

CS 160 | Summer 2022



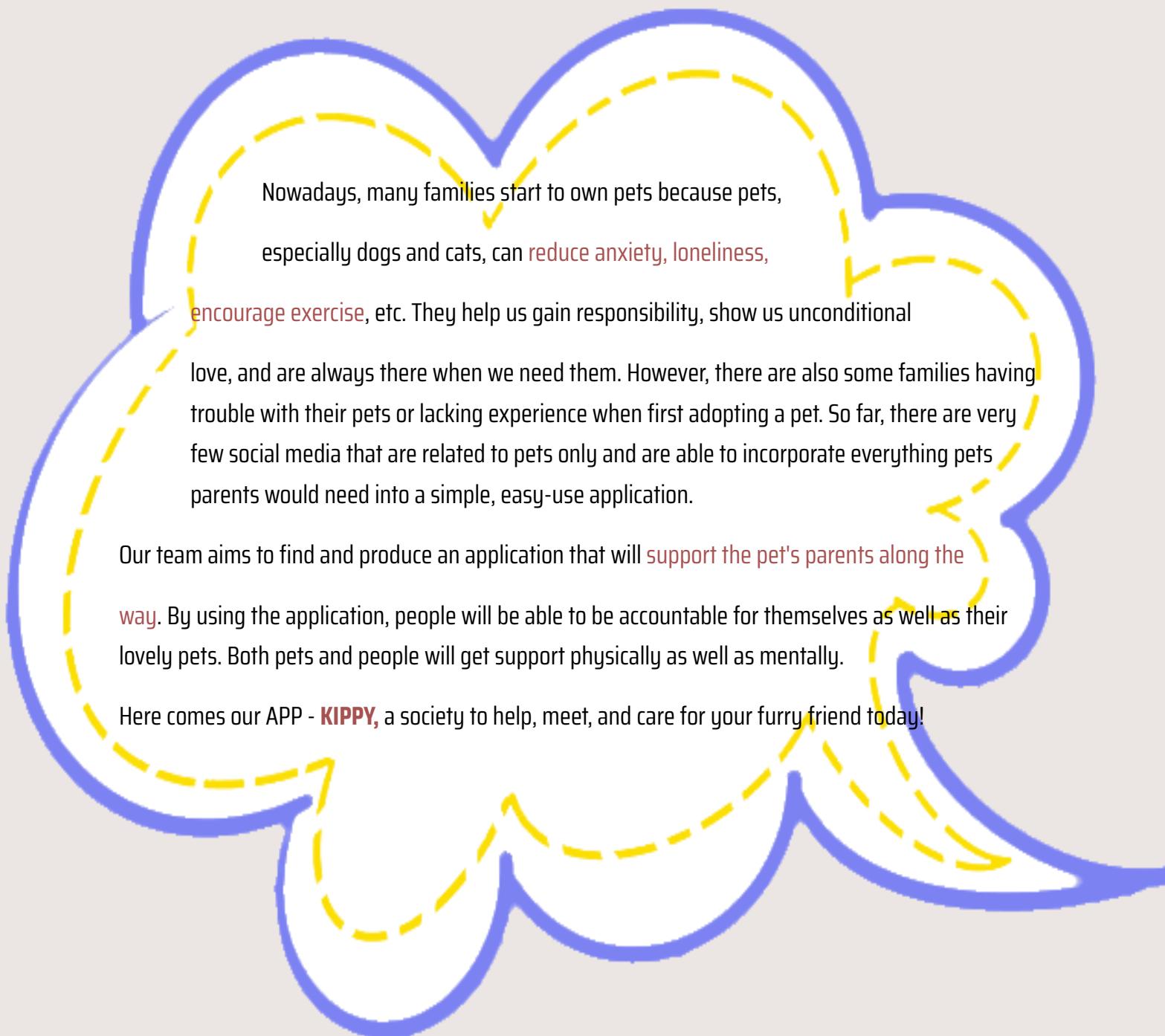
Team 8 - KIPPY

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Introducing Kippy



Nowadays, many families start to own pets because pets, especially dogs and cats, can **reduce anxiety, loneliness, encourage exercise**, etc. They help us gain responsibility, show us unconditional love, and are always there when we need them. However, there are also some families having trouble with their pets or lacking experience when first adopting a pet. So far, there are very few social media that are related to pets only and are able to incorporate everything pets parents would need into a simple, easy-use application.

Our team aims to find and produce an application that will **support the pet's parents along the way**. By using the application, people will be able to be accountable for themselves as well as their lovely pets. Both pets and people will get support physically as well as mentally.

Here comes our APP - **KIPPY**, a society to help, meet, and care for your furry friend today!

Design Process

Brainstorming

At the beginning of this project, each of our group members came up with various interesting ideas related to the theme of the project. Finally, we decided to choose the idea between entertainment and pet caring.

