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Section AC / BC | Assignment 3c
Feb 21st, 2019

Usability Testing Check-In
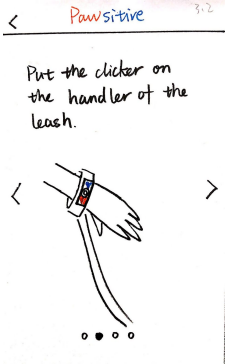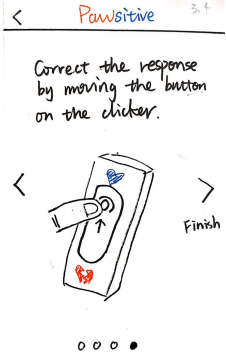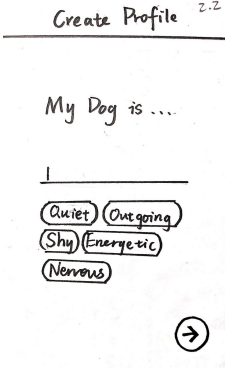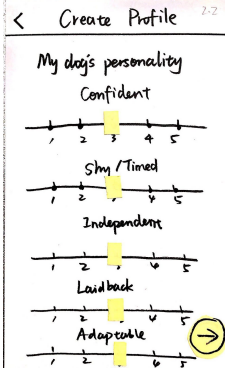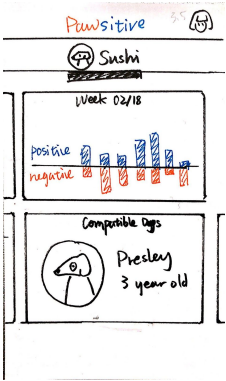
Heuristic Evaluation

Original Image	Issue Identification	Severity	Revision	Revision Image
	It's unclear how the clickers work when the owners have more than 2 dogs. **Heuristic**: Help and Documentation	4	Add a help/hint button that provides instruction for multiple devices/dogs owners	
	The Data Report visualization should allow users to view the past data. **Heuristic**: Consistency and Standards	2	Add forward and backward buttons and allow the user to swipe left or right to view previous weeks	
	There should be back buttons in the creating profile process that allow users to go back to the last step. **Heuristic**: User Control	4	Add back buttons that allow users to backtrack.	

Socialization Skip Sushi doesn't get along with dogs that are ... Size / Small / Medium / Breed / Color / Age **Socialization** Skip Sushi gets along with dogs that are... Size / Small / Medium / Large / Breed / Color / Age				‹ Create Profile 2-2 My dog's personality Confident 1 2 3 4 5 Shy / Timed 1 2 3 4 5 Independent 1 2 3 4 5 Laidback 1 2 3 4 5 Adaptable 1 2 3 4 5 ‹ 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 ▾] Breed [▾] Size [small ▾] Sex [▾] Personality [▾]
Pair Device 1.2 ※ ✳ Search	It's unclear how to pair devices for the first time users **Heuristic**: Help and Documentation	3	Add a step-by-step drawing with a caption of the pairing process	Pair Device 1.2 Hold your sensor device close to your phone. ※ ✳ Search

				Pair Device 1.3 Searching for device... Cancel Device not showing up? Help Pair Device 1.4 Successful
Create Profile 2.6 Sushi + Finish	Make the distinction between "Create Profile" and "Home Profile" screens **Heuristic**: Visibility of System Status	3	Create another home profile screen that allows users to edit their dogs' profiles	Dog Profile 2.0 Don't have any? Create one. + Create Profile 2.1 Upload Picture Name: Sushi Age: 0 yr 9 mo Breed: Mixed Size: Small Sex: F

				Dog Profile 2-6
Pair Device 1.2	Add more error screens, specifically with bluetooth connection page. **Heuristic:** Help users recognize, diagnose, and recover from errors	2	When the device has not been paired successfully, add a screen showing error	Pair Device 1.3
(No Image)	Add an option to view a tutorial at the beginning of the collar and button. **Heuristic**: Help and Documentation	1	Provide Instruction on how to use the physical devices	Pawsitive 3.1

