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CSCI 3002

Group Task 5

Part 1: Usability Testing

Prototype A:

<https://www.figma.com/file/Ysnvx7uaALLiQc7akunCyj/Dog-prototype-A>

Prototype B:

<https://www.figma.com/file/w5zqwNBMTQJkS3OdpMq0GZ/Dog-prototype-B>

For all studies:

- Study tasks:
 - Sign-up and login
 - Log food and water stats
 - Import dog's movement
 - View accumulated data in a graph
 - Fill in dog's profile after sign-up
- Study report questions:
 - Study Session #, date, time, location
 - Study participant info: give them a pseudonym, and note their occupation (often we would record their age, gender, etc., but in this case those aren't very relevant to the usability test)
 - Who conducted the study (and who else from your group helped)
 - **Observations from Prototype A:** What happened when testing prototype A? Did you notice anything surprising? Any confusion or mistakes?
 - **Observations from Prototype B:** What happened when testing prototype A? Did you notice anything surprising? Any confusion or mistakes?
 - **Participant feedback:** Summarize the participant's answers to the 7 questions below, plus any other questions you asked.
 - What did you like about Prototype A?

- What did you dislike about Prototype A?
- What did you like about Prototype B?
- What did you dislike about Prototype B?
- What was confusing about these prototypes?
- Do you have any suggestions for improving these prototypes?
- Would prototype A or B be more useful in tracking your dog's health?

Study Session #1:

- Date: 11/30
- Time: ~6pm
- Location: Oliver's house
- Participant info:
 - Roommate: #1
 - Age: 21
 - Owns a dog?: Yes
 - Ran through prototype A then B
- Study conductor: Oliver Larsson
- Observations for prototype A (in order of study tasks above):
 - Sign-up and login
 - All good. The "Forgot Password" was tested and worked too.
 - The back button from the "Forgot Password" linked to Prototype B so that was fixed.
 - Log food and water stats
 - Had to go through the landing page, home page, and "Spot" page to get to the food and water and had no issues. They said they liked the simplicity of the "Spot" page with clear buttons to navigate.
 - Import dog's movement
 - Same deal as before with easy navigation to the page. User said the pop-up screen to import movement from a device was cool.
 - View accumulated data in a graph
 - We probably could've worded this step better because Roommate #1 was confused what to do. After explaining that it entails viewing the graphs in "Exercise" and "Health" they got there easily.
 - Fill in dog's profile after sign-up
 - They found the "+" button right away as being a new dog entry.
- Observations for Prototype B (in order of study tasks above):
 - Sign-up and login

- Noticed that there's a sign-in on B but not A. Intentional to see whether a user prefers the extra option in B or if "login" acting as both login and sign-up is preferred.
 - Log food and water stats
 - Got through it with ease but extra steps in B seem to be monotonous.
 - Import dog's movement
 - No issues. Mentioned they like it more than the A version.
 - View accumulated data in a graph
 - Liked having all three options for "Health" in once place like in prototype A, but still liked the fluidity of moving between the graphs. No issues as far as usability goes.
 - Fill in dog's profile after sign-up
 - Same as A. Mentioned that they like the idea of having pictures like B rather than name like A.
 - Overall seemed to like what prototype A offered than what prototype B offered. Both prototypes worked well and no major confusion came up, but B is generally a longer process for all study tasks so this is likely why A is preferred.
- Participant Feedback:
 - What did you like about Prototype A?
 - Really straightforward. The pages encouraged the study tasks to be done correctly.
 - What did you dislike about Prototype A?
 - Downside of straightforward might be that the pages feel restricted. But wasn't a big issue since the application has a clear purpose.
 - What did you like about Prototype B?
 - More room to "breath" since the pages from A were, for the most part, split into several pages in B. This made the application seem more complex in a good way.
 - What did you dislike about Prototype B?
 - Sometimes the variation in pages made the study tasks confusing. Still works to get through but it got busy at times.
 - What was confusing about these prototypes?
 - A didn't cause much confusion but the business of B caused some. Notably in the "Health" pages where instead of having all three graphs consolidated in one page like A, they were split up into their own separate. He said it didn't necessarily add value.
 - Do you have any suggestions for improving these prototypes?
 - Main suggestion is to keep A as a base and maybe incorporate some of the "better" features from B. The sole feature he

mentioned in this point is using pictures on the home screen rather than the dog's names.

