Project 6. User Evaluation

1. **Written protocol**
   a. **Instructions for preparation and setting up the testing environment**

First, we will be looking for the international students who are OSU students, and then ask them if they have had experience selling or buying some second-hand stuff before via online platforms or media. If so, we would ask him/her to do the tasks we provide below.

Second, we will ask the participants to complete the tasks by using provided computers and doing the tasks via the Google Chrome browser.

Finally, we will give the time limit of 10 minutes for each task, and see if the participants can finish the tasks on time. We will also calculate the time taken for each task when the participants are in the process of completing it.

During the process of completing each task, we will not provide any help to the participants until the time is up or the tasks are all completed, and we will ask if they have some problems during the process and ask for their feedback.

   b. **Introduction and informed consent**

Before the interview begins, we will announce that the interviews and the data from the interviews are all for the requirements of the CS 565 Human-Computer Interface class. Also, we will first declare the purpose of the interview, the collecting data we are used to, and inform the participants that we would have some photoshoots and video recordings when they are doing the tasks, and see if they agree with those statements. If the participant agrees with everything shown above, we will start the interview.

   c. **Tutorial or training**

Before the participants start to do the tasks, we will roughly introduce the whole information about our website, which includes the interface of buyers and sellers, the posting interface, the message interface, and the searching webpage, and then demonstrate some detailed functions to the participants. After the demonstration, we will ask the participants to execute some functions on our website and see if they have understood how to use the website and switch the mode between buyers and sellers.

   d. **Tasklist**

1. You are looking for a used desk to palace your computer in your bedroom. The proper size for the desk should be between 890*460*980(mm) and 1200*600*25(mm). This table is best in dark colors. You don't want to spend more than $60.

2. You are selling a used pot that could be used when eating a hot pot. You need to make a sales post about your product. The pot is nearly 12.5 inches and 4.5qt, it could be used for

2-4 people. The picture of the pot is placed in the folder named products on the desktop. You decide to sell the pot for $30. Assumed you want to sell this pot as soon as possible, you are going to find a potential buyer on the wanted search page and leave a comment for the buyer whose need matches your products.

3. Assuming you are the buyer found at the end of task two (logged into another account), you need to communicate with the seller(played by one group member) who sent you a message and buy his pot. After the transaction is over, you must delete your wanted post about the pot.

e. Recording strategy

Our group decides to combine notes and video recordings to record our observations and finding. Video recordings will be made on the computers, and consent will be obtained from each participant. Each participant will do a video recording 1 minute before starting the task and will be reminded by our facilitator. Team member A was responsible for controlling the process of user completion, including training participants on the use of the website and guiding them to complete the survey at the end. Team members B and C acted as observers to observe and take notes on the participants and asked questions(up to 3 questions each participant) to the participants after they completed the questionnaire. Team member D plays the role of a tech person who is in charge of monitoring if the website is working properly.

f. Questionnaires, Interview questions:

● **Questionnaire:**

1. I understand what Beaver Neighbor Center exactly does.
    A. Yes
    B. No

2. How useful is our product to you?
    A. I would use this site if it really existed
    B. If there is really this site I will not use

3. How does Beaver Neighbor Center compare to craigslist?
4. What do you find most frustrating when you are doing tasks?
5. What were your impressions of the onboarding experience on the website?
6. What is your opinion about the organization of information on the screen?
7. What do you find best about our website?

- **Interview questions:**

1. When a participant gets stuck while completing a task, ask him about the stuckness. (e.g.where, why, how to solve)

2. What are the interesting things that participants would like to share in the process of completing the task

3. Are there any comments or suggestions that can help us improve the user experience and interface?

    The observer can ask 1-2 more questions that come to mind as the observing participant completes the task.

Debrief prompt: Finally, we thanked the participants and gave them a coffee gift card and snacks.