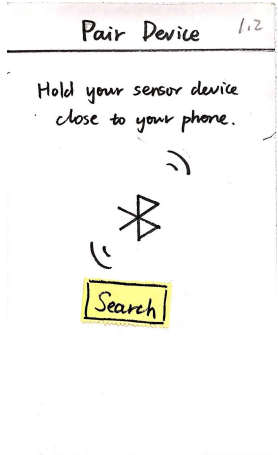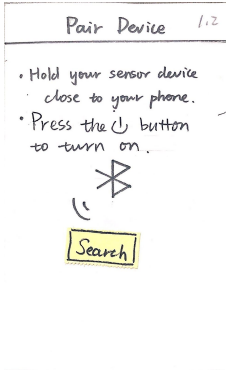|				
	Allow the user to type words into personality text input and choose from a select pool of words if the pre-selected list is not helpful. **Heuristic**: Flexibility and Efficiency of Use	3	Change the selection process to a screen with predefined main personality types that a user can rate from "Disagree" to "Agree"	
	Have a separate screen to browse multiple dogs for adoption. **Heuristic**: Aesthetic and Minimalist design	1	Having a list of multiple suggested compatible dogs at shelters that is swipeable	
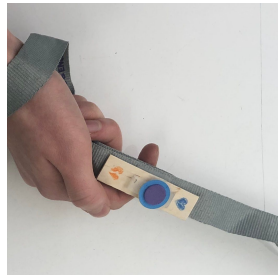
Usability Test

For our first usability test, our participant was a 21-year-old CSE undergraduate student. She has a 6-year old female miniature Australian Shepherd that she has had since her junior year in high school. Her dog is currently residing at her family's home. She describes her dog as very active but noted that the dog had not been socialized very much as a puppy. When out on walks or at the dog park, she explained that her dog seems to be anxious around bigger dogs but plays well with smaller dogs. We chose this participant because she is a dog owner and a member of the target audience of our project. The participant also demonstrated that she understood her dog well.

We conducted the test at a table in the CSE atrium, which is not the most optimal location. However, due to time constraints, we opted for a location that was more convenient for our participant. Testing went undisturbed. Megan and Aeron were the facilitators, ZK was the notetaker, and Grace was our computer.
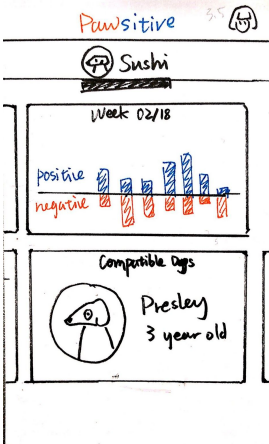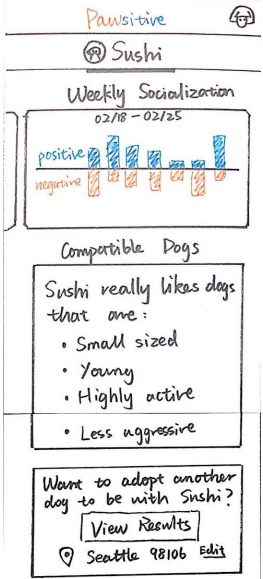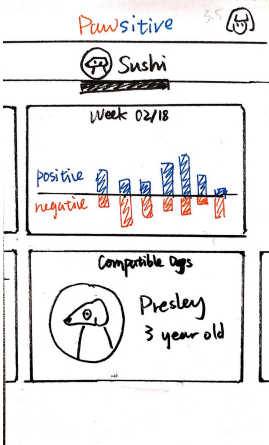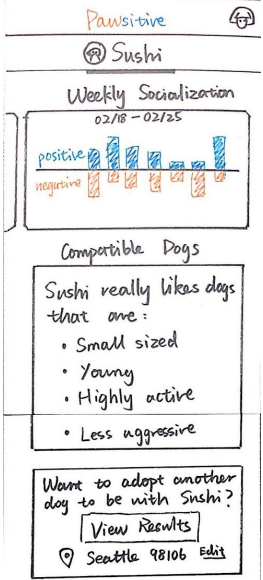
Testing consisted of three stages. The initial portion was a casual demographic interview where we asked general questions about her dog and her experience as a dog owner. We also went over the different mobile and physical components and debriefed her on the study. The second stage w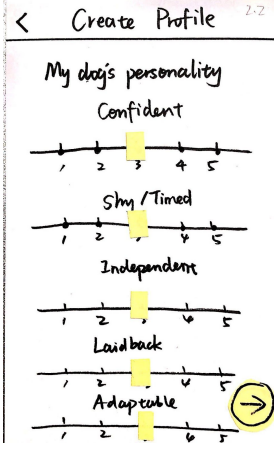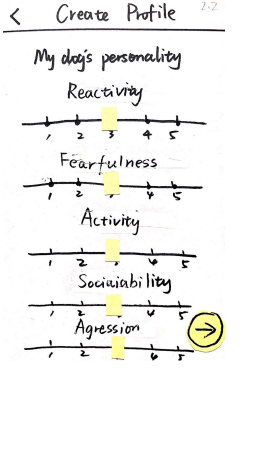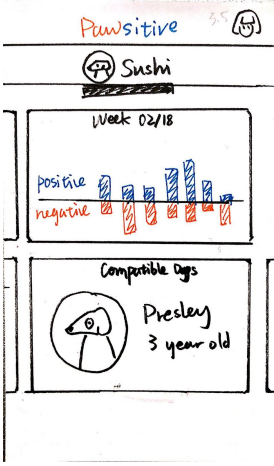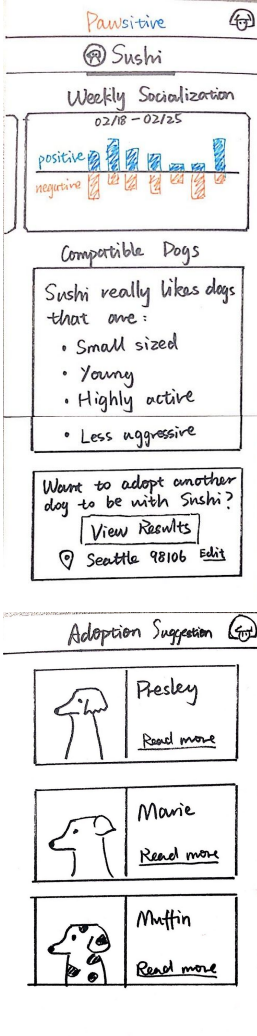as the usability testing split into two tasks. In the first task, we asked her to log into the app, pair the device to the app, create a profile for her dog, and go through a scenario in which her dog is feeling anxious on a walk and she needs to correct the device's compatibility prediction. The second task consisted of going through the mobile app to discover the suggested compatible dogs at shelters and eventually adopt a dog. Finally, the last stage consisted of asking questions about the participant's experience with the device and app.

