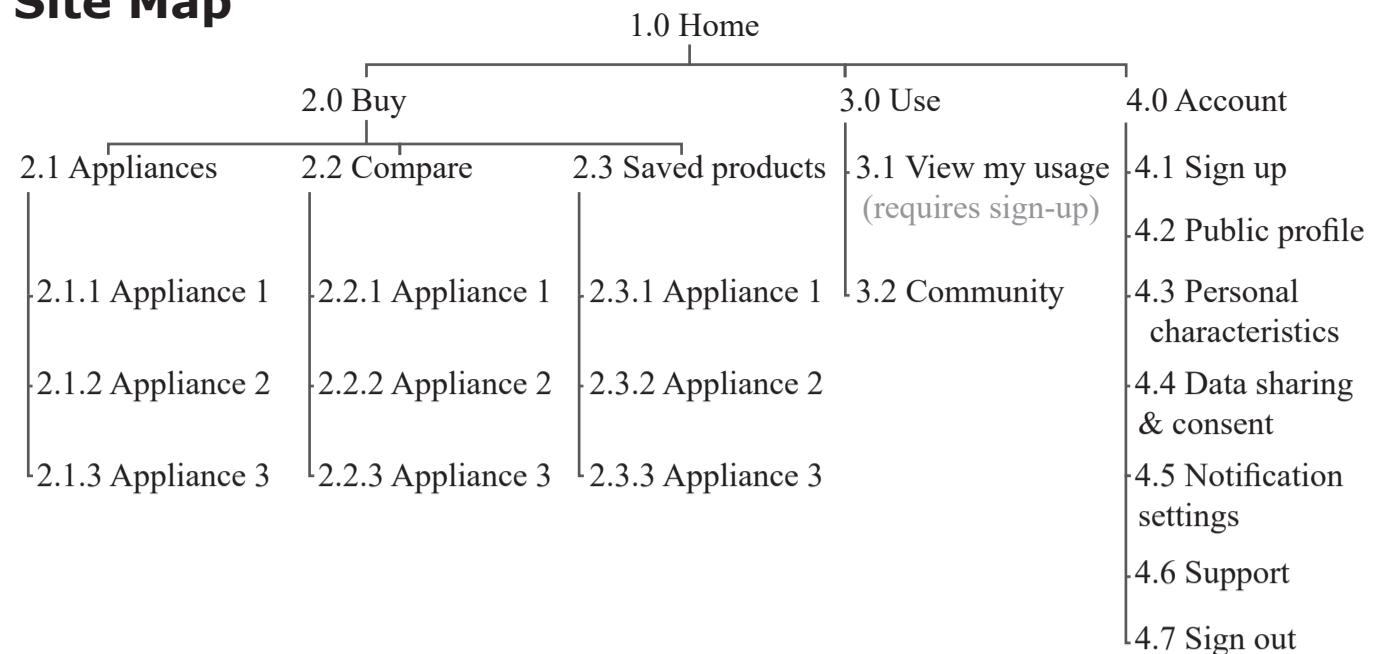
- During the purchase stage the user can view personalised ratings and usage data from others like them.
- Regular, personalised updates to communicate energy usage and cost. Emily has the option to track usage over time to compare her appliance usage with that of peers/comparable users.
- Continuous engagement of the app is driven by communicating the potential savings in relatable, tangible units.