- Would prototype A or B be more useful in tracking your dog's health?
 - A because it's quicker and more to the point.

Study Session #2:

Date: Dec. 2, 2018

Time: 3:30 PM

Place: Magda's house

Study Participant: Magda

Student

Dog owner

Conducted by: Bum Kim

Observations from Prototype A:

I noticed that we were immediately asking for information from any brand new user, which is off-putting because we haven't explained anything to them yet. This prototype felt surprisingly empty compared to the amount of stuff it actually had. We made the mistake of making the first page unrelatable to the app.

Observations from Prototype B:

The user seemed to be a lot more receptive to the flow of this prototype. Again, the first page aggressively goes into signing up without explaining why they should sign up in the first place. I noticed that there were a lot of sections that could be put together into the same section, which could have made it easier for the testee to follow the flow of the app.

Interview questions:

What did you like about Prototype A?

It seems really simple and there isn't any learning curve at all.

What did you dislike about Prototype A?

It's a little too simple and that makes it a little hard to follow because there isn't any flow between the pages of the app.

What did you like about Prototype B?

The sections are split up coherently and all the formatting feels more uniform than the first one (Prototype A).

What did you dislike about Prototype B?

It's the same in the first one (Prototype A), but neither of them have a welcome page that gives an overview of what the app is actually about.

What was confusing about these prototypes?

There are a number of features, but I would not know which ones to start with. A lot of them are useless at the start since I have no data. Maybe having a starter guide that gets a bit of information into your app would make it easier to see what the app is for and how it's useful.

Do you have any suggestions for improving these prototypes?

The same thing as the previous question. And add a welcome page before the login or signup page. Or you could even make the login/signup page fit the theme of what the app is about.

Would prototype A or B be more useful in tracking your dog's health?

I think B would be more useful just because the sections are more clear cut and coherent. They both seem to have the same features, but B is easier to follow.

Study Session #3:

December 2, 2018

12:00 PM

Norlin Library

Study Participant:

Zach

Student/Dog Owner

Conducted by:

Cory Flynn

Prototype A:

Right off the bat, Zach pointed out a flaw in prototype A. It is missing a page to sign up and create a new account. Besides the missing page, Zach liked the simplicity of the login page and its sleek look. Beyond the first page, Zach thought the simplicity may be too little. Specifically, he pointed out that the graphs on the health page were small and hard to see, while the add food or drink page vaguely requests information. Zach also noted that the dog specific information on the home page was both hard to see and unnecessary, as the same information is repeated on the information page. Further, Zach suggested we should change our 'back to home' buttons to simpler 'back' buttons that would go back one page rather than straight to home.

Prototype B:

Zach liked the fact that this prototype has a signup page, and really liked the look of it besides the missing color/outline for the back button. He loved the images of user dogs on the home screen saying, but also had questions about how the page would look for users with just one dog asking if the images would be resized to fit more of the screen. Zach was also slightly confused by the confirm/cancel buttons that appear right as the information page is opened. He suggested we should put a button for editing rather than allowing changes at all times, which could lead to unintended changes to the dog's profile.