2. **Session observations**

We ask customers relaxing at the coffee shop whether they have just arrived in Corvallis or are about to leave Corvallis. For customers who meet the conditions, we will let them perform an operation and feedback for about 15 minutes, and we will record their behavior. After the experiment, the participants can get a reward for their coffee and snacks. After an afternoon of interviews, we identified two participants who meet the target user criteria. Participant A, a graduate student at OSU, has a lot of second-hand stuff to sell because he is graduating in June and needs to leave Corvallis. Participant A learned that we needed to test the digital prototype, and he offered to take the test and let us record his behavior. participant B is an undergraduate student admitted to OSU in the spring of 2022. Our team members chatted with participant B and found that participant B has a lot of electronic products that he wants to buy, but because the price is too expensive, he wants to wait in the second-hand group chat to see if there are graduate students selling second-hand goods. We, therefore, believe that participant B fits the target audience of our website. After explaining what needs to be done, participant B agrees with us to observe and record.

a. **Session 1 Description**

We first let Participant A understand our task: He has a hot pot for selling, and he needs to use our website for sale. After Participant A basically learned about the operation method of our website, Participant A filled out a commodity list. He uploaded pictures of pots, tags, and some detailed information about the pot. For example, there were some black traces at the

bottom. After filling in and submitting, Participant A returned to the search page, entered the keyword HOT POT, and clicked on the three request posts, but the price of these three requirements was between 20 and 15, respectively. In the end, Participant A left a comment under the highest price post. Task 1 ends.

Then, participant A started Task2: he needed a fixed-size desk, but he could not find a suitable style on the shopping website, so he needed to release a desk on the desk on our website. Participant A entered the buyer's wanted page and fill out the size, price, and color requirements of the desk he needed. Now we tell him that two sellers contacted him, Participant A clicked the product information provided by the seller, but he told us that both styles were not what he wanted. Task 2 ends.
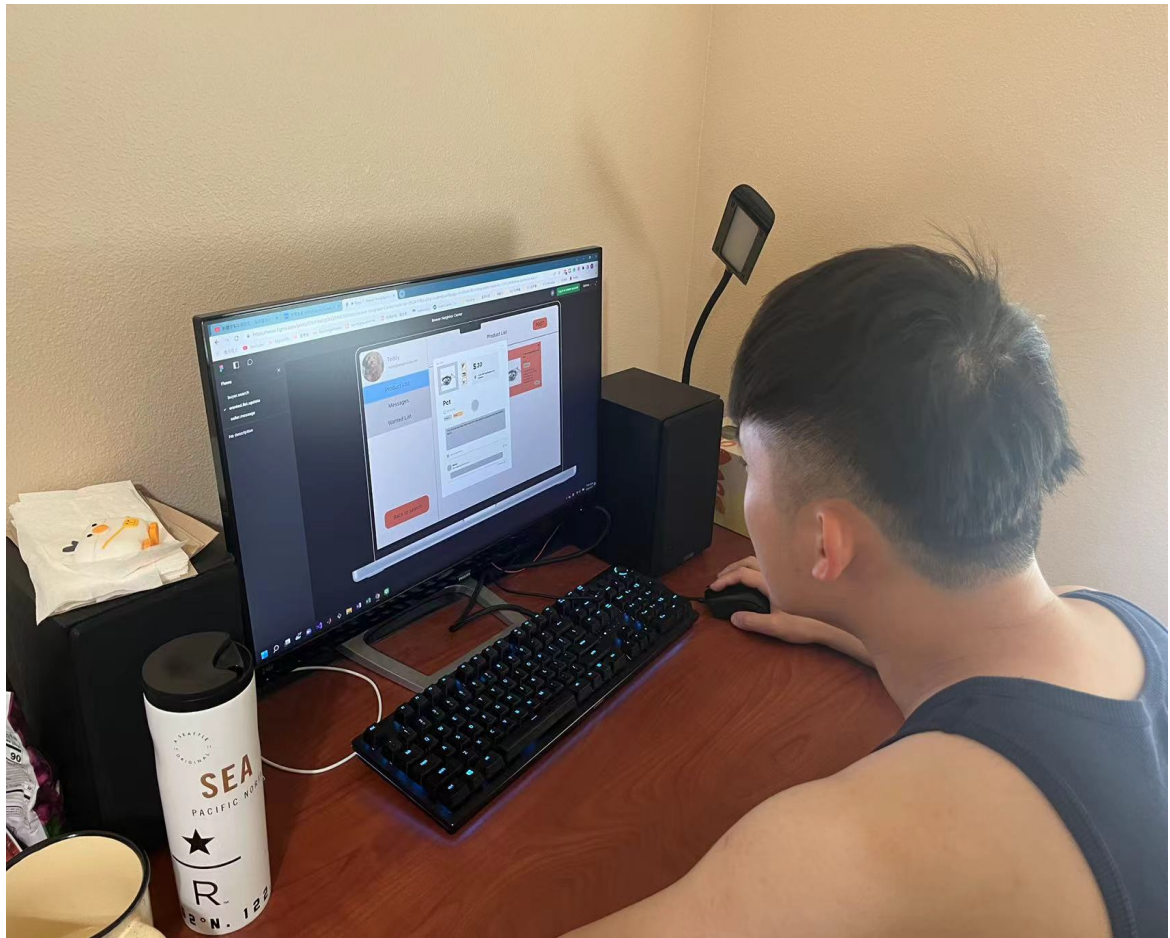
Questionnaire & Interview:

● I understand what Beaver Neighbor Center exactly does.

Yes.

● How useful is our product to you?

I think this is very friendly to sellers who want to sell items.

- What do you find in communication when you are doing tasks?

When I fill in the information, I need to fill in the information completely, because the platform did not provide a platform that can communicate before the seller's comment to talk about some requirements details.

- What is your opinion about our website?

This website requires a large number of users, whether it is a buyer or a seller because if the number of buyers is insufficient, the seller cannot find the buyer they want for a moment. On the contrary, if the number of sellers is insufficient, buyers need to wait a long time before getting the seller's comment. And if you comment on dissatisfaction, buyers can only continue to wait.

- Is there anything else to share with us?

I didn't find the request post with the price that I wanted, but because I was in a hurry to sell it, I chose the highest price post.

b. **Session 2 Description**

We first let participant B understand our task: he needs a fixed-size desk, but no suitable style is found on the shopping website, so he needs to release a need for desks on our website. After participant B basically learned about the operation method of our website, participant B entered the wanted list and started filling in the desk information, size, price, and filling in the style and color he wanted in the description bar. Now we tell him that there are two sellers contacting him. Participant B clicks the product information provided by the seller respectively. He clicked a few pictures and asked us if we could enlarge the picture. We answered that there were more pictures from more angles. After browsing the information, Participant B told us that he was interested in the wooden table. Task 1 ends.