EnerGo 2

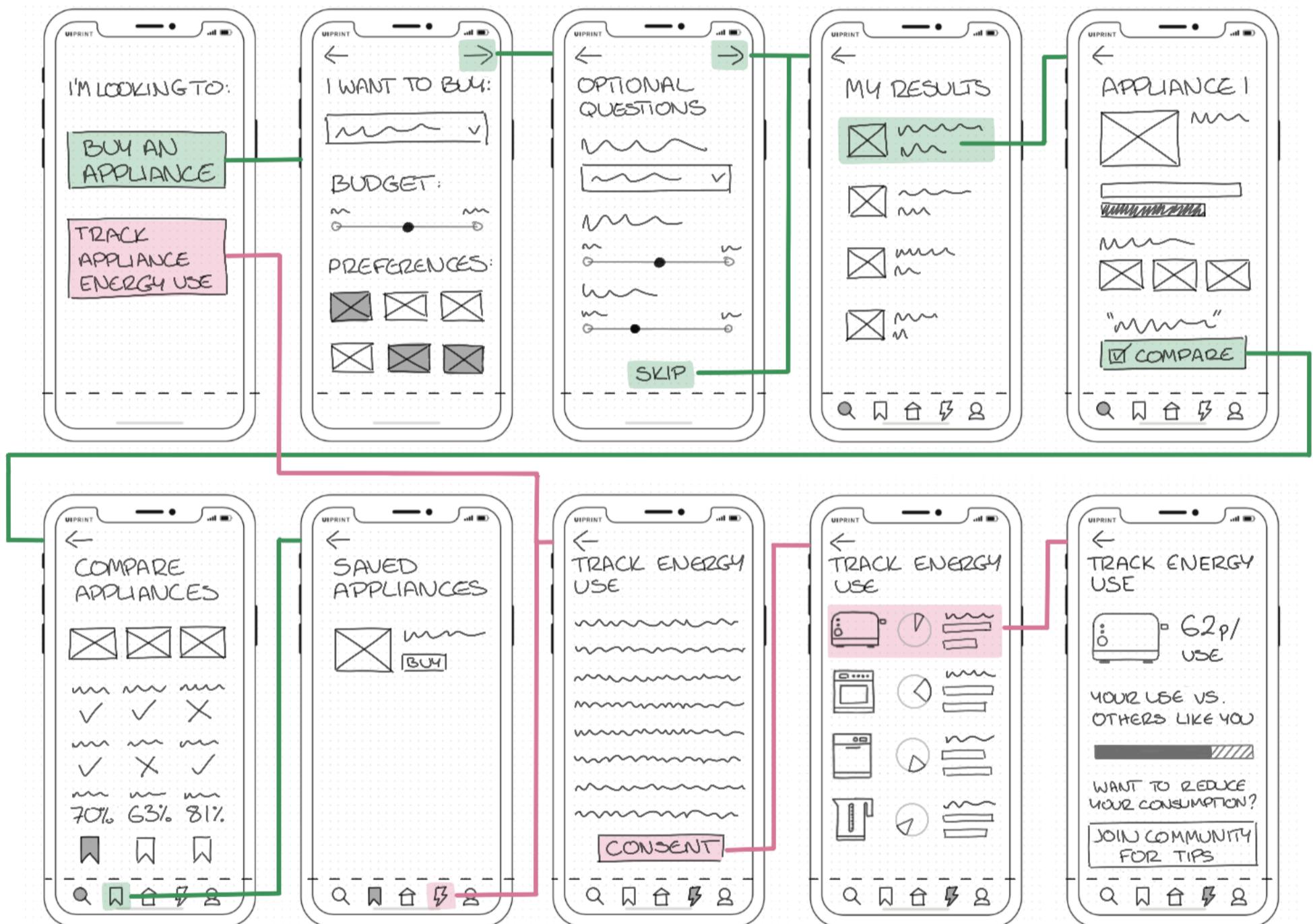
A site map was created to develop the app's feature hierarchy. Splitting use of the app into two key stages ('buy' and 'use') seemed most intuitive, as these are Emily's main use cases.

Emphasis was placed on the app being quick and straightforward to use, by not requiring user sign-up until later on in the journey, in order to view personalised usage data in the 'buy' stage.

Site Map



User Journey



Design Decisions

A decision was made to include buttons for both use cases in the onboarding screens, so users can monitor their existing appliances as well as buying new ones. Users could feasibly want to use both simultaneously and having to switch would deter from the experience. The modes are instead accessible through the navigation bar.

The wireframes uses a range of metrics by which to compare appliances pre-purchase, and to monitor usage post-purchase.