Since most of our group members are pet owners and we often face many problems with getting along with our furry buddies, we believe that it will be good if there is a platform that allows pet parents to share their valuable experiences about pet caring; So we made our final decision which is to produce an APP for pet parents.

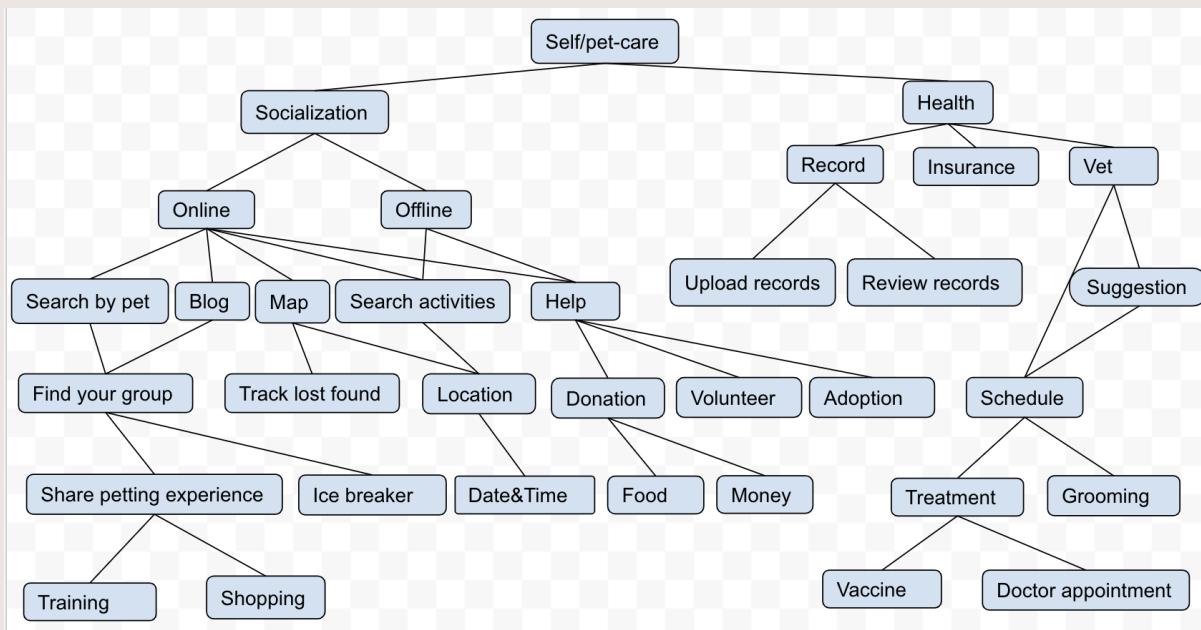


Once we confirmed the idea of our project, we started thinking about how we should name our App. Then, we came out with a name, Kippy. Kippy is a combination of kitty and poppy. The theme of our final project is accountability, so we intend to make our APP mainly focus on pets' health.

Besides that, some people also want to build up social relationships with strangers who might have the same interest in pets or pets' related topics with them. There are also groups of people who love cute and want to get involved and support the pet community. So we also want our APP to include two additional features, community and public welfare.

Task Analysis

After having rough ideas and functionalities of our application, we moved on to build a hierarchical task analysis that will bring our ideas into categories. During the group meeting, we discussed the main task we wanted to achieve and then moved on to deeper discussion about things related to the main task and some possible actions. In this step, we were able to break down each category into details so we wouldn't miss details. This process also helped us to organize our tasks and bring them into the correct subtasks. Later on, we would use this task analysis to determine whether it fits the needs of pets' parents.



Observational Study

Our application is aimed at pet owners, then the interview goals are more focusing on how those types of person react to our ideas. We prepared three groups of interviewees, namely **Mr. A, Mr. B, Mr. C** and **Ms. D**. **Mr. A** is a Berkeley student who owns 2 cats. **Mr. B** is a student who lives in the Los Angeles area, and currently owns one cat. His family also has one dog and two cats. **Mr. C** and **Ms. D** are a

couple who owns a cat. Almost all of them don't have much experience with pets because they are all having pets independently for the first time.

After these interviews, we noticed the following problems that pet owners may facing:

- First-time pet owners often misunderstand their pet's behavior
- They do not have a little concept of pet training
- They are also not very accustomed to how to get along with pets
- They are eager for help but feel complicated
- They often feel a nameless pressure rushing into their minds

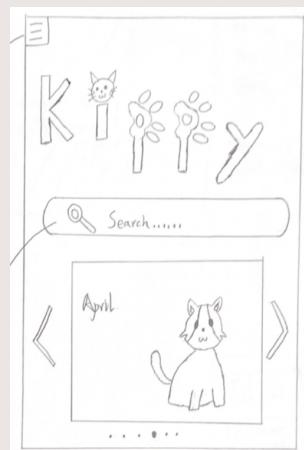
For those problems, we have also come up with corresponding solutions.