Then, participant B started his Task2: He had a hot pot for sale, and he needed to use our website for sale. participant B enters the keyword of Hot Pot in the search interface, finds a suitable request, and starts his comment. However, in the comments, I found that the goods need to be published first to send the goods to the buyer during the comments. Participant B enters the product page and enters the various information about Hot Pot and uploads it. Participant B returns to the search interface to enter the key port of the Hot Pot, retrieve the post, and comment. Task 2 ends.
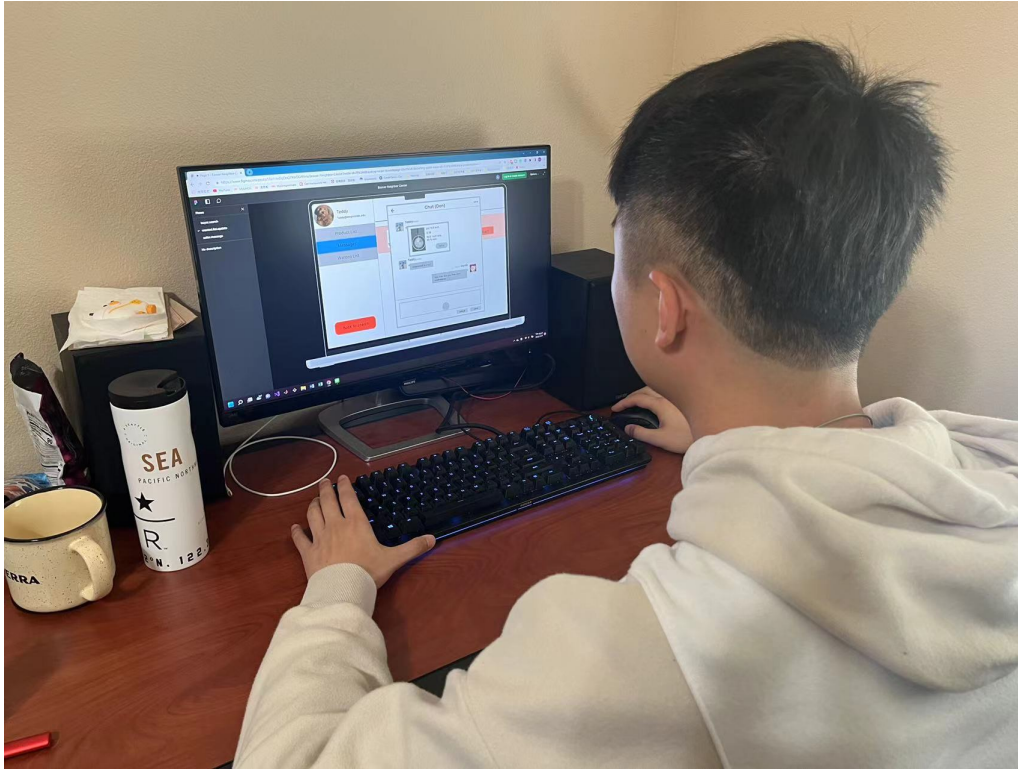
Questionnaire & Interview:

- I understand what Beaver Neighbor Center exactly does.

Yes.

- How useful is our product to you?

It is good for the seller, but it has to wait a long time for buyers.

- What is your opinion about our website?

It's better if there is a function that knows whether the price I set is appropriate. If my pricing is too high, no one will ask for a long time. I also want a function for interest, so that I don't have to find a post for each time I am interested in it again.

- What do you find most frustrating when you are doing tasks?

I want to know more details about products, such as more angles of photos or enlarged photos, but you do not have this feature.

- What do you find best about our website?

I like your ideas, but the website page design can be more beautiful and better.

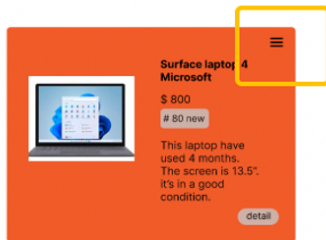3. **Usability lessons and reflections**
   Usability problems:

1. Participants didn't find the button/drop-down menu to switch the 'buy' and 'sell' interface. (P1)

Solution: Change the button to the dropdown menu.

2. Participants were confused about the button shown in the picture below. (P1, P2)


Solution: delete this icon. Or complete the pop-up window of this function.

3. Participants didn't find sort by tag entry and they didn't know how to search items by tags. (P2)

Solution: Add a filter icon/category below the search bar, and show the results by tag.

4. Participants were confused about the 'Setting', there wasn't any response after they clicked the 'Setting'. (Because the Setting is the title of this pop-up window) (P1, P2)
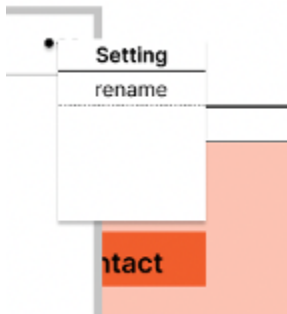

Solution: delete the text: setting.

5. Participants are confused about the button 'Next', they didn't know this button is the batch adding that support they add items continuously. (P1, P2)

Solution: change the text into continue add/batch add/ and add an 'editor 'add' icon adjacent to the text in the button.