Assumptions Made

The current design assumes that data and figures help Emily feel knowledgeable and in control of her energy use. However it is possible that too much information could overwhelm her. Focusing on the relatable unit she has chosen should ensure the right balance.

It has also been assumed that being able to see the financial and environmental impact of her behaviour changes over time helps Emily feel empowered and financially responsible.

Unresolved Design Issues

The app needs a detailed onboarding process, explaining the app's features and use of 'relatable units' to ensure the user feels informed. A progress bar could keep users feeling in control of this process.

A clear explanation of the different levels of data gathered and stored will ensure the user feels empowered and able to provide informed consent.

The app should also allow the user to set a good example for the community by contributing to the network and sharing tips for appliance use.

EnerGo 3

Low Fidelity Prototype

Marvel App was used to prototype the initial wireframes. This was helpful in evaluating how Emily would intuitively interact with an app, and how she was feeling at each stage. This process allowed the app to be tested against the design principles outlined on board 1.

The bodystorming process found the order and flow of the screens to be logical and straightforward most of the time.

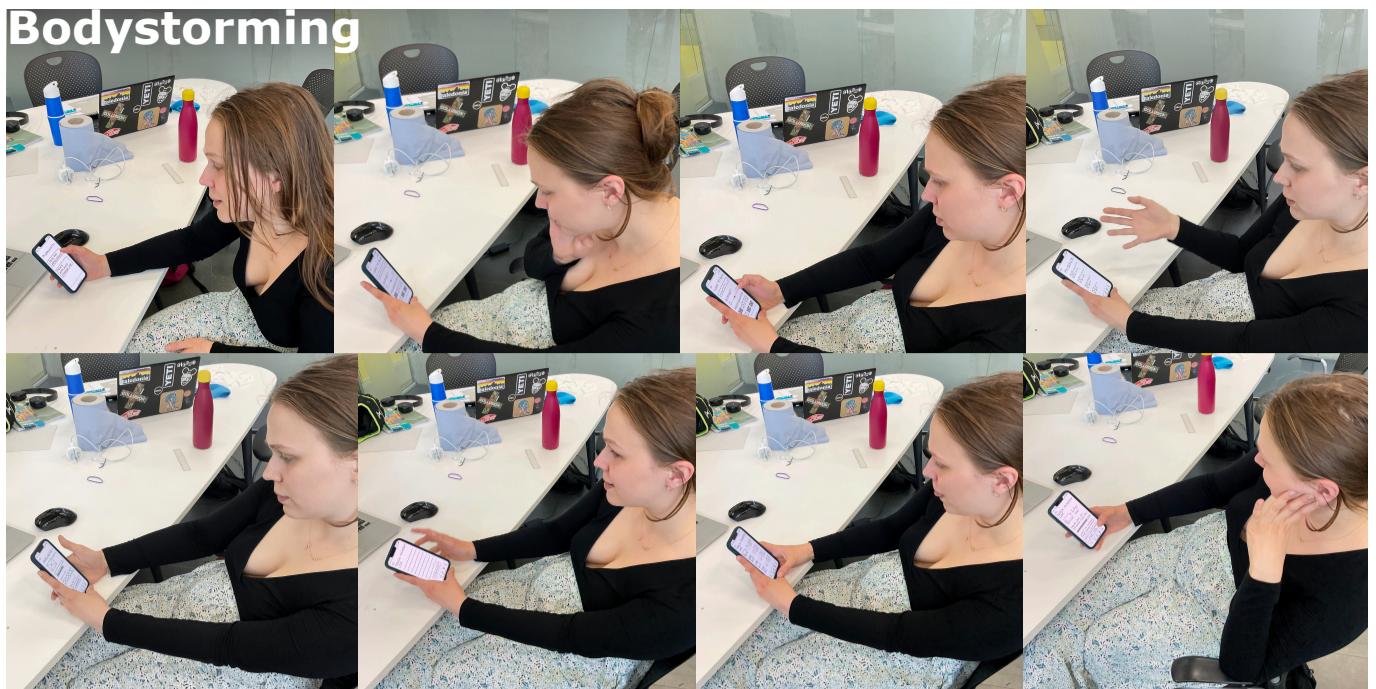
It showed how a user would intuitively interact with the app, and found this to differ greatly from what was expected while the screens were being designed.