Overall, the process went smoothly. The participant was able to complete each task and verbally communicated concerns throughout incidents. We learned that this communication was especially helpful to note for later as it showed which parts of our physical design were incomplete. Concerns and feedback she mentioned are listed below.

Original Image	Description of the Incident	Severity	Revision	Revision Image
	Connect the physical devices to the app The participant was confused about which device (button or collar) she needed to connect since there is more than 1 physical device. She also needed guidance on how to connect the devices (The only button is on the clicker and the participant was not sure whether the button also controls the collar).	4	Provide tutorials for the first-time users on which devices they will connect to and how to connect it. Add a button on the collar to turn it on/off.	
	Attach the button to the leash The participant was unsure of how to attach the button to the leash.	4	Make the attachable button more obviously "attachable" by adding a clasp (gluing the button to a binder clip so it can be attached to the leash).	

	Create Profile Personality The participant noted that confident is the opposite of shy, so she was inputting the same data twice.	2	Select more unrelated personality traits.	
	Interact with compatible dogs section The participant wondered if the weekly social graph was related to the suggested companion. It was also unclear that the suggested dogs were available for adoption.	4	Show personality traits of dogs that were enjoyable underneath the weekly social graph. Have a separate compatible dogs screen.	

	Suggested shelter dogs The participant wondered if the suggested dogs would be at shelters near her location.	2	Allow the participant to add an address.	
	Adoption Button Too Big for Frequency of Action Since adoption is not a highly frequent task and may be more of a "browsing" activity, the participant may not want to see suggestions everytime the home page is visited.	3	Place the adoption suggestions on its own screen, accessible through a button on the home page.	

