

HCI 594 Project Proposal	Team 1: Marianella Osorio, Kaleena “Rheeya”, Narwani, Timothy Lattimer, Sara Lenahan
	Date: January 19, 2022

0.0 Project Name: An Educational Resource Hub for Pet Adoption

1.0 Project Overview: Description and Context of Use

Motivation for project product:

Owning a pet can be a joyous experience, but the initial adjustment period after adoption can be a time of high stress for both the pet owner and new pet. Whether a first-time adopter or experienced one, integrating an animal into a new environment comes with a wealth of challenges such as behavioral issues, destruction of home or belongings, in-fighting between pets, aggression toward humans, and unexpected health issues. In fact, the entire journey from research to home integration is one that has a lot of room for improvements as prospective pet owners may have little to no training before committing to owning a pet, may have moved too quickly into becoming a pet parent, or simply have no idea where to even begin seeking information around best practices when adopting a new animal.

In addition, there has been a growing number of new pet owners during the COVID-19 pandemic. With the difficulties of owning a new pet, as well as the world opening up more, this unfortunately has led to an increasing number of pet relinquishments (i.e. surrender or abandonment). The motivation for this product is to help families acclimate with their newly adopted pets by providing them with resources they need to make the adoption process easier, which could help prevent pet relinquishment while reducing the amount of stress that can occur in the first six to twelve months of an adoption.

Target demographic for project product:

The target users for this application will be new dog and cat owners, including both first-time pet owners and previous/current owners who are adopting a new pet. This target demographic will be interested in finding resources that will help them through the adoption process.

Context of use of project product (where, when what platform(s)):

This will be a mobile application that new pet owners can reference to help them get acclimated with their new pet. The context of use can essentially be separated into three categories/phases: pre-adoption (while researching about adoptions), during adoption (the adoption commitment phase), and post-adoption (new owners, up to twelve months after the adoption). Since this will be a mobile application, it will be available to users any time, any place.

Project product’s benefits, based on competitive review:

Based on our competitive review, a few benefits of our mobile application are that it would act as an educational hub for: current pet owners looking to adopt a new pet, those who are curious about adoption, and also those who are in the process of adopting a pet. The education provided through the application would help pet owners and their pets acclimate effectively to one another during the first year of adoption. One weakness we identified throughout the sites we reviewed is that information is present, but it tends to be an overwhelming amount of information presented to the user all at once. This can lead to information overload and can lead to users not being able to quickly find the information

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they’re looking for; because of this, there is also an opportunity for us to consolidate information and present it in an easy-to-read, easy-to-access format. Therefore, we hope to create a somewhat interactive and engaging experience for users. Furthermore, because there has been a growing number of people adopting pets during COVID-19 closures, our project also hopes to address and provide additional information & resources related to acclimating a pet to a home during COVID-19. In addition, like mentioned above, our project product would be a mobile application that would benefit a wide range of people by allowing them to access necessary information anytime, anywhere.

How project product is differentiated from similar products, based on competitive review:

Each of the sites we reviewed had a specific purpose and focus on the pet adoption process. There was either a sole focus on getting pets adopted, such as with The Shelter Pet Project (2011); a sole focus on providing current “pet parents” educational resources about pet care such as with The Wildest (2021); but at times it was rare to find a site like PAWS Chicago (2022) that focuses on both. Thus, we envision our project idea being a “one stop shop” of sorts for information related to adopting a pet and caring for the newly adopted pet. We hope to do this in order to make the adoption process easier for all pet owners, especially those looking to adopt a new pet. Another difference between our mobile application and the existing sites and resources is that not only would we aim to provide users with information across all stages of adopting a pet, but we would hope to present users with information in a clear, organized way that does not overwhelm them.

