

## **FindMyPet**

*Audrey Volle, Miles Wilson, Brandon Webb, Adnan Asif*

### **Roles:**

Audrey Volle: Organizer

Miles Wilson: Idea Creator

Brandon Webb: Note Taker

Adnan Asif: Presenter

### **Problem:**

Losing a pet is a tragedy that sadly many people have experienced. The American Society for Prevention of Animal Cruelty reported that fifteen percent of lost pets are not found. While frantically searching for their pet, owners often must rely on searching themselves, calling animal control, word of mouth, distributing papers with descriptions of the animal, Facebook, etc. The success rate of these methods is not high. This is often due to the amount of time these methods take. By the time the information is spread that the pet is lost, the pet may have been stolen, wandered far away, or possibly passed away. When a person finds a lost animal, it also is a very difficult situation to navigate. The finder often must make several calls, go door to door, or make a social media post. This is also a time-consuming endeavor. The good Samaritan may be on their way to an event. Bystanders who choose not to help the abandoned animal may do so because they know the process of finding the owner would be too hard. There should be a solution that can make this process easier and more successful for the owner as well as the finder.

### **Research Goals, Stakeholders, and Participants:**

#### **Targeted Participants & Stakeholders**

The group of people who will use the design is individuals who have lost their pets, those who have found a pet, and bystanders on the lookout for lost pets. We plan on conducting interviews with people who have lost their pets and those who have found a pet. Animal shelter employees also will have a unique experience with people who lost and found pets so we will also go to the shelter, and conduct research with them. We would like to receive feedback from pet owners who had a difficult experience finding their pet or, in the worst case, never found their pet. These people might provide insight into what would make it easier to find their pet so that we might integrate more helpful features into our design. With feedback from pet owners, bystanders, and animal shelter employees, we will be able to design our app to better serve and assist these people.

#### **Primary Design Research Method**

Our approach to research is through interviews. We plan on interviewing three groups of people with a series of three questions. For the first group of people, people who have lost their pets, we plan on asking the following questions: What methods did you use to find your pet? If any, what method worked to find your pet? How long did it take to find your pet? What would have helped you find your pet easier and/or quicker? These questions will help us understand the pet owner's perspective. The next group is people who have found a pet. We will also ask this group three questions as follows: What did you do first when finding the pet? How did you try to find the owner? What worked to find the owner? The information gathered from this set of questions will assist us with learning the process those who find lost animals might go through and how we might improve this process. The last group of people, animal shelter employees, will have their own perspective on the pet-finding process as well as an insight into the other two groups of people. We will ask animal shelter employees the following questions: How likely is it for a pet owner who comes looking for their pet at the shelter to find it there? Is it common for animals to be found and brought to the shelter, but the owner does not come and retrieve them? What do you think is the most effective way to find your lost pet? Along with conducting an

interview, we plan on visiting the shelter to further our understanding of how the shelter operates.

#### Detailed Methods

Our method for conducting interviews is finding local people that fit our group descriptions. Constructing an outline to help aid the interview process will also be included in our research design. This outline will include specific questions we will ask and other talking points to discuss with the interviewee. We plan on conducting an interview at the local animal shelter, Edwardsville Animal Shelter. Our backup plan if we are unable to go to the shelter is to conduct an interview via a phone call. For the other two interviews, we have many personal connections with people who have lost and found a pet. We only plan on interviewing two individuals (one who lost their pet and one who found a pet) but we will conduct more interviews if needed. After asking these groups of people the designated three questions, we will have a discussion as a group about how we can improve our design to better suit the interviewees needs. We will also discuss tasks, problems, or opportunities we uncovered.

### **Research Results and Themes:**

#### Summary of Key Findings and Takeaways

We found that our design is something that is needed and will be used. As we hypothesized, pet owners are at a loss of what to do when they lose their pet. Our design would assist them in finding their pet. Similarly, people who have found a pet do not have an efficient safe way of finding the owner. Our design provides a safe and easy way of finding the owner. Overall, the interviews proved that we need a design like this for the safety of the pet and the owner.