While users are eager to get help, they feel that things are too complicated and therefore shelve the problems they are experiencing. In fact, it comes down to the fact that the user's recognition of the application is not high enough and not solid enough. The main goal for us is to develop a key idea or function that is able to raise users' commitment for the application. After a little research, a health function may do the work.

Users who are first-time pet parents don't have enough basic knowledge about caring for a pet. We can develop a function to provide tips, basic knowledge or let other experienced users share their knowledge. New pet parents can learn from other users' experiences. We may call this the pet parents community. Within the community, both pet problems and breeder stress can be well released.

Intermediate Sketches

In order to more intuitively show the functionality of our software, we have refined the sketches of several plates, from the initial idea of nearly thirty to five large sections: **home, socialization, user, health, and help**.



When making the home section, we mainly grasped two points: simplicity and attractiveness. Therefore, we spent lots of time on the logo and brand

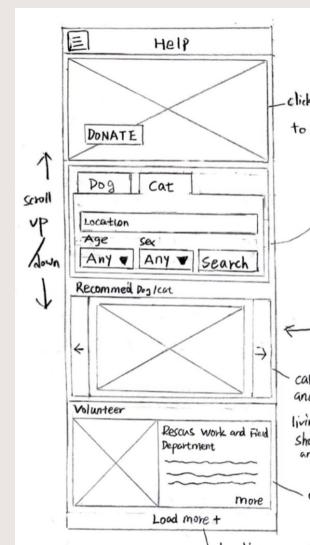
name. **Kippy** is our final outcome. It means keeping kittens and puppies with people in perpetuity (or just kitty and puppy).

When making the socialization section, we mainly grasped two points: connect and solve problems. Therefore, we add message, map, and game functions to resolve the connect points. Also, the search and post functions will do a huge favor for the pet parents. The most noteworthy function is the map. It contains events and lost/found. It not only helps pet parents to connect with strangers, but it also helps them navigate special situations.

When making the user section, we mainly grasped two points: shareable and convenience. The happiest thing for pet parents is to share the bits and pieces between them and the hairy children, so the function of sharing daily routines can grasp the psychology of users. Convenience is a must for every piece of software, so there's no doubt about that.

When making the health section, we mainly grasped two points: informative and interesting. The most stressful moment for every pet owner is when their pet is sick. Therefore, our main goal is to provide the most comprehensive information to help them past that dark period. Also, the interesting articles are able to help pet parents to get better known to their child.

When making the help section, we mainly grasped two points: service and be served. Therefore, adaptation and volunteer function seems necessary to build that relationship between pet owner and the society.



Peer Feedback

After posting our initial ideas to slack, we received lots of feedback from classmates. One of the classmates thinks that our HTA is hard to follow. She pointed out that offline and online activities are misleading on the map function. Therefore, we adjust the map to the offline mode, which is mainly focused on events, not for checking online surroundings. That will keep users' information safe. Also, another classmate pointed out that security is concerned. It is a great idea to " add another layer of security by requiring all pet owners to sign up and confirm their identity." However, it is not super friendly for the first time user. We may add some security messages when users exchange their contact information. Also, a classmate pointed out that a filter for blogs is a necessary function. Ideally we try to use some AI to push the related blogs to the user. That means when people sign up with their pet, like if Mrs. A has a cat and our application will only push cat related articles to Mrs. A. However, it is hard to show that function on the visualization part. I think the best solution is to make some clarification on the side for users.

Storyboard and Persona

When we imagined what our app would be like, we thought of creating a unique persona that signifies what our user will be like and what they will do performing various tasks. The persona we created for this web application is Max. Let's meet Max!

Max is a university student who lives in a pet-friendly apartment. Max is kind and responsible. His friend's cat recently gave birth to 4 cats. Max has always been interested in owning his own cat someday. He decides to ask for a cat from his friend. His friend is happy to give him the cat. Max is now a new pet parent having a baby kitten who is about 3 months old. His friend told him the basics about how to feed your cat and how to make the cat bathroom, but did not tell him how to read the behaviors or how to make the vaccinations for the kitten. He wants to learn more about his little kitten.

We thought of this specific persona because the participants we interviewed in our interview consist of college students. When we asked them about their pet raising experience, they answered that they

did not have a lot of help from their friends. It would be better if there is an application that can help them in the earlier stage of their pet raising experience.

Scenario 1: Buying food

With his new kitty arriving, Max wants to buy some cat food and treats for his growing kitten. He logged on to his account on Kippy. He searched for pet food recommendations related to a kitten. He found multiple blogs written by experienced and certified cat owners. He reads the blogs and chooses what type of food to buy. Max is very careful about the ingredients the food uses. He reads the ingredients and usage for each cat food and treats and looks for their pros and cons. After a click, he is directed to the website that sells the cat food. He is happy that he finished buying the food.

Scenario 2: Kitty has too much energy.

