

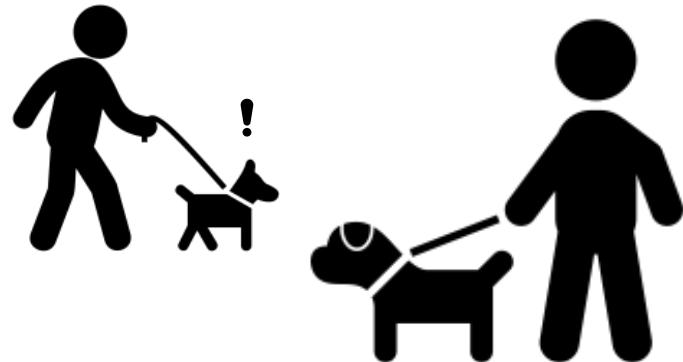
Pawsitive

Encouraging safe and positive social interactions for dogs

Aeron Langford, Grace Zhu, Megan Vo, ZK Lin

Pawsitive / Overall Problem

Overall Problem



PROBLEM

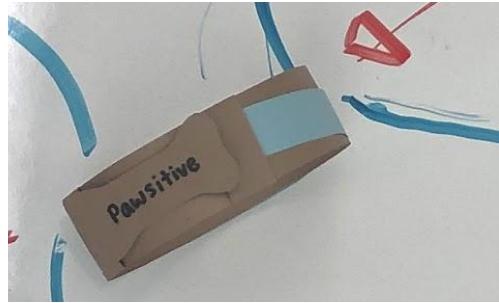
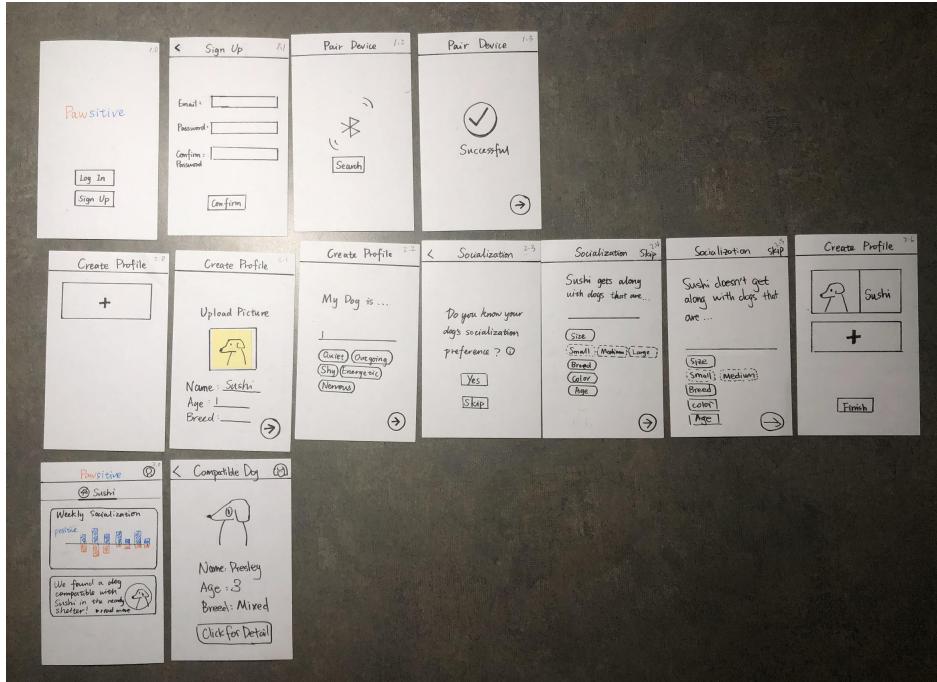
Socialization is critical for dog happiness, but difficult

