

# User Experience and Interface Design for a Digital Pet Adoption Platform

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## Abstract

In today's digital information and busy society, visiting many shelters in person and browsing countless animal shelter websites and social media groups to find the perfect pet match seems lengthy, cumbersome and complex. Therefore, we, as designers, must ensure flawless experiences in the analogue and digital worlds. Considering this, this paper focused on developing a user-friendly centralised digital pet adoption platform called PetScout, where users can browse through all the pets available for adoption from European animal shelters and rescue groups. Through user research, which included interviews with pet owners and the collection of quantitative data through an online survey aimed at current and prospective pet owners (i.e. those still looking for the perfect pet), as well as design thinking activities such as empathy maps, job stories, needs statements, personas and user scenarios, we were able to understand and empathise better with the needs of our users. Clearly defined problem and research framework were essential for defining the platform's requirements, developing an information architecture and crafting two viable low-fidelity concept solutions – web and mobile. After a moderated remote usability test of low-fidelity prototypes, we designed high-fidelity versions, which were tested again. The high-fidelity prototypes achieved a 100% task success rate, an average of 166 seconds to finish vital tasks, and an average of 97 points in the SUS questionnaire.

## Keywords

Pet adoption platform, user experience, user interface, user research, usability testing

## 1. Introduction

The rising global population of stray animals has become a pressing concern, with extensive implications in numerous countries. These stray animals are often the result of people abandoning their pets on the street because they have grown tired of them, are unable to afford the cost of neutering or spaying, or do not care enough to do so. Nevertheless, the main problem remains excessive breeding by dog breeders, who are focused primarily on profit. What is more, a single female dog and her offspring can produce up to 67,000 puppies within six years [1].

This problem forces many animals to roam the streets or seek shelter in shelters, where they either await possible adoption, spend extended periods of time waiting for a loving home, or face the tragic possibility of euthanasia [2]. This article explores the challenges and potential solutions to this growing problem.

The thought of visiting numerous animal shelters physically (or even travelling abroad to rescue and adopt pets from foreign countries) early in the search phase to find a perfect pet seems impractical, especially when searching for a companion matching their specific lifestyle. Instead, the initial screening for many is searching for a perfect pet online. This shift is not due solely to our fast-paced lives, but also because we live in a digital information society, where seeking information online is highly practical and convenient. It can be accessed instantly, saving time and providing flexibility. All one needs to access information is a digital device and an internet connection.

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With that being said, inadequate or unsatisfactory information online might sometimes lead us to abandon our search altogether, leading to a poor user experience. For example, consider how a bad experience at a restaurant, whether due to poor service or food quality, impacts the likelihood of a return visit. Similarly, unsatisfactory digital experiences can deter potential pet adopters from returning, eventually preventing them from adopting a pet. Enough qualitative information can impact user experience positively, as potential pet adopters have a better overview of whether a specific pet would be a good fit based on their needs and lifestyle.

On the other hand, the multitude of shelters and active rescue organisations that display the available pets can make finding a suitable pet difficult. Each facility usually has its own website or social media profile, forcing potential pet owners to visit multiple websites and platforms, which can lead to a complex and lengthy search.

Meanwhile, the likelihood of pets being adopted from animal shelters depends largely on the traits they possess, impacting their chances of adoption [2, 3, 4]. Certain characteristics, such as age, gender, size, classification as a dangerous breed [4] or being a mixed breed [2] contribute to dogs spending extended periods in shelters. Simultaneously, kittens are often adopted due to their appearance [3]. Besides physical characteristics, behavioural characteristics also hold significance. Pets would more likely be adopted if they are playful, friendly, social, obedient, gentle, have high energy levels or are non-aggressive [2].

Existing research has either focused on UX research, where the authors either tested the usability and efficiency of the pet adoption website [5], or developed and tested comprehensively a prototype of the product that helps individuals choose and adopt a pet that fits their lifestyles, while focusing on pet shelters and rescue organisations [6]. As the field of digital media is evolving rapidly, which influences visual design and user experience as well, it is urgent to continue research in the pet adoption experience.

Accordingly, our project focused on the relationship between usability and visual design, to improve online pet adoption experiences [7]. With a centralised digital pet adoption platform, we strived to ease and speed up the search process, increase the chances of adoption of all pets, and aim to go beyond just finding a suitable pet and ending the experience there. As pet adoption is a life-long commitment, we aimed to ensure a seamless and enjoyable long-term user experience for pet owners and their new pet companions.

