

Project Prototype – Part III

BarkBasics

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CSIT335_01 HCI

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Step 1. Design

Prototype 1:

Prototype 1 Login

A hand-drawn prototype of a login page. At the top is the text "BarkBasics" in a large, handwritten font. Below it is "Sign In" in a slightly smaller handwritten font. There are two input fields: "Email" with the placeholder text "user@email.com" and "Password" with placeholder text consisting of six asterisks. Below the password field is a link that says "Forgot Password?". At the bottom, there are three buttons: "Login", "Register", and "Sign in with Apple" which includes an Apple logo icon.

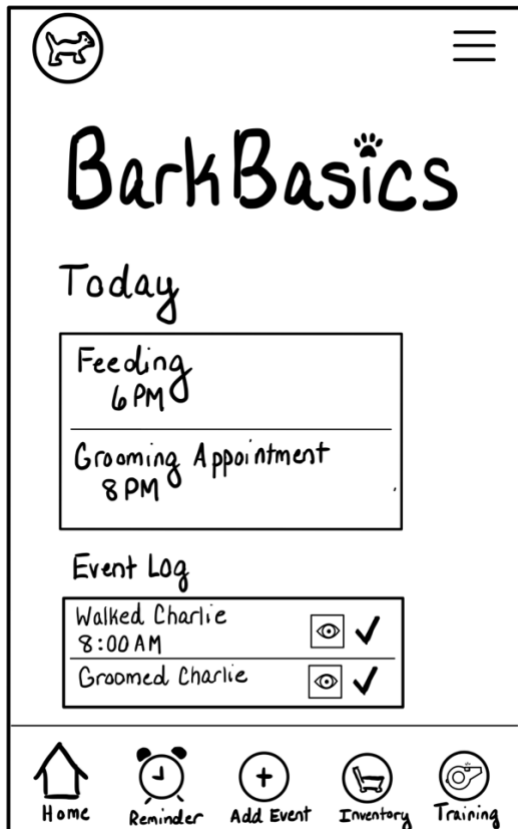
This is a simple login page that has a form field for email and password. There is a login button once the user enters their credentials. The user can also click the registration button to register for an account. The user also has the option to log in with their Apple ID. There will be proper form validation to make sure that the credentials entered are valid.

Prototype 1 Registration

A hand-drawn prototype of a registration page. At the top is the text "BarkBasics" in a large, handwritten font. Below it is "Registration" in a slightly smaller handwritten font. There are two input fields: "Email" and "Password". At the bottom, there are two buttons: "Login" and "Register".

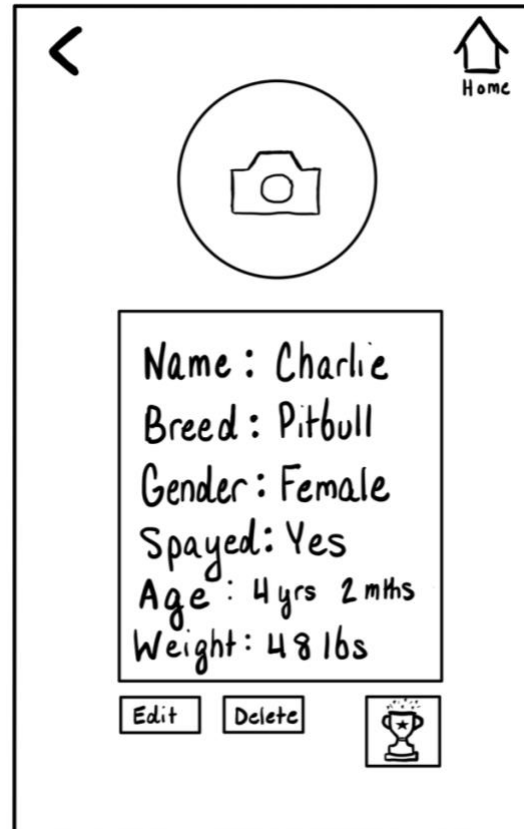
The user has a simple registration interface, with only an email and password field. The user can register for an account which will redirect them back to the login page. The user can also click the login button to go back to the login page without registering.

Prototype 1 Homepage



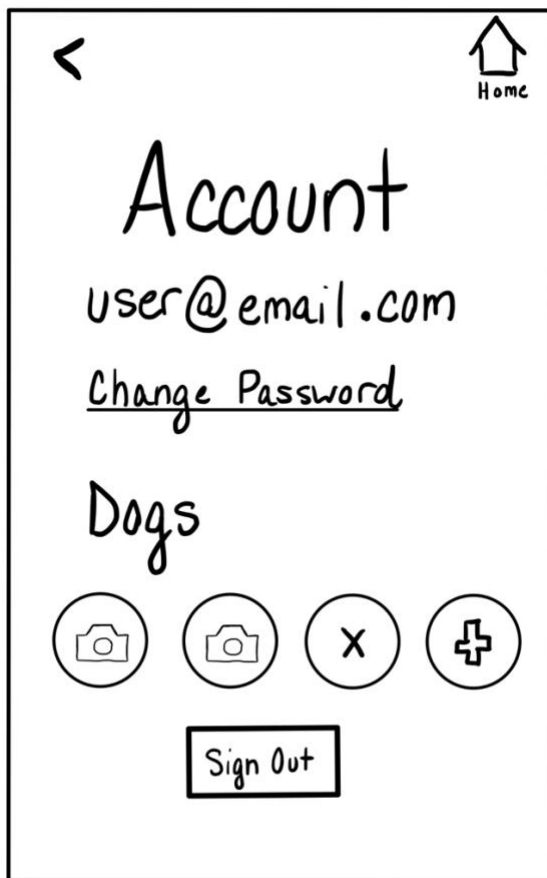
This is a homepage that shows reminders that are happening today as well as any events that were logged. The navigation bar at the bottom has different icons and textual data showing where each icon takes you. The three bars at the top will have a logout link and the dog icon on the top left of the screen is a button that redirects the user to the dog profile page.