In Emily's case, she's already overwhelmed by all the information and choice available to her, so is likely to be more sensitive and frustrated towards the app than she might usually be. This needs to be improved to ensure she feels empowered, and able to access the information that will help her feel knowledgeable rather than frustrated.

Navigation could therefore be improved to make the app as intuitive and straightforward to use as possible, and ensure it doesn't deter from the design principles.

The onboarding screens (2 & 3) use an arrow in the top right corner to navigate to the next screen. However as the questions asked of the user go downwards along the screen, one would expect the 'next' button to follow this pattern.

It wasn't always clear what was required or expected of the user. For example on screens 5, 6 and 9 it's not apparent that they can click on an item in a list to view it in more detail.



Main Design Changes

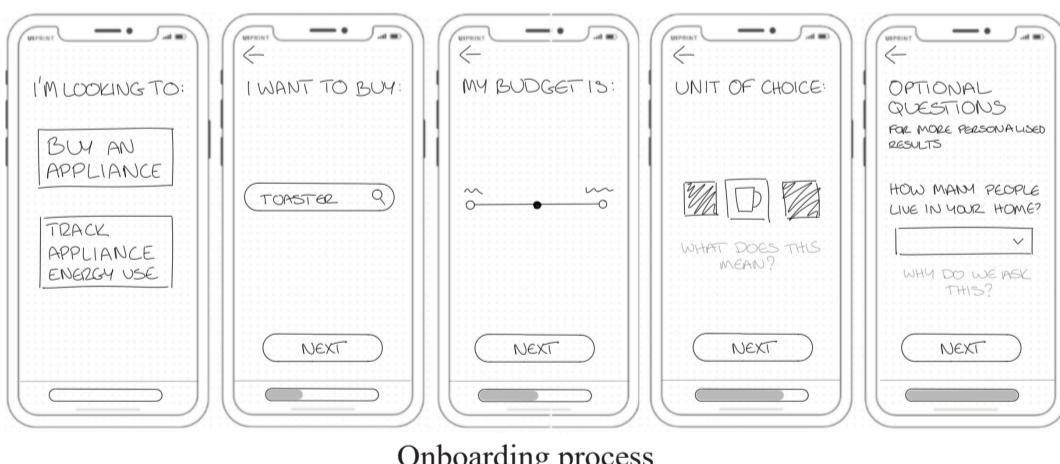
The onboarding screens have been simplified and made less demanding to allow Emily to process the content quickly and without frustration. The setup questions are limited to one per screen, and a progress bar has been added at the bottom to reassure the user that it's a quick process and they're in control. Emily has the option to read more about data collection in the app onboarding to ensure she feels in control of her data and knowledgeable about how it's being used.

Navigation commands have been made more intuitive through the addition of buttons at the bottom of screens. Calls to action have been simplified, with 1-2 answers/actions required of Emily per screen.

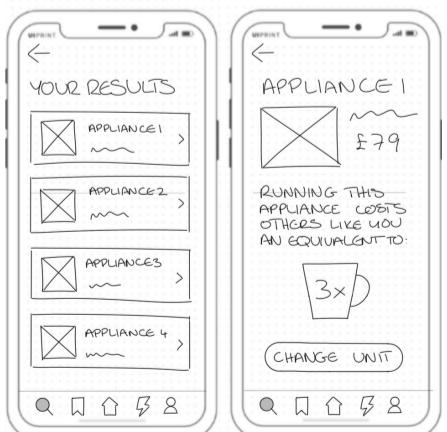
The iterated screens hone in on the use of intuitive units as this is one of the app's USPs. Emily has the option to quickly change between different 'relatable units' to ensure she's informed about appliance costs.

