

GDBA 301

A2: PETs Community

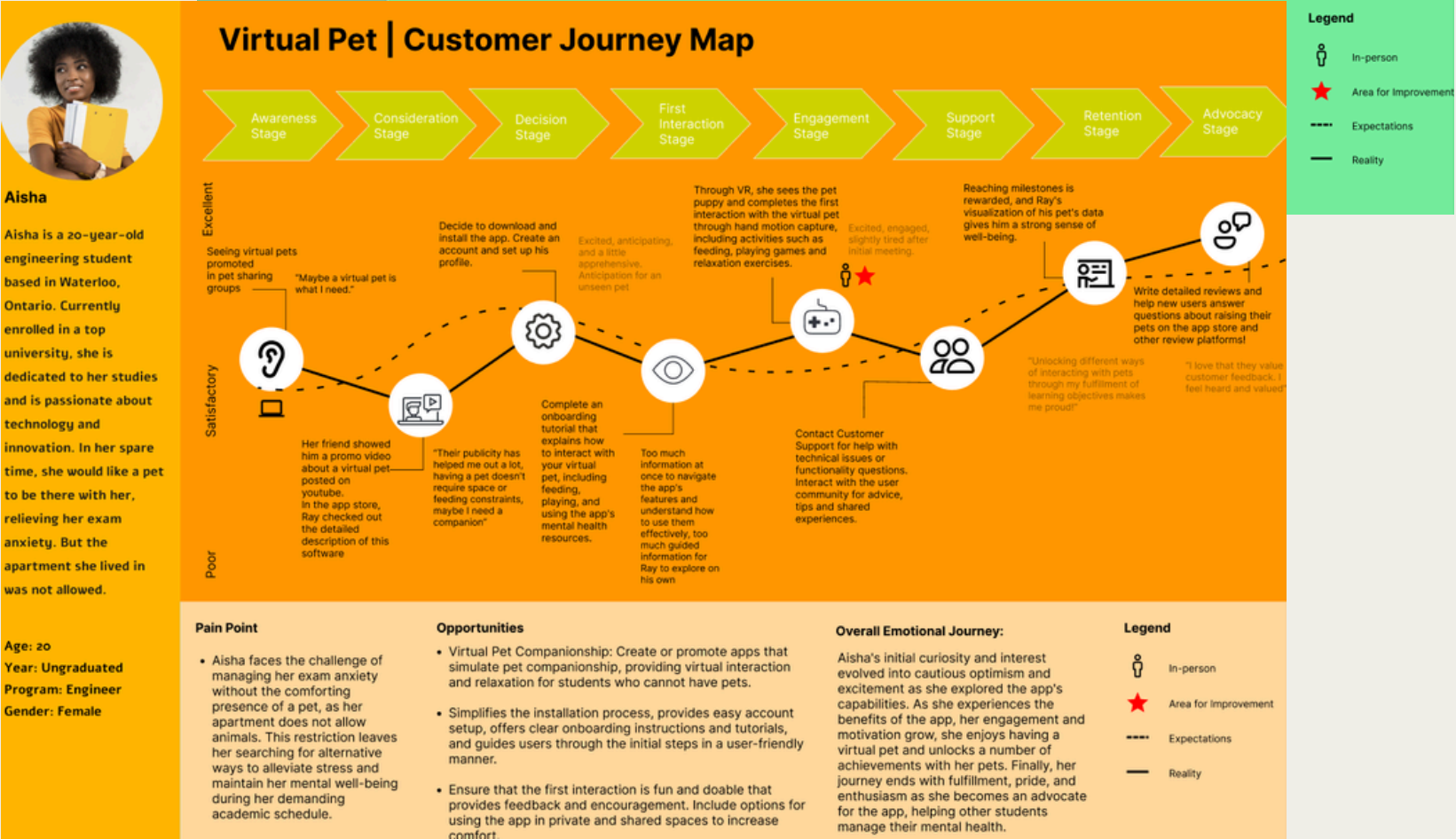
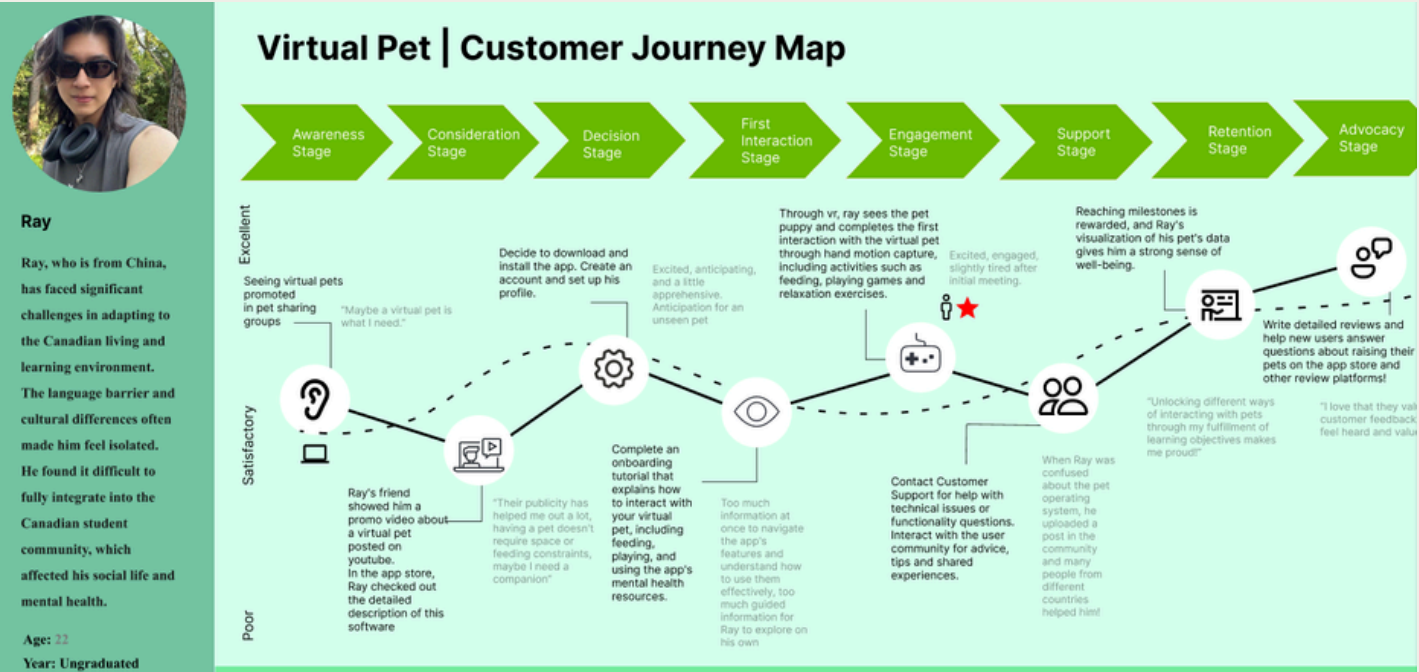
John Chen & Eric Li & Javek Liang
4 July, 2024

A G E N D A

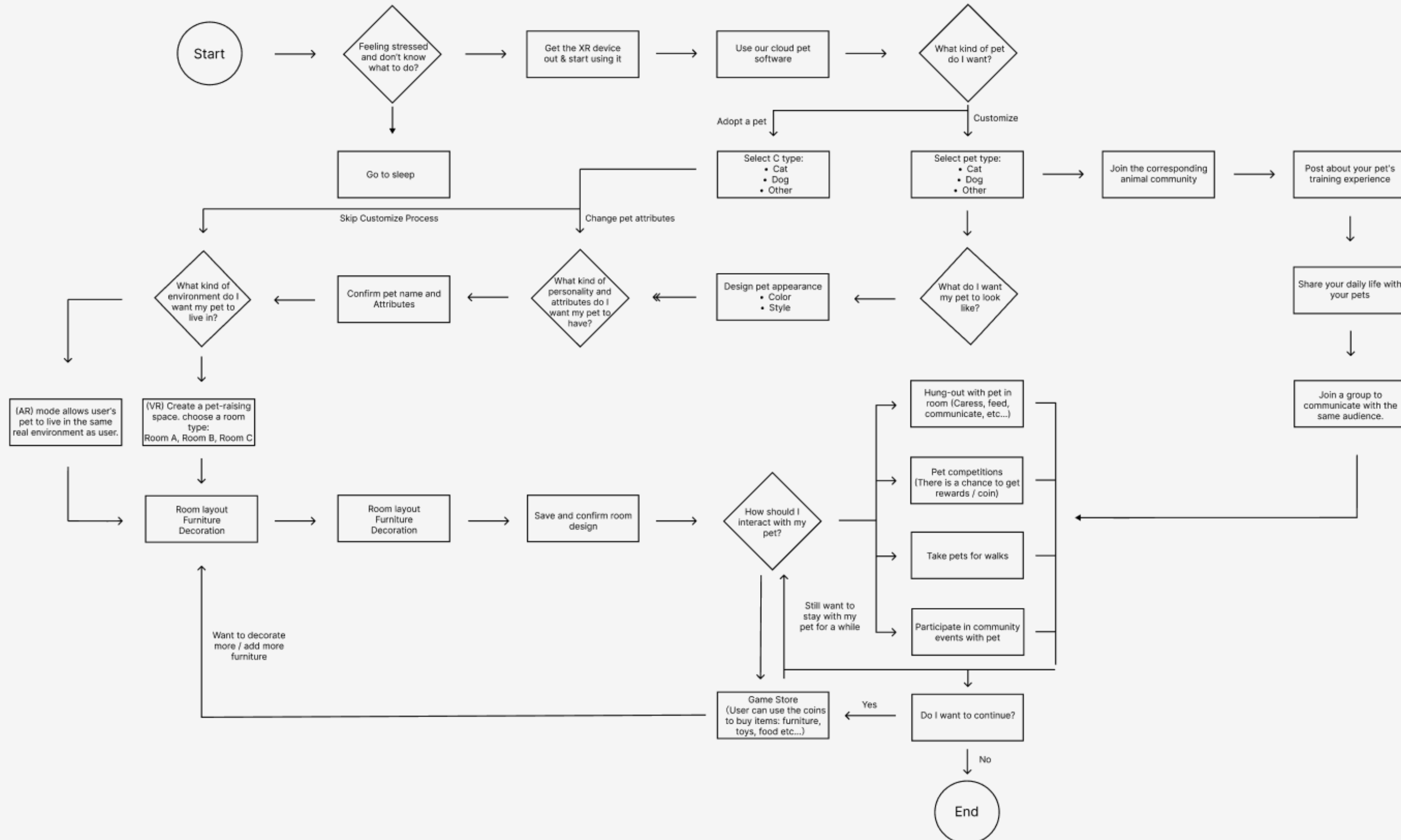
- Introduction
- Design Outline
- Initial Low-Fidelity Prototype
- Interview Questions
- User Testing and Analysis
- Actionable Design Changes
- Final Version of the Low-Fidelity Prototype
- Appendix

Introduction

Mental health challenges among undergraduates, particularly international students, are on the rise. Various factors, including academic pressures, cultural adjustments, and social isolation influence this trend. We have designed targeted support project to promote their well-being and academic success. We hope our support is effective for their mental health needs because we are international students.



