

THE DEVELOPMENT OF MOBILE APPLICATIONS FOR PET SITTING

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Introduction



The aim of this work is to develop an application that meets the specific needs of pet owners and caretakers. Based on the hypothesis that there is a significant need for a tool that simplifies the process of communicating, booking and finding reliable caregivers, the research focused on developing a user-oriented, secure and highly functional application. By integrating advanced features such as detailed profiles, reviews, GPS tracking of the pet's location and a secure communication platform, it is expected to significantly improve the user experience and increase user confidence in pet sitting services.

The pet sitting mobile application is a solution that enables easy communication, searching and booking of appointments with sitters. Owners have the ability to describe their pet in detail, including specific needs and behaviors, so that potential pet sitters can assess their compatibility. Pet sitters can create profiles highlighting their experiences, making it easier for owners to find the ideal pet sitter. With a rating system that enables the sharing of experiences and recommendations, the app contributes to the transparency and reliability of the service and provides a comprehensive tool to solve the challenge of finding a reliable pet care provider.

Experimental part



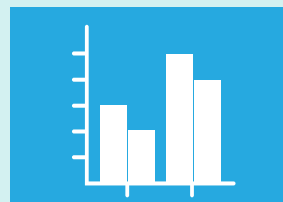
The target group comprises several different profiles of people. On the one hand, these are professionals with demanding jobs and long working days who occasionally need a pet sitter - while they are at work, when they have to go on a business trip or when they just want to relax. Another group are people who travel frequently and need a pet sitter on a regular basis. They need flexible and reliable sitters who can adapt to their schedule. In addition, there are pet owners with special needs, such as pets suffering from various illnesses or pets with behavioral problems - they therefore require special care. Older pet owners who are restricted in their mobility or have health problems that make it difficult for them to look after their pets independently are also part of the target group. They are looking for help from caring and reliable pet sitters who can help and support them with basic pet care tasks such as feeding, grooming and walking. Finally, there are the pet sitters themselves, people who offer pet sitting services as a part-time or full-time job, often out of love for the animals and a desire to help pet owners in their community. With all this information about the target group, it is possible to define several personas. An empathy map was created for each person.

For research purposes, an in-depth interview was conducted with four people belonging to different categories of people from the target group in order to gather as much information as possible about potential users. After thorough research and questioning, the next step is to create a wireframe for the app before the actual UI design is created. By creating a wireframe, a basic layout of the elements on the screen can be established, taking into account the needs of the users and the intuitiveness of the application. Creating wireframes allows designers to correct structural errors and improve usability before committing to design details. Wireframe testing has become very popular to effectively identify problems with the intuitiveness of an application. To avoid

spending hundreds of hours designing an application only to find that it's unusable in the end, it's very important to conduct testing at the wireframe stage. Jakob Nielsen popularized the idea of performing simple tests on early product models such as wireframes with only five users and identified the most important usability errors that can lead to the failure of an application (Angeles, 2024).

In order to test the intuitiveness of the application, three tasks were designed in which the respondents go through the most important functions of the application. The aim is to determine the degree of intuitiveness and user-friendliness of the application and to eliminate any shortcomings.

Interface design and prototyping



After creating the wireframe, the next step is to create the design of the user interface. When developing a design, it is important to keep some of the following guidelines in mind:

- Color selection
- Font
- Size of elements
- Navigation bar
- Creating and testing flows

The application was created with Figma, while the icons were drawn with Adobe Illustrator. First, the components are created, elements that are repeated several times throughout the design. Creating components makes the designers' work easier, as they act like building blocks from which the entire application is constructed. Editing one component affects all other elements of the design, i.e. the designer only has to make a change to one component, which is then applied to all elements of the application (variables - child element created from the main component - parent element).

The icons have been drawn in Adobe Illustrator in a modern geometric and minimalist style so that the application is not cluttered and all screens appear clean and transparent.