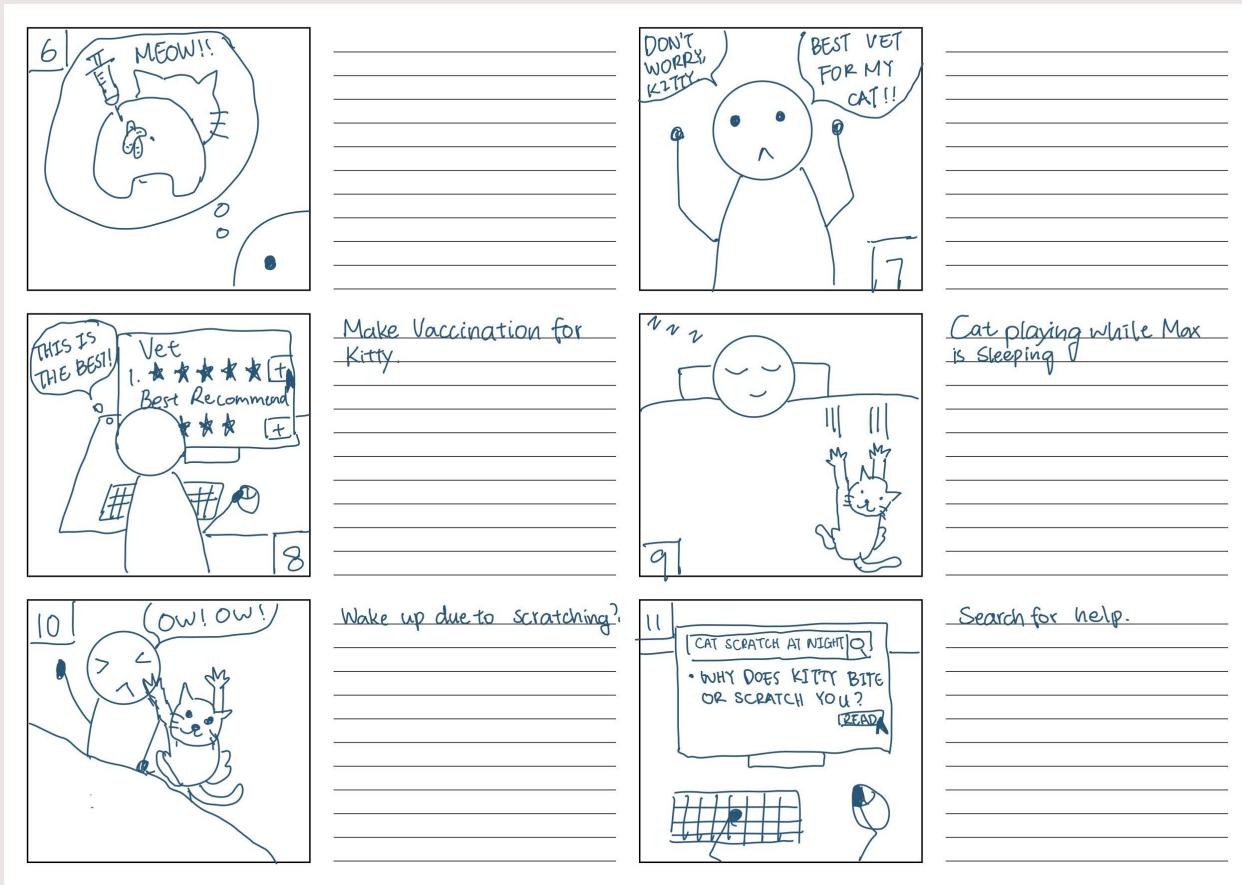
Max is sleeping at midnight. However, his little kitty is still hyped up. His kitten is still jumping and hyped up around him. He is still sleeping until his little kitten decides to jump on his face and bite him. He woke up quickly and took his kitten off his face. With minimal knowledge about cats, he does not understand why his kitten would not sleep. He searches on Kippy for blogs relating to cat biting and scratching and cats not sleeping at night. He then realizes that his cat has a lot of energy and he needs to wear off his cat's energy before sleeping. He decides to play with his cat for a while. After playing, both kitten and Max had a good night's sleep.

Both Scenario 1 and Scenario 2 captured many problems pet parents will face in the early stages of their pet raising experience. Raising a cat or dog from a baby is not easy. This is the platform that we want to make which will educate new pet parents and help them to bond with their pets.

Let's see visually about the day that Max got his kitty and walk through a day using Kippy, and see what choices he made dealing with his new furry friend.



In this situation, Max looks for products for his new kitty. He imagined himself playing with his kitty after the food and toy arrived. Thinking of his beautiful imagination, he quickly bought the toys he needed.