6. Participants think of the product list as the main product list page, which shows all the items that are on sale. (P2)
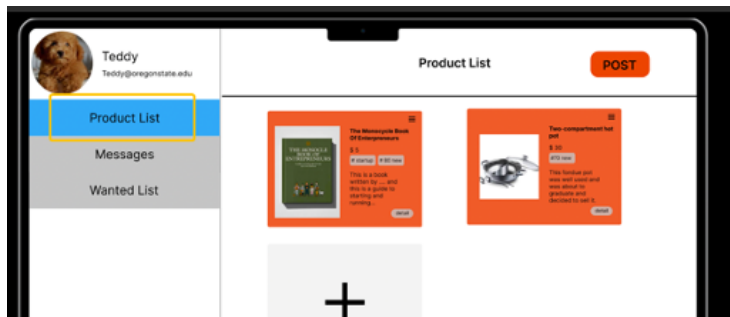

Solution: Change the text into 'My product list', 'my wanted list'. P.S.Maybe it would be better if we put the product list and wanted list together. And the third is Message. Another solution is to add a title on the top of the page, which indicates this is the 'my profile/my account page. *Suppose you are a new user, and the first page you see is this page, you may take this page as the main page by mistake.*

7. Participants think the color of each post is too strong, and they felt tired after watching the web pages. (P1)

Solution: change it to a light or increase the transparency of the background color.

8. Participants didn't want to fill out their address when they were posting a wanted post. They hope the address could be optional. (P2)
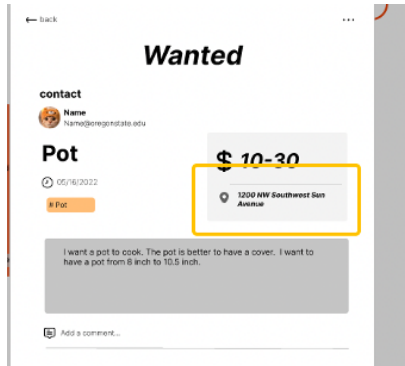
Solution: Make the address optional when users create the posts.

9. Participants didn't know the usage of the ''''' button on the wanted detailed information page. (P1, P2)
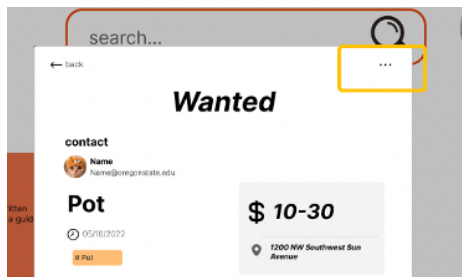
Solution: delete the button.

10. The page number is inconsistent with the current page. There should be 6 posts on this page.

Solution: make sure the number of posts is consistent with the page number.

High-level reflections:

From the experience, we have learned that our process of design and thoughts can be improved. Also, the testing strategy should be more friendly to our participants.

Firstly, our experiment process is not well organized and participants are not confused about the order of each session. When we were giving the introduction to participants, we just gave them an overview and requirements of the tasks instead of telling them there was a questionnaire session after each task. Second, we should leave some time to let the

participants ask questions after we gave the introduction. Third, we think it would be better to let only one person conduct the instruction, introduction session, and interview session, so the participants will feel more comfortable and calm. Fourth, because we are the designer, we are familiar with the operation of our webpage, so there exist unfriendly problems that we didn't notice. So in the future, before we invite participants and conduct the experiment, we should let our colleagues/classmates test the prototype first, that might reduce some problems and save time.

4. **Plan for iteration**

   Prototype modification - self-testing - user evaluation

   Prototype modification (5.28-5.31): During this step, we are going to change and modify our prototype which was suggested by our participants. We will list all the information first and learn how the other website/app designs a similar feature. Then we will redesign these components.

   Self-testing (6.1): Once we are finished with the second prototype, we will test it by ourselves and our classmates to find if there are still existing issues. If yes, we will repeat the modify-test session.

   User evaluation(6.2-6.3): We will invite the participants to re-evaluate the prototype to see if the revised version helps them finish the task friendly and efficiently.

5. **Contribution statement**

   Chi-Ho Chou: Co-participate in interviews, act as facilitator(team member A) and document editor.

   Danlin Song: Co-participate in interviews, act as an observer(team member B), and document editor.

   Jiawei Luan: Co-participate in interviews, act as an observer(team member C) and document editor.

   Siming Liao: Co-participate in interviews, act as tech person(team member D) and main document editor.