When looking at the PAWS Chicago site, a great strength is that this website offers an extensive amount of information, which can at times be overwhelming to the reader when navigating through the website. PAWS Chicago also does not offer this information in mobile app form, which could be an opportunity to set our new application apart from PAWS. The Adopt-A-Pet (2000) website has a similar issue. When navigating through the resources, the information provided to users is either in the form of various links on a page with an image or two to break up the blocks of text, which can possibly still be overwhelming for users and can make it hard to find specific information quickly.

However, while most of the sites we reviewed tend to overload users with information, one site we reviewed, The Wildest (2021), included interactive features in order to educate the pet owners who visit their site. With tools such as an “Ask a Vet” chat feature or a “To-Do List” creator tool, pet owners are able to learn more about pet care through an engaging design. Therefore, our mobile application would take inspiration from this website and focus on offering users a comprehensive suite of content through a range of resource types (e.g. text-based resources, video and audio-based resources, etc.).

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Human factors basis or support for your proposed effort, based on literature review:

Since the proposed project focuses on keeping individuals informed throughout the pre-adoption, adoption, and post-adoption phases, it is important to understand what pet owner motivations, goals, and pain points are. Before talking with users directly, peer-reviewed articles were sourced and analyzed to help provide initial insights. Three key themes emerged in the literature review on this topic: motivational factors for adoption, the impact of the COVID-19 pandemic, and causes for relinquishment.

Pet Owner Adoption Decisions

During the pre-adoption phase, prospective pet owners decide to acquire a pet based on several factors. Holland, et al. (2019) indicated that people choose to adopt dogs based on household structure, accommodation type, ethnic variation, prior dog ownership, and socioeconomic factors. Their research suggests that the decision to adopt a dog is frequently influenced by previous dog ownership. Furthermore, prospective pet owners can be motivated to adopt due to social influence and base their decision on current trends and their social circle.

Prospective pet owners often do not stop seeking out information at the end of the pre-adoption phase. Instead, per Weiss, et al. (2012), pet owners are obtaining and analyzing new information when they are in the midst of selecting a pet. Factors such as animal activeness, appearance, personality, location within the shelter, description of the animal, and terminology all were seen to influence prospective owner decisions. Cited examples included animals at the front of the shelter having higher rates of adoption and seeing the word “stray” in the description for an available animal dissuaded prospective pet owners. In terms of differences when looking at dogs versus cats, those who adopted dogs cited appearance as being important while people who adopted cats referenced behavior although appearance also mattered when looking at kittens. Other factors of importance included behavior with people, animal age, and playfulness (when considering kittens or puppies).

The Impact of COVID-19

The COVID-19 pandemic impacted the pet adoption process and owner/pet relationships. Applebaum, et al. (2020) assessed owner/pet relationships during the pandemic and found that hardships typically fell into three major categories: pet focused, human-focused, and household-focused. These hardships include difficulty meeting the needs of pets, issues working from home, balancing responsibilities, etc. Conversely, the owner/pet relationship can also be positively impacted during the pandemic. Kayabasi, et al (2021) found that the introduction of quarantining with pets during the COVID-19 pandemic increased owner sensitivity to meeting their pets needs and further impacted the social support pets provided their owner. Additionally, animal purchases increased over the duration of the pandemic. One in four new pet owners claimed their purchase was influenced by the pandemic. Understanding the needs and concerns of current and new pet owners during the pandemic can aid in finding solutions to prevent pet relinquishment.

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Why Relinquish?

According to Powell, et al. (2021), of the roughly 3.2 million animals adopted every year, somewhere between 7-20% of those adoptions result in the animal being returned. Regardless of whether or not there is a pandemic, this issue is of great concern due to the stark consequences that can occur for these animals such as euthanasia. The most common reasons for animals to be returned are related to behavioral problems, aggression toward humans and animals, owner related reasons (e.g., moving,) and medical needs (Powell, et al., 2021; Hawes, et al., 2020.) Animal age in particular correlated with the reasons for relinquishment where adolescent dogs between the ages of 2-8 and senior aged cats saw higher rates of return over their counterparts. Though a fair number of adoptions result in relinquishment, pet owners say that the relinquishment process is highly stressful to the point where some pet owners choose never to adopt again. Knowing that in a given year roughly 1 in 5 pet adoptions can result in relinquishment, there is an opportunity to try to reduce this experience's likelihood by making pet owners more informed about what it means to be a pet owner, helping them select the right pet for their family, and building their skills in pet care.

2.0 Project Goals

- Goal:** Clearly understand the needs of new pet owners to provide motivation for the new application.

Measure: This can be measured by coding and analyzing user responses captured through user and industry interviews. In addition, the competitive review and literature review both provide insights into emerging themes relevant to the pet adoption process. Findings in these latter two methods can be verified or refined based on the user and industry interviews.
- Goal:** Organize site categories in a way that best matches user goals and needs.

Measure: This can be measured through the three rounds of open and hybrid card sorting. Categories that are most commonly matched together by users in these rounds will be integrated into lo-fi and mid-fi prototypes. In addition, the site categories (menus and labels) will be tested again during the click test rounds and usability evaluations. In these later tests, task completion rates and ease of navigation measures will help to refine the categories established from the card sorts.
- Goal:** Users are able to find educational resources they need for taking care of their new pets without needing to use search functions.

Measure: This can be measured with click testing (to track clicks) and usability testing (to measure ratings, number of successes and failures, the total number of steps to complete tasks, etc.)
- Goal:** Develop a deeper understanding of barriers within the adoption process that could potentially increase pet relinquishment.

Measure: This can be measured through themes that emerge from industry interviews and speaking with the professionals about issues that contribute to pet relinquishment.

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3.0 Proposed Methods

1. **Method:** Competitive Review
Goal (contribution to project): To provide insights into what solutions currently exist (if any), to see what is currently out there for new pet owners, and to find gaps in the existing solutions that our project could potentially address.
2. **Method:** Literature Review
Goal (contribution to project): To gather research that has already been done related to new pet owners, and to observe which questions have been answered in order to familiarize ourselves with the areas of pet ownership and pet ownership during the COVID-19 pandemic.
3. **Method:** User Interviews
Goal (contribution to project): To help the team gather information from new pet owners to learn more about our target users, their challenges as new pet owners, and what resources they would find most valuable. This contributes towards building the personas and the information architecture of the application.
4. **Method:** Industry Interviews
Goal (contribution to project): To help the team gather information from the viewpoint of those who work in shelters to learn more about what resources new pet owners often seek. This contributes to the information architecture and what resources are chosen to include in the lo-fi and mid-fi prototypes.
5. **Method:** Personas
Goal (contribution to project): To assist with identifying who the team is designing for and understanding what the various needs and goals are for new pet owners.
6. **Method:** Card Sort
Goal (contribution to project): To find patterns in the content and help organize the information architecture of the application, which will be incorporated into our lo-fi and mid-fi prototypes.
7. **Method:** Lo-fi Prototype
Goal (contribution to project): To implement our learnings from our previous methods to put together a preliminary prototype for testing.
8. **Method:** Lo-fi Evaluation - Click test
Goal (contribution to project): To evaluate where users are seeking information from the lo-fi prototype view of the application by tracking where users are clicking.

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9. **Method:** Mid-fi Prototype

Goal (contribution to project): To use the results from the lo-fi evaluation and make necessary changes to the lo-fi prototype. In addition, update the prototype to a better working prototype through refined details in the design.

10. **Method:** Mid-fi Evaluation - Usability Evaluation

Goal (contribution to project): To learn about any pain points in the application through testing by asking users to complete a series of tasks, to which we can take as feedback towards future steps in the project.

4.0 Project-Related Activity

Brief Description: Hybrid card sort

Objective: Our team wishes to create a resource for new pet owners where they can quickly and easily find the information they need to become acclimated with their pet. We will conduct a hybrid card sort to understand where users may expect to find information and to explore the possibilities for the information architecture of our new application.

Preliminary implementation plan: Our team will offer a hybrid card sort using Optimal Workshop.

Planned availability period: Week 6 - February 7-9, 2022

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5.0 Planned Weekly Schedule

Week (Beginning)	Methods	Deliverables	Comments
3 (17 Jan 2022)	<ul style="list-style-type: none"> Competitive Review Literature Review User and Industry Interviews 	<ul style="list-style-type: none"> Analyzing Competitors Summarizing and Solidifying Literature Creating draft consent form, protocol, and interview questions Recruit for interview 	—
4 (24 Jan 2022)	<ul style="list-style-type: none"> User and Industry Interviews 	<ul style="list-style-type: none"> Finalize protocols Conduct Interviews Analyze Results Work on sections related to User Interviews in the final report 	Weekly Status Report due
5 (31 Jan 2022)	<ul style="list-style-type: none"> Personas Card Sort 	<ul style="list-style-type: none"> Create persona drafts Create Card Sort Protocols Run 1st round of Card Sort Work on sections related to persona in the final report 	Weekly Status Report due

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6 (7 Feb 2022)	<ul style="list-style-type: none"> • Card Sort • Lo-fi Prototype 	<ul style="list-style-type: none"> • Recruit for card sort rounds • Run 2nd round of card sort • Make adjustments to Card Sort based on Round 2 results • Run 3rd round of card sort • Analyze card sort results • Create Lo-fi Prototype Sketches • Work on sections related to the Card Sort in the final report 	Weekly Status Report due
7 (14 Feb 2022)	<ul style="list-style-type: none"> • Lo-fi Prototype • Click Test 	<ul style="list-style-type: none"> • Finalize lo-fi prototype • Create Click Test Protocols • Recruit for 1st round of Click Test • Run 1st round of Click Test • Make adjustments if needed for Round 2 of Click Test • Work on sections related to the lo-fi prototype in the final report 	Weekly Status Report due
8 (21 Feb 2022)	<ul style="list-style-type: none"> • Click Test • Mid-fi Prototype • Usability Evaluations 	<ul style="list-style-type: none"> • Recruit 2nd round of Click Test • Run 2nd round of Click Test • Analyze Click Test Results • Design mid-fi Prototype • Create Usability Evaluation Protocols • Work on sections related to the click test and mid-fi prototype in the final report • Recruit for Round 1 of Usability Evaluations 	Weekly Status Report due

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9 (28 Feb 2022)	<ul style="list-style-type: none"> • Usability Evaluations • Mid-fi Prototype 	<ul style="list-style-type: none"> • Run 1st round of Usability Evaluations • Make adjustments to mid-fi prototype (if needed) • Recruit for 2nd round of usability evaluations • Run 2nd round of usability evaluations • Analyze Usability Evaluation Results • Work on sections related to the mid-fi prototype and usability evaluations in the final report 	Weekly Status Report due
10 (7 Mar 2022)	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Finalize final report • Submit final report 	Final Report due Monday, March 7 @ 11:59 PM

6.0 Team Contributions

Team member name	List specific contributions to this assignment
Marianella Osorio	Project Overview (Project Product's Benefit & Project Product Differentiation), Literature review (2 articles), Competitive review (3 analyses), Methods, Goals, Weekly Schedule, references
Kaleena "Rheeya" Narwani	Project Overview (motivation), Literature review (2 articles, Why adopt and relinquishment summaries), Methods, Goals, Weekly schedule, references
Timothy Lattimer	Project overview (motivation, target demographic, context of use), Literature review (1 article), Competitive review (1 analysis), Methods, Goals, Project-Related Activity, Weekly schedule, references
Sara Lenahan	Weekly schedule, Literature Review (COVID-19 summary and adoption decisions), references

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7.0 References

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