Prototype 1 Dog Profile



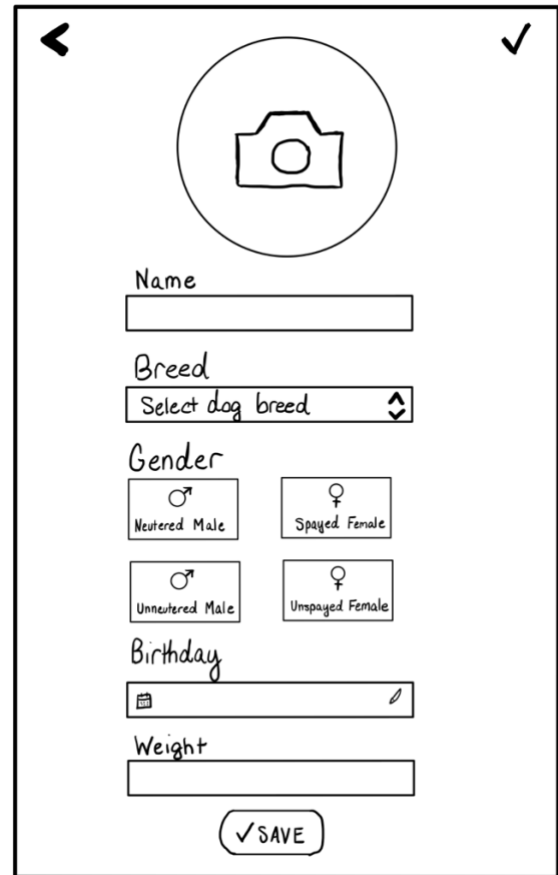
This dog profile page shows the dog's information entered by the user. The user can choose to edit the profile or delete it. The trophy icon will redirect the user to the achievement's page. The user can click the home button on the top right of the page to navigate back to the homepage.

Prototype 1 Account Page



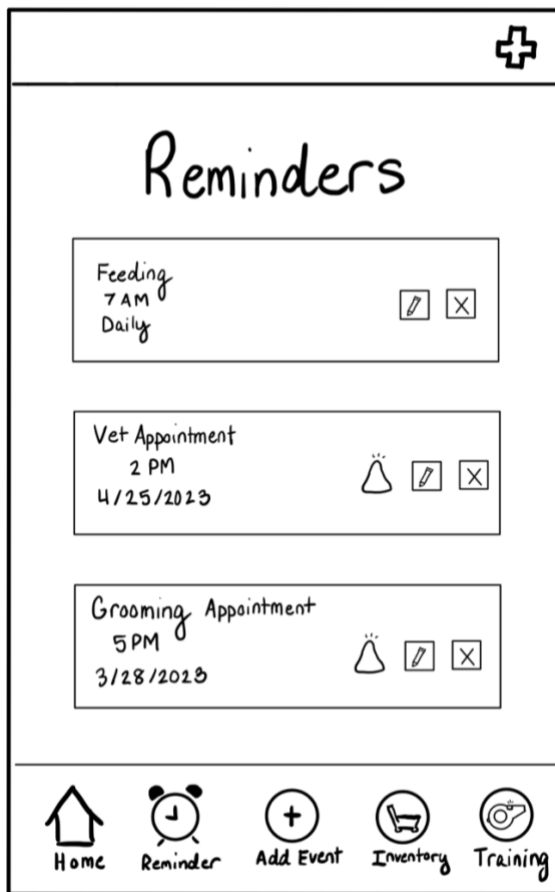
Here is a simple account's page showing the user's email address and the option to change their password. The dogs associated with the user will also be shown on the bottom of the page, with the option to add another dog to your profile. When the user clicks the dog's profile picture, that dog will then be the activate profile. The user can clock the home icon on the top right to navigate back to the homepage.

Prototype 1 Modify Dog Profile



This page allows the user to edit and existing dog profile or add a new dog profile. Once the user is done entering the dog's information, they can click the save button or the checkmark icon on the top-right of the screen. The user can also click the left-facing arrowhead on the top-left of the screen to navigate back.

Prototype 1 Reminders





The 'Reminders' screen features a title bar with a plus icon in the top right corner. The main heading is 'Reminders'. Below this, there are three reminder cards. Each card contains the event name, time, and frequency, along with edit and delete icons. The bottom navigation bar includes icons for Home, Reminder, Add Event, Inventory, and Training.




+

Reminders




Feeding
7 AM
Daily



Vet Appointment
2 PM
4/25/2023



Grooming Appointment
5 PM
3/28/2023



Home

Reminder

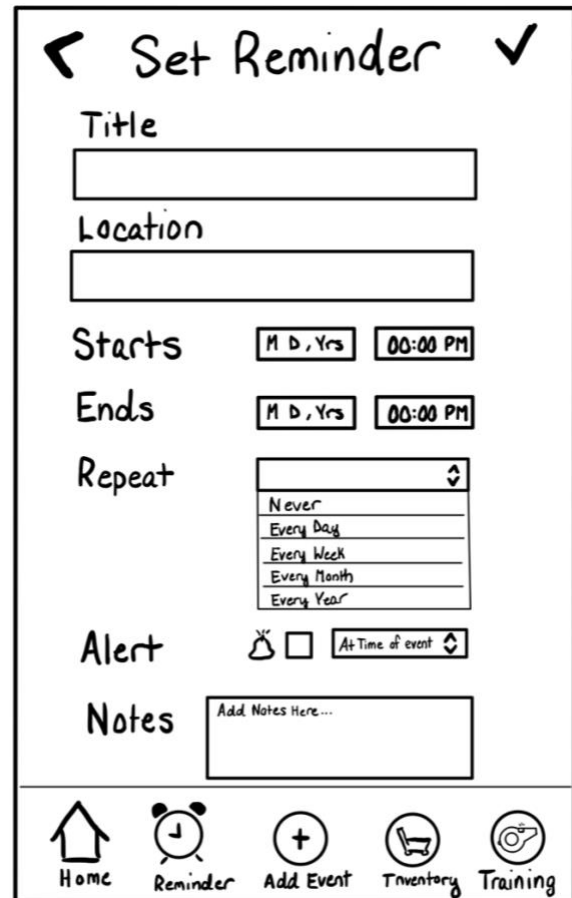
Add Event

Inventory

Training

This is the reminder's page that has all reminders that have been scheduled for the future. The user can click the + icon on the top right of the screen to add a new reminder.

Prototype 1 Set Reminder



The 'Set Reminder' screen has a title bar with a back arrow and a checkmark. It contains form fields for Title, Location, Starts, Ends, Repeat, Alert, and Notes. The bottom navigation bar is identical to the Reminders screen.

Set Reminder

Title

Location

Starts

M D, Yrs

00:00 PM

Ends

M D, Yrs

00:00 PM

Repeat

Never


Every Day

Every Week

Every Month

Every Year

Alert

☐

At Time of event

Notes

Add Notes Here...