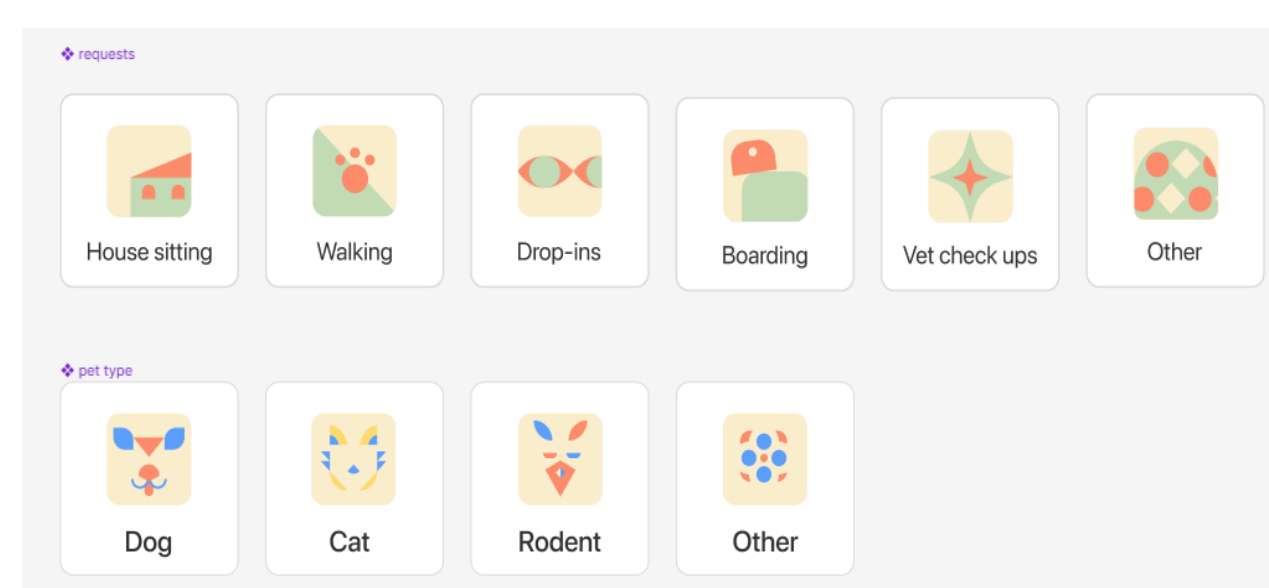


Figure 1

Display of icons

The color palette consists of four colors: Blue (#54A0FF), Beige (#FAEDCA), Orange (#FF8966) and Green (#C1DBB3). Beige, orange and green are soft shades. Soft shades have a calming effect and in the context of an application whose main function is to give pet owners a sense of security and reduce stress, the use of soft shades is a good choice. The blue color is mainly used to highlight the buttons. Figure number 1 shows the icon.

Throughout the process of creating mobile or web applications, from the initial conceptual sketches to the

final design refinements, testing with users should be a constant process. In this way, it is possible to discover usability issues, confirm design decisions and ultimately create the best possible user experience.

The final stage of the development of the WagWatch application is testing with potential users (Figure 2). The application was tested with a total of 30 users.