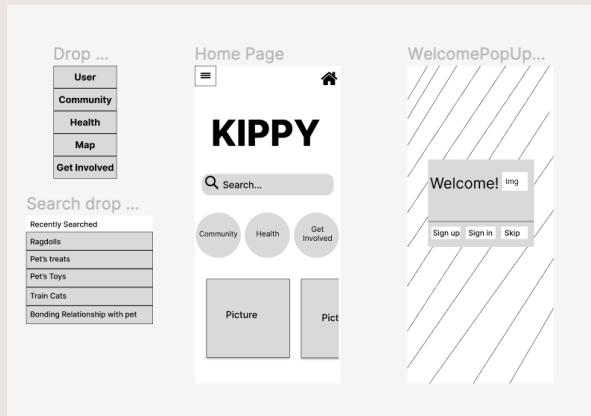
Max's kitty is still very young, about 3 months old. It did not get any vaccination shots yet. Worried about his cat's health, Max goes on Kippy to search for vet hospitals for his cat. He reads vaccination related blogs and finds all the shots his cat needs. After he finished preparing everything, Max went to sleep. However, his cat decides to play with him and Max is woken up feeling hurt.



After reading about why his cat scratches him, he understands his cat. Look at Max, he is happy about bonding with his cat!

Low Fidelity Wireframe

We designed our low fidelity wireframe in Figma. The goal of this first draft is to use our intermediate sketches and design clear and organized wireframes to enable early visualization of alternative design solutions, which helps spur innovation and improvement.



Home Page: This is our home page wireframe. Our home page has a drop down menu bar on the top left which is easy for users to navigate between different pages. We will have a logo in the middle of our home page and a gallery at the bottom. The three circles represent the three main functions of our application.

Two wireframes for survey pages. The left one, 'Survey1Page', shows a 'Survey' section with questions about pets ('What pets do you have?' with radio buttons for 'Dog' and 'Cat') and interests ('What topics are you interested in?' with checkboxes for 'Pet's food', 'Pet's supply', 'Pet's health', 'Pet training', and 'Know other pet parents'). It includes a 'Continue' button. The right one, 'Survey2Page', shows a section for 'The users you might be interested...' with profiles for 'GraceZzz', 'AmyD', and 'AlexZhang', each with a plus sign icon. It also has fields for 'Username:' and 'Password:' and a 'Submit' button.

Survey Page:

This is the beginning of our applications, where users try to make an account, they can choose their preference, whether they have a cat or a dog. This function sort of works like a filter function.

Three wireframes for map-related pages. 'MapEventPage' shows a map with a location pin and a list of events: '1. Dog parents social at Dogs Park', '2. Dog salon available', '3. Dogs & Cats date', and '4. Pets racing competition'. It includes tabs for 'Map', 'Pet Lost', and 'Event'. 'MapLostPage' shows a map with a location pin and a list of lost pets: '1. Dog lost at Almansor Park' and '2. Cat missing near Lincoln Street'. It includes tabs for 'Map', 'Pet Lost', and 'Event'. 'MapLostInfoPage' shows a detailed view of a lost dog at 'Almansor Park' with a 'Picture' button, '(Post's detail)' link, and contact information 'Contact: (xxx)xxx-xxxx'. It includes tabs for 'Map', 'Pet Lost', and 'Event'.

Map Page:

It contains lost pet information and event information. We thought of this function because visualization of lost pets on the map is easier for people to notice.

The wireframe shows two pages side-by-side. The left page is titled 'Community Page' and features a header with 'Community' and a search bar. Below the header are four placeholder cards labeled 'Picture' and 'Title'. At the bottom are tabs for 'Community', 'Ice Breaker', 'Post', and 'Message'. The right page is titled 'Ice Breaker' and also has a header with 'Ice Breaker'. It displays four placeholder cards labeled 'Picture' and 'Game Name'. Below each card is a 'Description:' field with three ellipsis dots. At the bottom are tabs for 'Community', 'Ice Breaker', 'Post', and 'Message'.

Community Page: The main functions of our community page is not just to message your friends like other applications. We want users to bond using our applications. They can add users they like or meet through blogs. Or they can simply get together with friends and play ice breaker games. Our ice breaker games support users to play with other pet parents they meet.

User page:

The user page allows users to see their info, their calendar, friends, and medical record. Medical record is a function we thought about when thinking about our user stickiness. We want to keep our users, so a portable medical record like this will allow users to keep our users.

The wireframe shows a user profile for 'Amy'. It includes a circular icon with a person silhouette, the name 'Amy', and five navigation items: 'Info' (with a paw icon), 'Calendar' (with a calendar icon), 'Friends' (with a people icon), 'Medical Record' (with a clipboard icon), and 'Setting' (with a gear icon).

The wireframe shows two pages. The left page is 'Get Involved Pa...' and includes sections for 'DONATE' (with a large X over it), 'Dogs' and 'Cats' buttons, a 'Location' search with dropdowns for 'Age' and 'sex', a 'Search' button, 'Recommend Dogs' (with arrows), and a 'Volunteer' section with a 'Rescue work and Field Department' note and a 'More' link. The right page is 'Search help' and shows a 'Search' bar, a 'Filter' section, and a list of four placeholder cards for pets named 'Rico' with details: 'Akta', 'male', '4 yrs', and 'Alameda,CA'. At the bottom is a 'See All' button.

Get Involved Page:

We think of the functions of donating and adoption because we want to give our users more information, users might not be pet parents yet but are interested in adopting one.

User-Free Evaluation

In our user free evaluation, we went through a Heuristic evaluation. Most of the icons we used are related to the real world scenario. In our wireframe, we marked everything with their English names. The user has control of every single interface. There is not an unexpected jump from one page to another. The top left menu bar on every interface can lead the users to jump between interfaces. The home button on the top-right corner is a constant reminder to users that they can click this and go back to the home interface. The users do not need to remember anything by themselves. However, one thing we lack in our wireframe is error prevention. We do not exactly have error prevention in our prototype. If they misclick on the post page, they will either post or just lose all of their progression.

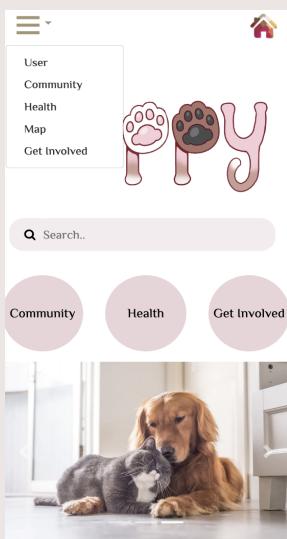
Through our user-free evaluation, we are able to better understand what are the pros and cons about our current application. We can improve our application within the final design. Some of our functions may cause too much trouble such as the survey because users would prefer a filter that they can choose within the application.

Final Design

Our final design of the application is a vivid, more detailed and descriptive version of our wireframe. We added menu bars for each main task so users can easily utilize it. We also designed our application logo with our application's name - KIPPY. The color scheme of our application is mostly pink and brown due to cats' pink paw and dogs' brown paw.



We used cartoon cat, pink paw, and brown paw in our logo. The logo is consistent with pink and brown gradient colors. We also used a cute font to represent our cute pets.



In this final design, we use a menu icon on the top left of the screen and it shows the main tasks of our application which includes User, Community, Health, Map, and Get Involved. The search bar in the middle allows users to search for anything they want such as pet training, or pets' health advice and more pets related. Then, we also created three topics which represent functions that users are most interested in. We also added a photo gallery in the end and it will automatically swipe the pictures to see some lovely pets images posted by users.

Community - Post

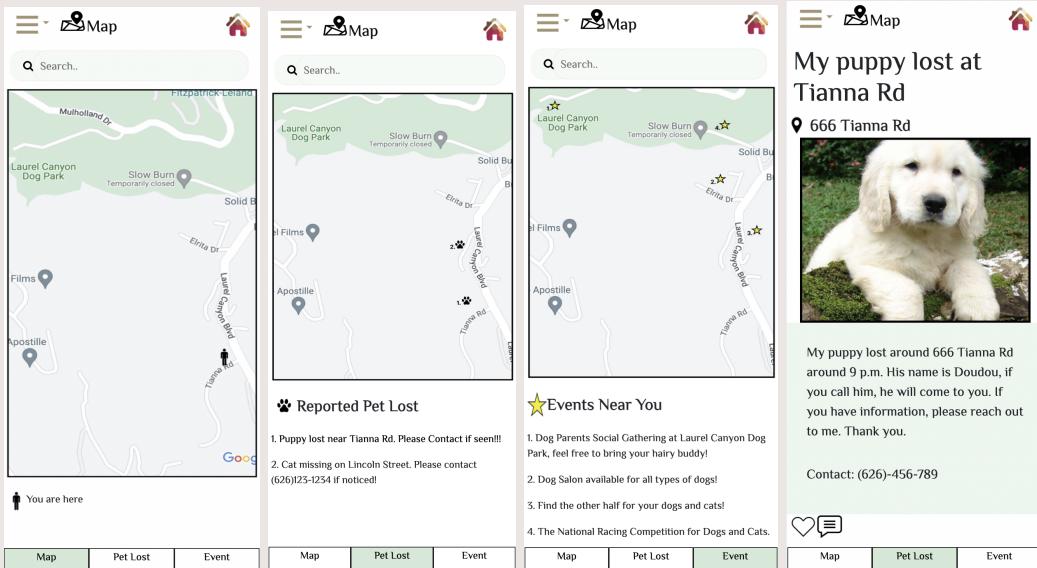
The first functionality of community is post. Users of the application can post and share their thoughts on this platform. The posts can be anything they want to share, including questions, good places to visit, suggested or avoided pet supplies, advice as first-time pet parents, or make friends. We also incorporated filters so users can choose to see posts only, users accounts only, videos only and images only. The “+” in the post detail screen also allows users to follow a user they are interested in and they could be friends with each other if the user followed back. The menu bar in the bottom gave users flexibility to choose main screens of the community task and the relevant rectangular will be pink to represent the current screen.

Community - Ice Breaker



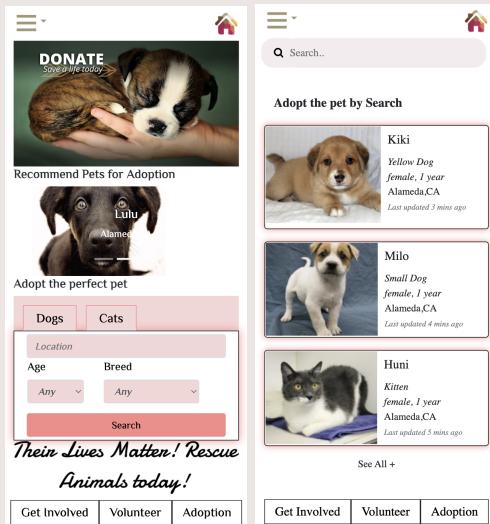
Another functionality of the community is Ice breaker and Socialization. After users become friends with each other, they can message to chat with each other and talk about anything they want. We also had a game screen and provided some games to users. Then, they can pick one game and invite friends to join their game room and start the game online. Some people may also choose in person gathering and activity through our platform which is available in the map section.

Map



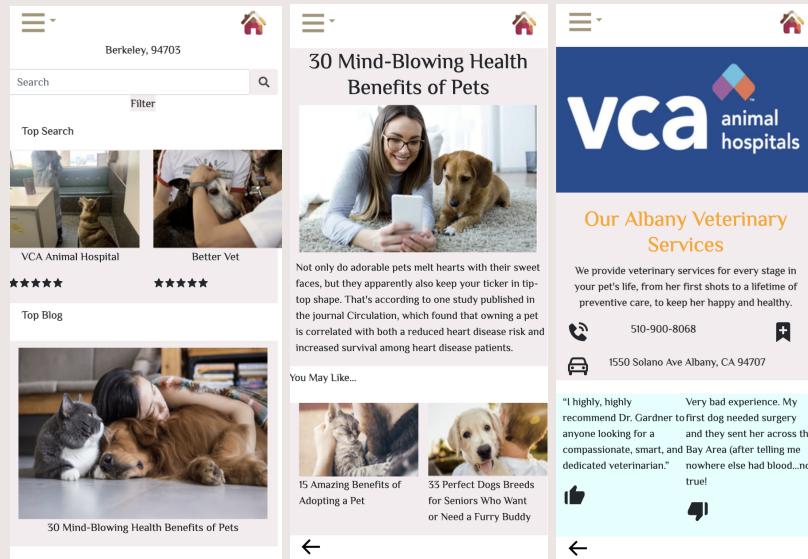
Our App includes a mapping feature. Users of the application click the menu bar at the bottom of the page to switch among the navigation page, event page, and the pet lost report page. When the pet parents want to bring their pet to participate in some events, they can find any pet event nearby by using the map. Also, if users' pets are lost, users can post on this page, and others who have any information can reach them out.

Get Involved



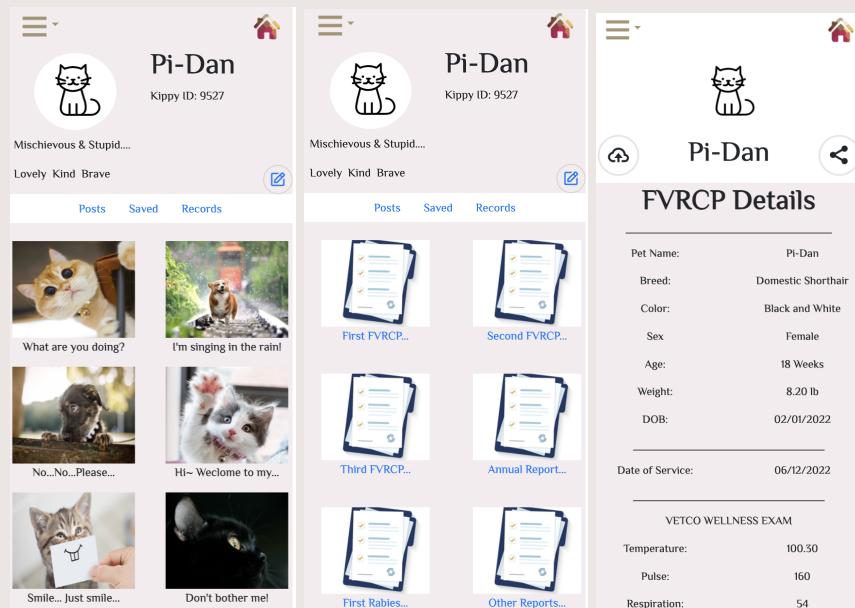
Another significant feature that our App includes is public welfare. Users can donate supplies or supplies to the shelters in order to support the homeless animals. Additionally, they can sign up and become a volunteer in any community event to help pets. Beside that, users who want to bring furry friends home can adopt a dog/cat from this website.