Home

Reminder

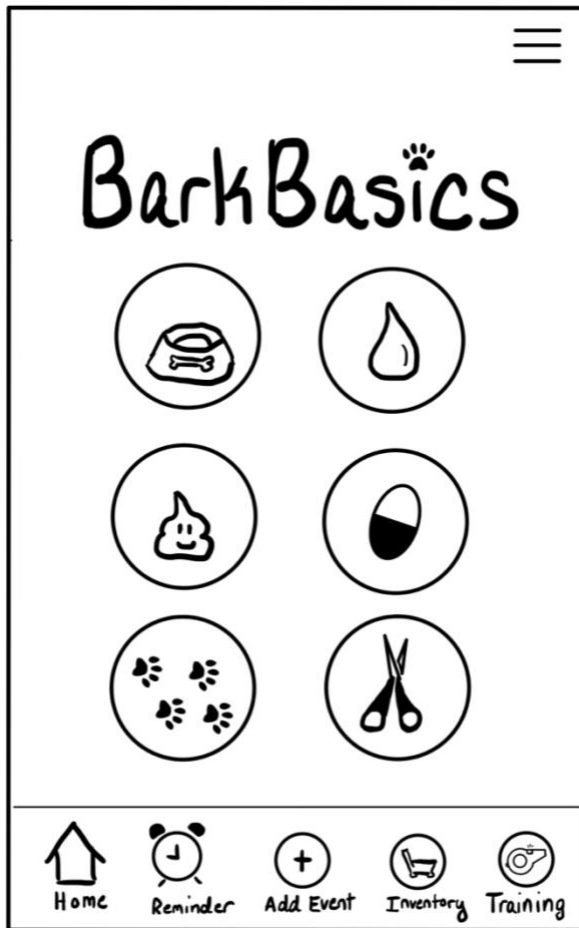
Add Event

Inventory

Training

The user can enter all of the reminder's information such as the title, location, start date and time, end date and time, repeat, alerts, and notes. Once the user is done entering the information, they can click the checkmark to save the reminder.

Prototype 1 Add Event



This is the Add Event page which can be accessed by the middle + icon on the bottom nav bar. A simple design with minimal textual data is used. Identifiable icons are used to demonstrate events such as a dog bowl for food, a water droplet for water, a goofy poop emoji for potty, a pill for medication, pawprint tracks for walks, and scissors for grooms.

Prototype 1 Log Food



Here is a simple add food log menu to document and food or feeding events that have taken place. The user is also given a text box to include any notes that they want to record.

Prototype 1 Log Water

A hand-drawn prototype of a 'Log Water' form. At the top, it has a title 'Log Water' with a left-pointing arrow and a checkmark. Below the title are three input fields: 'Date' with a calendar icon, 'Time', and 'Notes' with a placeholder 'Add Note Here...'. At the bottom is a 'Save' button with a checkmark icon.

This log water page is a simple form field to document anything related to your dog's water consumption.

Prototype 1 Log Potty

A hand-drawn prototype of a 'Log Bathroom' form. At the top, it has a title 'Log Bathroom' with a left-pointing arrow and a checkmark. Below the title are four input fields: 'Dog(s)' with a dropdown arrow, 'Date' with a calendar icon, 'Time', and 'Notes' with a placeholder 'Add Note Here...'. At the bottom is a 'Save' button with a checkmark icon.

This log bathroom page is a simple form field to document anything related to your dog's bathroom schedule.

Prototype 1 Log Medication

A hand-drawn prototype of a 'Log Medication' page. At the top, there is a title 'Log Medication' with a back arrow on the left and a checkmark on the right. Below the title, the form is organized into sections: 'Dog(s)' with a dropdown menu, 'Medication' with a text input field, 'Frequency' with six radio button options ('1 x Yr', '1 x Month', '1 x Wk', '2 x Wk', 'Daily', '2 x Day'), 'Administered' with a dropdown menu showing 'Orally', 'Duration' with a date picker icon and a text input field, and 'Notes' with a large text area containing the placeholder 'Add Note Here...'. At the bottom left, there is a 'Save' button with a checkmark icon.

This is the Log Medication page. The user can choose which dog they are logging this information for if they have multiple dog profiles on their account.

Prototype 1 Log Walk

A hand-drawn prototype of a 'Log Walk' page. At the top, there is a title 'Log Walk' with a back arrow on the left and a checkmark on the right. Below the title, the form is organized into sections: 'Date' with a date picker icon and a text input field, 'Time' with a text input field, 'Distance' with a text input field, 'Location' with a text input field, and 'Notes' with a large text area containing the placeholder 'Add Note Here...'. At the bottom left, there is a 'Save' button with a checkmark icon.

This is the Log Walk page. The user can log information such as the date and time of the walk, the distance, and the location of the walk. The user is also offered a notes textbox field to record anything else they would like to document about the event.

Prototype 1 Log Grooming

Log Groom ✓

Dog(s)

Date

Notes

Add Note Here...

✓ Save

Add Photo

The user can fill out the date of a grooming session and any notes the user wants to record. The user can also click the camera image to upload an image of the grooming.

Prototype 1 Supplies

Supplies +

<input type="checkbox"/>	Potty Bags	★	
<input type="checkbox"/>	Treats	★	
<input type="checkbox"/>	Training Pads		
<input type="checkbox"/>	Toys		
<input type="checkbox"/>	Supplements		