On the screens that include a list of items, the items indicate more clearly that the user can click on them for more detail.

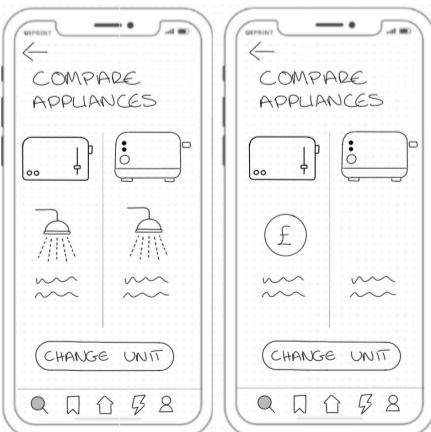
Wireframe Iteration



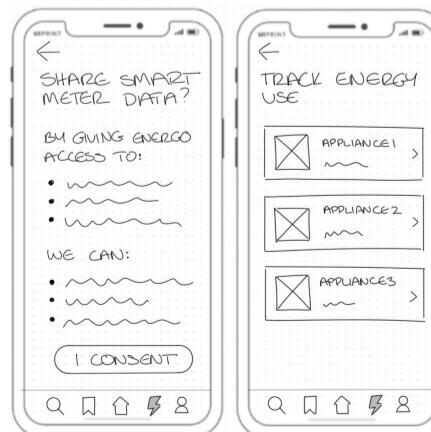
Onboarding process



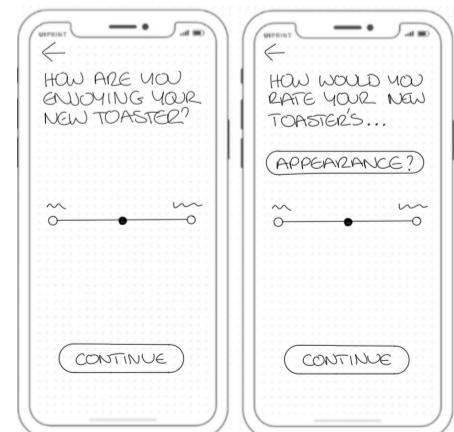
Search results and viewing item in more detail



Product comparison using relatable units



Clear explanation of data collected and how it's used



Quick reviews to build network and contribute to the community

Evaluation

Changes made to resolve the issues identified include:

- Two additional onboarding screens to spread out their content and make it easier to digest.
- Screens providing comparisons between products have been adapted to show only one unit at a time. This makes the user journey simpler for Emily, who is stressed and overwhelmed.
- The use of smart meter data has been explained more clearly, and the option to contribute to the network developed, so Emily can meet her goals of being a role model and part of a community.