## **2. User Experience, Usability and User Interface**

According to the ISO 9241:11:2018 Standard, user experience is a term that covers users' different types of perceptions and responses, that arise before, during and/or after an interaction with a system, product, or service. In addition, user experience results from "brand image, presentation, functionality, system performance, interactive behaviour, and the assistive capabilities of a system, product or service" [8]. Additionally, user experience is shaped by the individual's personality traits, skills and knowledge, and by the user's internal and physical condition derived from past experiences. Furthermore, the context in which the product or service is used influences the user experience significantly [8].

User experience is defined similarly by Don Norman and Jakob Nielsen, as they described this term as a concept that encompasses all interactions between a user and a company, service or product. They designated that great user experience ensures that a user's needs will be fulfilled without the interaction with a system, product or service being perceived as burdensome [9].

Usability is a term that encompasses the "extent to which a system, product or service can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use [8]." In addition, usability can be understood as a set of five components: learnability, efficiency, memorability, errors and satisfaction [10].

Furthermore, Jakob Nielsen developed fundamental usability practices in 1994 – known as "usability heuristics" – for an interaction design that offers a set of ten established and widely accepted practical principles in a professional environment, to help evaluate the usability of a product and make informed decisions [11].

Additionally, interface design is indispensable in product development, as user interfaces are crucial in facilitating communication between users and systems. As such, they should be intuitive, aid users in accomplishing their tasks easily, and allow users to achieve their objectives without frustration. Poorly designed interfaces can, in turn, lead to financial losses, reduced efficiency, increased user frustration and dissatisfaction and potential security risks [12].

### 3. Design Process

We used the five phases of the established design thinking process to develop our digital pet adoption platform concept. Table 1 provides an overview of the five phases, our activities and their objectives.

**Table 1**  
**Phases, Activities, and Objectives of the Project**

| Phase     | Activities  | Objectives  |
|-----------|---|---|
| Empathise | Semi-structured interviews<br>Survey  | Identify and understand user needs and values.          |
| Define    | Personas<br>Empathy mapping<br>Needs statements<br>Job stories<br>User scenarios            | Define design problems by analysing the collected data. |
| Ideate    | “How might we?” questions<br>Crazy 8’s<br>MoSCoW prioritisation<br>Information architecture | Brainstorm possible solutions.                          |
| Prototype | Low-fidelity prototype<br>High-fidelity prototype   | Create clickable concepts to validate and refine them.  |
| Test      | Moderated usability testing with a thinking-aloud method<br>SUS questionnaire               | Evaluate the implemented solutions.                     |

#### 3.1. Empathising with Users

In the first phase of the design thinking process, we conducted user research to gain better insights into our users and understand how they might use our product [7]. We used interviewing and surveying as our research methods.

We conducted four semi-structured interviews, with all the participants being dog owners. The interview guide was based on Kenny & Regan’s [13] work and covered topics such as:

1. Pet adoption details (process)
2. Use of technology
3. Usage and familiarity with pet adoption platforms
4. Interviewees’ backgrounds

With the help of the online survey, from which we received 39 valid responses, we got additional quantitative insights [7]. We used a combination of open-ended, multiple choice and Likert scale questions on a scale of 1–10, along with text boxes for additional input in the survey. The online survey encompassed an introduction, a consent form, inquiries about general pet adoption information, demographic details, pet search locations, frequency of online platform visits, pet search duration, device usage, the significance of specific pet physical and behavioural traits, and, lastly, the assessment of the perceived importance of the website/app functionalities.

### 3.2. Defining the Problem

In this phase, a comprehensive data analysis was carried out, which included identifying problems and establishing a research framework. This process included diverse activities such as creating personas, empathy maps, formulating needs statements and job stories, as well as developing user scenarios.

Following the user interviews, three different personas were developed, including information regarding their traits, goals and frustrations, enhanced with real interview quotes [7]. Empathy maps were then created for each persona, highlighting their thoughts, actions, expressions and feelings. In addition, need statements, job stories and user scenarios were formulated, to address user problems, motivations and product requirements. All these activities led to a comprehensive understanding of user behaviour and product requirements. Some of the identified user and platform needs were as follows:

- Users need to be able to filter and search for available pets quickly to narrow down the results.
- The platform must provide accurate and detailed profiles for each pet, as some users had difficulty finding adequate information about the animals.
- Qualitative visual content should be used that depicts the pet's appearance and personality clearly.
- Offer the possibility to the user to start the inquiry and expressing their consideration for adoption directly from a platform, as well as to provide shelter contact information.
- The platform should have a user-friendly, attractive and professional interface.
- A mobile solution is a necessity, as most interviewees and survey respondents used their smartphones to search for pets to adopt.