Home Reminder Add Event Inventory Training

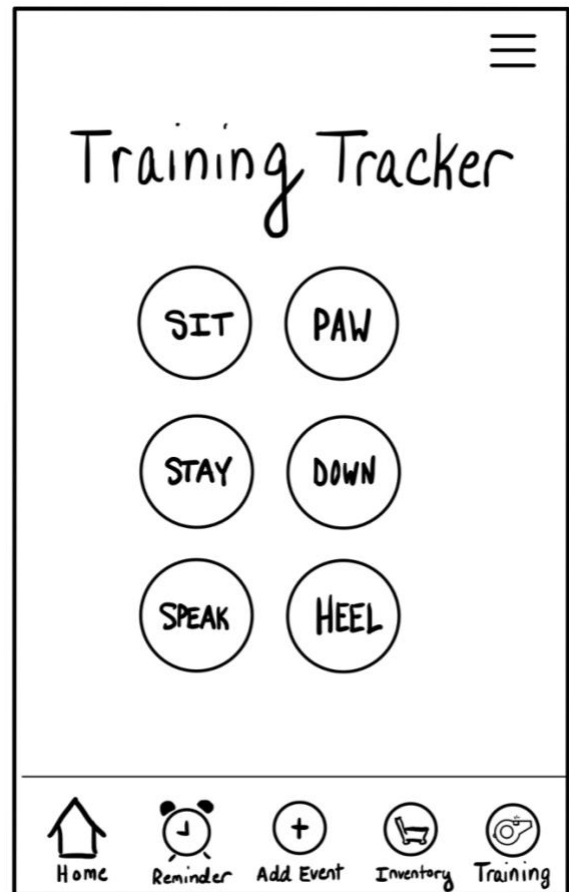
This is the supplies page which can be navigated to using the shopping cart icon on the bottom nav bar. All supplies are listed here as well as a star signifying the priority of the item. A picture is also shown which is updated by the user. The user can click the + icon on the top right of the screen to add a new supply to the list. A trash can icon is present next to every item so the user can remove an item from the list.

Prototype 1 Add Supply

Hand-drawn prototype of the 'Add Item' page. The page has a title bar with a back arrow, 'ADD ITEM', and a checkmark. Below the title bar are three input fields: 'Name' (text box), 'Quantity' (spinner box), and 'Priority' (star icon). At the bottom left is a camera icon and the text 'Add Photo'. At the bottom center is a button labeled 'SAVE' with a checkmark icon.


This is the add supply page. The user can record the name of the supply and the quantity, as well as include a priority flag for the item. The user can also click the camera image to upload an image of the item.


Prototype 1 Training Page



This is the training tracker page. There are 6 basic commands that the user can choose to keep track of. Each circular icon can be clicked, and the user will then be navigated to that specific command's progress tracker page.


Prototype 1 Specific Training Tracker

 **Command: Sit**





Start by holding a treat near the dog's nose, and then slowly move the treat upwards towards their head, so that their bottom goes down. Once they are in sitting position, give them the treat and praise them! Repeat this process 10 times until your dog learns the command.


Complete 10 times to learn the command.


Learn 


0%50%100%

 Home

 Reminder



 Add Event


 Inventory

 Training

This is the specific command's page. Each command will have a lightbulb icon that can be clicked for a hint to pop up. When the learn button is clicked, the percentage tracker will increment, reflecting the progress made on learning the command and being awarded the achievement.


Prototype 1 Achievements Page


 **Achievements** 



Charlie

Sit

Paw 

Stay 

Down

Speak

Heel

This achievements page will show any badges your dog has achieved from the training tracker. This page is unique per dog, depending on which dog's profile is currently active.

Prototype 1 Events Log



This is the events log page. Any event that has been created by the user will be shown here. A trashcan item is present next to every event so the user can delete that log.

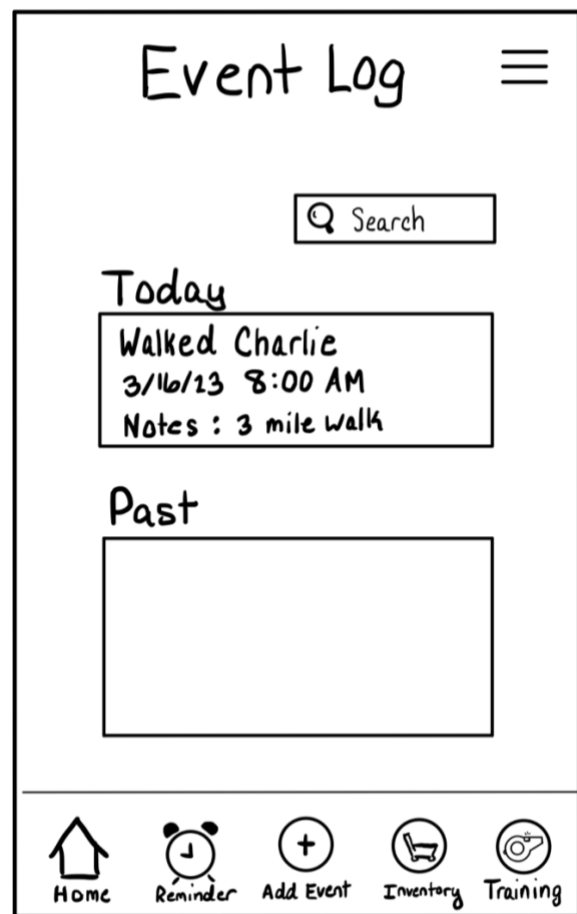
Prototype 2:

Prototype 2: Homepage





This is my second prototype for the main homepage of the app. In this version, I decided to make simple but recognizable icons to navigate through the mobile app. The + icon will bring the user to the add event page. This event logbook will bring the user to the event log page, the whistle icon will bring the user to the training page. The shopping cart icon will bring the user to the supplies page. The alarm clock icon will bring the user to the reminders page. This pawprint icon will bring the user to the dog profile page.

Prototype 2 Event Log



This is my second prototype for the events log page. This page will have two sections, one for events that have been logged today, and all past logged events. There will also be a search bar that the user can use to find specific events with typed in keywords.

Prototype 2 Log Medication

 Log Medication 

Dog(s)


Medication

Frequency

Administered


Notes


Add Note Here...

 Save

In this 2nd prototype for the Log Medication page. I removed the checkboxes for the frequency field and made it into a drop down option to be uniform with the rest of the form field. I also removed the duration field since the user can put that information in the notes textbox field or just delete the log when the medication is no longer taken.

Prototype 2 Command Tracker


 Command: Sit





Start by holding a treat near the dog's nose, and then slowly move the treat upwards towards their head, so that their bottom goes down. Once they are in sitting position, give them the treat and praise them! Repeat this process 10 times until your dog learns the command.


Progress Tracker


010


Learn 

 Home

 Reminder

 Add Event

 Inventory

 Training

In this 2nd prototype of the specific command tracker page, I removed some textual information from the page. I also changed the scale of the progress tracker from percentage to a numerical range of 0-10. The learn button is now on the bottom of the page and centered.