Revised Process

Entire Prototype Overview
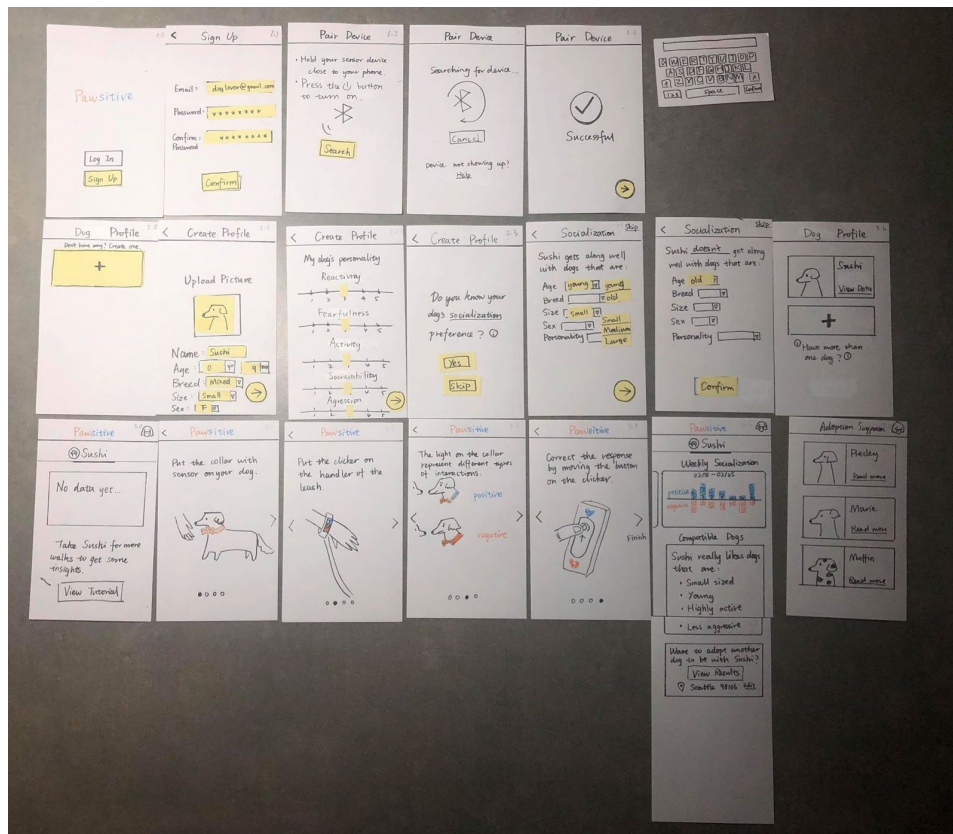
Task 1

Creating a new profile for their dog and override lights on collar with button
The participant gets the app and device and needs to set up their dog's profile. First they connect devices to the app (Figures 1-4). Then the participant/owner creates a profile for their dogs (Figures 5-10) and attaches the physical components to get ready for a walk after viewing a tutorial (Figures 11-17). Then we talk through a scenario in which the collar lights up blue; however, the owner senses their dog's nervousness and wants to override the compatibility decision (Figure 18). The owner then corrects the compiled false results through the use of the button (Figure 19) and the collar lights up yellow (Figure 20).
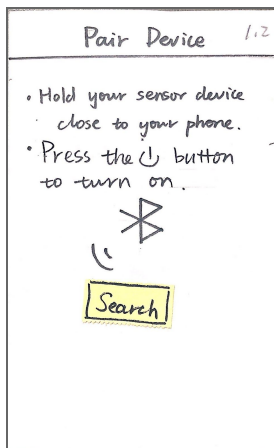

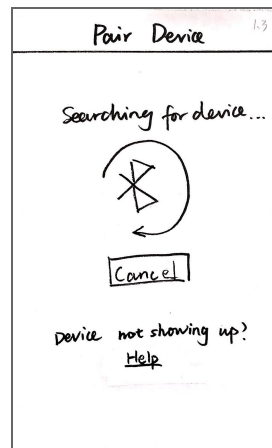Figure 1. Tap search to find the Pawsitive device

Figure 2. Allow the participant to cancel if needed

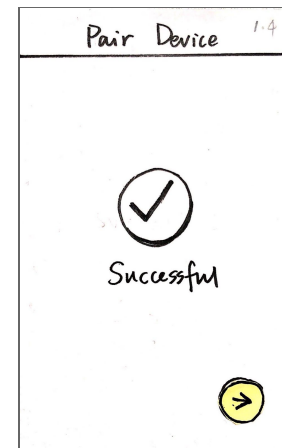Figure 3. Hold the power button on the collar to connect

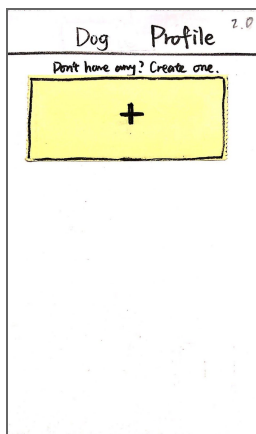Figure 4. Press the arrow to move on once pairing is successful

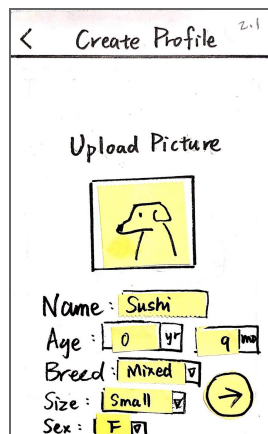Figure 5. Participant presses "+" to add a dog profile

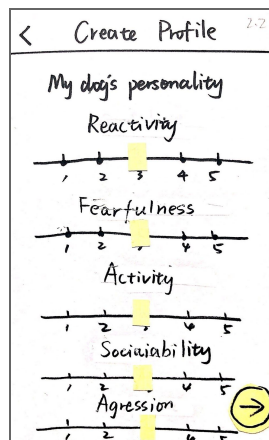Figure 6. The participant inputs basic information about their dog

Figure 7. The participant indicates their dog's personality by sliding the ranges

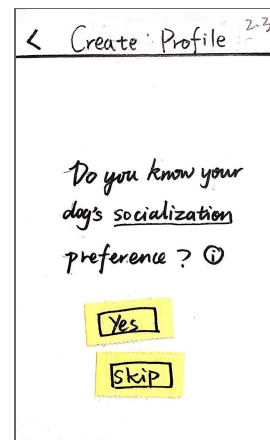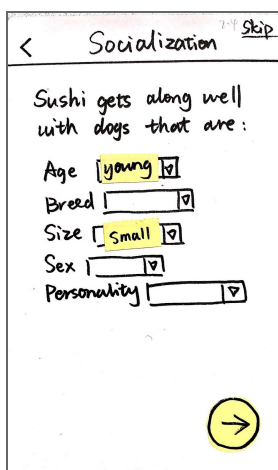Figure 8. The participant presses "Yes" to indicate their dog's socialization preference

Figure 9. Participant taps and selects traits that their dog does get along with. Understands rest of fields are optional
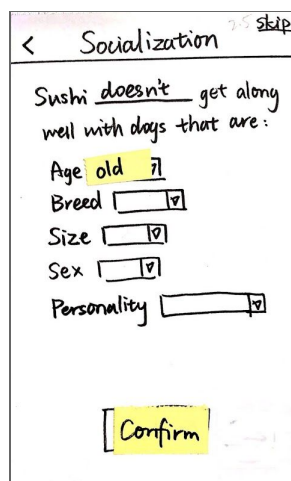

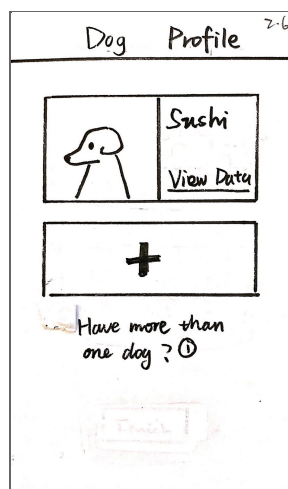Figure 10. Participant does similar thing to Figure 9 but with incompatible dogs

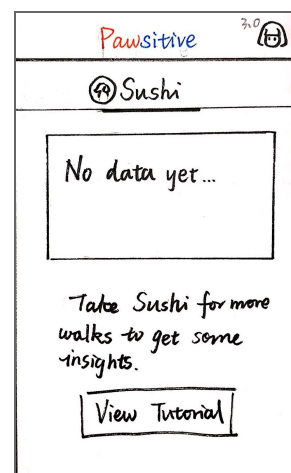Figure 11. Participant clicks on their dog profile

Figure 12. Participant clicks on "View Tutorial"

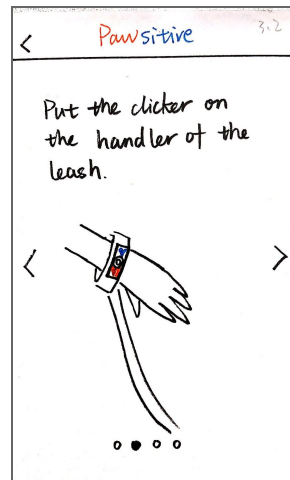Figure 13. Participant swipes right to view next step

Figure 14. Participant swipes right
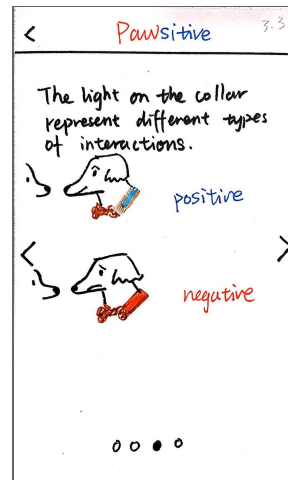
Figure 15. Participant swipes right

Figure 16. Participant swipes right to finish tutorial

Figure 17. Participant attaches button to leash

Figure 18. While on a walk, the collar turns blue

Figure 19. The owner senses the dog's nervousness and pushes the button towards themselves to override the device

Figure 20. The collar light switches to yellow

Task 2

Explore compatible dogs for adoption

After a few months of using Pawsitive, this owner decides that their dog, Sushi, would benefit from a permanent companion. On the Pawsitive home page, a panel appears asking "Want to adopt another dog to be with Sushi?" (Figure 21). These dogs are found

based off of the compatible dog types listed above and the owner location, which can be edited, if incorrect. When the owner taps "View Results", various dogs from nearby shelters are presented (Figure 22). The owner clicks on "Read More" to be directed to the dog's adoption page on the shelter's website.
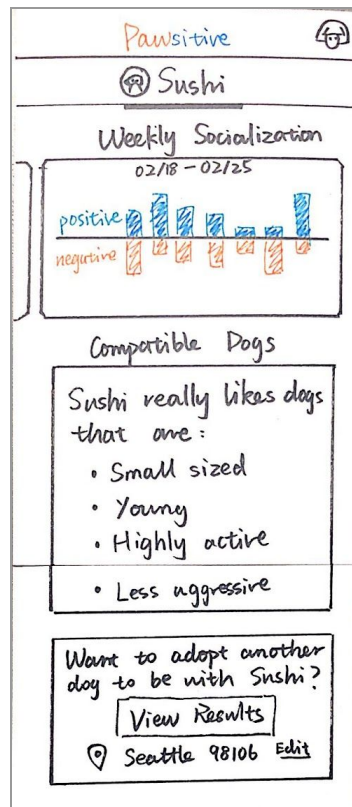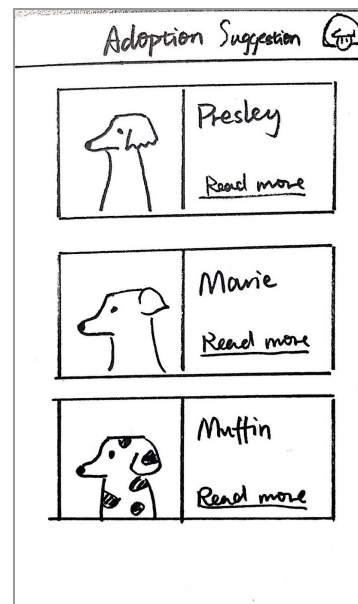

Figure 21. Adoption Panel

Figure 22. Suggested Dogs

Plan for Remaining Participants

Our target participants are dog owners who understand how to read the emotions of their dogs and have general experience with socializing their dogs on walks. We have already scheduled a meeting with UW Informatics student who owns one dog and are in the process of scheduling one other meeting.

The main goal for the additional tests is to smooth the integration of wearable technology. This includes syncing the devices with the mobile application and turning the devices on to prepare for a walk. A secondary goal is to clarify the adoption task, so participants understand how to view suggested pets, should they desire.

We plan to continue the roles of Megan and Aeron being facilitators, ZK being the notetaker, and Grace being our computer. Due to scheduling constraints, we may have to switch out when one of us cannot attend.

We noticed that it took the computer some time to manipulate the modifiable portions of the UI, as the sticky paper was pre-attached to the note cards. To decrease time spent, we may organize all sticky paper on another sheet of paper, ordered by sequence of cards. We could adopt a system in which one of the facilitators hands the sticky paper to the computer as needed. We will also aim to not provide the participant with any guidance in our future tests.