EnerGo 4

Reflection

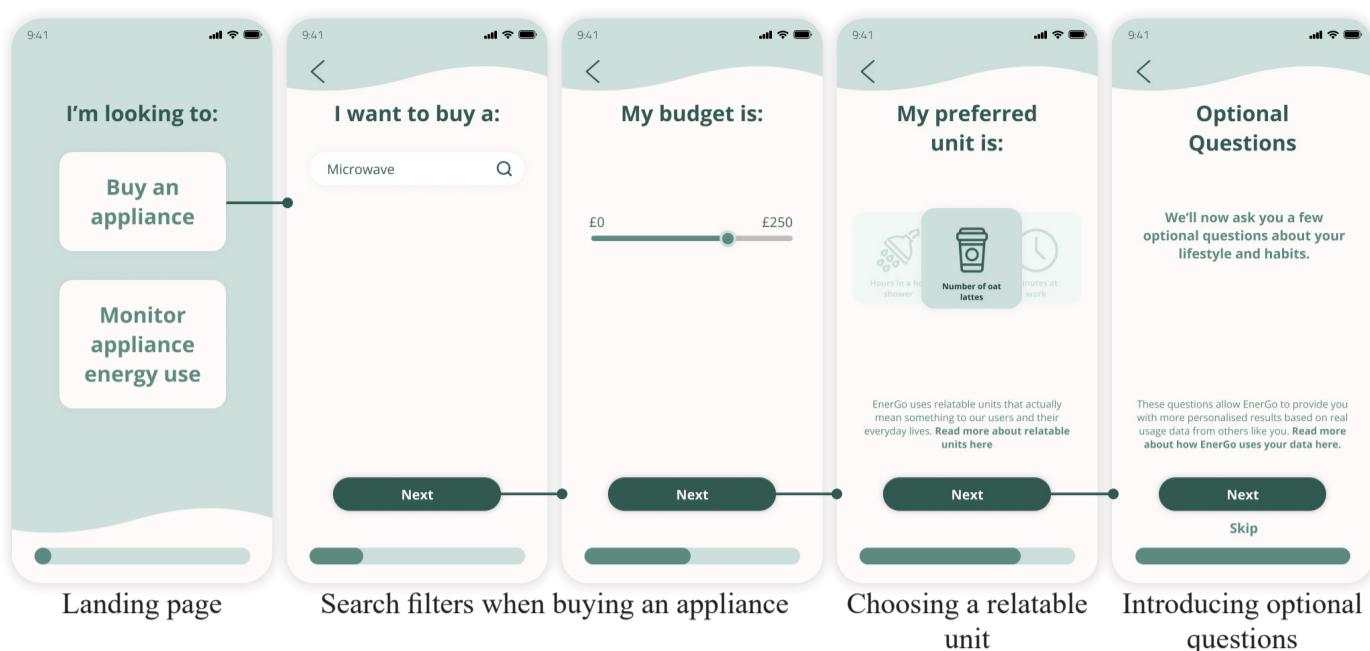
The concept is an promising one, with a unique focus on circularity between product purchase and use. By empowering users through smart meter data and relatable units, it helps them make the right choice at the point of purchase or replacement. Users' interest in their energy use is retained after purchase through regular updates and meaningful comparisons. The 'review' feature of the app has been omitted in the final iteration.

The execution, however, focuses on breadth rather than depth. Some aspects of the app, such as the appliance-specific usage updates, therefore lack detail. A more thorough exploration of how these would work would be beneficial.

Experience principles & needs

EnerGo successfully meets its experience principles. Reliable user data empowers Emily, together with relatable units that

Onboarding journey



help her understand energy use to make informed decisions that are environmentally and financially responsible.

The app meets Emily's goals of feeling reassured and independent as it provides her with information to understand energy use and make decisions independently. It validates the impact of these decisions, meeting the task goal of saving money. The 'community' and 'role model' experience and task goals have not been fully met, as development focused on the earlier stages of app use and these goals overlooked.

Appliance purchase and monitoring journeys



Use of Data

The app lets Emily take advantage of smart meter technology to allow for data driven decision-making and validation. Some thought has been given to the ethical implications of this, and consent has been split into different levels to reflect the ways data could be used in the app.

EnerGo works on the assumption that the app can easily access smart meter data and make references from it to analyse how she uses appliances in her home.

Process Reflection

This process has taught me to consider every single step of an experience, and to think more critically about how I use apps and products. Bodystorming, particularly using Marvel, was very insightful, as holding the design in my hand exposed my assumptions about how I'd use an app.

I found myself getting excited by the various features of the app and creating multiple screens rather than delving deep into 1-2 specific journeys. If I were to complete this project again, I'd take a more considered approach to focus on quality rather than quantity.

Given more time, I'd develop the community aspect of the app. This would add a new level to the data sharing, whereby it's less anonymous and more local, to allow Emily to compare her appliance usage to others in her block of flats and promote healthy competition within the building.

I'd also add a 'review' element to build on the 'role model' task goal. This would ask users one simple question at a time about their appliance, and would give users a community score that increases with each review, to motivate users to contribute to the community.