DESIGN SPACE

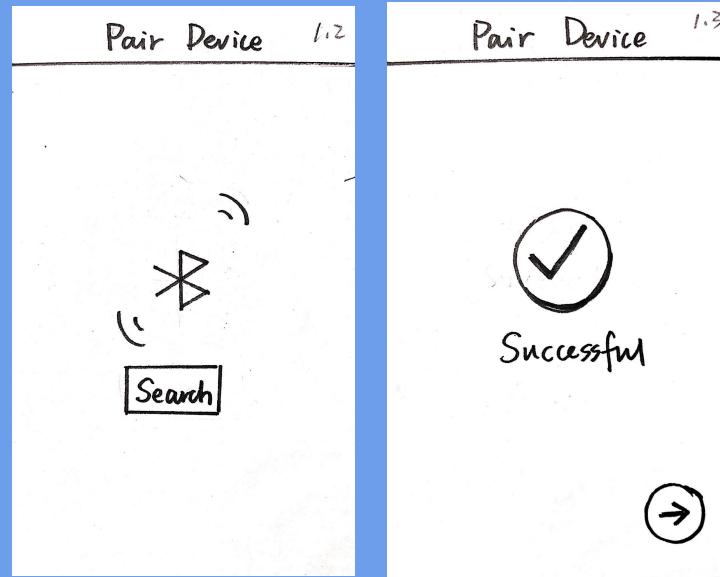
Neighborhood dog and owner community

Pawsitive / Initial Prototype

Initial Paper Prototype



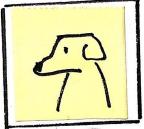
Task 1: Identifying dog friends and decreasing negative owner interactions



Task 1: Identifying dog friends and decreasing negative owner interactions

Create Profile ^{2.1}

Upload Picture



Name: Sushi

Age: 1

Breed: 

Create Profile ^{2.2}

My Dog is ...

I

(Quiet) (Outgoing)
(Shy) (Energetic)
(Nervous)



< Socialization ^{2.3}

Do you know your dog's socialization preference? ⓘ

[Yes] 

[Skip]

Socialization ^{2.4} Skip

Sushi gets along with dogs that are...

[Size]
(Small) (Medium) (Large)

[Breed]

[Color]

[Age] 

Socialization ^{2.5} skip

Sushi doesn't get along with dogs that are ...

[Size]
(Small) (Medium)

[Breed]

[color]

[Age] 

Task 1: Identifying dog friends and decreasing negative owner interactions

The image shows two screenshots of a mobile application interface. The left screenshot is titled "Create Profile" and shows a placeholder for a dog's photo next to the name "Sushi". Below this is a large plus sign button and a "Finish" button at the bottom. The right screenshot is titled "Pawsitive" and shows a profile picture of "Sushi" with the status "No data yet...". A handwritten note below the screen reads: "Take Sushi for more walks to get some insights."

Create Profile

Sushi

+

Finish

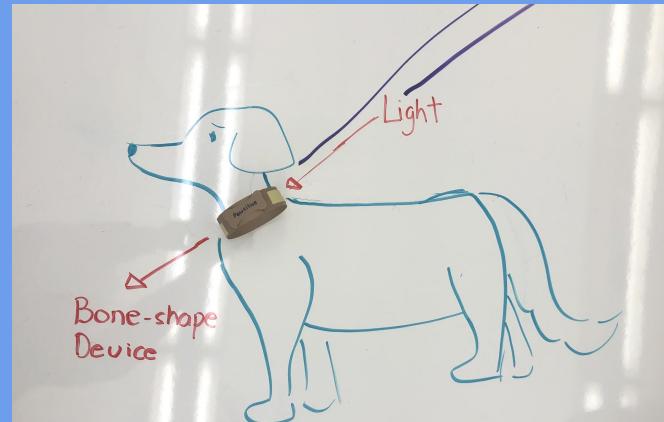
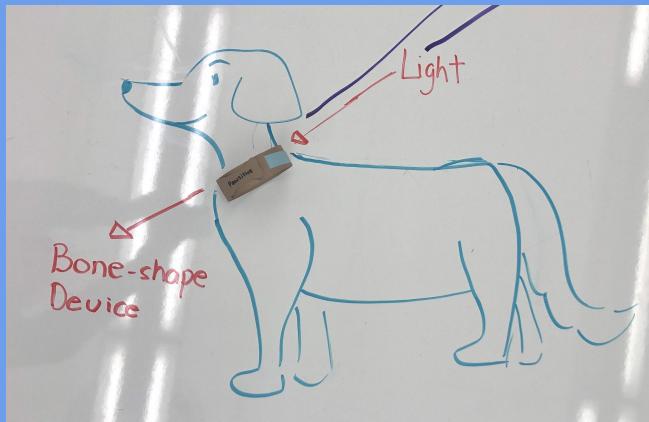
Pawsitive

Sushi

No data yet...