Part 2: Heuristic Evaluation

Prototype	Heuristic	Evaluator
A	Visibility of system status	Oliver Larsson
A	Match between system and the real world	Oliver Larsson
A	User control and freedom	Oliver Larsson

A	Consistency and standards	Oliver Larsson
A	Error prevention	Bum Kim
A	Recognition rather than recall	Bum Kim
A	Flexibility and efficiency of use	Bum Kim
A	Aesthetic and minimalist design	Cory Flynn
A	Help users recognize, diagnose, and recover from errors	Cory Flynn
A	Help and documentation	Cory Flynn
B	Visibility of system status	Oliver Larsson
B	Match between system and the real world	Oliver Larsson
B	User control and freedom	Oliver Larsson
B	Consistency and standards	Oliver Larsson
B	Error prevention	Bum Kim
B	Recognition rather than recall	Bum Kim
B	Flexibility and efficiency of use	Bum Kim
B	Aesthetic and minimalist design	Cory Flynn
B	Help users recognize, diagnose, and recover from errors	Cory Flynn
B	Help and documentation	Cory Flynn

Usability Aspect Reports:

UAR #: 1	Problem/Good: Good	Rated by: Oliver L
Name: Prototype A: Forgot password		
Relevant heuristic: Visibility of system status		
Steps to reproduce: From landing page click on the “Forgot Password?” text highlighted in blue		
Detailed explanation: When a user is prompted to enter their email and “send”, they want direction as to what they should do next. The page notifies the user that they will receive an email with directions. When they press “send” they are sent back to login page to try again once their password is reset.		
Possible solution: Trade-off: User might want to reset password in the app. Note: I’m listing trade-offs for the good evaluations based on what the Myers/John template says. Hopefully I’m interpreting that right.		
Severity (low, medium, high, critical): Low	See also:	

UAR #: 2	Problem/Good: Problem	Rated by: Oliver L
Name: Prototype A & B: Add exercise or food data		
Relevant heuristic: User control and freedom		
Steps to reproduce: For A: From the home page, select “Spot” -> “Exercise” -> “Import”, or “Spot” -> “Eating Habits” -> “Add food or drink”		

<p>For B:</p> <p>From the home page, select “Spot” -> “Exercise” -> “Import” or “Spot” -> “Eating Habits” -> “Food/Drink”</p>	
<p>Detailed explanation: The user cannot reverse a decision to import data for exercise or eating habits. This could cause issues if the data is wrong or the user has accidentally connected to the wrong device (for exercise).</p>	
<p>Possible solution: There is room on all the problem pages for a “Cancel” button so this is probably the most reasonable solution.</p>	
<p>Severity (low, medium, high, critical): Medium</p>	<p>See also:</p>

UAR #: 3	Problem/Good: Problem	Rated by: Oliver L
Name: Prototype A: Log in or sign up		
Relevant heuristic: Consistency and standards		
Steps to reproduce: Landing page		
Detailed explanation: There is no sign up button for new users. The login button can act as both but it will likely cause confusion for most new users.		
Possible solution: Put a “Sign Up” button on the landing page, same as how it works in prototype B.		
Severity (low, medium, high, critical): High	See also:	

UAR #: 4	Problem/Good: Good	Rated by: Oliver L
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Name: Prototype A & B: Navigation buttons throughout the application	
Relevant heuristic: Match between system and real world	
Steps to reproduce: No specific steps. Once you login or sign up and move further into the application, buttons for going back to the home page, settings page, etc. are present in the bottom corners.	
Detailed explanation: These buttons all clearly state what will happen if you click on them. For the home button it directs you back to a page that says “Home” so you know it landed in the correct area. The settings button is a universal icon for “Settings” and directs you to a page that has “Settings” at the top.	
Possible solution: Trade-off: Maybe people don’t want to go straight to home or settings from a given page.	
Severity (low, medium, high, critical): High (important that users know what buttons do)	See also:

UAR #: 5	Problem/Good: Problem	Rated by: Oliver L
Name: Prototype A & B: Entering data in exercise or eating habits		
Relevant heuristic: Visibility of system status		
Steps to reproduce: For A: From the home page, select “Spot” -> “Exercise” -> “Import”, or “Spot” -> “Eating Habits” -> “Add food or drink” For B: From the home page, select “Spot” -> “Exercise” -> “Import” or “Spot” -> “Eating Habits” -> “Food/Drink”		