#### Design Research Participants

##### *Participant 1: A lost pet owner*

Our first participant was a pet owner who had lost their pet. We learned a few things from this participant. Unprompted, the participant suggested that a GPS tracking collar would have been extremely useful in their attempt to find their pet. Not only was this feature already included in our design, but we added other useful features centered around the GPS feature. We also were able to reaffirm our beliefs about what pet owners result in when they find their pets. The participant resulted in physically searched for and chased their pet.

##### *Participant 2: Animal shelter employee*

We received a lot of helpful information from this participant. We were first asked questions relating to the amount of lost or stray animals that the animal shelter takes in. We learned that animal control is more involved with that process, and the animal shelter is not allowed to take in strays/ lost pets. They said they received lots of calls asking if they have their pet there at the shelter and that they direct them to animal control. We explained our design and it was met with extremely positive feedback. The employee said that this would solve the problem of social media being a poor place to try and find a pet or the owner. The participant said, "having a centralized place where everyone in this situation could go at any time would be an amazing thing."

##### *Participant 3: A person who found a pet*

Our participant that found a pet did so randomly. They were not expecting to find a dog when they did and were certainly not prepared to deal with it. This participant suggested that it would be beneficial to somehow have direct contact between the owner and themselves. Our design would provide that feature.

### **Research Themes**

#### Theme 1: Finding a pet is a difficult and stressful experience

Participant one displayed the biggest evidence of this theme. They had to chase their pet throughout their neighborhood. Chasing a pet that is much quicker than a human is definitely difficult. During this, the owner might worry that the pet could run out of sight or into

traffic, which can add extra stress. Thankfully this participant was able to retrieve their pet without this happening.

*Theme 2: There is no obvious/easy way to find the owner/pet*

The pet owner and pet finder had a tough time figuring out what to do initially because there is not an obvious solution to their problem. After we discussed the concept of the design with the participants, they expressed that this would aid in solving the initial shock and problem-solving of the event.

*Theme 3: Finding and losing a pet happens randomly so it is beneficial to be prepared in case it occurs*

All participants expressed that losing or finding a pet is not something that they were expecting to happen. Since they did not expect it to happen, they were not prepared for when it did. Losing a pet is a scary experience. The thought that it may never be found is thought many who go through losing a pet experience. Providing peace of mind and the ability to be prepared in case this occurs would be extremely beneficial. Having a pet profile to quickly upload when their pet is lost would provide the user with some peace of mind that they are prepared if this were to ever occur.

**Task Analysis:**

*Who is going to use the design?*

People who have lost pets or people who want to help find a lost pet. Bystanders who are trying to find the owner of a lost pet.

*What tasks do they now perform?*

For pet owners, these tasks are now performed by physically going out and searching for the pet by calling their name. They also go to social media like Facebook and make a post about their lost pet. Sometimes they also make posters of their lost pet and display them across the local area.

Bystanders who found a pet perform tasks like going from door to door to find the owner. They also make social media posts. In some cases, they call or go to the local animal shelter for them to take in the lost pet.

*What tasks are desired?*

The desired tasks are an easier way of finding lost pets, an easier way of advertising information about lost pets, and a better way of getting in contact with the owners of lost pets.

*How are the tasks learned?*

They are often learned from what others have done in similar situations or in the past. They have seen these tasks be semi-successful so that is what they result on. Not many attempts are made to utilize newer technology to aid in finding lost pets.

*Where are the tasks performed?*

The tasks are currently performed in local communities, social media websites like Facebook, and the local area around the owner's home.

*What is the relationship between the person and the data?*

The only "data" that currently exists in these tasks would be the login information for a user into a social media or potentially their phone number for contacting.

*What other tools does the person have?*

There are not many tools other than what we have already mentioned and this is exactly why we are even attempting our idea in the first place. They tend to use word of mouth, social media, and long arduous searches to try and find the pet or, in the case of the people who find the pet, the owner.

*How do people communicate with each other?*

Over social media or straight through texting/call if you are familiar with the owner of said pet. Occasionally, they also go door to door to get information.

*How often are the tasks performed?*

The tasks would be performed as many times as the owner could want before the pet is found. Obviously, if time goes on and on without them being found the frequency of the tasks being performed would go down over time.

*What are the time constraints on the tasks?*

Overall, the time constraints vary, but overall, every task should be done as soon as possible since the pet is likely in distress and danger every moment that they're not found.

*What happens when things go wrong?*

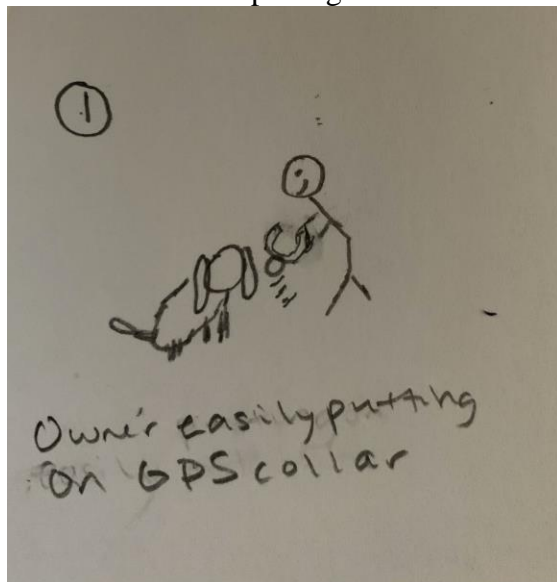
Without being too morbid, the pet could potentially die if they are not found. As a result of that, there would be massive emotional distress from the pet's family.

## **Design Sketches:**

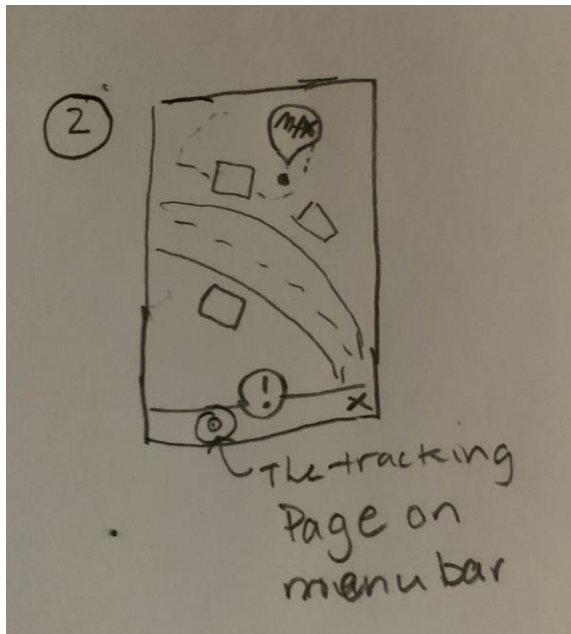
### Design 1: Location Tracking Collar

A location tracking collar would be put on all animals in the household that is in danger of running away or are in danger of getting lost. Our app would provide an easy-to-use interface so that the owner can track their pet's location at any time.

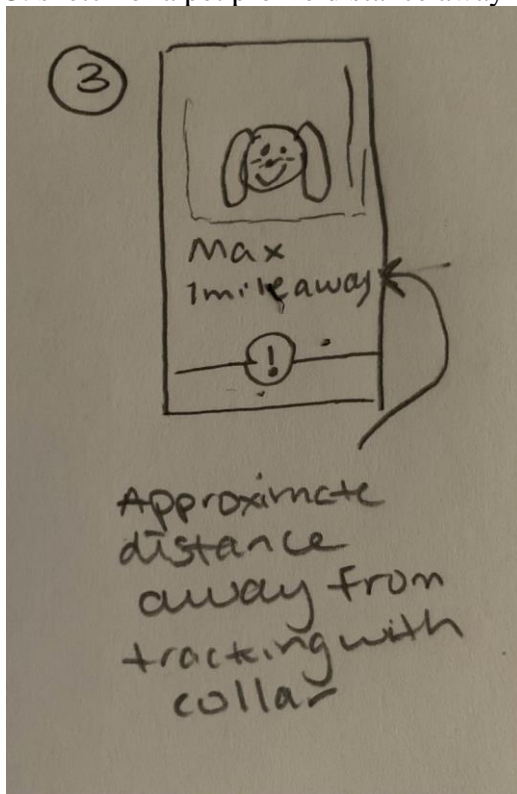
1. sketch of owner putting on the collar



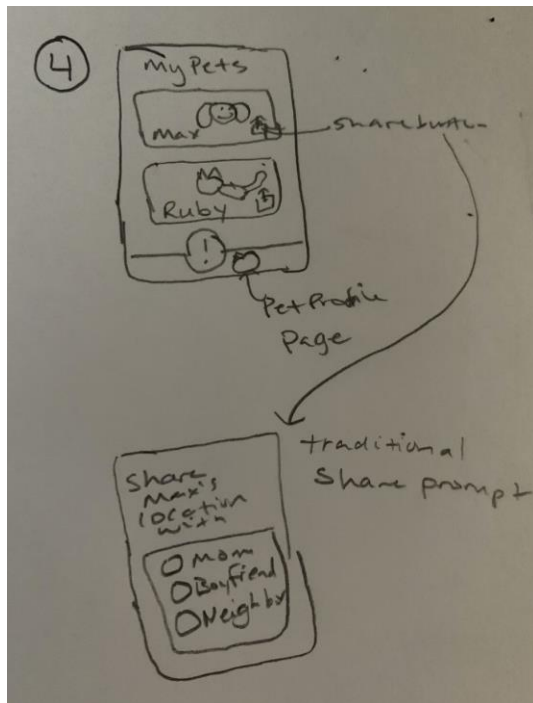
2. sketch of the location tracking page and the menu bar identified



3. sketch of a pet profile distance away identified



4. sketch of user sharing pets location on the app



Task 1: The collar would be a traditional-looking collar that is easy to put on and secure to avoid the pet taking it off.

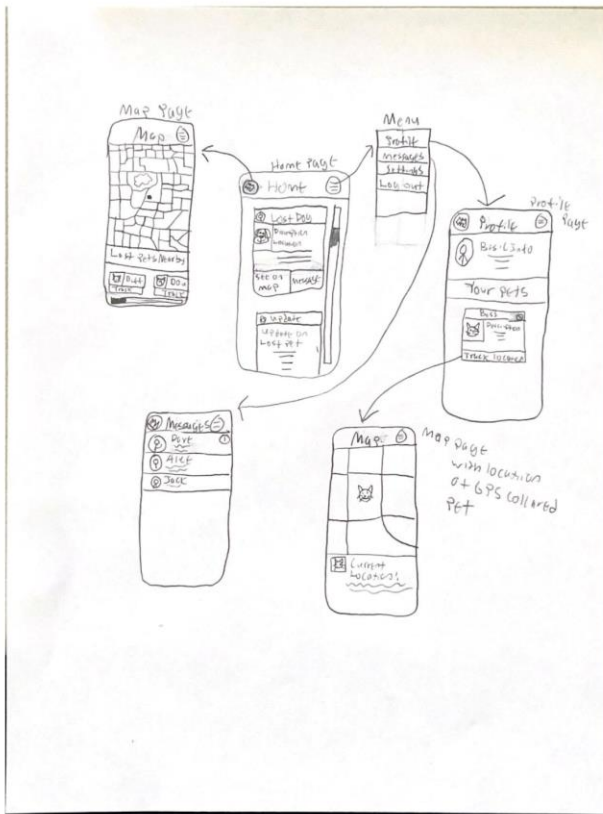
Task 2: The app will have a page indicated on the menu bar designated just for location tracking of the user's pets. This makes it easy for the user to navigate towards that and potentially find their pet sooner. This page can also be navigated by clicking the pet's profile.

Task 3: If the pet were to ever run off, the GPS feature would allow people in the area to know approximately where the pet is. If a person is within one mile away from the lost pet, they would see "1 mile away" on the pet's profile, and update if the pet gets farther away.

Task 4: The primary owner will have access to the location of the animal, but can allow others (friends, family, neighbors) to also have access. This feature will be easy to find on the location tracking page and the pet profile page.

#### Design 2: App for Finding Lost Pet

Our main idea has been to build an app to assist in finding lost pets or contacting their owners. This design shows a potential layout for the app. It features a home page where users can browse listings for lost pets in the area or view updates on other news of lost pets. A drop-down menu located on the right side can lead to your profile where you can set up a bio with information as well as add your pets, which can be easily added to a lost pet listing. You can also track your pets if they have a GPS collar from their listing. This will lead to a map showing their location both on a map as well as listing their current location in the text at the bottom. You can also view the map normally from the top left side of the screen to view lost animals and where they were last spotted. Finally, you can access a messaging system that will allow you to contact others and chat with them about potentially lost pets if you happen to lose them or they happen to find them.



Task 1: The integrated GPS tracking for pets with collars will allow users to easily find lost pets so long as they have the app installed.

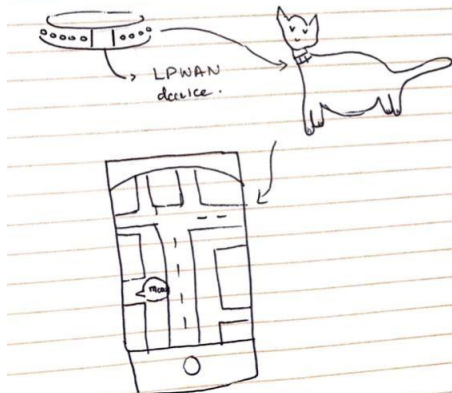
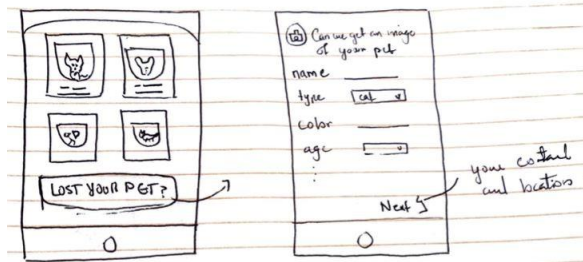
Task 2: Contacting the owners of lost pets is made simple by allowing you to spot listings on the home page and then be able to directly message the owner from the listing through the app.

Task 3: Putting out listings for a lost pet can be done from your profile by selecting the pet and then posting a message to the home page. This will help make sure that these listings are seen by others in the area when they check the app.

Task 4: Having a map will make searching for lost pets much easier as you can easily view their last known location as well as the surrounding area where they might be found. This can make searching for a lost pet much easier for both an owner and a concerned third party.

### Design 3: App for Finding Lost Pet

This is an additional design for our app design including the same tasks as above.



## Scenarios:

### Losing a pet: Easy - Existing Task

Billy gets home from work and decides that before cooking dinner he should walk his dog since they have been stuck in the house all day. After Billy takes his dog on a walk, he goes back into the house. Unfortunately for Billy, he does not close the door all the way after taking off his dog's leash. Billy's curious dog then decides to go out the slightly open door when Billy is not looking. Now Billy has lost his pet and needs to figure out a way to find them.



### Searching for a lost pet: Hard - Existing Task

Kate had a long day of work and allowed her dog to play on her own in the backyard. Once done with the work Kate goes to check on her dog just to find out she is not there. Kate gets anxious and starts looking for her around the house and the backyard. Kate now is sure that her dog isn't in the house, making her more anxious, now she rushes to the neighbors to check if she went to their backyard or house, and hearing a no makes her panic. After looking around the neighborhood, Kate feels helpless and posts about her dog on her social media (Facebook, Snapchat, etc.). She does not get much response and proceeds to take the old way; she prints posters of her dog and pastes them all over the neighborhood. Waiting with anxiety and stress makes Kate feel worse, hence, she keeps on checking with the local animal shelter and searching for her dog around the neighborhood.

### Trying to find the owner of a found lost pet: Hard - Existing Task

While on his morning walk Jack comes across what he believes to be a lost dog. After finding no identification on the dog's collar, Jack brings the dog inside so that it won't run away while he searches for the owner. Jack begins by asking his neighbors if they have lost or know someone who has lost their dog. Unfortunately, this doesn't work and no one knows anything about a lost dog. Next, Jack checks Facebook for any posts of a lost dog but has no luck finding any post about a lost dog. After a few days of hunting and spreading the word, Jack is told about a family that lost their dog a week ago. Jack meets with the family and after they confirm that it is their dog Jack gives the dog back to its rightful owner.

### Finding and contacting the owner of a pet found through the app: Medium - enabled by our design.

Billy had recently lost his dog. Someone in Billy's neighborhood noticed that there was a dog with a collar (with no information) wandering around and decided to try and lure it into their house with some dog food. They then decided that they should look through the FindMyPet app for potential posts in their area. After looking through the lost pets in their area, they found that there was a match to the dog they had just seen. They then click contact on the app and provide the information of where the owner can come to pick up the dog.

### Track pet with GPS collar: Easy - enabled by our design.

A pet owner, Amanda, is unsure about the location of their dog, Robbie. Rather than going and searching for her pet, she remembers she has a location tracking collar to find the exact location of her pet through an app. She looks at her app and discovers that Robbie is still in the house. She looks under her couch to see if Robbie is in his favorite hiding place and there he is.

### Post lost pet on the app: Easy - enabled by our design.

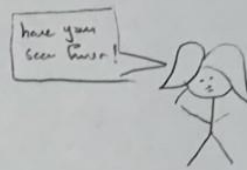
A pet owner, Crystal, lost their cat, Sunshine. At first, they were puzzled about what to do. Fortunately, they had a profile for their cat that they could upload in case Sunshine was ever lost. They post their pet on the app quickly, hoping that someone will find their pet, see their pet profile on the app, and contact them to tell them that they found it. A few hours later, a person who lives a few blocks over contacts Crystal that they have found Sunshine and can drop her off right away. Relieved, Crystal messages back, and receives her cat.

## **Storyboards:**

### Task 1: Posting lost pet on the app



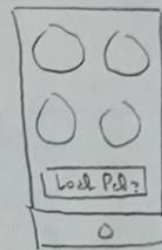
Kate can't find her pet cat  
Furr! anywhere.



Contacting neighbours to see if  
they have seen Furr.



Kate opens the FindingPet  
App.



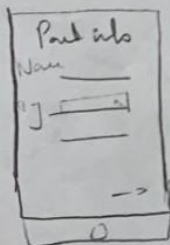
Kate chooses the  
Lost Pet option on the  
homepage.



App asks Kate to post pic  
of Furr.



Kate browses through her  
images to find pictures of  
Furr.



Kate posts info  
of Furr and her  
contact info



Furr's info is on the app, now she  
waits for the Finder to contact her

## Task 2: Finding a pet owner on the app

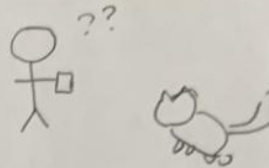
## Task 2: Finding pet owner on app

①



Bystander is driving and sees a cat alone by the road

②



The bystander got out of their car and looks through app to see if owner reported the pet to be lost.

③



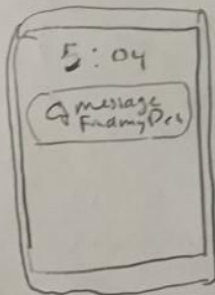
The person didn't see that cat on the app so they take a picture of the cat to post on the "lost" page.

④



Post 'lost Pet on app'

⑤



The owner sees the post and messages the person.

⑥



The owner lets the person know that they are on their way.

⑦



The owner has retrieved their pet.

## Appendix of Feedback and User Research: User Design Research Feedback:

After receiving feedback, we concluded that this is indeed a problem that needs to be resolved. It is not just a problem, but a prevalent one as we received personal stories where they struggled to find their pet or the owner. There was a response that this may not be a large-scale problem, but fifty percent of the feedback givers were pet owners. That proves that at least fifty percent of people could be at risk of losing and not retrieving their pets. After we revealed the idea of an app to make this process easier, we received mostly positive responses with a few critiques. One critique was that the misidentification of pets could be a problem as it would be very hard for someone to tell similar animals apart. This could be solved by meeting with the owner about the pet, allowing them to determine if that is their pet. The final piece of major feedback we received was that for our app to be effective people need to have already signed up for it. We plan to fix this by working with other organizations such as Facebook or other social media to help get in contact with owners of these pets and to direct them to the app when they need help finding their lost pet.

#### Task Review Feedback From Lacie Duff, Madison Bilotta, Simran Patel, Noah Al-Khamoas

We received helpful feedback from this group. They approved of the tasks that we came up with and gave us a few ideas to improve the tasks, as well as our design. They asked questions like what is the solution if someone loses their pet in an area with no service, how does the GPS collar defer from microchipping, and if we plan on implementing a reward system for people who find pets.

#### Interviews

##### Type: Those who have lost pets

Q: How did you lose your pet?

A: My cat was allowed to roam outside in the backyard, but sometimes he would explore outside of my yard.

Q: What did you do once you realized your pet was lost?

A: I would start looking for him in the neighborhood, and yell out his name.

Q: What did you do to attempt to find your pet?

A: I would shake the treat bag while yelling for him.

Q: If found, what worked to help find your pet?

A: Walking the neighborhood, yelling his name.

Q: What didn't work/help?

A: Chasing him, if I saw him from a distance.

Q: How long did it take to find your pet?

A: 15 minutes up to 24 hours.

Q: What would have helped find your pet easier and quicker?

A: A GPS tracking device in a microchip that is implanted under the skin and linked to my phone would have helped.

Type: Found a pet

Q: How did you find the pet?

A: The pet came up to me randomly.

Q: What did you first do once you found it?

A: I comforted the pet and contemplated what to do to find the owner.

Q: How did you go about trying to contact the owner?

A: I made a FaceBook post.

- Q: How difficult was it to get in contact with the owner?
  - A: It was pretty difficult. It took awhile for the owner to see my post and get in contact with me.
- Q: If you got in contact with the owner what did you do?
  - A: We met up and I gave them their dog.
- Q: If you didn't get in contact with the owner what did you do?
  - A: Contact an animal shelter

Q: What would have made it easier to find and get in contact with the pet's owner?

A: A direct contact with the owner rather than waiting for someone who knows the owner to see my post and then inform the pet owner that someone found their pet.

Type: Animal shelter employee

Q: How many pets get brought in that are considered lost or that have owners?

A: Not many, they mostly go to animal control. They receive many there.

Q: How often do people with lost pets come looking for their pets at the shelter?

A: Often. They are mistaken for animal control so they are directed towards there.

Q: How many of those find their pets at the shelter?

A: Very little.

Q: How often do lost pets get brought in that never have their owners come looking for them?

A: Very little, animal control deals with this.

Q: Why do you believe this might be?

A: Irrelevant.

Q: What do you think the best way to find a lost pet is?

A: Most people find success through social media.

Q: "Explain project" what are your thoughts and concerns on this idea?

A: This is a great idea. It solves the problem of people not knowing where to go when this happens to them. Animal control is closed on Sunday and this app could be used whenever.

**Contributions**

- 25% Audrey - Organized 2I, Worked on assignments leading up to 2I
- 25% Miles - Worked on assignments leading up to 2I
- 25% Brandon - Worked on assignments leading up to 2I
- 25% Adnan - Worked on assignments leading up to 2I