DESIGN OUTLINE(FLOW CHART)



INITIAL LOW-FIDELITY PROTOTYPE

Dashboard Login



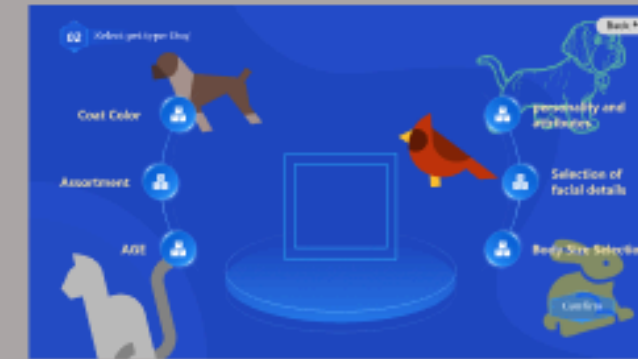
Function Introduction



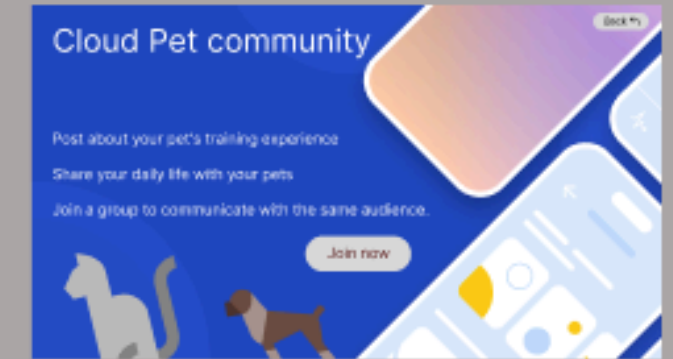
Select pet Type



Design the pet



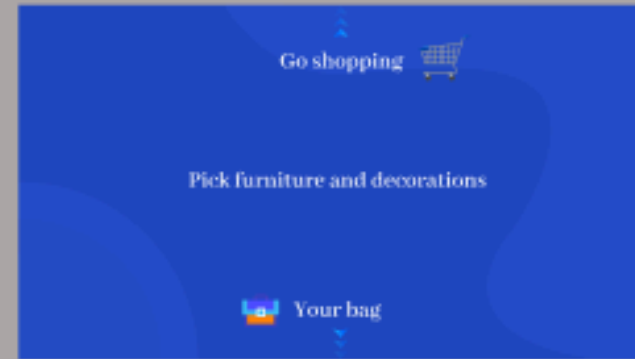
FAQS



Model Selection



Furniture Place



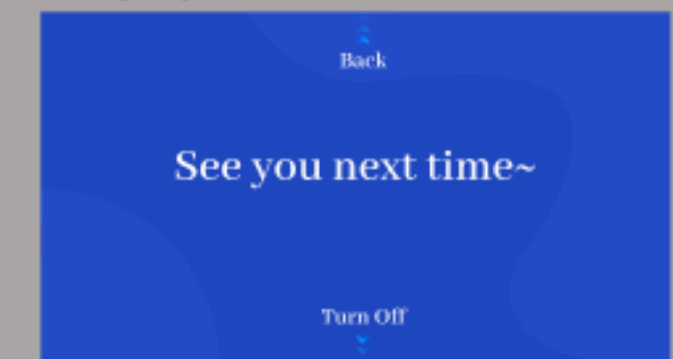
Adopt Page



Profile Page



Ending Page



Strategies for Collecting Data

Interview Question:

1. Overall, which features or design elements do you think are the most distinctive and do you feel they can help you relieve stress?
2. Which features enhance your sense of participation and happiness?
3. What aspects of our project do you think can be improved?
4. What types of social activities or support groups would you like to see in the virtual pet community?

USER TESTING AND ANALYSIS

Pet Community Survey (Low-fidelity Prototype Experience)

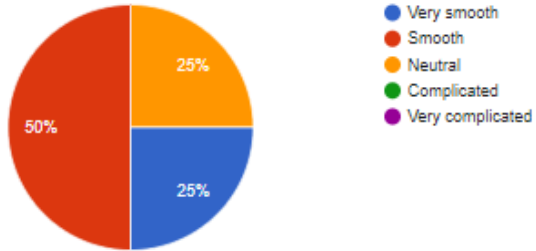
4 Replies

[Publishing analysis results](#)

Was the login process simple and smooth?

(4 replies)

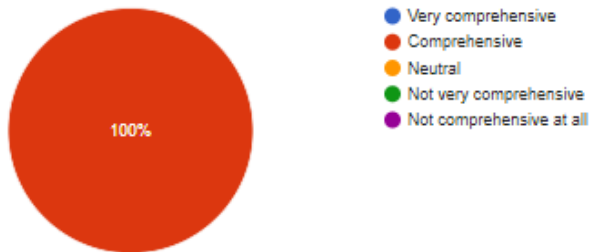
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Is the user profile interface comprehensive?

(2 replies)

[copy](#)



Which pet selection method do you prefer?

(4 replies)

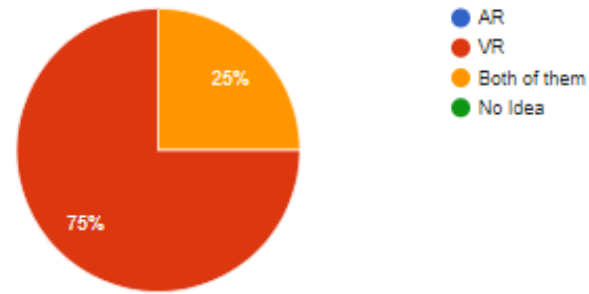
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Do you prefer AR or VR mode?

(4 replies)

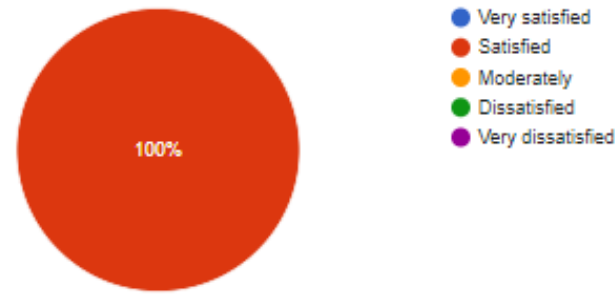
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Are you satisfied with the design and functionality of the room?

(4 replies)

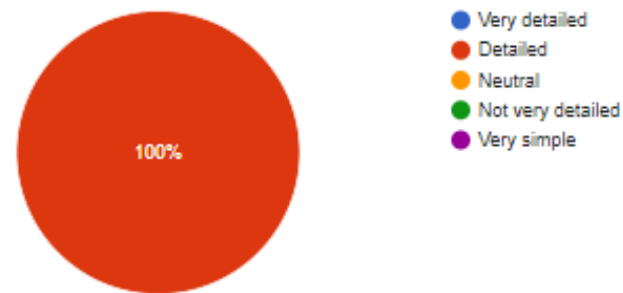
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How detailed do you find the custom pet feature?

(4 replies)

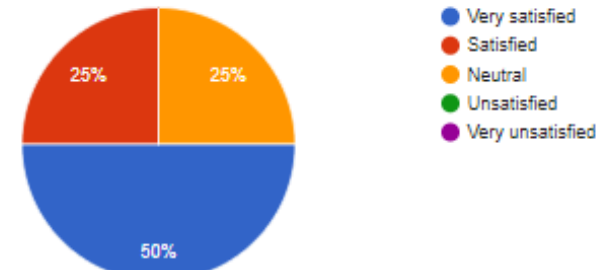
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Are you satisfied with the interaction options available in the platform?

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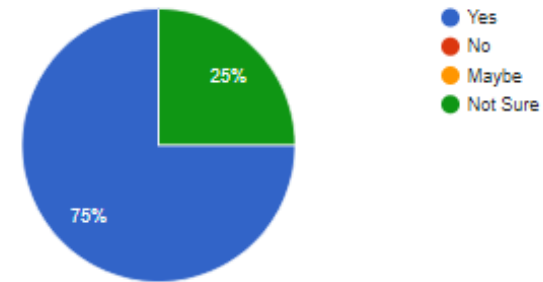
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Do you feel that community activities (sharing pet daily life, joining interest groups, etc.) can enhance your social experience?

(4 replies)

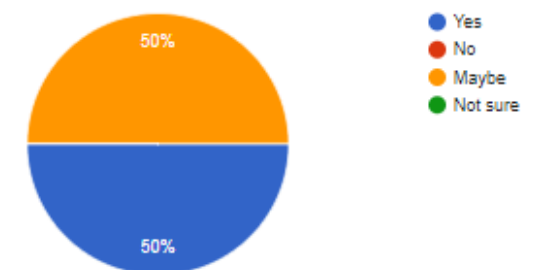
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Do you think this project helps relieve stress and improve mental health?

(4 replies)

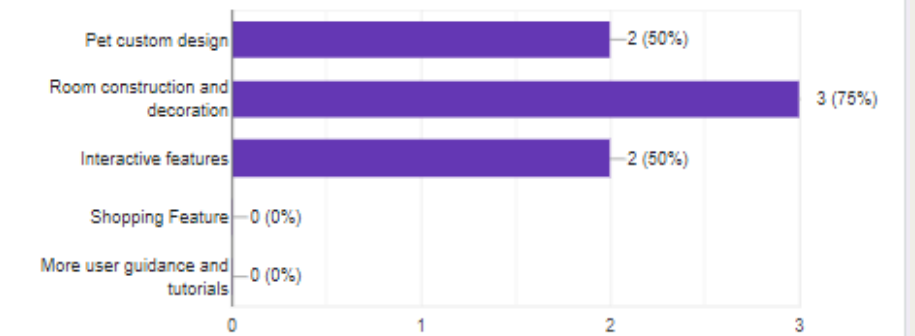
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Which aspects of the project do you think can be improved? (Select all that apply)

(4 replies)

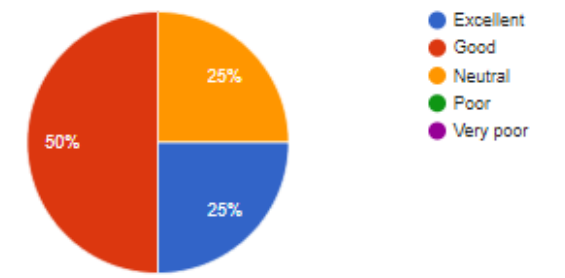
[copy](#)



How would you rate your overall experience?

(4 replies)

[copy](#)



FEEDBACK WE RECEIVED

1. I think that I would like to use the system frequently.

Strongly Disagree

Strongly Agree

1

2

3

4

5

2. I found the system unnecessarily complex.

Strongly Disagree

Strongly Agree

1

2

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3. I thought the system was easy to use.

Strongly Disagree

Strongly Agree

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4. I think that I would need the support of a technical person to be able to use the system.

Strongly Disagree

Strongly Agree

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5. I found the various functions in the system were well integrated.

Strongly Disagree

Strongly Agree

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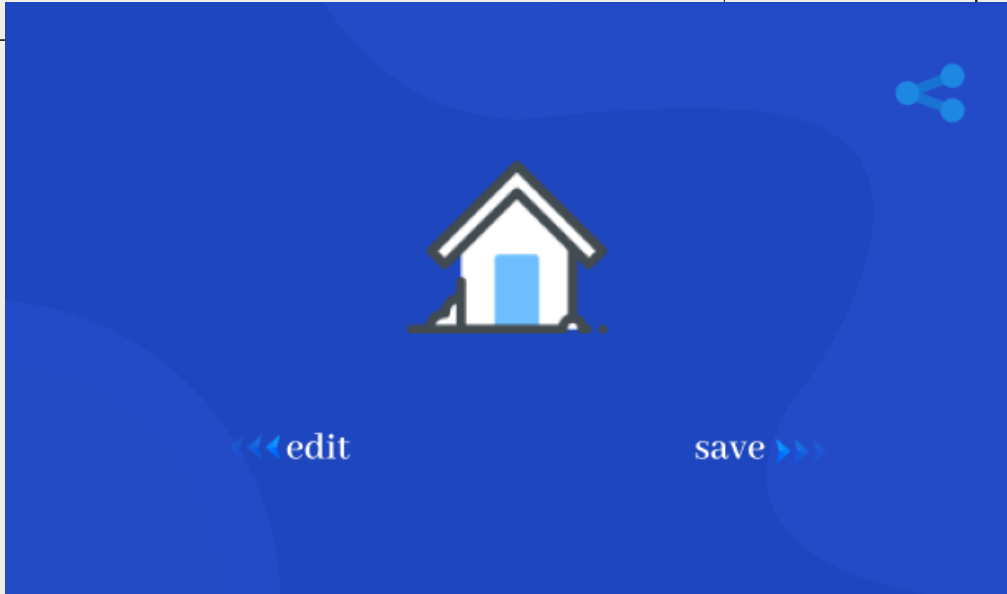
5

We collected the data and created a visual score form.

ACTIONABLE DESIGN CHANGES



Game Store Page

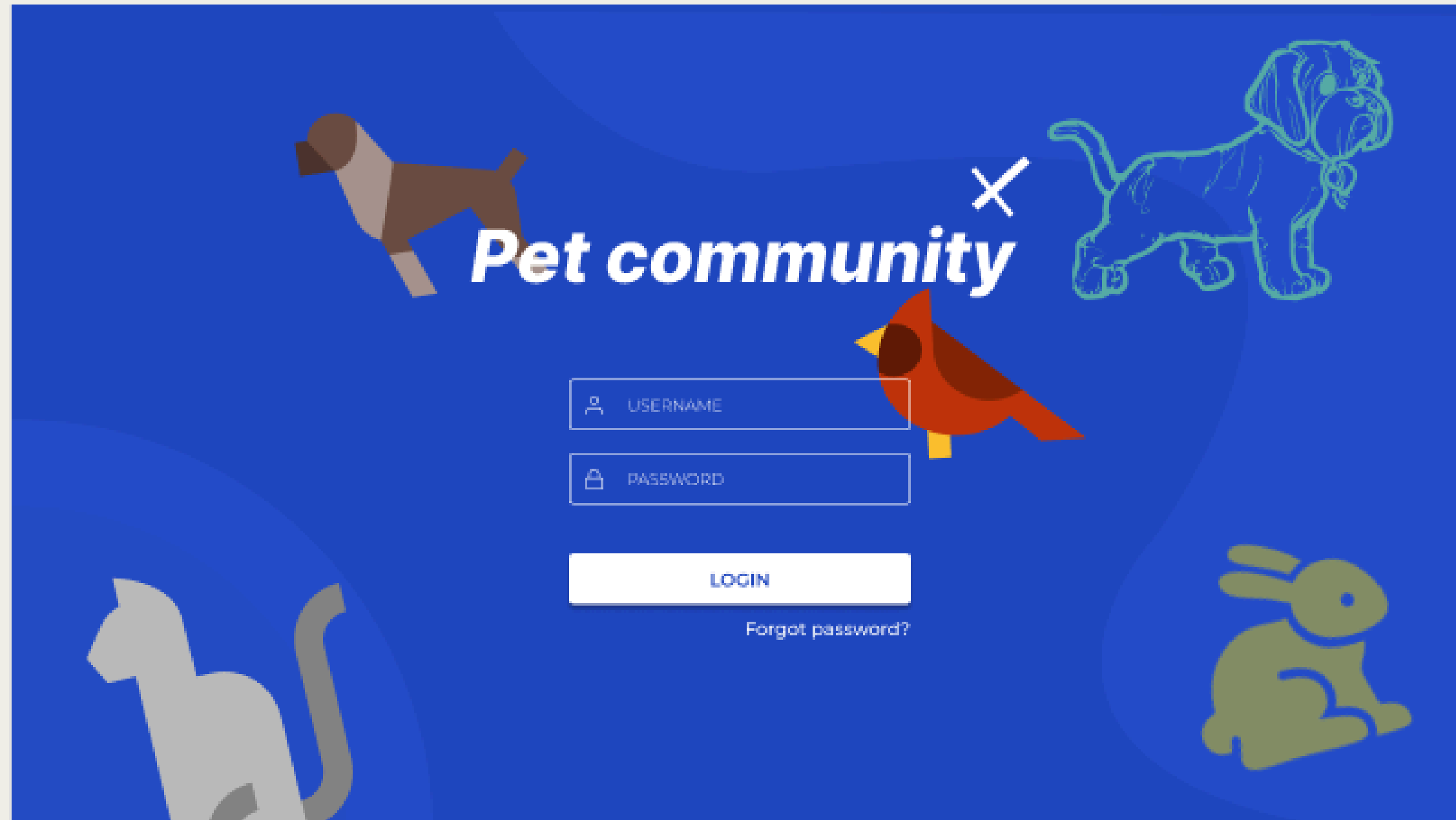


Save Page



Interact Page

FINAL VERSION OF THE LOW-FIDELITY PROTOTYPE



Let's move to Styly to see our final version~

APPENDIX (CITATIONS)

Figma Community. (n.d.). Pet icons. Retrieved from [https://www.figma.com/design/Bw1x8gd2LeCoriaBdi4AJL/Pet-icons-\(Community\)?node-id=0-1&t=rVb551POXlfEmGV2-0](https://www.figma.com/design/Bw1x8gd2LeCoriaBdi4AJL/Pet-icons-(Community)?node-id=0-1&t=rVb551POXlfEmGV2-0)

Figma Community. (n.d.). Free Pets Illustrations & Icons. Retrieved from [https://www.figma.com/design/lZOWe3dqXqHhA1TY06sguy/Free-Pets-Illustrations-%26-Icons-\(Community\)?node-id=1-851&t=OSMemhwZFOiKSxVp-0](https://www.figma.com/design/lZOWe3dqXqHhA1TY06sguy/Free-Pets-Illustrations-%26-Icons-(Community)?node-id=1-851&t=OSMemhwZFOiKSxVp-0)

Figma Community. (n.d.). Free Animals Material Icons. Retrieved from [https://www.figma.com/design/iW005ENFLCK9WcZwh9PvOg/Free-Animals-Material-Icons-\(Community\)?node-id=0-180&t=4O5MNya0DnomjeSy-0](https://www.figma.com/design/iW005ENFLCK9WcZwh9PvOg/Free-Animals-Material-Icons-(Community)?node-id=0-180&t=4O5MNya0DnomjeSy-0)

Liang, J. and Chen, J. 2024. Flowchart created using Figma. June 30, 2024. Retrieved from <https://www.figma.com/design/gsVFWEMmpmv9yIGco6kUQV/GBDA-301---A2?node-id=0-1&t=Qu5WOdmewPxqg42d-1>.

Liang, J. 2024. Pet Community Survey (Low-fidelity Prototype Experience) - Survey and Report Results Using Google Forms. July 2, 2024.

Thank you!

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4 July, 2024

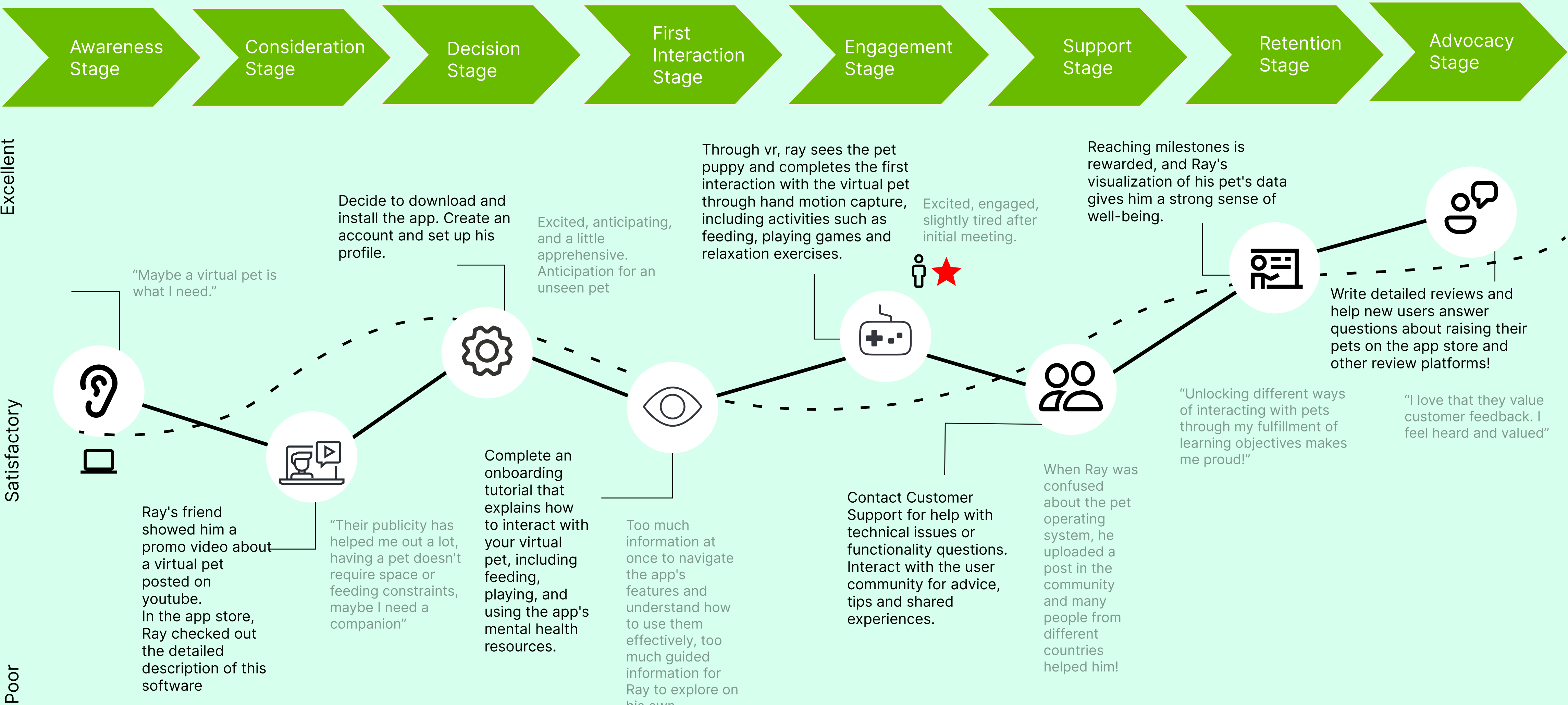


Ray

Ray, who is from China, has faced significant challenges in adapting to the Canadian living and learning environment. The language barrier and cultural differences often made him feel isolated. He found it difficult to fully integrate into the Canadian student community, which affected his social life and mental health.

Age: 22
Year: Ungraduated
Program: mathematics
Gender: Male

Virtual Pet | Customer Journey Map



Pain Point

- During the onboarding process, it can be overwhelming to see too much information at once.
- If the community is not active or responsive, it can feel isolated.
- Difficulty in sharing achievements in a way that highlights their importance.
- The challenges of creating compelling content on social media.

Opportunities

- Regularly launch new campaigns and challenges, offer a variety of rewards and incentives, and ensure strong technical support and frequent updates to the app to keep it running smoothly and fun.
- Ensure that the first interaction is fun and doable by providing adjustable difficulty levels that provide feedback and encouragement. Include options for using the app in private and shared spaces to increase comfort.
- Simplifies the installation process, provides easy account setup, offers clear onboarding instructions and tutorials, and guides Ray through the initial steps in a user-friendly manner.
- Provide easy access to comprehensive support resources to ensure fast, helpful customer service. Foster a vibrant, active user community by encouraging participation and facilitating interaction.

Overall Emotional Journey:

Ray's initial curiosity and interest evolved into cautious optimism and excitement as he explored the app's capabilities. As he experiences the benefits of the app, his engagement and motivation grows, and occasional frustrations are addressed through timely customer support. Ultimately, Ray's journey ends with fulfillment, pride, and enthusiasm as he becomes an advocate for the app, helping other students manage their mental health and social integration.

Legend

- In-person
- Area for Improvement
- Expectations
- Reality

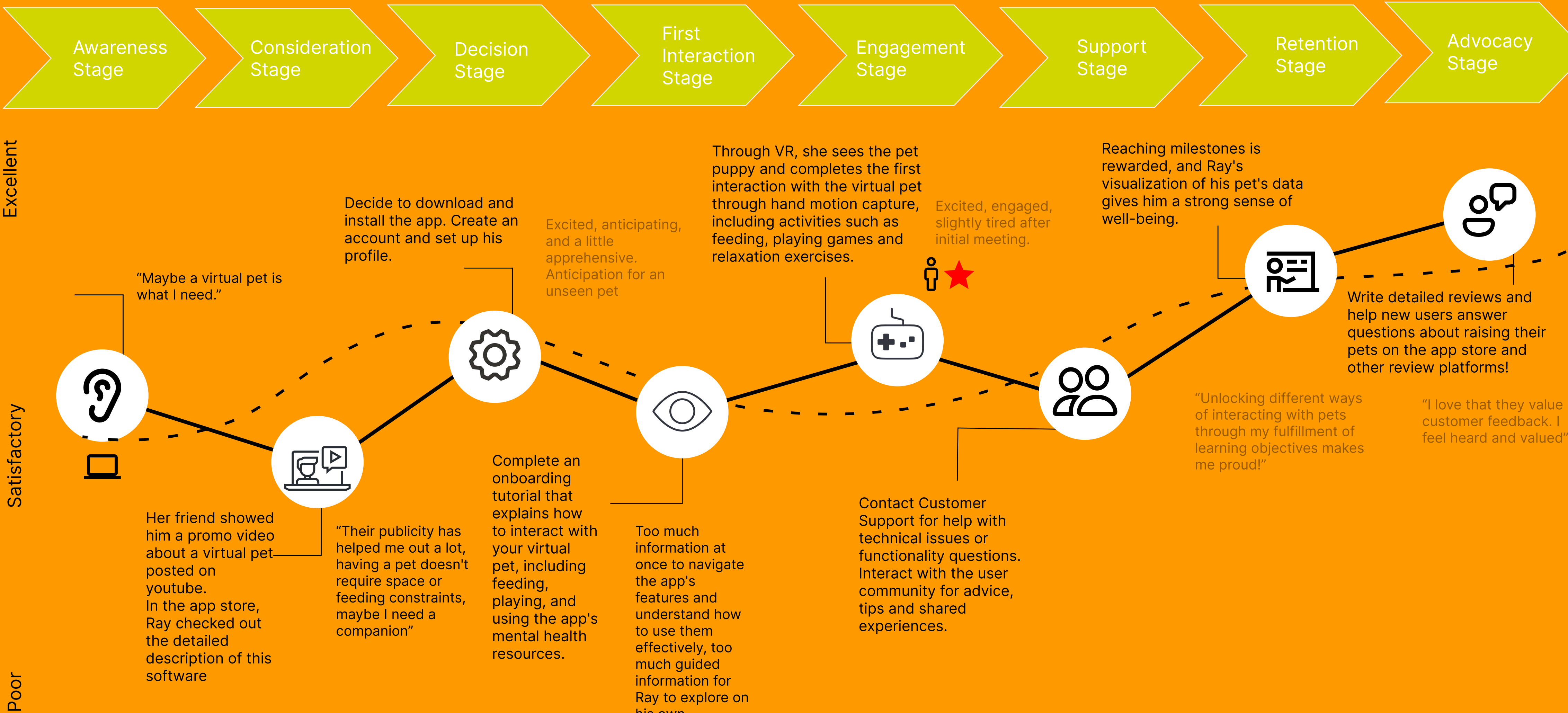


Aisha

Aisha is a 20-year-old engineering student based in Waterloo, Ontario. Currently enrolled in a top university, she is dedicated to her studies and is passionate about technology and innovation. In her spare time, she would like a pet to be there with her, relieving her exam anxiety. But the apartment she lived in was not allowed.

Age: 20
Year: Ungraduated
Program: Engineer
Gender: Female

Virtual Pet | Customer Journey Map



Pain Point

- Aisha faces the challenge of managing her exam anxiety without the comforting presence of a pet, as her apartment does not allow animals. This restriction leaves her searching for alternative ways to alleviate stress and maintain her mental well-being during her demanding academic schedule.

Opportunities

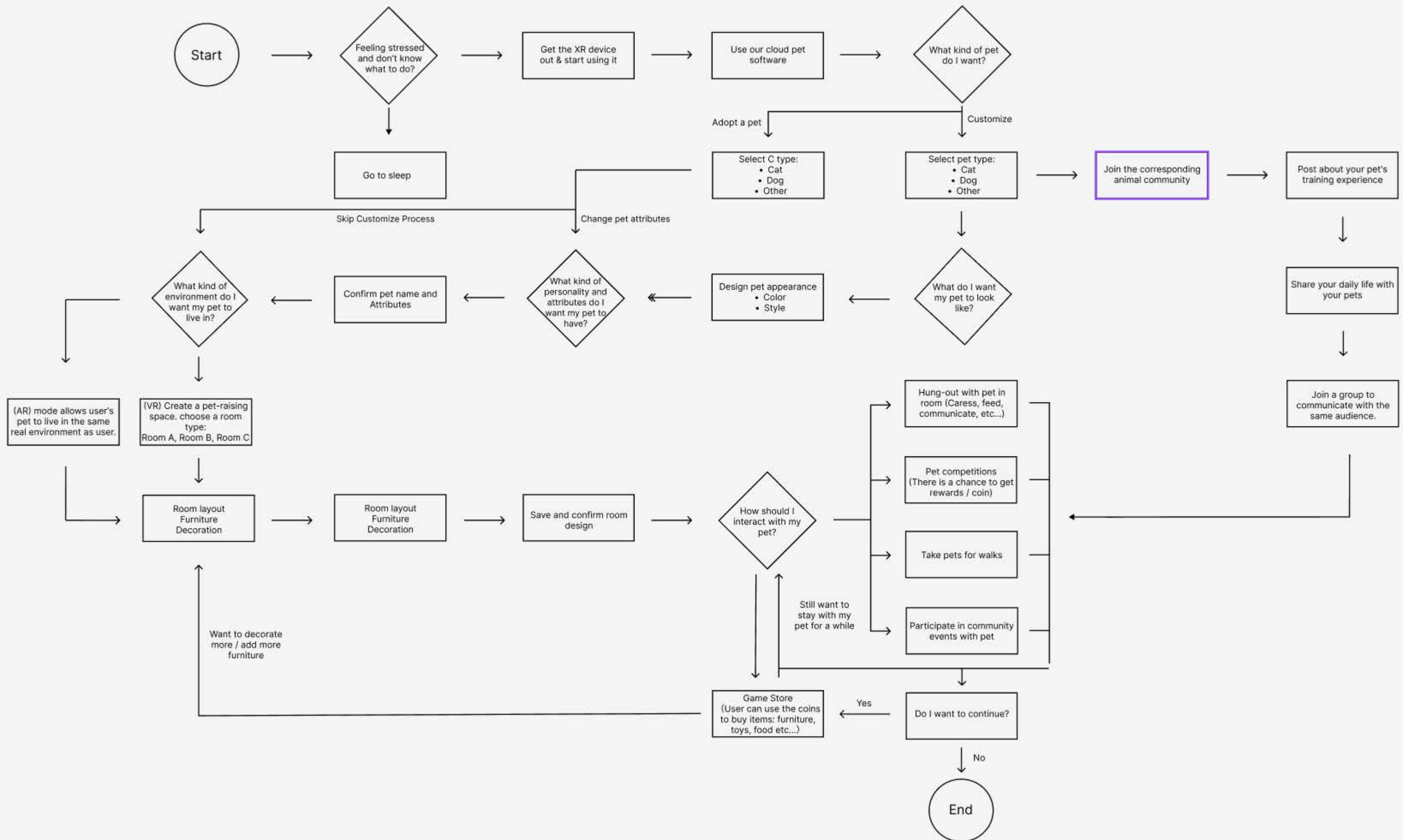
- Virtual Pet Companionship: Create or promote apps that simulate pet companionship, providing virtual interaction and relaxation for students who cannot have pets.
- Simplifies the installation process, provides easy account setup, offers clear onboarding instructions and tutorials, and guides users through the initial steps in a user-friendly manner.
- Ensure that the first interaction is fun and doable that provides feedback and encouragement. Include options for using the app in private and shared spaces to increase comfort.

Overall Emotional Journey:

Aisha's initial curiosity and interest evolved into cautious optimism and excitement as she explored the app's capabilities. As she experiences the benefits of the app, her engagement and motivation grow, she enjoys having a virtual pet and unlocks a number of achievements with her pets. Finally, her journey ends with fulfillment, pride, and enthusiasm as she becomes an advocate for the app, helping other students manage their mental health.

Legend

- In-person
- Area for Improvement
- Expectations
- Reality





Pet community



USERNAME



PASSWORD

LOGIN

[Forgot password?](#)

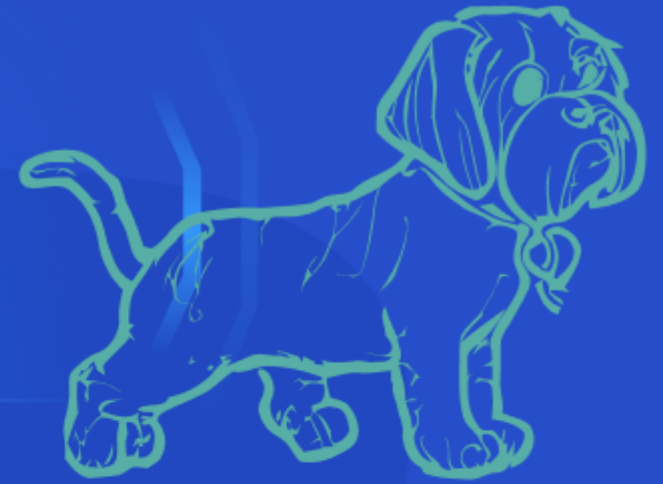


Cloud Pet Function Introduction



01

Pet Choices



02

Community



04

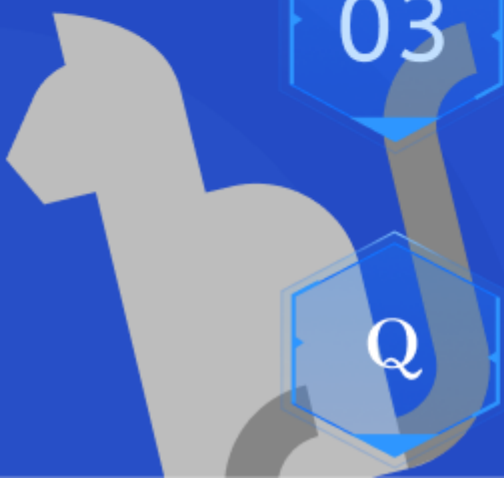
Environmet
VR/AR

03

User Profile

Q

FAQs



01 Select pet type:



02

Select pet type: Dog

Back ↩

Coat Color



Assortment



AGE



personality and attributes



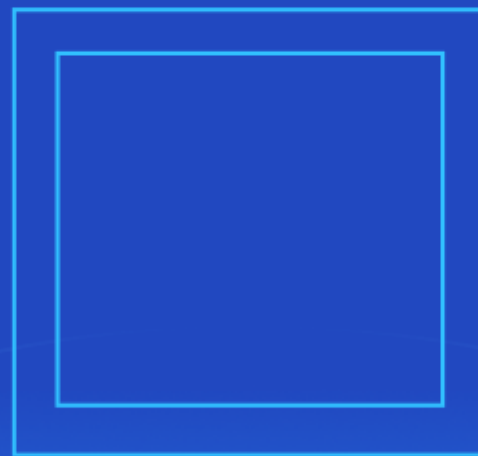
Selection of facial details



Body Size Selection



Confirm



Cloud Pet community

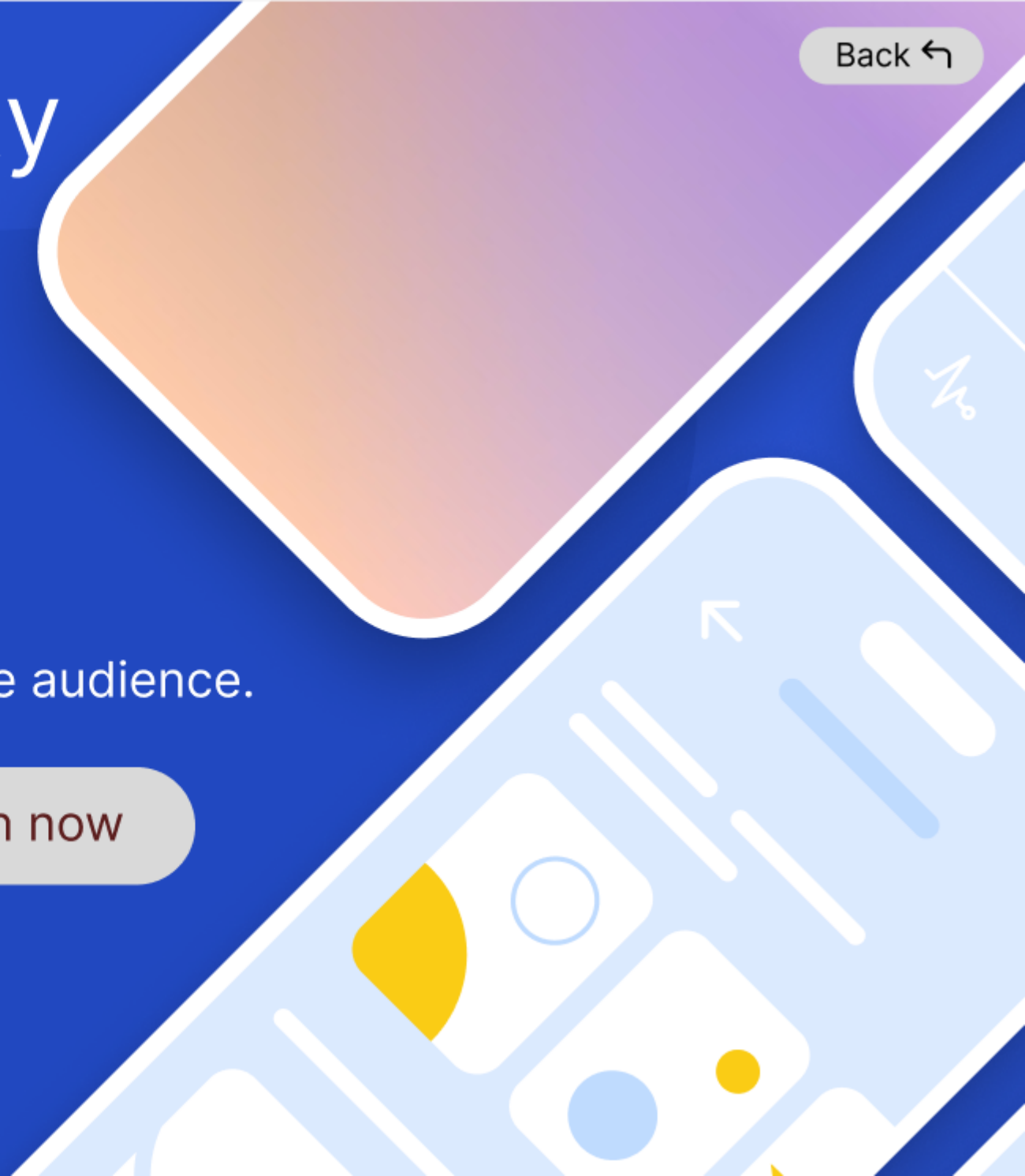
Back ↩

Post about your pet's training experience

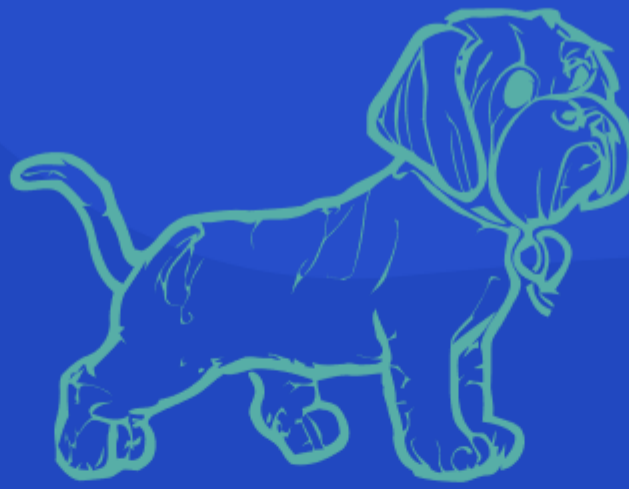
Share your daily life with your pets

Join a group to communicate with the same audience.

Join now



04



A

AR (in your room)

B

VR (build a room)





Go shopping



Pick furniture and decorations




Your bag



Adopt

Back ↩



Cat		Dog	
<div><div>Name</div><div>Age: xxx</div><div></div><div><div>Favor</div><div>Adopt Now</div></div></div>			

1 2 3 4 5 6.....

Profile

ID:123456



Name

Age: xxx

Email: xxx

Phone: xxx

		Achievement:
My pets:		

Cancel

Save

Pet Community Survey (Low-fidelity Prototype Experience)

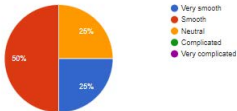
4 Replies

[Publishing analysis results](#)

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 [copy](#)

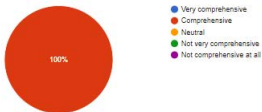
(4 replies)



Is the user profile interface comprehensive?

 [copy](#)

(2 replies)



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 [copy](#)

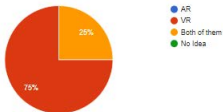
(4 replies)



Do you prefer AR or VR mode?

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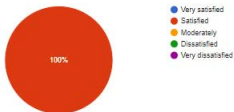
(4 replies)



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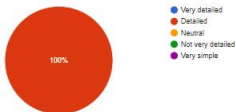
(4 replies)



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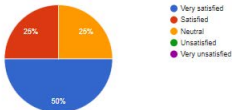
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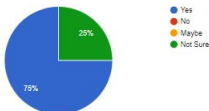
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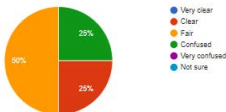
(4 replies)



Are all the steps clear?

 copy

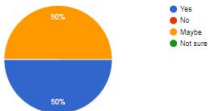
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Do you think this project helps relieve stress and improve mental health?

 copy

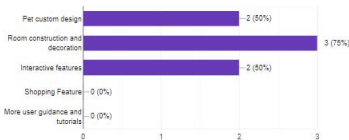
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Which aspects of the project do you think can be improved? (Select all that apply)

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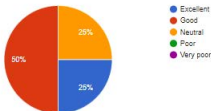
(4 replies)



How would you rate your overall experience?

 copy

(4 replies)



System Usability Survey

Participant Number:

1. I think that I would like to use the system frequently.

Strongly
Disagree

Strongly
Agree

1	2	3	4	5

2. I found the system unnecessarily complex.

Strongly
Disagree

Strongly
Agree

1	2	3	4	5

3. I thought the system was easy to use.

Strongly
Disagree

Strongly
Agree

1	2	3	4	5

4. I think that I would need the support of a technical person to be able to use the system.

Strongly
Disagree

Strongly
Agree

1	2	3	4	5

5. I found the various functions in the system were well integrated.

Strongly
Disagree

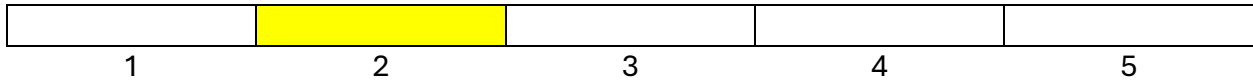
Strongly
Agree

1	2	3	4	5

6. I thought there was too much inconsistency in this system.

Strongly
Disagree

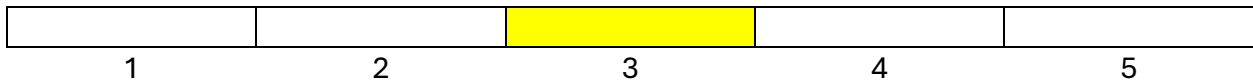
Strongly
Agree



7. I would imagine that most people would learn to use the system very quickly.

Strongly
Disagree

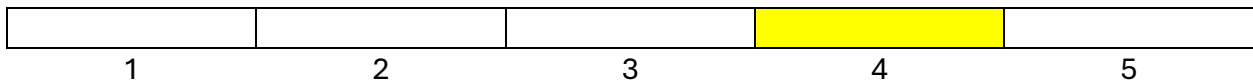
Strongly
Agree



8. I found the system very cumbersome to use.

Strongly
Disagree

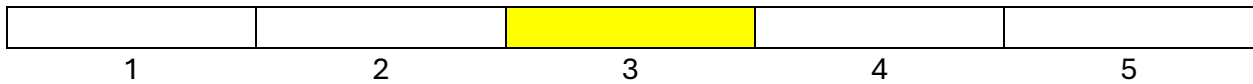
Strongly
Agree



9. I felt very confident using the system.

Strongly
Disagree

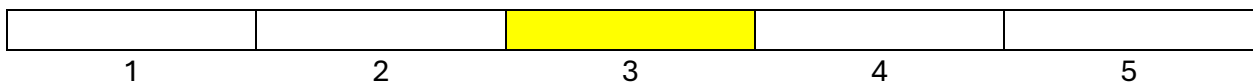
Strongly
Agree



10. I needed to learn a lot of things before I could get going with the system.

Strongly
Disagree

Strongly
Agree



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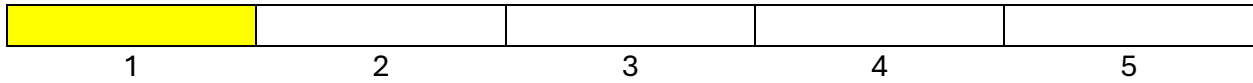
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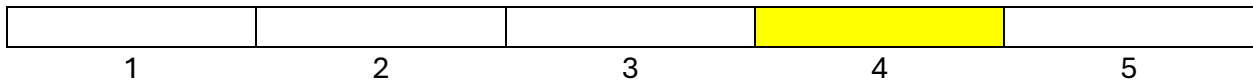
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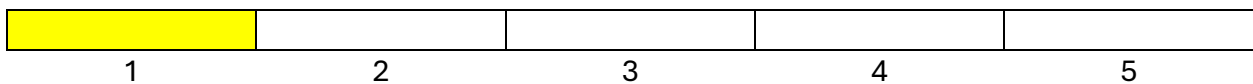
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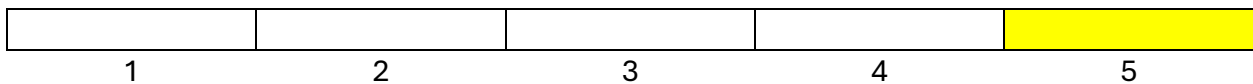
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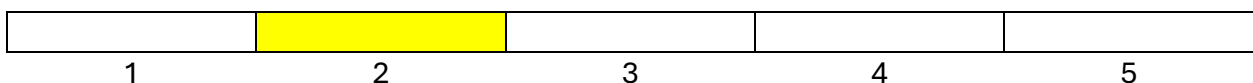
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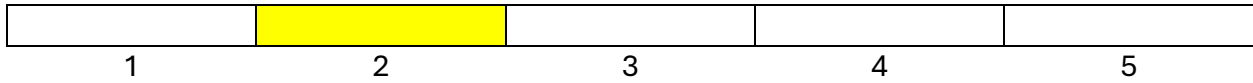
Strongly
Agree

1	2	3	4	5

6. I thought there was too much inconsistency in this system.

Strongly
Disagree

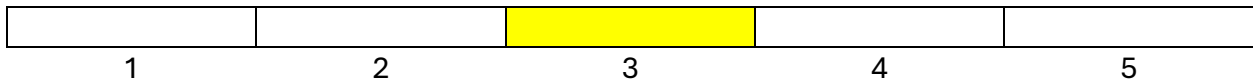
Strongly
Agree



7. I would imagine that most people would learn to use the system very quickly.

Strongly
Disagree

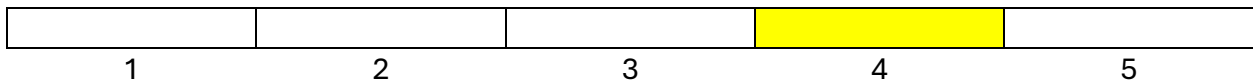
Strongly
Agree



8. I found the system very cumbersome to use.

Strongly
Disagree

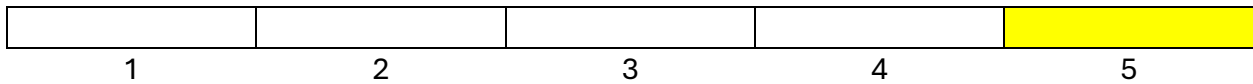
Strongly
Agree



9. I felt very confident using the system.

Strongly
Disagree

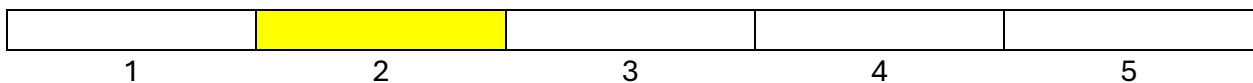
Strongly
Agree



10. I needed to learn a lot of things before I could get going with the system.

Strongly
Disagree

Strongly
Agree



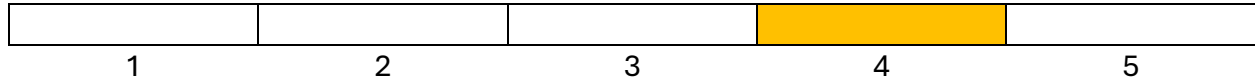
System Usability Survey

Participant Number:

1. I think that I would like to use the system frequently.

Strongly
Disagree

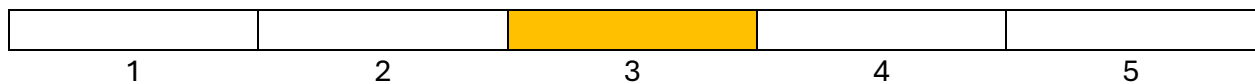
Strongly
Agree



2. I found the system unnecessarily complex.

Strongly
Disagree

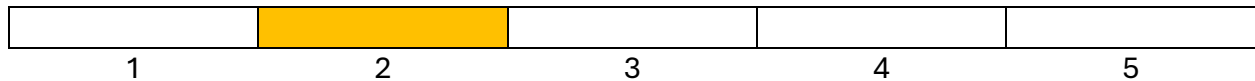
Strongly
Agree



3. I thought the system was easy to use.

Strongly
Disagree

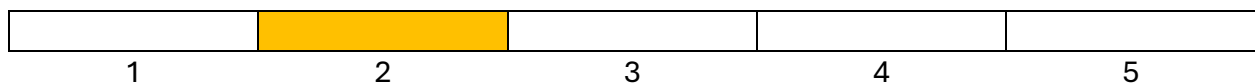
Strongly
Agree



4. I think that I would need the support of a technical person to be able to use the system.

Strongly
Disagree

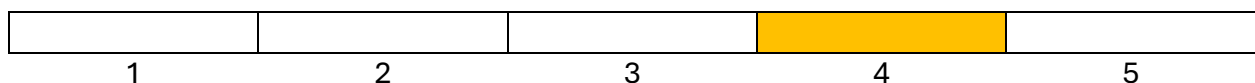
Strongly
Agree



5. I found the various functions in the system were well integrated.

Strongly
Disagree

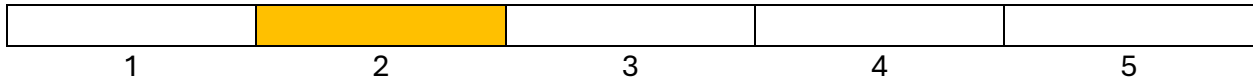
Strongly
Agree



6. I thought there was too much inconsistency in this system.

Strongly
Disagree

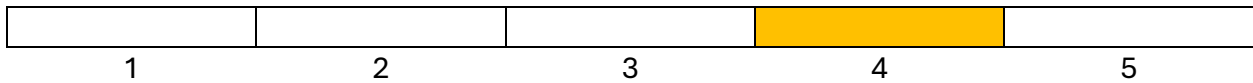
Strongly
Agree



7. I would imagine that most people would learn to use the system very quickly.

Strongly
Disagree

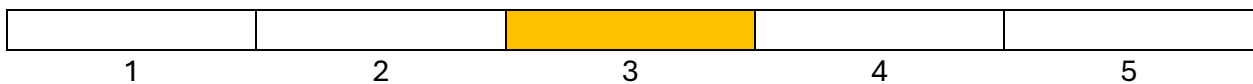
Strongly
Agree



8. I found the system very cumbersome to use.

Strongly
Disagree

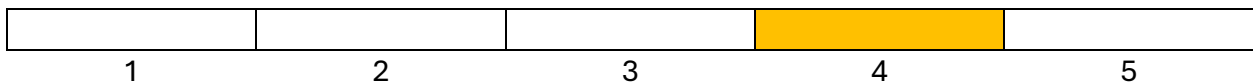
Strongly
Agree



9. I felt very confident using the system.

Strongly
Disagree

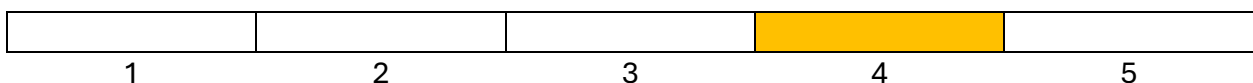
Strongly
Agree



10. I needed to learn a lot of things before I could get going with the system.

Strongly
Disagree

Strongly
Agree





Pet community ×



USERNAME



PASSWORD

LOGIN

[Forgot password?](#)



Cloud Pet Function Introduction



01

Pet Choices



02

Community

03

User Profile

04

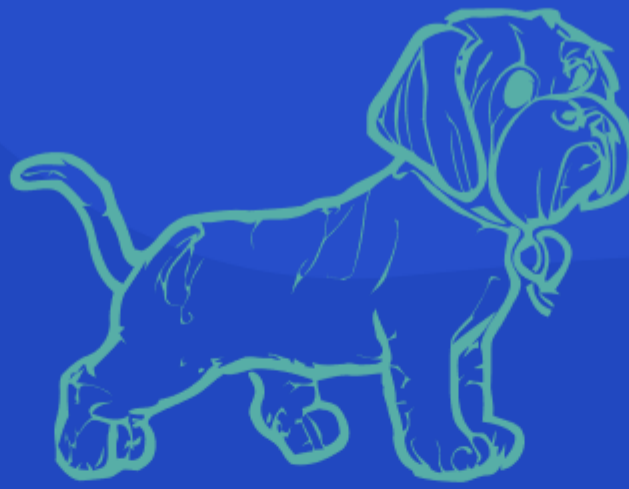
Environmet
VR/AR

Q

FAQs



04



A

AR (in your room)

B

VR (build a room)



02

Select pet type: Dog

Back ↩

Coat Color



Assortment



AGE



personality and attributes



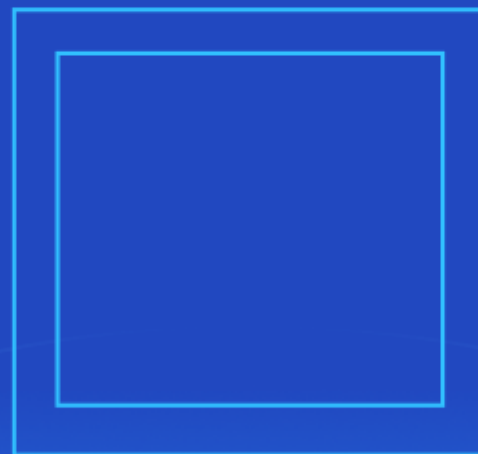
Selection of facial details



Body Size Selection



Confirm



Cloud Pet community

Back ↩

Post about your pet's training experience

Share your daily life with your pets

Join a group to communicate with the same audience.

Join now



01 Select pet type:





Go shopping



Pick furniture and decorations




Your bag



Adopt

Back ↩



Cat		Dog		
Name	Age: xxx			
				
Favor	Adopt Now			

1 2 3 4 5 6.....

Profile

ID:123456



Name

Age: xxx

Email: xxx

Phone: xxx


		Achievement:
My pets:		

Cancel

Save

Game store

[Back](#) 

Furniture		Toys	Clothing
Name	100 		
Add	Buy now		

1 2 3 4 5 6.....



edit

save

FAQs



- [What is Cloud Pet?](#)
- [How do I use Cloud Pet?](#)
- [Is Cloud Pets recognized by the Animal Protection Institute?](#)
- [How do I upload my post in the community](#)
- [How do I check my pet's status and information?](#)
- [Are there any extra practice modules?](#)



Contacts

- helpdesk@CloudPet.ca
- info@CloudPet.ca
- +1 (800) 321-9876

Online Resources

- www.CloudPet.ca
- www.CloudPet.ca/support



Chilling In

Go shopping

Pet Competitions

Slide to interact with your pet

Profile

Quit



Walking Practice

Your bag

Community Events

Introduction :

Undergraduate mental health issues are a growing concern. Not only domestic students, but also international students far away from home, need to face increasing academic pressure, as well as possible cultural conflicts, rebuilding social circles, language barriers, and other pressures. To address this issue, the goal of our project is to address these challenges by creating a cloud-based pet community using XR (Extended Reality) technology. This innovative solution allows students to customize and care for virtual pets, design their living spaces, and participate in a common area where pet lovers can walk their pets or participate in community activities. The goal is to create a supportive and engaging environment to help undergraduates manage their mental health more effectively.

Our final low-fidelity prototype showcases this speculative future, providing a comprehensive and interactive XR experience to meet the needs of domestic and international students. This prototype includes customizable pet options, personalized pet living spaces, and common areas for social interaction and activities, providing a holistic approach to mental health support.

The iterative goal of this project was to create an immersive, supportive, and interactive virtual environment to promote positive mental health coping strategies and foster relationships among students. The research questions we led in this project include: 1. How to use XR technology to create an engaging and supportive virtual pet community for undergraduates? 2. What features and interactions in the XR environment are most effective in promoting students' mental health and social connection? 3. How do domestic and international students' experiences and needs in the XR pet community differ, and how can these differences be addressed in the design?

The solutions developed by addressing these issues will not only alleviate the mental health challenges faced by students, but also enhance their overall college experience through innovative and interactive technology.

Interview Transcript:**Interview Question**

1. Overall, which features or design elements do you think are the most distinctive and do you feel they can help you relieve stress?
2. Which features enhance your sense of participation and happiness?
3. What aspects of our project do you think can be improved?
4. What types of social activities or support groups would you like to see in the virtual pet community?

Interview Transcript 1 - Jiating Zhang

"Yeah, logging in is pretty straightforward, nothing too complicated."

"Wow, I can actually customize or adopt a pet here. oh.... so, I can pick a pet that's already set up. Super convenient."

"The customization is really detailed. emmmm...After picking a cat, ok....then...I can tweak its looks. I can change the color and style. It's pretty thoughtful. Designing the pet's personality and traits is fun too. "

"This feature for creating spaces and picking modes is really nice. I can choose different room types and then arrange the furniture and decorations. "

"I didn't expect you guys to differentiate between AR and VR modes. I guess it will be difficult for you guys to implement it, but the idea is great."

"Decorating the room seems like it's gonna be a lot of fun. I can freely choose and place furniture and decorations. Once I save and confirm the design, yep, it's kind...super user-friendly."

"wow....so, the other features can let me interact and play with my pets in the room, and participate in the pet competition and win rewards? It's quite challenging and fun."

"and... I can also use the reward I win in the game store? awesome! okay....it really boosts user engagement."

"Overall, the experience is really smooth. It's great for animal lovers to relieve stress and just have fun without any hassle."

Jiating's answers:

1. Overall, which features or design elements do you think are the most distinctive and do you feel they can help you relieve stress?

"Well, I think the most distinctive feature is the ability to customize or adopt a pet. The customization process is very detailed and allows me to design my pet's appearance, personality, and attributes. This creative process is really engaging and helps distract me from my stress. Also, the AR mode where the pet can interact with me in the real environment is quite novel and makes me feel more connected to the virtual pet."

2. Which features enhance your sense of participation and happiness?

"The feature that most enhanced my sense of engagement and happiness was the ability to share my pet's daily life in the community and join interest groups. It made the whole experience more social and interactive. Also, participating in pet competitions and receiving rewards that can be used in the game store is very motivating. I feel like this feature will give me a sense of accomplishment and encourage me to continue playing."

3. What aspects of our project do you think can be improved?

“One area that could be improved is the initial setup process. While it is straightforward, adding a bit more guidance or a tutorial for first-time users could make it even more user-friendly. Also, while the customization options are great, having more variety in terms of pet types and accessories would make it even better. It would be wonderful to see more exotic pets and unique items available for customization.”

4. What types of social activities or support groups would you like to see in the virtual pet community?

“I would love to see more structured social activities like virtual pet training workshops, where users can learn tips and tricks for training their pets. Support groups for different interests, such as a group for new pet owners or a group for users dealing with anxiety, would be very helpful. ”

Interview Transcript 2 - Georgina Li

"The login interface is very simple"

"Good, here I can choose to customize my pet or adopt it directly. I don't like to spend time on customization, so I just choose to adopt a dog, eazy."

"The dog's appearance and attributes have been set. I just need to confirm the name and attributes, which saves a lot of time."

Georgina smiled and started to choose "The next step is to create a living space for the pet. The function of selecting the room type is very comprehensive. There are several different rooms to choose from. I think I will choose a pink one."

"It's also interesting to decorate the room, but With the freedom to choose furniture and decorations, it feels like creating a small world for your pet. ”

“In AR mode, the dog can interact with me in the real environment, which is very interesting. In VR mode, I can immerse myself in the virtual room more, and it really feels like taking care of a real dog.”

Georgina opens the group chat system “This function of joining groups with similar interests to communicate will definitely allow me to meet many like-minded friends.”

“The whole experience feels pretty good, especially the step of customizing pets is omitted, which is very friendly to lazy people like me. The process of interacting with pets and designing rooms also makes me relax. ”

Geogina’s answers:

1. Overall, which features or design elements do you think are the most distinctive and do you feel they can help you relieve stress?

"I think the most distinctive feature is that you can adopt a pet directly without spending time on customization. This is really convenient for me because I don't like to spend too much time on details. And the process of entering the room to design and arrange furniture is really fun. It's like building a small home for your pet. This process makes me feel relaxed."

2. Which features enhance your sense of participation and happiness?

"The sense of participation and happiness mainly comes from the community interaction function. I can share my dog's daily life, join some interest groups, and communicate with other pet lovers. It feels very interesting. In addition, the interaction with dog in AR and VR mode also makes me feel very happy, and there is a real sense of companionship."

3. What aspects of our project do you think can be improved?

"I think the interactive functions can be enriched, such as some adventure activities that can be done with pets."

4. What types of social activities or support groups would you like to see in the virtual pet community?

"I hope to see more pet training courses or sharing sessions where people can exchange experiences of raising pets. There are also some support groups for stress management, which will also be very helpful for those of us who like to raise pets."

\

Interview Transcript 3 - Bryce Li

"Wow, your interface is very cute. I like these animal charts. Okey, log in first."

"okey... a brief introduction to the steps, next."

"Oh, the next interface is to customize pets, so I'd better adopt one directly. Customization takes too much time, hmmmmmm, click on the cat, okay, continue."

"Then, now it's time to choose the mode, okay, then VR, then design the room and place the furniture, it's quite comprehensive, there is also a shopping store, and then save it."

"Oh, I like this protection interface, so many functions, then I choose to interact with the cat."

"OK, then the interaction ends and returns to the homepage, I'll check out the store, wow, pretty good, the function is the same as the game."

"Ohoh, I just noticed that you also have a profile interface, let me take a look, emmmm, pretty good and detailed, you can also show your own pet."

"Okay, that's it. Overall, the experience is very good, especially adopting a pet directly can save a lot of time. Designing a room and interacting with pets can help me relax and relieve a lot of anxiety."

"And this introduction interface also provides a quick overview, there is nothing to understand"

Bryce's answers:

1. Overall, which features or design elements do you think are the most distinctive and do you feel they can help you relieve stress?

"I think the most distinctive feature is that you can adopt a pet directly without spending too much time on customization. In addition, the room layout and furniture selection are very free, which is a very interesting process. It allows me to relax when I am anxious and settle in the space I created."

2. Which features enhance your sense of participation and happiness?

"The sense of participation and happiness mainly comes from the community interaction function. I can share the daily life of cats in the community, join interest groups, and communicate with other pet lovers. It feels very interesting. In addition, the interaction with cats in AR and VR mode also makes me feel very happy, and there is a real sense of companionship."

3. What aspects of our project do you think can be improved?

"I think we can add more options in the selection of pet types and decorations. This will make the room design more diverse and the pet image more personalized. In addition, I can give some suggestions for community activities, such as fashion competitions for pets"

4. What types of social activities or support groups would you like to see in the virtual pet community?

"I hope there will be a pet lover support group for stress management, such as sharing relaxation techniques, which will also be very helpful for those of us who often feel anxious."

Interview 4 - Coco Gan

"Hey, the login process is very simple, and I'm in right away!"

"Hmm... introduction interface...Okey... continue to the next page"

"Let me see..... customize a pet or adopt, Although I already have a cat in real life, I still want to customize a new cat here. The game feels so nice!"

" click it, wow, I can also choose the color and style of the cat, and I can also set its personality and attributes. I feel that the cat I designed must be the cutest!"

"Wow, you guys also specially made a FAQs interface, so clear"

"The next step is to create a living space for the pet, so I will definitely choose a colorful room."

"The process of decorating a room is like playing a decoration game. You can freely choose furniture and decorations, and you can also adjust the position. It feels very creative. I am curious about how other users will design it."

" I will definitely use the AR mode, so that I can have two cats in real life."

"This interactive interface has a complete set of functions, including a store, backpack, and pet competitions."

"And the idea of your community function is great! I can share my cat's daily life, join various interest groups, and communicate with other pet lovers. Participating in activities is also my favorite part, because there are all kinds of interesting competitions and activities."

"Wow, you also have a game store. I think you can really make this game."

"Profile interface, goo.... introduction, information, and ID. Wowwww, you have considered everything."

"The whole experience is great, especially the community and event functions, which are very suitable for people like me who like to socialize. The room design and interactive process are also very interesting to me. However, the color of your interface may cause visual fatigue to users."

Coco's answers

1. Overall, which features or design elements do you think are the most distinctive and do you feel they can help you relieve stress?

"I think the community and activity features are the most distinctive, allowing me to communicate with other pet lovers and participate in various interesting activities. These interactions really help me relax."

2. Which features enhance your sense of participation and happiness?

"The sense of participation and happiness mainly comes from community interaction and activity features. I can share my cat's daily life, join interest groups, and communicate with others. There are also various competitions and activities, which are really fun!"

3. What aspects of our project do you think can be improved?

"I think they are all good. There are not many areas that need improvement. It is already very comprehensive."

4. What types of social activities or support groups would you like to see in the virtual pet community?

"I hope to see more social activities, such as virtual parties, pet shows, outdoor adventures, etc. There are also some interest groups, such as cat training groups, pet photography groups, etc., so that you can communicate and learn with more people."

Interview Summary

All interviewed users thought that the login process was simple and smooth, without complicated steps, and the profile interface was clear. This shows that our login system design is effective and users can easily enter the platform. This is crucial to improve the satisfaction of users' first experience.

In terms of pet selection, Jiating and Coco like to customize their pets, while Georgina and Bryce prefer to adopt pets directly. Direct adoption is convenient for users who don't like to spend time customizing. In order to meet the needs of different users, we will still provide both customization and direct adoption. At the same time, Jiating and Bryce hope to add more pet types and customization options to increase diversity and personalization.

The process of room design and furniture arrangement is considered interesting by all users. The freedom to choose furniture and decorations increases the user's sense of participation and creative space. To further enhance this experience, we can add more decorations and furniture options to give users more choices when designing rooms to meet their creative needs.

In terms of interactive mode, everyone mentioned that the choices in AR mode and VR mode feel novel and flexible. Because it depends on the user's intention to maintain the interactive experience in AR and VR modes, increase immersion and realism, which are important factors in improving user experience.

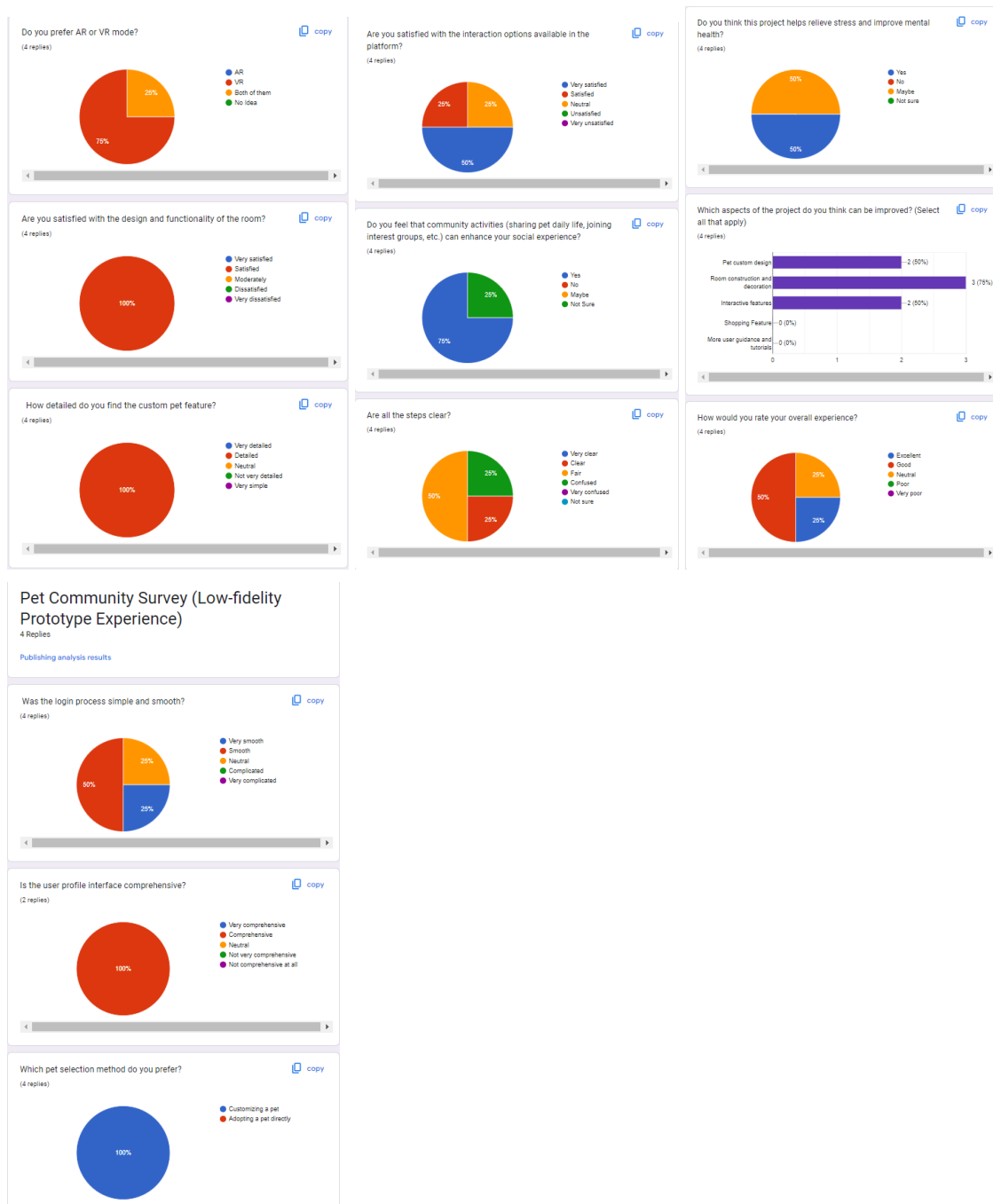
The community interaction and activity features are considered very interesting by all users. They can communicate with other pet lovers and increase sociality. This feature provides users with the opportunity to join interest groups and participate in various activities. In particular, our user Coco likes the social and activity features very much. She and Georgina both hope to see more interesting social activities or competitions, such as virtual parties, pet shows and outdoor adventures.

In terms of improvement suggestions, Jessica and Bryce hope to add more pet types and decoration options, Georgina hopes to add more interactive features and adventure activities, and Coco thinks that the functions are already comprehensive and there are not many suggestions for improvement.

In general, in order to optimize and improve our XR cloud pet community project, we will continue to ensure that the login process is simple and smooth, continue to provide a variety of pet choices and rich customization options, maintain the freedom of room design and

increase the choice of decorations, provide users with different interactive experiences in AR and VR, provide rich community interactions and social activities, and provide detailed guidance and tutorials for new users.

User Testing and Analysis



The survey results show that most users found the login process very smooth or smooth, but a quarter of users found it complex, indicating that there is room for simplification.

In addition, all respondents found the user profile interface comprehensive, and everyone preferred pet customization, which highlights the importance of strong customization features.