Prototype 2 Supplies Log

Supplies Log +

Need

Potty Bags ☐

Treats ☐

Have

Supplements

Home Reminder Add Event Inventory Training

In this second version of the supplies log page, I realized that there wasn't a distinction between what the user already has and what the user needs. In this prototype, the user will have two sections, Need and Have. The need section will have a checkbox that the user can click to move the item to the have column. They can also edit the item with the pencil icon or delete the item with the trashcan icon. The user can click the + icon on the top right of the screen to add a new supply to the need section.

Prototype 2 Add Supplies

< Supplies ✓

Name

Quantity

✓SAVE Delete

In this add supply page, I decided to remove the priority feature since I redesigned the underlying functionality of the inventory/supply tracker. I also removed the add image feature to simplify the design of the supplies log page.

Prototype 2 Dog Account Info (Includes Achievements)

Hand-drawn prototype of a dog account info screen. The screen includes a back arrow, a camera icon in a circle, and a home icon. The main content is a box with "Information" and a dropdown arrow, containing details for a dog named Charlie: Breed: Pitbull, Gender: Female, Spayed: Yes, Age: 4 yrs 2 mths, and Weight: 48 lbs. Below this is an "Achievements" section with a trophy icon and a dropdown arrow. At the bottom are "Edit" and "Delete" buttons.

In this 2nd version of the dog account prototype, I decided to combine the dog profile and achievements page into one page. Here the user can access all information pertaining to their dog. When the user clicks the down arrow on the achievement's tab, a list of badged will be shown.

Prototype 2 Log Walk

Hand-drawn prototype of a Log Walk screen. The screen includes a back arrow, the title "Log Walk", and a checkmark. The form includes fields for "Date" (with a calendar icon) and "Time". Below these is a "Notes" section with a text box containing the placeholder "Add Note Here...". At the bottom is a "Save" button with a checkmark.

I decided to simplify the form field on this 2nd prototype for the Log Walk page. I removed the distance and location field to simplify the interface. The user can record that information in the note's text box.

Prototype 2 Log Groom

A hand-drawn prototype of a mobile application screen titled "Log Groom". The screen features a back arrow on the top left and a checkmark on the top right. Below the title, there are four input fields: "Dog(s)" with a dropdown arrow, "Date" with a calendar icon, "Groomer's Phone Number", and "Notes" with a placeholder text "Add Note Here...". At the bottom, there is a "Save" button with a checkmark icon.

This 2nd prototype of the Log Groom page only has a small change. I decided to include a field to include the groomer's number so the user can also keep track of that information without needing to use the note text box.

Step 2. Evaluation

After creating and evaluating both prototypes, a decision was made to combine them for the final product. Specifically, the prototypes from the 2nd version were chosen to override the prototypes from the first version for certain pages. After simulating how a user would navigate this application, the prototypes from the first version offered some issues and drawbacks, over the prototypes from the 2nd version. For instance, the homepage in the 2nd prototype was preferred for its streamlined design that effectively conveys information using easily identifiable icons instead of textual data. Moreover, the event log can now be viewed from the homepage, which was not possible in the first prototype. The medication log page from the 2nd prototype was also favored for its uniform layout of form fields, which was achieved by replacing checkboxes with a dropdown menu for frequency requirements. The command page from the 2nd prototype was also chosen for its simplistic design that is easy for users to understand. In addition, the progress tracker now uses a numerical range instead of a percentage scale from the first prototype, which some users may find confusing.

One of the significant changes between the two prototypes was the supplies log, which had a vague layout in the first prototype. The 2nd prototype improved this by allowing users to track items they need and items they already have separately. As a result, the priority feature was no longer necessary for the add supplies page in the 2nd prototype. In summary, the modifications carried out from the first to the second prototype notably enhanced the usability of the application and will be integrated into the ultimate low fidelity prototype of the mobile application.

Step 3: Choice and Refinement

After completing both prototype 1 and prototype 2, I decided to merge the versions together for the finalized product. I will choose the prototypes from the 2nd version to override the prototypes from the first version for the specific pages. For the homepage, the 2nd prototype is more streamlined and efficiently gets the information across in a simplistic way. There is no textual data present and easily identifiable icons are used to help the user navigate to specific parts of the application. There is now also an option to view the event log from the homepage, where the first prototype did not have a way to see the event log, only after adding a new event. The log medication page drawn in the 2nd prototype offers a more uniform layout of the form fields, especially after replacing the checkboxes for the frequency requirement to a dropdown menu. The specific command page in the 2nd prototype also offers a simplistic design that is easy for the user to digest. The progress tracker now makes more logical sense to the typical user by using a numerical range rather than a percentage. Some users might confuse the percentage scale from the first prototype to be a difficulty level of the command rather than the actual progress of the training.

The supplies log was one of the larger changes between prototype versions in terms of functionality. The first prototype was vague, and it would be difficult for the user to differentiate between whether the list was logging supplies the user needs or logging what the user already has in their inventory. The 2nd prototype now differentiates the two and allows the user to track both items that they need and items that they currently have at home. The add supplies page in the 2nd prototype that is being implemented in the final version does not have the priority feature for the item. Since the items are being divided between what the user needs and what the user has, there is no longer a need for the user to flag an item as a priority, since the items the user needs will be listed as the top of the supply log page. Overall, the changes between prototype 1 and prototype 2 offer more usability for the users of this application and will merge and represent the final low fidelity prototyping of the mobile application.

Step 4: Finalized Design

Storyboard

1. When the user opens the app, they will be presented with the sign in page. The app is only accessible if the user has an account. If the user does not have an account, they can click the register button, which will redirect them to the simple registration page. Since this will be an iOS mobile app, there will also be the option to sign in using Apple ID.

A hand-drawn sketch of a mobile app screen titled "BarkBasics Sign In". The screen contains the following elements from top to bottom: the title "BarkBasics" in a large, bold, sans-serif font; the subtitle "Sign In" in a smaller, bold, sans-serif font; an "Email" label above a rectangular input field; a "Password" label above another rectangular input field; a "Forgot Password?" link in a smaller font; two buttons labeled "Login" and "Register" side-by-side; and a "Sign in with Apple" button featuring the Apple logo and text.

2. The user only needs to enter their email and password in order to register. Proper form validation will be used here to make sure the email is valid as well as not already registered.

A hand-drawn sketch of a mobile app screen titled "BarkBasics Registration". The screen contains the following elements from top to bottom: the title "BarkBasics" in a large, bold, sans-serif font; the subtitle "Registration" in a smaller, bold, sans-serif font; an "Email" label above a rectangular input field containing the text "user@email.com"; a "Password" label above another rectangular input field containing six asterisks "*****"; and two buttons labeled "Login" and "Register" side-by-side. A mouse cursor icon is shown pointing at the "Register" button.