Take Sushi for more walks to get some insights.

Task 1: Identifying dog friends and decreasing negative owner interactions



Task 2: Identify compatible dogs as a permanent companion for current dog

Pawsitive 3.0

Sushi

Weekly Socialization

	positive	negative
1	blue bar	red bar
2	blue bar	red bar
3	blue bar	red bar
4	blue bar	red bar
5	blue bar	red bar
6	blue bar	red bar
7	blue bar	red bar

We found a dog compatible with Sushi in the nearby shelter! [read more](#)

< Compatible Dog



Name: Presley
Age: 3
Breed: Mixed

Click for Detail

Testing Process



Heuristic
Evaluations

2



Usability Tests

4



TA Critiques

2

Usability Test



Demographic Interview



Usability Test



Debrief

Sign up & Create Profile

Use Physical Devices

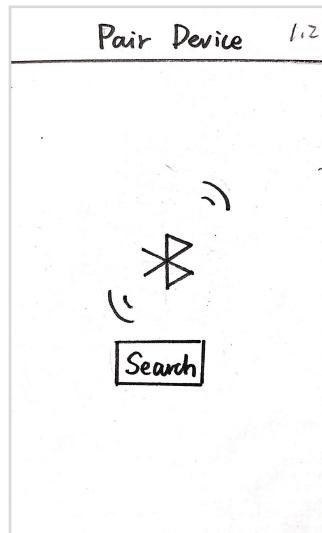
Explore Adoption Suggestions

Pawsitive / Testing Process and Results

Testing Results: Provide Help and Documentation

Problem

Lack of instruction

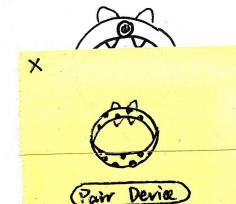


Solution

Clarify instructions for bluetooth pairing

Pair Device

Turn on the bluetooth on your phone, and turn on the collar by LONG PRESSING the button at the back of the collar.



Testing Results: Introduce scenarios to get better data

Problem

Lack of organization and risk of subjective input

Create Profile 2.2

My Dog is ...

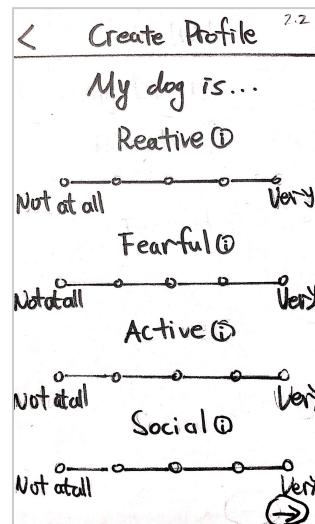
I

(Quiet) (Outgoing)
(Shy) (Energetic)
(Nervous)

→

Problem

Lack of clarity with ranking dog qualities



Solution

Contextualize personalities with scenarios

Create Profile 2.2

How energetic is your dog ?

- "You don't really expect me to fetch that ball, do you ?"
- "Let's play catch. This is fun !"
- "Why are you stopping? We've only been playing for 3 hours !"

→

Pawsitive / Testing Process and Results

Testing Results: Refine content structures

Problem
Ambiguous Content Structure

The screenshot shows a mobile application interface for a dog named Sushi. At the top, it says "Pawsitive 3.0" and has a profile picture of Sushi. Below that is a section titled "Weekly Socialization" with a bar chart. The chart has two series: "positive" (blue bars) and "negative" (orange bars). The bars are of varying heights, but the values are not explicitly labeled. Below the chart is a text box containing the message: "We found a dog compatible with Sushi in the nearby shelter! >read more". A small circular icon with a dog's face is next to the text.