Most users preferred to use VR mode, indicating that this aspect is where users pay the most attention.

Users consistently expressed satisfaction with the design and functionality of the room and found the pet customization feature detailed, thus giving positive feedback on these aspects.

While most users were satisfied with the interaction options, a considerable number of users were neutral, indicating potential room for improvement.

Most users found community activities to enhance the social experience, but some uncertainty indicated the need for clearer or more engaging community features. Half of the users found the process steps very clear, while others were either clear or confusing, indicating the need for improved clarity and guidance.

Regarding stress relief and mental health, half found the project beneficial, while the other half were unsure, indicating the need to enhance mental health support features.

From the post-interview survey results, the areas with the most suggested improvements were room construction and decoration, pet customization design and interaction features, while shopping features and user guides were satisfactory. Overall, half of the users rated their experience as excellent, with the remainder rating it as good or neutral, indicating an overall positive review, but room for further improvement.

Group Work Contract (In-class Activity)

OVERVIEW

This assignment is to get you and your group talking about roles and expectations as you work together on A2 and A3. The more you bring this kind of communication to the surface, the richer group experience you will have – and the less likely you are to experience conflicts. Remember that groups develop norms – both stated and unstated – as they interact with each other over time. Recognize those norms and use those to your benefit. Don't take anything for granted.

The importance of you being honest cannot be stressed enough. Your honesty will help your group function better in the long run. Please, also remember that everyone has different communication styles and ways of dealing with conflict. Be sensitive. Allow others time to think and contribute.

This assignment is not a race. If you need more time – take it. This will be one of the few chances you get to create a very healthy group environment. If you rush to be done, I guarantee you will have a greater chance of having a negative overall group experience.



Assign a group member who will be in charge of keeping track of time.



Assign a group member who will be in charge of writing things down.



Appoint a “mediator” whose responsibility is to rephrase, clarify, and redirect discussion.

1. Have each group member start a blank document and spend **2 quiet minutes for each** of the following points, writing their answers down on the paper:
 - **1-4 specific things** that you know you will want to do in your group (i.e. organizing communication, coding, media creation, planning user testing, running user testing, etc.).
 - **Four ground rules** that you believe will benefit your group and help you function better (i.e. giving each person a chance to speak whenever making decisions and assigning a member who is in charge of making sure that happens, updating everyone twice weekly via email or phone, etc.)
 - **Three things** that you have experienced in groups that you DON'T want to happen; along with how you think it can be prevented.
 - **Finish this sentence...** “I function best in groups when...”
 - **Finish this sentence...** “I really hope our group can...”

Spend **3 minutes per person** sharing what they have written. Do not move on until each person has shared from each bullet point on their list. If other subjects come up which your group feels are important, write them down so you can cover them later.

Write down on the contract FIVE ground rules from your lists above that your group wants to be sure to follow. Consider the method you'll use to make decisions, how you'll resolve conflicts, how you'll provide feedback, etc.

2. Spend **2 minutes** looking over the descriptions of the three roles and their responsibilities. Write down some tasks pertaining to each role.
3. As a group, spend **2 minutes discussing the list** of every task you think you will need to accomplish for a fully completed A2 (read the outline carefully) – up to the day of presenting it. Be as specific as you can, like: organizing meetings, designing the interface, developing user testing, etc. Your group note taker should be **adding to the list on the Contract** if necessary.
4. Spend **10 minutes** looking over each role: **Project Navigator, Insights Gatherer, Architects.**

Project Navigator: similar to project manager but with the addition that you take a zoomed out overview to suggest where the team should go next. They should ideally also plan each week in advance perhaps.

Insights Gatherer: conduct research, synthesize findings, and effectively communicate insights across the team. This role also acts as a bridge between navigator and architects, translating all discoveries into actionable recommendations to guide tangible decisions.

Architects: create visuals, prototypes, and tangible representations of verbal concepts and ideas. This role is crucial in making abstract ideas concrete, facilitating clearer team discussions and further development of projects.

Make sure you are thinking about REALITY – i.e. your work schedule, your personal skills and habits, etc. It will give your group an idea of both what will be required of each role, as well as get a sense of who will be doing what and if you feel the equity of work is distributed evenly.

5. Spend any **additional minutes** adding other rules or notes in the space provided on the Group Contract handout. Also use the space provided in the **Other** section **Roles and Responsibilities** list to write down any additional tasks and assign them to a group member.
6. Have a member of your group **read the Group Contract aloud** to everyone to make sure nothing is missing – or if there are additional topics/issues that your group needs to address and add.

THIS IS A CONTRACT. Should difficulties come up later in the term, your group will be responsible for the things listed. As with any contract, the unstated things do not hold any merit. So get it all down – even if it feels silly. **Everyone must sign it at this time.**

7. For **3 minutes of quiet writing**, each group member should start another blank document, write their name on it, and write a paragraph or more explaining how they feel after going through this exercise. Each group member may also add notes or comments to me which they want me to know. This part will be private. **Be sure to add this to your A2 appendix.**

Group Contract

The intent of this contract is to hold group members accountable to conduct and responsibilities which the group feels are important to a healthy working relationship. It is important to realize that bringing the “unstated” rules of conduct and communication to the surface will help groups function in a more positive way. This contract will be in effect through the duration of this class, and all group members will be responsible for maintaining compliance with this contract.

Contact Info

Share your contact information with each other, do not include this information in the appendix.

We agree to use: (fill in communication method below. ie email, Discord, carrier pigeon, etc.)

WECHAT,DISCORD,EMAIL

as our main channel of communication.

Ground Rules

1. Regular Updates:

Commit to updating the group with progress or hurdles twice a week via the agreed communication method.

2. Equal Participation:

Ensure that each member has an opportunity to contribute to decision-making processes.

3. Respectful Feedback:

Agree to provide constructive feedback respectfully and in a timely manner.

4. Conflict Resolution:

Establish a method for resolving disputes, possibly through a majority vote or a discussion facilitated by the mediator.

5. Punctuality for Meetings:

Members should agree to be punctual for meetings to maximize efficiency and respect everyone's time.

Other Rules or Notes

1. Confidentiality of discussions and group work.
2. Roles for each meeting, rotating so everyone takes turns keeping minutes or leading the discussion.
3. Guidelines for remote meetings, if applicable.
4. A rule about preparing for meetings by review all necessary materials beforehand.
5. A commitment to a positive attitude and openness to new ideas.
6. Regular check-ins on group morale and workload distribution.

Roles and Responsibilities					
Project Navigator		Insights Gatherer		Architect	
Task	Initials	Task	Initials	Task	Initials
Overseeing the project	EL	Conducts research	JL	Create visuals	JC
Planning each week in advance	EL	Synthesizes findings	JL	Prototypes	JC
Suggesting the team's next steps.	EL	Communicates insights	JL	Tangible representations of verbal concepts and ideas.	JC
Handle meeting scheduling and documentation.	EL	Bridging the gap between the Project Navigator and Architects	JL		
Task	Initials	Task	Initials	Task	Initials
Coordinate all project timelines and deliverables	EL	Conduct user research to inform the design of the prototype	JL	Design and develop the low-fidelity prototype based on insights provided by the Insights Gatherer.	JC
Ensuring that the team adheres to the schedule	EL	Analyze data and extract actionable insights that guide the low-fidelity prototype's development.	JL	Responsible for the visual and functional aspects of the prototype.	JC
Maintain the project scope and objectives	EL	Prepare the research findings for the appendix.	JL	Document the design process and rationale for the appendix.	JC

We each hereby agree to and sign this contract as a witness of our commitment to meeting it.

Eric Li

Print Name

Eric Li

Signature

Javek Liang

Print Name

Javek Liang

Signature

John Chen

Print Name

John Chen

Signature

Research Consent Form Script for Oral Consent

Hello, our names are Jiating Zhang, Georgina Li, Bryce Li, Coco Gan and we are undergraduate students from the Stratford School of Design and Business in 3th year . We are taking the course GBDA 301: Global Digital Project, and it is taught by Prof. Karen Cochrane.

I am/my group is designing an XR piece to support de-stressing for international undergraduate students at the University of Waterloo. We are interested in you trying out the [low-fidelity/high-fidelity] prototype and giving us valuable feedback to understand better what parts of the work we could improve upon and anything you don't understand. As it is just a prototype, you might have to use your imagination a bit.

The study involves you trying out our prototype in person and fill out a questionnaire and answer a few interview questions. With your permission, the whole session will be audio and video-recorded to facilitate data collection.

We estimate that the study will take about 45 minutes to complete. Your participation in this study is voluntary, and you may choose not to participate or answer any of the questions. You can withdraw anytime during the study or until we analyze the data, which we plan to do on September 2, 2024.

We do not anticipate any risks from participating in the interview, nor do we anticipate that you will derive any benefit except for helping us complete this class project. However, if you require assistance or anything comes up in the study that causes distress, please seek out the University of Waterloo counselling services at 519-888-4096.

We will treat your personal information as confidential, although absolute privacy cannot be guaranteed. No information disclosing your identity will be released or published without your consent. You will be assigned a code so that your identity will not be directly associated with the data you have provided. This code will be generated in the style of "P#" with the # incrementing by one per subsequent interview starting with P1. All data, including coded information, will be kept in a password-protected secure computer.

The transcripts will be transcribed using Microsoft Word's annotation software using pseudonyms to ensure all information remains de-identified. The data collected from this study will be presented in GBDA Global Digital Project I class assignments. The data might also be used for future publications focusing on the course. The data will not be used in other unrelated research publications.

Your de-identified data will be retained for a period of 1 year and securely destroyed.

University of Waterloo
GBDA 301: Global Digital Project I Course Ethics

This class ethics was reviewed and cleared by the University of Waterloo Research Ethics Board (REB# 46351. If you have any questions for the Board, contact the Office of Research Ethics, toll-free at 1-833-643-2379 (Canada and USA), 1-519-888-4440, or reb@uwaterloo.ca.

For all other questions regarding this study, or if you would like additional information, please contact me at j29liang@uwaterloo.ca. You can also contact my course instructor, Prof. Karen Cochrane, by email at karen.cochrane@uwaterloo.ca.

Do you have any questions about this study or need any clarification?
No

Do you voluntarily agree to participate in this study?
Yes

Do you agree to be audio and video recorded?
Yes

Do you consent that de-identified quotations from this research may be used in my class presentations or publications?
Yes

Do you permit us to show screenshots or short clips of the video with your faces blurred in my class presentations or publications that come out of this research?
Yes

May I get an email address to reach you so I can send you a feedback letter?
Yes

Georgina Li: g25li@uwaterloo.ca
Jiating Zhang: j262zhan@uwaterloo.ca
Bryce Li: m69li@uwaterloo.ca
Coco Gan: c23gan@uwaterloo.ca

The date today is September 2, 2024.

Thank you, I will now begin the study.

Verbal Consent Log

Participant Study ID	Consent Obtained For:	Date of Verbal Consent Discussion:	Name of individual conducting the verbal consent discussion.	Signature of individual conducting the verbal consent discussion.
Georgina Li Jiating Zhang Bryce Li Coco Gan	<input checked="" type="checkbox"/> All questions asked by the participants were addressed. <input checked="" type="checkbox"/> Participant voluntarily agreed to participate in this study. <input checked="" type="checkbox"/> Participant agreed to be audio and video recorded. <input checked="" type="checkbox"/> Participant agreed to anonymous quotations from this research may be used in class presentations or publications. <input checked="" type="checkbox"/> Participant agreed to show screenshots or short clips of the video with their face blurred in class presentations or publications.	July 2, 2024	Georgina Li Jiating Zhang Bryce Li Coco Gan	<i>Georgina Li</i> <i>Jiating Zhang</i> <i>Bryce Li</i> <i>Coco Gan</i>
	<input checked="" type="checkbox"/> All questions asked by the participants were addressed. <input checked="" type="checkbox"/> Participant voluntarily agreed to participate in this study. <input checked="" type="checkbox"/> Participant agreed to be audio and video recorded. <input checked="" type="checkbox"/> Participant agreed to anonymous quotations from this research may be used in class presentations or publications. <input checked="" type="checkbox"/> Participant agreed to show screenshots or short clips of the video with their face blurred in class presentations or publications.			
...				