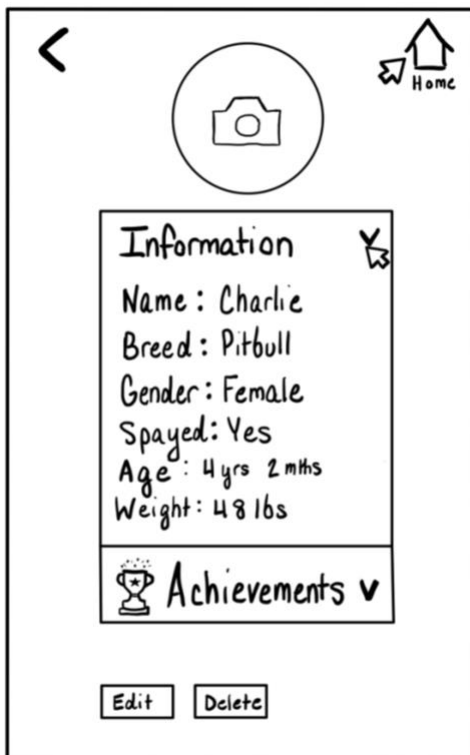
3. Once the user registers and signs in successfully, they will be redirected to the homepage. Here there are 6 identifiable icons signifying the different functionalities that the app allows. The user will navigate to the “Paw Print” icon to create an profile for their dog.



4. Here, the user can create a profile for their dog. They can include the name, breed, gender, birthday, and weight of the dog. The user can also choose to upload an image from their phone of their dog. The breed form field can either be typed in or picked from a drop down menu. Once the user fills in the information, they can click the save button on the bottom or the checkmark on the top right of the screen. The user can also click the left-facing arrow on the top right to navigate back to the homepage.

A hand-drawn mockup of the dog profile creation form. At the top left is a back arrow, and at the top right is a checkmark. Below these is a large circular placeholder for a dog's photo, containing a camera icon. The form fields are as follows: "Name" with the text "Charlie" entered; "Breed" with a dropdown menu showing "Pitbull"; "Gender" with four radio button options: "Neutered Male", "Spayed Female", "Unneutered Male", and "Unspayed Female"; "Birthday" with a date picker showing "August 30, 2019"; and "Weight" with the text "48 lbs" entered. At the bottom is a button labeled "✓ SAVE" with a cursor arrow pointing to it. The entire form is enclosed in a rectangular border.

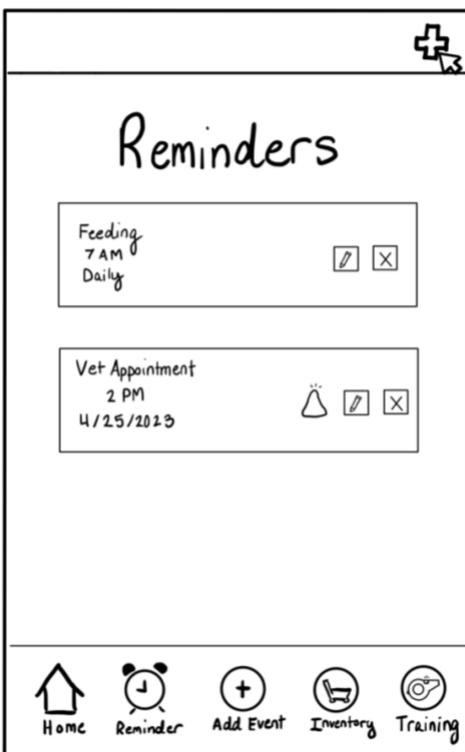
5. Once the user clicks save, they will be redirected to their dog's profile. Once section will include your dog's details, and the other section will include any training achievements your dog has earned. When the user toggles the arrow, the list of commands will be shown, and a badge will represent the achieved command. Once the user is finished, they can click the home button.



6. The user will now click the clock icon which represents a reminder.



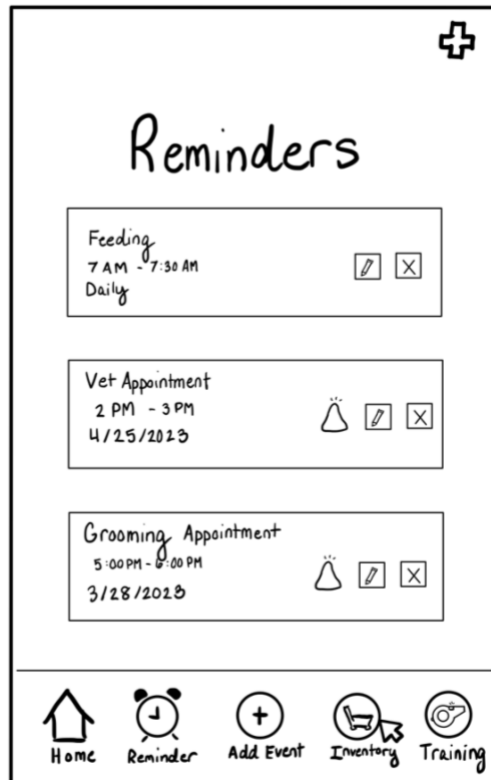
7. Here, all reminders that have been scheduled will be shown. The user has the option to edit the reminder by clicking the button with the pencil or deleting the reminder by clicking the X icon. A bell icon signifies that a notification alert was set for that reminder. The user can click the + icon on the top right corner to add a new reminder.



8. The user can create a new reminder. There are fields for the title of the reminder, the location, the start date and time and the end date and time, a repeat drop down menu with several options, and an alert checkbox with a drop down menu for the time of the alert. A simple note's text box is also available for the user to include any other information pertaining to the reminder. Once the user is done, they click the checkmark icon on the top right to save the reminder. The user can also click the left-facing arrow on the top left of the screen to navigate back to the reminders page without saving the reminder.



9. The notification will appear on the reminder's page. Next, the user will navigate to the shopping cart icon on the button navigation bar to enter the Supplies Log page.



10. Here, the user will have a supply log that has items that the owner needs as well as the items that the owner already has. The need section will have a check box that will transfer the item over the have section. The pencil icon button will be to edit the supply, and the trash can icon is used to delete the item. The + icon on the top right is used to add a new item to the need column. The have column will have an incrementor and decrementor function. If the user decrements the item to 0, it will be removed from the log.