Health



We also incorporated a Health function in our application. As a pet parent, the most important and necessary function is to make sure pets' health. In the Health screen, users can pick a hospital and see the details of the hospital. Another cool thing is our app also generates top blogs so user can view the article to learn some pet-related knowledge.

User



The last important functionality in our application is the user profile. Users can save their pet digital vaccine record here as well as the posts they liked for future view. Also, other users who want to get in touch with you can view your profile to know more about you.

User Evaluation

Feedbacks

1. The search bar on the home page is kind of plain.
2. The home page should have some information photos, not just the simple unrelated photo. For now, it's kind of useless.
3. The message part is kind of uncommon, users believe "friends" may be a better name.
4. The menu on the home page is pretty clear, and all necessary information is included.
5. If "they/we" are able to change the pink style, that would be super nice.
6. It is not clear what function our application have. Sometimes they will ignore the map function or user since it is not on the home page.

Findings

1. Users expect more functions on our application but with a more simple layout. Our goal is to provide an all-in-one application for pet owners. However, too many features make our application slightly bloated.
2. Users expect more flexible designs. They want to be able to change layout and styles to suit their own needs. To our application, building a changeable style that would gain more user commitments.
3. Users are not familiar with the interactions of the application. They are kind of confused about how to get from one interface to another. It would be better if there is something to remind them where they were at.

Technical Challenges

Layout Design Challenge

At the beginning of producing the prototype, HTML and Javascript became our enemies. We spent lots of time adjusting the texts and images. Sometimes, the elements would be placed in the wrong positions of the page, and we have no idea how we should deal with this issue since we were not proficient in HTML at the beginning. While we were working on progress, we were becoming more and more familiar with using HTML, and now HTML became our best ally.

Video Recording Challenge

Due to the limitation of our environment, we were only able to use our phone to record the video. While making the video, we always accidentally record the background noise. Editing the video is also a big challenge to us.

Conclusion

Through this final project, we were able to use techniques we learned in the semester to make our final deliverable successful. We are really proud we made it since we were all pet parents and saw this app is beneficial to our society.

To us, they are not only pets, but also our family members who will stay with us for a long long time, so taking good care of them is our prior responsibility. Most of our group members are cat/dog parents, and we all know that raising our cute buddies is a heavy duty, and our purpose of designing this website is to provide a platform that allows pet parents to meet each other and share their valuable experience in raising their pet. KIPPY is very meaningful to us and all of our group members are very dedicated to this project. Future direction of this project will be working towards making a help guide for first-time app users. Also, we discussed the necessity of adding error prevention so users will get confirmations before making a decision. We may design an observational study for usability tests to test this feature. Another idea is about our ice-breaker game feature. We think instead of creating an own game room and inviting friends to join, we could make it so it will show a list of game rooms which are waiting for other users to start the game. Therefore, a user would be able to pick available game rooms to meet more new friends. These are something we are considering to enhance and thank you for reading and enjoying our application.

Reference

[GitHub Repository](#)

[Kippy Poster](#)

[Figma Link](#)

[Figma Present Link](#)

[Final Video](#)

[Photo Reference Document](#)



Help, meet, and care for your furry friends today!

Group 8: Amy Dong, Grace Zheng, Alex Zhang, Gang Hu, Minghua Tan

Introduction:

In today's society, there are many families owning pets. However, pet parents need to be responsible for their pets to ensure pets are healthy and happy. Meanwhile, they also need to be accountable for their pets and their own mental health for problems and concerns when dealing with pets.



Public Welfare

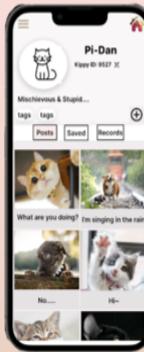
- Donate funds or supplies to organizations listed.**
- Adopt a pet today.**
- Volunteer for pet saving or care organizations.**

Map

- Show lost pets and events near me**

Health

- Recommendations for vets.**
- Search bar for vet.**
- Specific information for vets.**
- Blogs related to pet health and pet training.**



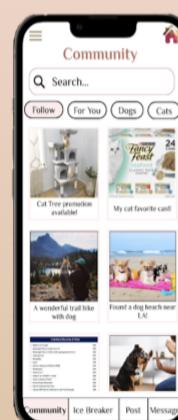
User

- View the medical record.**
- View the posts you saved or liked.**
- Organize the blogs you posted.**



Community

- Ice breaker game with friends**
- Search for blogs using key words**
- Communicate with others**
- Posting or sharing information**
- View post details and comments by other people**



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