### 3.3. Ideating Design Concepts

In the Ideate phase, we attempted to brainstorm some possible solutions [7]. We began by forming the “How might we questions” (first introduced by Procter & Gamble in the 1970s [14]), where we addressed different aspects of the problem. Moreover, with the help of the Crazy 8's exercise we developed a few design ideas, which we then transformed into sketches.

As we gained a better understanding of our solution, we defined the platform's requirements with the help of the MoSCoW analysis [15]. Finally, we created information architecture for the platform, which served as a guide in helping us organise content meaningfully.

### 3.4. Concept Prototyping

In the fourth phase of the design thinking process, we created so-called vertical prototypes [7] – that, according to Nielsen (1993), incorporate only specific system features which are otherwise designed to be fully functional [10] – for both desktop and mobile applications, prioritising the key user flows of the pet adoption platform:

1. Searching and filtering pets
2. Providing sufficient pet background information on pet profiles
3. Starting an inquiry (by filling out a pre-adoption form)

We began by creating low-fidelity prototypes, as these allowed us to transform our initial ideas into screen designs quickly and efficiently and make iterative improvements before investing significant time and resources into potentially unviable solutions. We validated the low-fidelity prototype in the first round of usability testing before proceeding to create high-fidelity prototypes, which required more time and effort due to their high-precision attributes.

Both low- and high-fidelity prototype design, as well as prototype validation, were carried out in the widely known design tool – Figma.

We created a style guide with primary and secondary colours, such as white and various shades of green, as part of the user interface design for the high-fidelity screens. Additionally, we defined the accent colours for different system states (i.e., success, info, warning and danger).

Since text is fundamental for communication between the system and the user, it was necessary to choose a typeface that was legible, readable and aesthetic. We opted for Google Fonts' Inter sans serif font. Moreover, we obtained a consistent set of icons for our interface from the free [Untitled UI](#) icon library. Finally, we also designed a logo for the pet adoption platform.

## 4. Concept Evaluation

In the Test phase of the design thinking process, we assessed the viability of the conceptualised mobile and desktop solutions created in both low and high-fidelity. We began by testing the low-fidelity prototype. Using the gained insights and applied corrections, we then evaluated the high-fidelity concept as well [7].

### 4.1. Methods & Usability Metrics

For evaluating our design concepts, we used a combination of qualitative and quantitative methods. The primary method used was remote moderated usability testing, as we aimed to observe how users interacted with our product first-hand. Additionally, we used the thinking-aloud method, to capture the participants' verbal cues [7].

Furthermore, we gathered quantitative data by measuring how many test participants accomplished given tasks, and how long they needed to accomplish them. We measured the time for each task, starting the clock after the user pressed the "Start" button (after reading the task instructions) in the prototype, and stopping it as soon as the task goal was reached. Moreover, we measured user satisfaction by administering the SUS questionnaire, which participants completed at the end of the test session. The observed variables measured within this section can be seen in Table 2.

**Table 2**  
**Methods Along With Variables and Indicators**

| Method                  | Variable      | Indicator                    |
|-------------------------|---------------|------------------------------|
| System usability rating | Effectiveness | Task completion rate         |
|                         | Efficiency    | Average task completion time |
|                         | Satisfaction  | SUS score                    |
| Thinking aloud method   | Verbal cues   |                              |

### 4.2. Testing Procedure & Tasks

In their natural environment, participants were invited to join the online session through Google Meet, using either their phones or computers (depending on the prototype version they were testing). The session involved recording both audio and screen interactions. Following an introduction to the test session and a request for demographic information, the participants were asked to start sharing their screens. Subsequently, they received a Figma link to access the click prototype, where they also received the written tasks sequentially.

The participants needed to finish four tasks, that included finding a suitable pet with the help of the filter, learning more information about a pet by visiting their profile, adding pets to favourites, and starting an adoption inquiry. These tasks are presented in

Table 3.