11. When the user wants to add an item, they can include the name and the quantity needed. The user can then either click the Save button or the check mark on the top right corner to save the item and add it to the Supplies Log.

Supplies

Name

Leash

Quantity

1

✓SAVE Delete

12. Once the user saves the supply, it will be added to the supply log. All changes will reflect on this page based on the action the user decided to do.

Supplies Log

Need

Treats

Leash

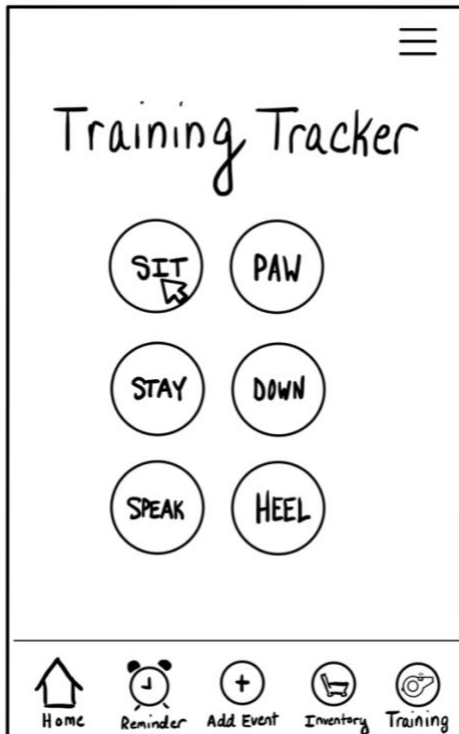
Have

Potty Bags

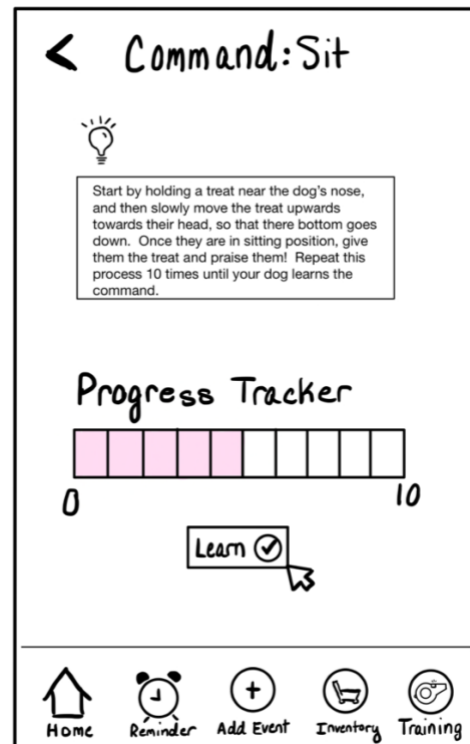
1

Home Reminder Add Event Inventory Training

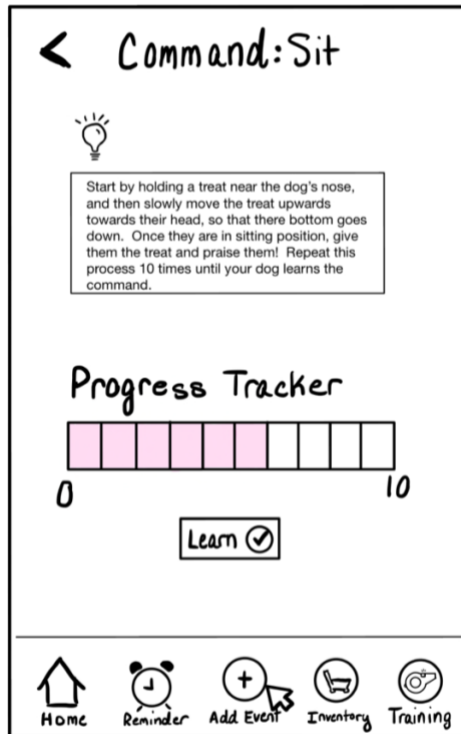
13. The user will be able to select 6 different basic commands that a dog can learn. The user will navigate to the “SIT” button to track a successful training session.



14. The user will be redirected to the Sit Command page. On this page, there will be a lightbulb icon representing helpful hints to teach your dog the specific command. Once the dog successfully completes the command, the user can click the learn button to increment the tracker.



15. The progress tracker bar will then update, showcasing that the dog has now successfully sat 6 times. When the tracker reaches 10, a badge will be added to the dog's achievement's section. The user will now click the + icon signifying the Add Event page.



16. The user will be redirected to the Add Events page where 6 identifiable icons will appear to log certain events. Here the user will choose the icon for logging a walk.



17. The user will fill in the form to log their walk with their dog. This includes choosing the dog (if multiple dog accounts exist), the date, the time, and any notes that the user wants to include. The user can either click the save button at the bottom of the log or the check mark on the top right corner. The user can click the left-facing arrow to navigate back to the Add Event Log page.

← Log Walk ✓

Dog(s)
Charlie

Date
3/16/2023

Time
8:00 A.M.

Notes
3 mile walk

✓ Save

18. Once the user clicks save, they will be redirected back to the Event Log Page and their event will appear in the today section of the log. Once a new day starts, that event will then transfer over the “Past” section of the log. The user can choose to search for keywords such as “Food”, “Walk”, “Potty”, etc. to filter through logged events.

Event Log

Search

Today

Walked Charlie
3/16/23 8:00 AM
Notes : 3 mile walk

Past

Home Reminder Add Event Inventory Training

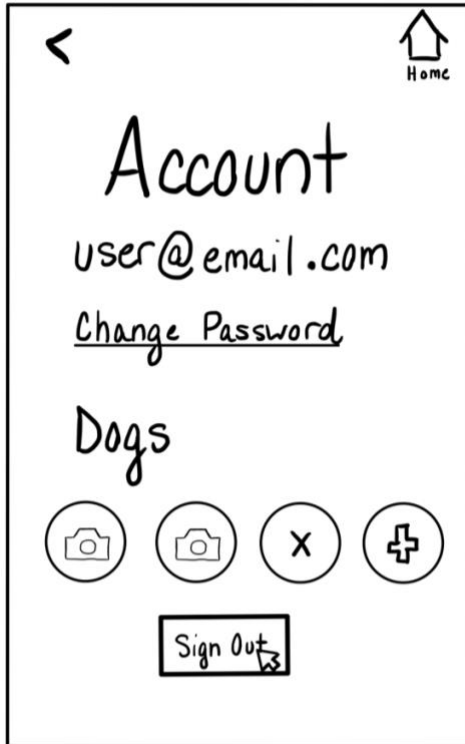
19. The user will then navigate to the three bars to end their session on the app.