Solution

The screenshot shows the same mobile application interface after refinement. It now clearly displays the "Weekly Socialization" data with specific numerical values for positive and negative interactions. Below this, there is a new section titled "Compatible Dogs" with a detailed list of traits: "Sushi really likes dogs that are:" followed by a bulleted list: "• Small sized", "• Young", "• Highly active", and "• Less aggressive". At the bottom, there is a message: "Want to adopt another dog to be with Sushi?". A "View Results" button is present, along with the location information "Seattle 98106" and an "Edit" option.

Pawsitive / Testing Process and Results

Testing Results: Request feedback after a walk

Problem

Believability of interaction with dogs without Pawsitive device

N/A

Solution

Request feedback after walk

11:05

Pawsitive
How's your walk with Sushi?

Did Sushi have any memorable interaction?
 Yes No

How was the interaction?
 Negative Neutral Positive

Review the Walk

Review the Walk

What was the dog that Sushi met like?

Size

Color

Breed

Done

Pawsitive / Final Paper Prototype

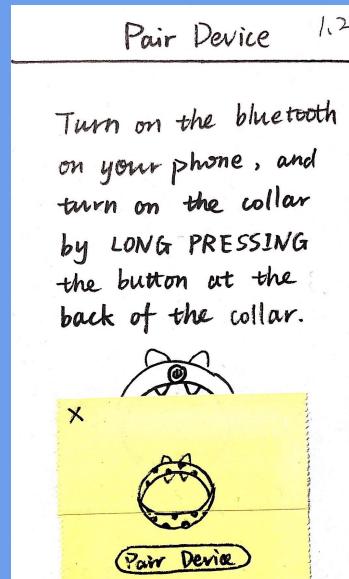
Final Paper Prototype



The blackboard displays 12 cards illustrating various features of a dog training application:

- Sign Up**: A yellow card showing a form with fields for Email (dog@location.com), Password (*****), and Confirm Password (*****). Buttons for Log In and Log Up are at the bottom.
- Paw Device**: A yellow card with instructions: "Turn on your paw device on your phone and scan for the collar by LONG PRESSING the home button on the back of the device". It includes a drawing of a paw device and a checkmark icon.
- Paw Device**: A white card with a checkmark icon and the word "Successful".
- Dog Profile**: A yellow card showing a profile picture of a dog and a "Edit" button.
- Create Profile**: A yellow card with a "Upload Picture" section showing a small dog icon and a "Next" button. Below it is a "Name: Spike" section with fields for Age (1 year), Breed (Border Collie), Size (Medium), and Sex (Male).
- Create Profile**: A white card with a question: "How energetic is your dog?" and five options: "I'm not really expert at playing with dogs, but I do you?", "I'm not really good at playing with dogs.", "Let's play catch! This is fun!", "Why are you stopping? We're only been playing for 3 hours!", and "I'm not really good at playing with dogs, but I do you?".
- Create Profile**: A white card with a question: "Do you know your dog's socialization preferences?". It shows a "Yes" button with a checkmark and a "No" button.
- Socialization**: A yellow card with a list of items: "Spike gets along well with dogs that are", "Age: young []", "Breed: [Border Collie]", "Size: [Medium]", "Sex: [Male]", and "Personality: []". A "Confirm" button is at the bottom.
- Positive**: A yellow card with the text "@Sushi" and a note: "No data yet...". It includes a "Take Sushi for more walks to get some positive reinforcement" button.
- Positive**: A yellow card showing a dog with a bow tie and the text "Put the collar with senior owner dog". It includes a "Done" button.
- Positive**: A white card showing a dog with a bow tie and the text "Put the collar on the owner or the leash, where most comfortable for your friend". It includes a "Done" button.
- Positive**: A white card with a note: "The light on the collar represents different types of reinforcement: positive, negative, neutral". It includes a "Done" button.
- Positive**: A white card with a note: "Correct this response by moving the button on the cluster". It includes a "Done" button.
- Positive**: A white card with a note: "Double press the button to cancel tap!". It includes a "Done" button.
- Review the Walks**: A yellow card with the time "11:05" and a note: "How many walks with Sushi?". It includes a "Done" button.
- Review the Walks**: A yellow card with the text "How did Sushi like the walk?". It includes a "Positive", "Neutral", and "Negative" button.
- Review the Walks**: A yellow card with the text "Did Sushi have any memorable interaction?". It includes a "Yes" and "No" button.
- Review the Walks**: A yellow card with the text "How was the interaction?". It includes "Positive", "Neutral", and "Negative" buttons.
- Review the Walks**: A white card with the text "What was the day that Sushi not like?". It includes a "Size", "Color", and "Breed" section with dropdown menus and a "Done" button.
- Positive**: A yellow card with the text "@Sushi Weekly Summary 22/08-23/08". It includes a bar chart titled "Positive Reinforcement" and a section titled "Competitive Dogs" with a note: "Sushi really likes dog that are: Small sized, Young, Highly active, Less aggressive".
- Positive**: A white card with the text "What are other members doing on the board?". It includes a "View Posts" button.
- Addition Requests**: A yellow card with a "Pending" section showing "Sushi" and "Border Collie", and a "Recent posts" section showing "Momo" and "Nathan". It includes a "Done" button.

Task 1: Identifying dog friends and decreasing negative owner interactions



Task 1: Identifying dog friends and decreasing negative owner interactions

Dog Profile 2.0



Upload Picture



Name: Sushi

Age: 0 yr 9 mo

Breed: Mixed

Size:

Sex: F

Neutered: Yes No Don't Know

Sprayed: Yes No Don't Know



< Create Profile 2.1

Upload Picture



Name: Sushi

Age: 0 yr 9 mo

Breed: Mixed

Size:

Sex: F

Neutered: Yes No Don't Know

Sprayed: Yes No Don't Know



Create Profile 2.2

How energetic is your dog?

- "You don't really expect me to fetch that ball, do you?"
- "Let's play catch. This is fun!"
- "Why are you stopping? We've only been playing for 3 hours!"



< Create Profile 2.3

Do you know your dog's socialization preference? ⓘ

Yes

Skip



< Socialization ⌂ skip

Sushi gets along well with dogs that are:

Age: young old

Breed: A1 A2

Size: ♂ Grayhound ♀ Greyhound

Sex: ♂ Alaskan ♀ Australian

Personality: Calm Active Friendly Independent



Task 1: Identifying dog friends and decreasing negative owner interactions

Pawsitive 3.0

Sushi

No data yet...

Take Sushi for more walks to get some insights.

[View Tutorial](#)

Pawsitive 3.1

Put the collar with sensor on your dog.

Pawsitive 3.2

Put the clicker on the handler of the leash.

Pawsitive 3.3

The light on the collar represent different types of interactions.

Pawsitive 3.4

Correct the response by moving the button on the clicker.

Pawsitive 3.5

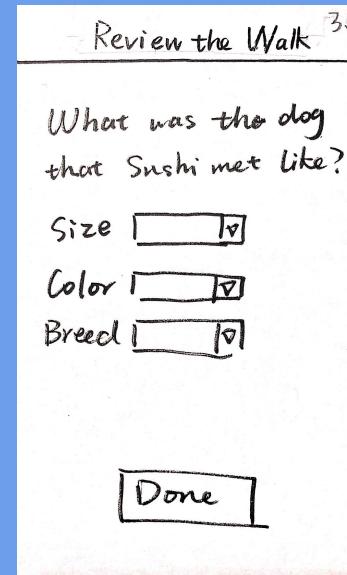
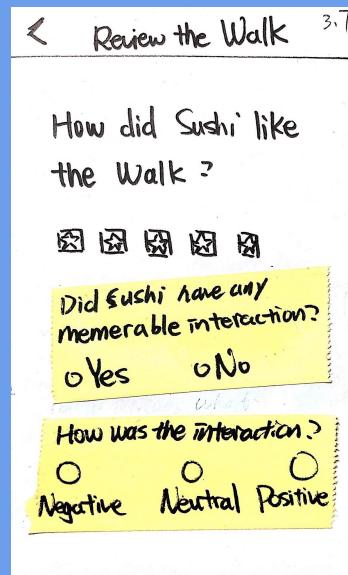
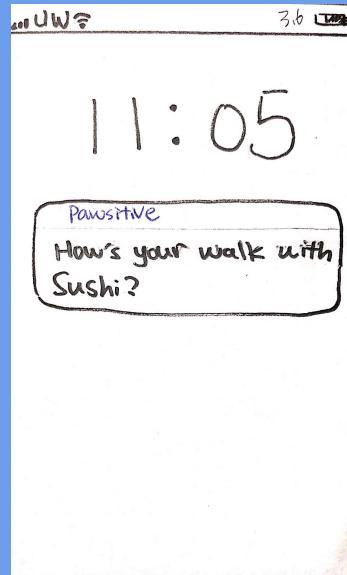
Double Dress the button to cancel input

Finish

Task 1: Identifying dog friends and decreasing negative owner interactions



Task 1: Identifying dog friends and decreasing negative owner interactions



Task 2: Identify compatible dogs as a permanent companion for current dog

Pawsitive 🐾

👤 Sushi

Weekly Socialization
02/18 - 02/25

Date	positive	negative
02/18	High	Low
02/19	Medium	Medium
02/20	High	Low
02/21	Medium	Medium
02/22	Low	Medium
02/23	Medium	Low
02/24	High	Low
02/25	Medium	Medium

Compatible Dogs

Sushi really likes dogs that are:

- Small sized
- Young
- Highly active
- Less aggressive

Want to adopt another dog to be with Sushi?

[View Results](#)

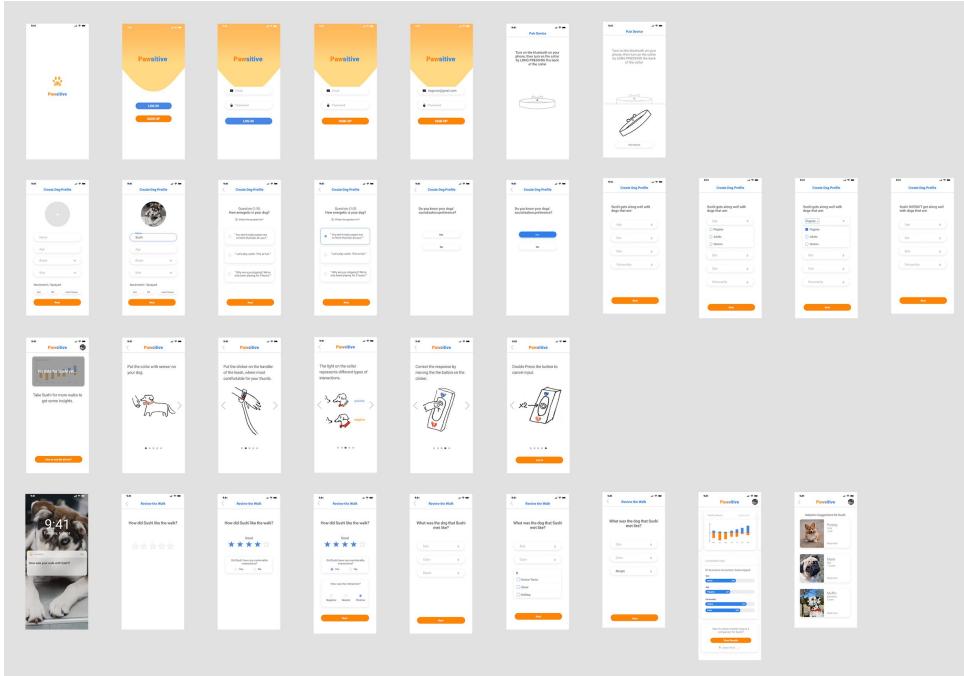
👤 Seattle 98106 [Edit](#)

Adoption Suggestion 🐾

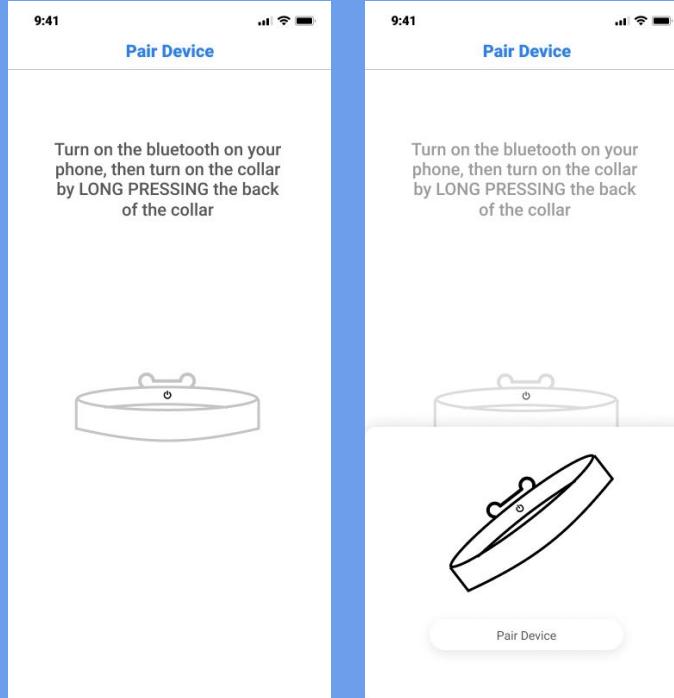
	Presley
Read more	
	Marie
Read more	
	Muffin
Read more	

Pawsitive / Digital Mockup

Digital Mockup



Task 1: Identifying dog friends and decreasing negative owner interactions



Task 1: Identifying dog friends and decreasing negative owner interactions

9:41 Create Dog Profile



Name — Sushi

Age

Breed

Size

Neutered / Sprayed

Yes No I don't know

Next

9:41 Create Dog Profile

Question (1/5) How energetic is your dog?

① What's the question for?

" You don't really expect me to fetch that ball, do you? "

" Let's play catch. This is fun! "

" Why are you stopping? We've only been playing for 3 hours! "

Next

9:41 Create Dog Profile

Do you know your dogs' socialization preference?

Yes

No

9:41 Create Dog Profile

Sushi gets along well with dogs that are:

Puppies

Adults

Seniors

Sex

Size

Personality

Next

9:41 Create Dog Profile

Sushi DOESN'T get along well with dogs that are:

Age

Sex

Size

Personality

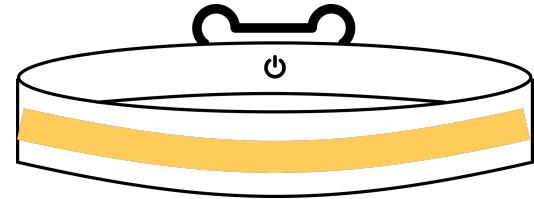
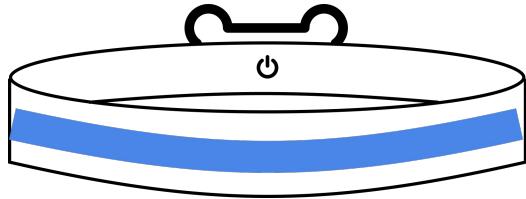
Next

Task 1: Identifying dog friends and decreasing negative owner interactions

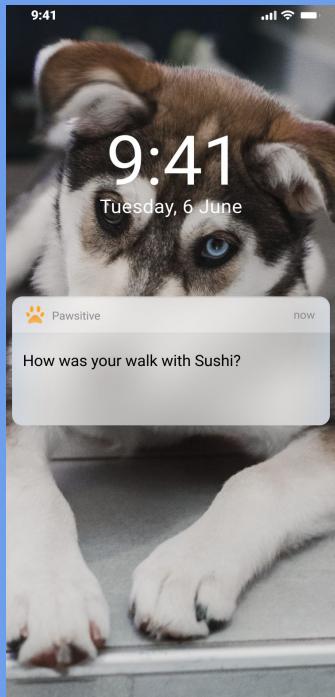
The screenshots show a sequence of instructions:

- Screenshot 1:** A weekly report screen with a bar chart showing "No data for Sushi yet...". Below it says "Take Sushi for more walks to get some insights." and a "How to use the device?" button.
- Screenshot 2:** Instruction: "Put the collar with sensor on your dog." with an illustration of a dog wearing a red collar.
- Screenshot 3:** Instruction: "Put the clicker on the handler of the leash, where most comfortable for your thumb." with an illustration of a hand holding a clicker.
- Screenshot 4:** Instruction: "The light on the collar represents different types of interactions." with illustrations of a dog with a blue heart (positive) and a red heart (negative).
- Screenshot 5:** Instruction: "Correct the response by moving the the button on the clicker." with an illustration of a hand pressing a button on a clicker.
- Screenshot 6:** Instruction: "Double Press the button to cancel input." with an illustration of a hand double-pressing a button on a clicker.

Task 1: Identifying dog friends and decreasing negative owner interactions



Task 1: Identifying dog friends and decreasing negative owner interactions



The image shows a smartphone screen with a background photo of a dog's face and paws. A notification bubble from the "Pawsitive" app is visible, asking "How was your walk with Sushi?". The phone's status bar shows the time as 9:41 and the date as Tuesday, 6 June.

9:41

Review the Walk

How did Sushi like the walk?

Good

Did Sushi have any memorable interactions?

Yes No

How was the interaction?

Negative Neutral Positive

Next

9:41

Review the Walk

What was the dog that Sushi met like?

Size

Color

Beagle

Next

Task 2: Identify compatible dogs as a permanent companion for current dog

9:41

Pawsitive

Weekly Report 06/06 - 06/12

Mon Tue Wed Thu Fri Sat Sun

Compatible Dogs

Of all positive encounters, Sushi enjoyed:

Size

Small 64%

Age

Puppies 47%

Personality

Active 92%

Calm 82%

Want to adopt another dog as a companion for Sushi?

View Results

Seattle, 98106

9:41

Pawsitive

Adoption Suggestions for Sushi

Presley Corgi 1 year

Read more

Marie Pug 1.5 years

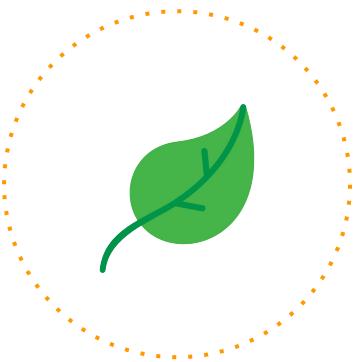
Read more

Muffin Dalmatian 2 years

Read more

Pawsitive / Summary

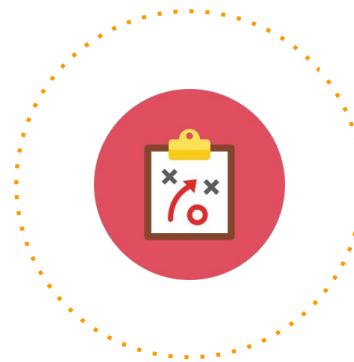
Reflection



Fresh Perspective
in Design

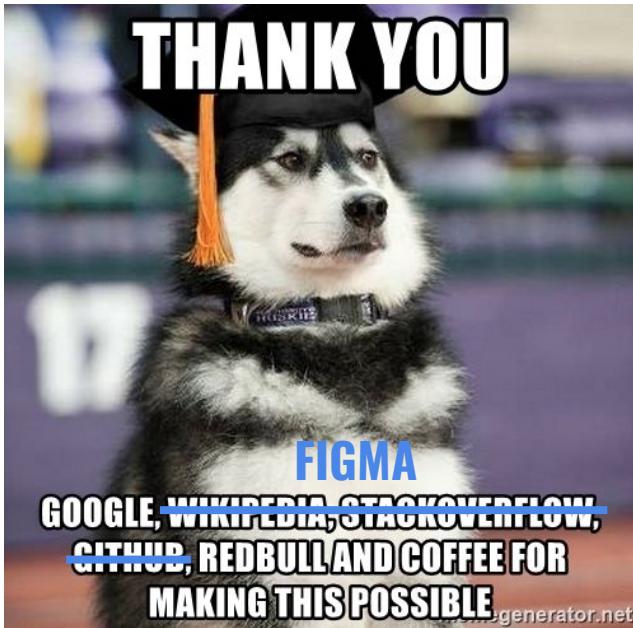


Content Information
Structure



Preparation in
Testing Process

Paw^sitive / Questions



Thank You

Any Questions?