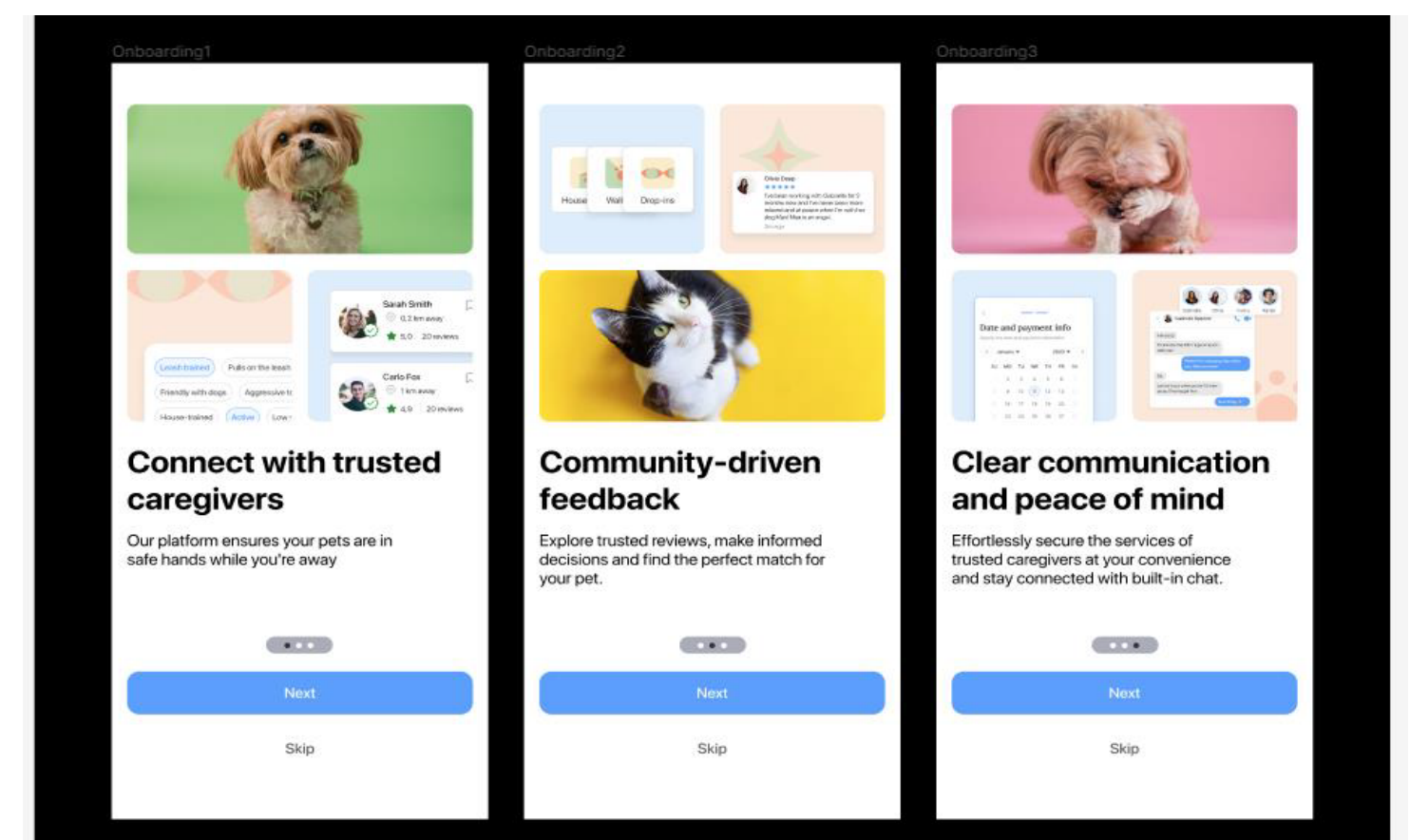


Figure 2

Presentation of the onboarding

Conclusion



The development of applications requires a deep understanding of the needs and wishes of many users. Successful user interface and user experience design for applications requires a user-centered approach that involves very detailed research and testing to ensure that functionality and design meet all user expectations.

This process began with defining the goals, a thorough market and competitor analysis, followed by user research to determine their wants and needs. All the information gathered was used to define the functionality and design conceptual sketches that could be continuously tested and adjusted to make the design intuitive and user-friendly. The result was an innovative application, WagWatch, aimed at pet owners and pet sitters. The application offers all the key functions for easy communication, searching and booking of petsitters. Design is an ongoing process that never ends, so the development of an application will never really be complete. There will always be new features that can be introduced to solve different problems and new ways to improve the usability of the design. In addition to functionality, the design of the user interface is also crucial to the success of an application. A consistent and carefully designed color palette, iconography, typography and graphics can go a long way in creating an attractive user experience that adds value to the application itself and encourages users to use it more often.

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