Detailed explanation: When you submit information into either exercise or eating habits pages, you don't get a confirmation that the data was received. However, the graphs that go along with the data will update when you submit the data.	
Possible solution: We should have a popup that appears when the user clicks a submit/add/import button since a graph updating might not be as obvious as a confirmation needs to be.	
Severity (low, medium, high, critical): Low	See also:

UAR #: 6	Problem/Good: Problem	Rated by: Bum K
Name: Prototype A & B: Setting a new password in the sign-up page		
Relevant heuristic: Error prevention		
Steps to reproduce: For A: From the landing page, type a username and a password, and click "login" For B: From the landing page, select "Sign Up", fill in the username, email, and password, and click "Sign Up".		
Detailed explanation: When the user fills in the forms, the app will expect the forms to be filled in a certain format. For example, usernames should not contain special characters, emails should have a name and a domain separated by the '@' symbol. And passwords should be at least 8 characters and include certain special characters. If the user's answers to the forms do not match those criteria then the sign up will not work.		
Possible solution: A check mark should be placed in each form every time that the user fills in a valid response. A list of the criteria for each form should be placed below the respective form box.		
Severity (low, medium, high, critical): high	See also:	

UAR #: 7	Problem/Good: Problem	Rated by: Bum K
Name: Prototype A: Editing a pet's basic information		
Relevant heuristic: Recognition rather than recall		
Steps to reproduce: From the home page, select the dog that you want to edit, select the "info", then select the pencil icon to edit the dog's basic information.		
Detailed explanation: The steps to edit a user's pet's basic information are redundant and we can remove a step. It's relevant to the heuristic because that extra step makes it harder to recall how to edit the pet's basic information.		
Possible solution: Instead of selecting we could do "edit info", which takes the user directly to be able to edit their pets information.		
Severity (low, medium, high, critical): low	See also:	

UAR #: 8	Problem/Good: Good	Rated by: Bum K
Name: Prototype A & B: Setting the interval of notifications about pet's health		
Relevant heuristic: Flexibility and efficiency of use		
Steps to reproduce: On any page except the login or signup page, select the settings cog icon, and select how often to be notified about your pet.		
Detailed explanation: The user is able to get to the settings page to adjust the app to their needs from whichever page they are on. The settings icon is also unintrusive enough that a		

<p>newer user can ignore it whereas the experienced user can access it quickly from anywhere. The default settings for the interval of notifications caters to newer users, but more experienced users can change the intervals to suit their needs.</p>	
<p>Possible solution: Something that could be improved might be setting the thresholds for which a notification should be sent. For example, if a dog is not eating as often as usual, the user might set “unusual” to what they themselves think is unusual.</p>	
<p>Severity (low, medium, high, critical): low</p>	<p>See also:</p>

UAR #: 9	Problem/Good: Problem	Rated by: Bum K
Name: Prototype A & B: Adding food or drink		
Relevant heuristic: Error prevention		
Steps to reproduce: From the home page, select “Spot” -> “Eating Habits” -> “Add food or drink”, then enter the date, type of food, and the amount of food.		
Detailed explanation: There is a moderately high chance that the user might enter a date that could not be possible or in the past. Or a type of food that doesn’t exist. The user might even mix of the fields and enter a number where a word should be or vice versa.		
Possible solution: To address the date issue, we can have the current date pop up and make it scrollable, so that the user can easily choose a date that makes sense. For the amount of food, we can also put a scrollable number, so that the user knows that it should be a number value.		
Severity (low, medium, high, critical): medium	See also:	

UAR #: 10	Problem/Good: Problem	Rated by: Bum K
Name: Prototype A & B: Adding food or drink		