**Table 3**  
**Usability Testing Tasks**

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| Task description   |
|--|
| <p><b>1. Find a suitable pet.</b><br/>Look for a dog with the following characteristics:</p> <ul style="list-style-type: none"><li>• Located in Austria</li><li>• Medium-size</li><li>• 0–4 years old</li><li>• Female</li><li>• Mixed breed</li><li>• Dog-friendly</li></ul>                              |
| <p><b>2. Find more information about this pet.</b><br/>The dog you just found caught your attention, and you'd like to find more information about it. Discover whether this dog would be a suitable fit for people who already own a dog and obtain information on the medical condition of this dog.</p> |
| <p><b>3. Save this pet for later.</b><br/>It seems as though this dog might be the right fit, but you want to see other dogs before making a decision. How would you ensure that you find this dog again?</p>  |
| <p><b>4. Start the adoption inquiry.</b><br/>It's been three days, and you finally decided that the dog is a great match for you. Now, you're returning to the app to start the journey of bringing home your selected furry friend.</p>   |

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In addition, after all the tasks were completed, we conducted brief interviews with the participants, where we delved deeper into their experience with the prototype.

Finally, they were asked to complete the SUS questionnaire.

## 5. Participants

Before starting the research, we obtained approval from the Commission for Research Ethics of the Faculty of Arts at the University of Maribor. This approval covered the user research phase, including surveys and interviews, as well as the second – usability testing – part. The first part was approved on May 27, 2022, and the second part was granted on April 25, 2023.

### 5.1. Interviewees

The inclusion criteria for participating in an interview were: residence in Europe, at least 18 years old, and strong speaking and writing English skills. Additionally, the interviewees had to meet at least one of the following criteria:

- a) They were current pet owners that they had adopted from a European animal shelter or other European animal rescue organisation in the last five years, or
- b) They were currently looking for a pet for adoption, either from a European animal shelter, or through other animal rescue organisations based in Europe.

Meanwhile, individuals excluded from this study were those residing outside Europe, below 18 years old, lacking proficiency in English, who had adopted or searched for a pet more than five years before beginning the study, or having bought a pet from a breeder.

We used the snowball method to recruit interviewees.

Table 4 shows demographic characteristics of the interviewees participating in this study [7].

**Table 4**  
**Interviewees' Demographic Characteristics**

| Gender        | Age     | Country  | Adopted animal | Adoption place           |
|---------------|---------|----------|----------------|--------------------------|
| Female        | 27      | Austria  | Dog            | Rescue group (Romania)   |
| Female        | 30      | Austria  | Dog            | Animal shelter (Austria) |
| Female & male | 58 & 53 | Sweden   | Dog            | Animal shelter (Sweden)  |
| Male          | 25      | Slovenia | Dog            | Rescue group (Macedonia) |

## 5.2. Survey Respondents

The inclusion criteria for completing the survey mirrored those for participating in an interview, with the inclusion of an additional requirement: participants had to search actively for pets to adopt online, e.g. on animal shelter websites, social media, or mobile apps.

Moreover, we used the same exclusion criteria as for recruiting interviewees, with an additional exclusion of individuals who only searched for and looked at animals in person.

We used convenience sampling to obtain respondents, sharing the survey on various social media platforms, including Facebook, Instagram and LinkedIn. We distributed the survey predominantly among various European pet adoption groups on Facebook and LinkedIn. Meanwhile, on Instagram, the survey was shared on Stories.

Despite 392 initial survey visits, we obtained only 48 valid responses, with a further drop-out, resulting in only 39 participants completing the survey.

Table 5 shows the characteristics of the valid survey respondents.

**Table 5**  
**Demographic Characteristics of Survey Respondents**

| Characteristic  | Sub-characteristic | Percentage (%) |
|-----------------|--------------------|----------------|
| Gender          | Female             | 82.05          |
|                 | Male               | 17.95          |
| Age             | 21–25 years        | 48.72          |
|                 | 26–35 years        | 25.64          |
|                 | 36–45 years        | 17.93          |
|                 | 46–55 years        | 5.12           |
|                 | 56 or older        | 2.56           |
| Country         | Austria            | 2.56           |
|                 | Cyprus             | 2.56           |
|                 | France             | 5.13           |
|                 | Georgia            | 2.56           |
|                 | Germany            | 5.13           |
|                 | The Netherlands    | 5.13           |
|                 | Poland             | 2.56           |
|                 | Portugal           | 2.56           |
|                 | Slovenia           | 7.69           |
|                 | Spain              | 5.13           |
|                 | Sweden             | 5.13           |
| Adoption status | United Kingdom     | 53.85          |
|                 | Adoption completed | 64.10          |
|                 | Seeking adoption   | 35.90          |

### 5.3. Usability Testing Participants

The participants for usability testing had to match the following inclusion criteria: residence in Europe and being older than 18 years. Participants not meeting these requirements were not eligible to partake. The usability testing participants were recruited using convenience sampling.

Twenty people participated in the two rounds of usability testing. In the first round, ten people tested the low-fidelity prototypes, of whom half evaluated the mobile version, and the other half evaluated the desktop version [7].

In the second round of usability testing, another ten participants evaluated the high-fidelity prototype, where, again, five of these tackled the mobile prototype, and the rest tested the prototype for desktop applications [7].

Table 6 shows the distribution of the usability testing participants' demographic information and prototype's level of fidelity and its version.

**Table 6**  
**Demographics, Prototype Fidelity and Version Distribution of Usability Testing Participants**

| Nr. | Gender | Age | Country        | Prototype fidelity |      | Prototype version |         |
|-----|--------|-----|----------------|--------------------|------|-------------------|---------|
|     |        |     |                | Low                | High | Mobile            | Desktop |
| 1   | Female | 25  | Austria        | •                  |      | •                 |         |
| 2   | Male   | 26  | Slovenia       | •                  |      | •                 |         |
| 3   | Female | 29  | Slovenia       | •                  |      | •                 |         |
| 4   | Male   | 35  | Slovenia       | •                  |      | •                 |         |
| 5   | Female | 38  | Austria        | •                  |      | •                 |         |
| 6   | Female | 19  | United Kingdom | •                  |      |                   | •       |
| 7   | Male   | 24  | Austria        | •                  |      |                   | •       |
| 8   | Male   | 32  | Austria        | •                  |      |                   | •       |
| 9   | Male   | 45  | Austria        | •                  |      |                   | •       |
| 10  | Female | 56  | Sweden         | •                  |      |                   | •       |
| 11  | Female | 24  | Italy          |                    | •    | •                 |         |
| 12  | Female | 25  | Spain          |                    | •    | •                 |         |
| 13  | Male   | 25  | Slovenia       |                    | •    | •                 |         |
| 14  | Female | 28  | Austria        |                    | •    | •                 |         |
| 15  | Female | 30  | Austria        |                    | •    | •                 |         |
| 16  | Female | 25  | Austria        |                    | •    |                   | •       |
| 17  | Female | 28  | Slovenia       |                    | •    |                   | •       |
| 18  | Female | 28  | Austria        |                    | •    |                   | •       |
| 19  | Male   | 28  | Austria        |                    | •    |                   | •       |
| 20  | Male   | 46  | Austria        |                    | •    |                   | •       |

In addition to demographic information, we gathered data on the different mobile and desktop platforms on which the participants tested the prototypes. However, the look and feel of the tested concept across these platforms was the same – meaning that, for example, the mobile prototype looked the same on Android and iOS. Slightly more than half (60.00%) of the mobile testers used an Android phone, whereas the others (40.00%) were iOS users. Meanwhile, nine (90.00%) out of ten desktop testers were Windows users, resulting in only one (10.00%) participant using a macOS-based device.



## 6. Results

### 6.1. Empathise Phase Results

User interviews in the Empathise phase revealed that current challenges faced by potential pet adopters include the lack of background information on available animals, the inability to meet the rescue animals in advance, the lengthy search process, and complex or untrustworthy platforms when adopting animals.

Moreover, data obtained from the online survey indicated that adopters place a high value on certain pet attributes, like the size, age, health condition and pet's location. Additionally, pet photos are very important to them. Regarding behavioural traits, the survey revealed that compatibility with other animals and energy levels are the most significant traits, followed by the need for attention and pets being house-trained. Conversely, compatibility with children appeared less important among the respondents. However, it was still included in the user interface, since it is a responsible practice in the pet adoption process.

### 6.2. Prototype Phase Results

In the Prototype phase, we created prototypes in low and high fidelities for the mobile and desktop versions of the platform, focusing only on the essential components:

- Home
- Filter
- Pet profile
- Sending an inquiry

The desktop homepage contains several elements, such as a "How it works" section, that explains a step-by-step guide on how the PetScout platform functions, articles on pet adoption, and FAQs. Meanwhile, the mobile homepage only displays cards of available pets, with each card including a photo, name, age, breed and pet location.

Users searching for particular pets can use the filter to adjust and refine their search criteria, making it easier to sort among the countless available pets, as well as to create a more tailored experience.

The pet profile in both versions includes photographs, the pet's name, location, breed, age, size, descriptions, temperament, compatibility with other animals/children, medical conditions, frequently asked questions (FAQs) and shelter contact information.

Individuals who wish to adopt a specific pet can submit an inquiry directly from the platform and are required to complete a pre-adoption form consisting of four steps. The steps include providing personal information, adding a personal note for the shelter, entering their contact details, and reviewing their entered data before finally sending the inquiry. Once the user has completed and sent the inquiry, this form is sent to the respective animal shelter for assessment. It is important to note that filling out this form does not mean adoption. Rather, it enables shelters to sift through numerous interested candidates efficiently and help them identify the most suitable match for the pet.

We designed this feature by using a more playful approach to designing forms, by incorporating statements with blank spaces, instead of standard questions where people had to type in their answers. For each statement, we provided single-choice responses, and users were encouraged to complete these statements' blanks by selecting from the answers given to them. With this approach, we aimed to make the form-filling process more engaging and enjoyable, particularly for those who find lengthy questionnaires cumbersome. The form included statements regarding prior experience in pet ownership, family and household information, including children and other pets, and, finally, details about the lifestyle and schedule of the potential adopter.

We also added a feature that allows users to add pets to their favourite list. This is a common practice in modern user interfaces, as it provides a convenient way for users to access their preferred items quickly and easily when they return to the platforms.

### 6.3. Test Phase Results

Concurrently, the outcomes of the evaluation of the low-fidelity prototype offered valuable input for improving the platform's functionality and design in the next iterative phase. The evaluation's main recommendations at this point included a number of areas for development that served as the basis for the second design iteration.

Firstly, there was some misunderstanding about the icon used to access the filter feature on mobile. Some participants believed it to be a hamburger menu, so we proposed to change the icon to a more suitable one.

Secondly, desktop users anticipated that a counter on the heart icon would show up as they added pets to their list of favourites, letting them know how many animals they had saved.

Thirdly, we had complaints about the pre-adoption form responses' awkward positioning—they appeared at the bottom of the mobile screen when landing on the page, making it difficult to perceive them, as also nothing happened when they tapped on the blank input controls located higher up.

Finally, another improvement suggestion from the participants was that they would wish for some helpful tips for creating a unique note in the inquiry flow, so that it would be easier for them to write something. With these suggestions in mind, we worked iteratively on the concepts, and transformed them into prototypes with high-fidelity attributes, so that we could test these as well.

Meanwhile, the qualitative and quantitative results of the high-fidelity moderated usability tests showed that the platform was perceived as usable, user-friendly and pleasant. Table 7 shows that the overall task completion rate of the mobile and desktop prototypes was 100%, the average time to complete a task was 166 seconds, and the participants' assessment of the system resulted in a SUS score of 97.

**Table 7**  
**Usability Score of the High-Fidelity Prototype (Mobile and Desktop)**

| Usability metric | Usability measure                | Usability score |
|------------------|----------------------------------|-----------------|
| Effectiveness    | Task completion rate (%)         | 100             |
| Efficiency       | Average task completion time (s) | 166             |
| Satisfaction     | SUS score                        | 97              |

Further qualitative findings were discovered. Users described the platform as intuitive, easy to use and navigate, as all of the participants were able to complete the given tasks quickly and trouble-free. Furthermore, the usability testing participants were satisfied with the variety of filter options, including the possibility to filter pets based on their personality traits and compatibility with other animals, as, this way, they were able to reduce the number of irrelevant pet results.

Many users were pleased with the "like" button feature, as it allowed them to save their favourite pets, making it easy for them to access their saved pets later on. They appreciated how simple it was to access the entire favourites list, and also liked that the "like" button was located conveniently on the pet cards found on home, rather than only on the pet profile.

Additionally, the test participants were content with the visibility of the system status, which is the first principle on the list of the Nielsen's heuristic's criteria [11].

Furthermore, participants expressed satisfaction with the visual layout and appearance. Moreover, they often mentioned the high quality of information provided, stating that they were pleasantly surprised by the volume and organisation of the comprehensive information, particularly on the pet profile page.

Nevertheless, we identified further prospects to enhance the concept, specifically focusing on the pre-adoption form. To alleviate the workload on animal shelters, our future strategy involves integrating tailored pre-adoption forms. Recognising that numerous shelters have their unique adoption questionnaires; we aim to accommodate their individual requirements by incorporating them into our platform.

A few examples of the high-fidelity screens for desktop and mobile applications are shown in Figure 1 and Figure 2.

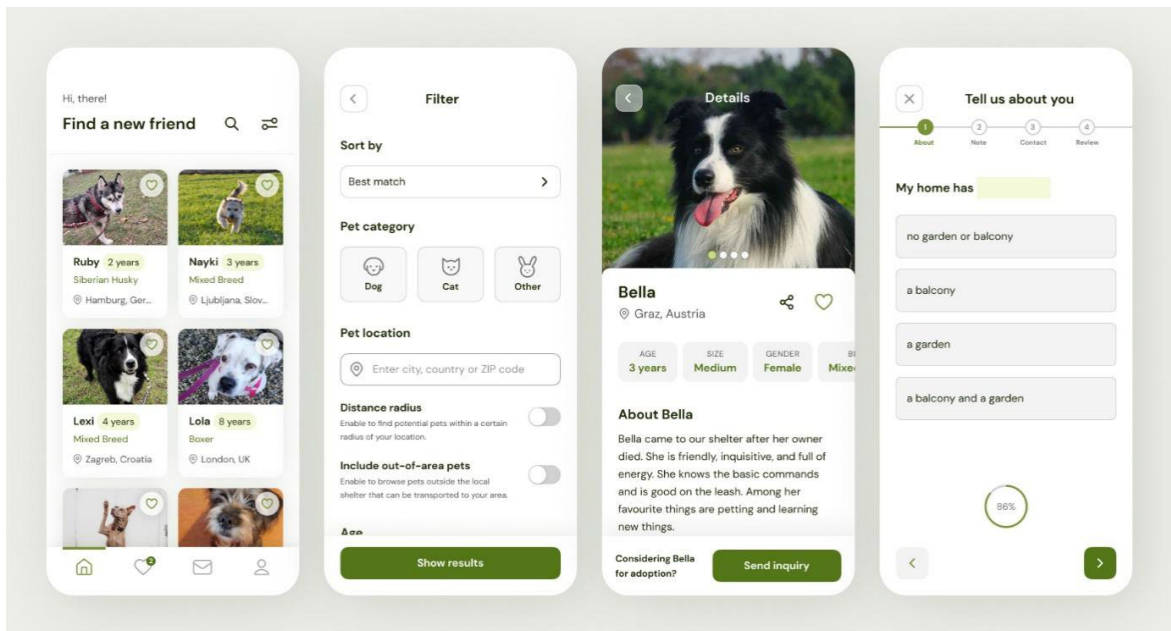


Figure 1: Look and Feel of the Final Mobile Solution

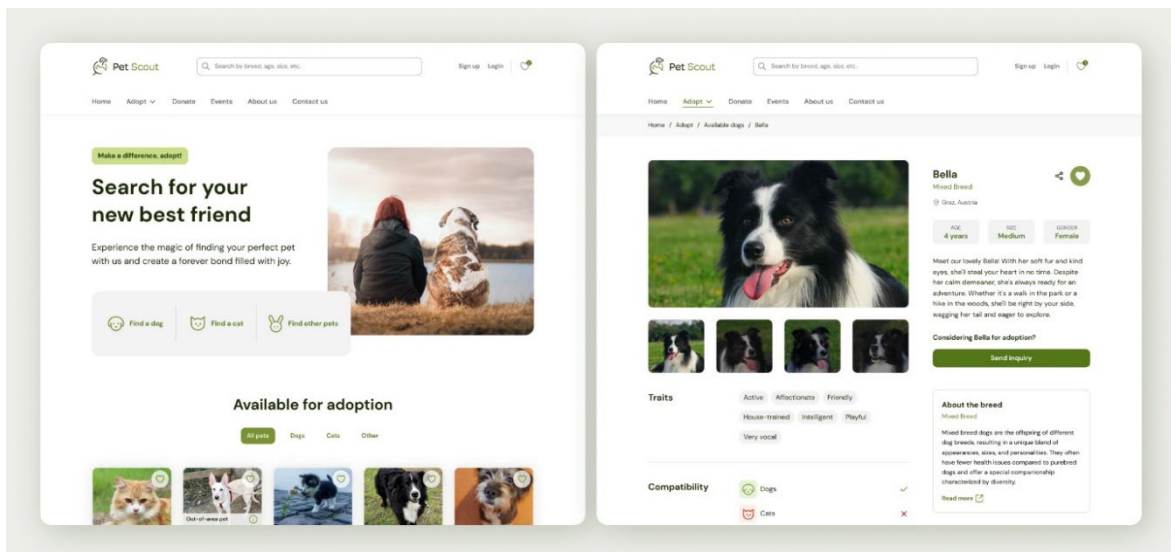


Figure 2: Look and Feel of the Final Desktop Solution

## 7. Discussion and Conclusion

With this project we aimed to enhance the pet adoption journey, by simplifying the process of finding pets and fostering lasting experiences for prospective pet owners and their companions.

User research was essential to our project, as it allowed us to understand the needs and values of the people who want to adopt, so that we can offer them a flawless user experience in the pet adoption process. Research revealed that users require efficient filtering and search options when browsing available pets online. Moreover, detailed and comprehensive pet profiles are crucial to fulfilling potential adopters' wants for extensive information about potential pets. This information helps users ensure that the pets align well with their lifestyles before making

adoption decisions. Another user requirement the platform had to meet is to offer high-quality graphic content that captures the visual appearances and personalities of the displayed pets. Moreover, research showed that potential adopters would like to be able to contact the animal shelters directly from the platform and would also still like to have additional contact information displayed. Finally, a mobile-friendly solution for such a pet adoption platform is necessary, as most of the recruited persons used smartphones to search for pets to adopt. Nonetheless, we also created a desktop solution, acknowledging the secondary use of computers for searching for pets.

Meanwhile, usability testing facilitated the successful evaluation of the platform concept by providing valuable feedback and suggestions for improvement. The usability test report indicates a user-centric, aesthetically pleasing, and easy-to-use solution, with a few minor areas remaining for improvement.

Further research is still required to create a complete pet adoption platform that covers all the necessary features, functions and needs for both users and shelters. We suggest expanding the scope of interviews to include more diverse pet owners and including multiple European shelters to better understand their needs to achieve this. Additionally, ongoing design improvements are vital to meet the evolving user and technical requirements. Furthermore, as we only created click prototypes using Figma, the platform still needs to be developed for the end-users.

This study also has limitations worth noting. Language barriers emerged as the product was only in English, posing challenges for users with limited English proficiency. To improve inclusivity, offering the platform in multiple languages is crucial. Moreover, the participant pool for usability testing lacked representation of real users, as many did not have prior pet adoption experience. Furthermore, the majority of participants were experienced users. Lastly, due to the large geographical coverage of this study and limited resources, remote testing was conducted, which had its limitations in comprehending non-verbal cues. In the future, it can be improved by having either a balanced or controlled set of participants based on their geographic and other demographic data.

With the help of this project, we can offer some insights and recommendations to animal shelters and rescue organisations that could help aid them in facilitating successful pet adoptions:

1. Create detailed pet profiles covering as much background information as possible. Particularly important is to include physical and behavioural characteristics. Our research also showed that adding information regarding the compatibility with other animals is preferred. Ensure providing friendly descriptions to offer users a vivid portrayal of the pets available for adoption.
2. Use genuine and qualitative photos to depict animals accurately.
3. Use advanced search filters, so that the users can refine the results. We included location, age, size, breed, gender, personality traits, medical condition, and compatibility with dogs, cats, and children.
4. If possible, enable the like and share function, so that the users can save their preferred animals and share them with their friends and family.
5. Last but not least, optimize your website and its content for mobile devices to offer a smooth and user-friendly experience on smaller screen sizes as well.

Moreover, based on this study's findings, we provide some recommendations for practitioners to follow when conducting a UX design:

1. User research is crucial: Conduct user research because understanding the users' needs is essential to building user-friendly products.
2. Evaluate design concepts iteratively: With the help of evaluating low-fidelity prototypes we can identify any issues quickly and early.
3. Recognition rather than recall: If icons are used, these should communicate their meanings clearly. For example, the filter feature should distinguish clearly from the hamburger menu. Moreover, use hints within forms to assist users in specific tasks, such as providing guidance when writing a personalised note.
4. Visibility of system information: The feature of adding the content to the list of favourites should provide an informative indicator on the heart icon used to access the list, displaying the current count of items in the list of favourites.

In conclusion, this work explores how a user-centred design can influence the pet adoption process positively, benefiting the pets, potential adopters and animal shelters. We demonstrated a practical approach, that highlights the pivotal role of user experience and interface design in enhancing the pet adoption process with the help of several research methods and design thinking activities in the project. We focused on how leveraging these elements can impact the ease of discovering and adopting suitable pets significantly, contributing to the overall long-term user experience, considering that pet adoption is a lasting commitment.

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