20. A dropdown menu will appear to log out of the account. The user can either click the Log Out link or navigate to the account Info Page.



21. The user navigates to the Account info page and clicks the sign out button to log out of the account.



User Experience Map

Design Map: User tracks training progress

User clicks the whistle icon on the homepage or the bottom navigation bar.

User is redirected to the training tracker main page. The user clicks the "SIT" icon to track a command.

The user is brought to the Command Sit tracker. The user clicks the lightbulb icon to reveal a hint.

The user makes their dog sit one time. The user clicks the learn button to increment the progress tracker.

The user's dog is awarded a badge achievement for sitting 10 times.

Can this application extend this functionality in later implementations to include more training information such as videos?

The time constraint of the class coupled with beginner level of digital prototyping will not allow this implementation now but maybe in a future one.

Badges are unique based on the dog profile that is currently active.

Key:

Step

Comment

Question

Idea

See a related map

Design Map: User sets a reminder

User clicks the clock icon either from the homepage or the bottom navigation bar.

User is taken to the reminders page. The user sees all set reminders. The user wants to set a reminder so they click the + icon on the top right of the screen.

The user is redirected to the set reminder page. The user fills out each form field and sets a notification alert.

The user clicks save and is redirected to the reminder page where they see their new reminder.

Have the reminders be in the order of when the next reminder is scheduled for.

Should there be a search bar or filter option to find a specific reminder?

Add a search field at the top of the page to find specific reminders.

All reminders have and edit and delete icon.

Key:

Step

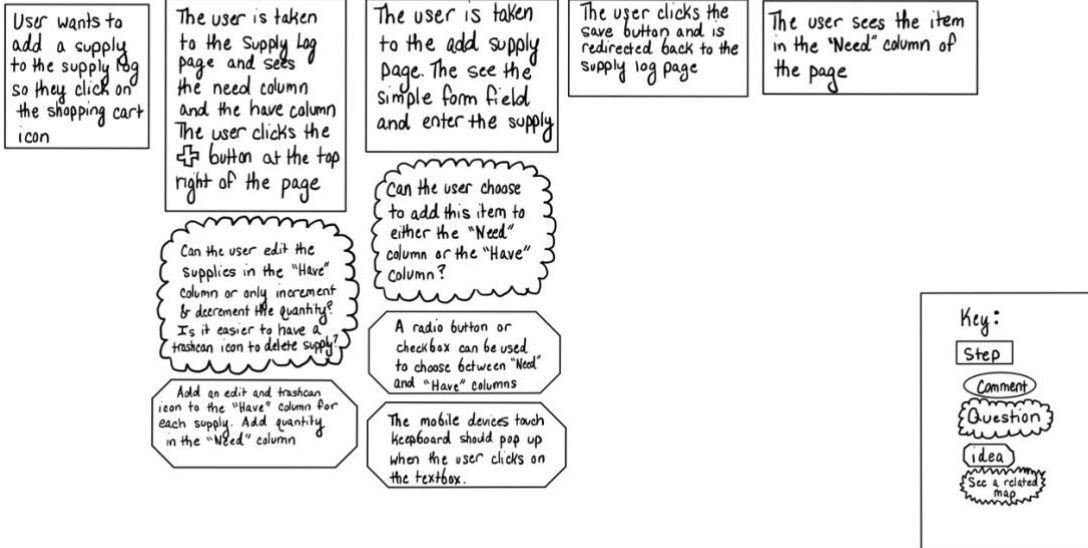
Comment

Question

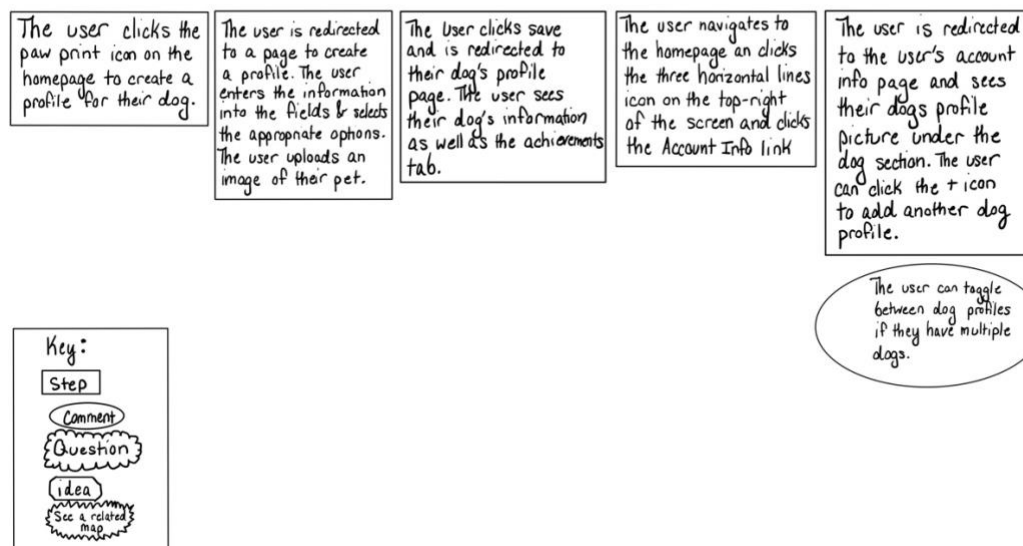
Idea

See a related map

Design Map: User adds supply



Design Map: User creates a profile for their dog



Step 5: Lessons Learned

As a designer working on a mobile app for dog owners, I've gained a wealth of knowledge through low fidelity prototyping. One crucial takeaway is the ability to identify essential features by studying user interactions in the early stages. This helps me to iterate quickly and experiment with various design ideas and functionalities before finalizing the app. By conducting this process, I can also anticipate potential issues and identify workarounds, making the overall digital design phase more efficient. Another benefit is that testing the app's functionality beforehand helps me to make necessary changes and optimize solutions, saving significant time and effort during development. Through low fidelity prototyping, I've come to understand the importance of identifying crucial features and designing around potential design flaws, ultimately creating an intuitive, user-friendly app that fulfills dog owners' needs.