Relevant heuristic: Recognition rather than recall	
Steps to reproduce: From the home page, select “Spot” -> “Eating Habits” -> “Add food or drink”, then enter the date, type of food, and the amount of food.	
Detailed explanation: Adding a food or a drink is going to be a very common action in this app, which the user will have to do. The problem with that is that it takes many button presses in order to get to the part to actually add an entry, but it also takes a lot of typing to enter the data.	
Possible solution: The most common options such as adding food or drink should be added as an option to the home page under each dog or only 1 level deeper than that. This way the user can add food or drink as soon as they open the app. The actual part of inserting the entry should have “smart” entries that take past entries and estimate what the entries might be. For example, date will always be current date, type of food will probably be the same as the type of food from the previous entry, and the amount of food will generally be within the same range. Alternatively, the food or drink measurement could be automated.	
Severity (low, medium, high, critical): medium	See also:

UAR #: 11	Problem/Good: Problem	Rated By: Cory Flynn
Name: Prototype B: observing information on dog information page		
Relevant heuristic: Aesthetic and minimalist design		
Steps to reproduce: From home page, select “Spot” -> “Info”		
Detailed explanation: The info page presents the user with buttons to confirm or cancel changes and to change the profile picture. Realistically the user will not be doing this very often making these buttons less relevant than the information concerning the users dog. The bright colors of these buttons distract from the relevant information on the page.		
Possible solution: Create a separate page for updating the dogs information that can be		

accessed by a small button positioned in a corner of the page.	
Severity (low, medium, high, critical): high	See also:

UAR #: 12	Problem/Good: Problem	Rated By: Cory Flynn
Name: Prototype B: incorrect or non existent email entry		
Relevant heuristic: Help users recognize, diagnose, and recover from errors		
Steps to reproduce: Click “Sign Up” then type in incorrect or non existent email		
Detailed explanation: Our prototype does not ask the user to confirm their email address, nor recognize non existing email addresses. This poses a problem when users incorrectly enter their email address, as they will not receive emails concerning their account. Because we do not confirm email address, we do not allow for correction the possible error that is entering an incorrect email.		
Possible solution: Confirm all email addresses from new accounts.		
Severity (low, medium, high, critical): medium	See also:	

UAR #: 13	Problem/Good: Problem	Rated By: Cory Flynn
Name: Prototype A & B: importing exercise data		
Relevant heuristic: Help users recognize, diagnose, and recover from errors		

Steps to reproduce: From home page, select “Spot” -> “Exercise” -> “Import”	
Detailed explanation: Our prototypes have no error handler for when devices cannot be connected to properly. This could leave our users wondering why they are not receiving feedback on their device connection when in reality it is not connected properly.	
Possible solution: Add an error handling page that notices when a device is connected improperly and notifies the user.	
Severity (low, medium, high, critical): medium	See also:

UAR #: 14	Problem/Good: Problem	Rated By: Cory Flynn
Name: Prototype A & B: adding food or drink		
Relevant heuristic: Help and documentation		
Steps to reproduce: From home page, select “Spot” -> “Eating Habits” -> “Add food or drink”		
Detailed explanation: The app itself does not specify clearly enough what is expected for entry into the “type” category. In order to document caloric intake we need to know the caloric information for the food.		
Possible solution: We need to give the user a list of food or drink type that we have calorie information on.		
Severity (low, medium, high, critical): Critical	See also:	

UAR #: 15	Problem/Good: Good	Rated By: Cory Flynn
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Name: Prototype B: home page simplicity	
Relevant heuristic: Aesthetic and minimalist design	
Steps to reproduce: Login or Signup to navigate to home page	
Detailed explanation: The home page in prototype B only textualizes the names of the dogs. Below dog names are the dog profile pictures, and below those is a plus sign signifying a dog profile can be added.	
Possible solution:	
Severity (low, medium, high, critical):	See also: