**User-Centered Design Project: UniSwap**

The Six

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# 1 ABSTRACT

University students often lack a secure, user-friendly platform to exchange items within their community, leading to inefficiencies and safety concerns. Existing solutions fail to address issues like security, accessibility, and sustainability. This report introduces UniSwap, a university-based platform that facilitates the exchange of goods among students and staff through a secure, non-monetary point system.

To develop UniSwap, we conducted a literature review and gathered user requirements via questionnaires and interviews with diverse student groups, identifying security, convenience, and sustainability as top priorities. An interactive prototype was designed focusing on key functionalities: sign-up and verification, completing transactions, and posting items for exchange.

A usability study with six university students using semi-structured interviews evaluated the prototype. While users appreciated features like university credential verification and overall usability, issues such as confusion in transaction processes and navigation inconsistencies were identified.

Based on these findings, we proposed enhancements to the prototype, including interface reorganization, improved navigation, clearer guidelines for the point system, and additional accessibility features. Future work involves expanding usability studies and refining design through iterative testing.

UniSwap aims to provide a secure, inclusive, and user-centered platform tailored to university communities, promoting sustainability and strengthening social connections through efficient item exchange.

# 2 INTRODUCTION

University campuses are bustling areas of activity where students and faculty regularly swap, acquire, and discard items such as textbooks, furniture, kitchenware, and apparel. However, the lack of a unified, secure platform for such transactions has resulted in inefficiencies, waste, and financial hardship. Existing solutions, such as social media marketplaces, do not address the specific challenges that university communities face. Issues including a lack of verification, the risk of scams, and a lack of accessible features disproportionately affect certain groups, such as international students, students with disabilities, and those who prioritize sustainability.

This report introduces UniSwap, a secure, university-based platform that facilitates the exchange of reusable goods among students and staff. UniSwap uses university credentials for user verification, creating a secure and exclusive environment for non-monetary transactions via a point-based system. It incorporates features like structural search filters, accessibility options, and gamification to increase user engagement and diversity. UniSwap

strives to promote sustainability while catering to the specific needs of university communities.

Problem Statement: University students lack a secure, user-friendly, and convenient platform to exchange items within their community.

Research Question: What features and functionalities are essential in designing a user-centered platform that meets the unique needs of university students for item exchanges?

## 3  LITERATURE REVIEW

The development of UniSwap, a secure and community-driven exchange platform, builds upon existing academic and industry discussions.

### 3.1 Collaborative Consumption and Resource Sharing

Collaborative consumption, a concept popularized by Botsman et al. (2011), highlights the shift from ownership to access as a sustainable economic model, encouraging resource-sharing practices through non-monetary exchanges. Platforms like Facebook Marketplace illustrate the practicality and popularity of such models in contemporary digital ecosystems. UniSwap expands on these ideas aiming to foster environmental sustainability and strengthen social connections by promoting the reuse of gently used goods within university communities.

### 3.2 Trust and Safety in Online Marketplaces

UniSwap's university credential verification system aligns with research by Nah and Davis (2002), who emphasize the importance of trust and security in online interactions. The risk of fraud, which is a common challenge for general marketplaces like Facebook, can be alleviated effectively with this system by restricting access to authorized university members. The corresponding safe and trustworthy transaction environment enhances the appeal of UniSwap and promotes the sense of community among users.

### 3.3 Addressing Financial Challenges

The financial stress faced by many university students is documented. The National Student Financial Wellness Center (2020) reports that 70% of students experience financial stress, seeking cost-effective solutions. UniSwap directly addresses this issue through a non-monetary point system which enables students to acquire essential items without economic strain. This feature particularly eases the burden of international students who face unique challenges due to frequent relocations and limited budgets (Alam, 2015).

### 3.4 Scenario-Based Design for Usability

Carroll (2000) advocates for scenario-based design as a means of developing systems which address real-world user needs properly by focusing on user interactions in specific contexts. UniSwap's features, such as detailed item listings and structural search with campus-based

location filters, were designed based on user scenarios like buying textbooks or furnishing dorm rooms, ensuring UniSwap's relevance and effectiveness meets the specific needs of our target users.

### 3.5 Transaction Enhancement through Direct Messaging

Miles et al. (2000) proposed a framework for understanding human factors in web-based electronic commerce, pointing out the critical meaning of communication tools in enhancing transaction experiences as well as offering a secure and efficient medium for interaction. UniSwap's integrated messaging system, in alignment with these insights, streamlines negotiations and improves the overall process with reduced misunderstandings and boosted trust among users through seamless communication.

### 3.6 User Engagement through Gamification

UniSwap's point-based system aligns with the extrinsic motivation models outlined by Deterding et al. (2011). Such gamification in non-game contexts creates a dynamic and engaging platform which enhances engagement and motivation. By rewarding users for posting and exchanging items, we leverage this approach to encourage sustained participation.

### 3.7 Conclusion

Drawing from a diverse body of research, UniSwap integrates principles of trust, sustainability, and engagement into a cohesive tailored platform for university communities, demonstrating its alignment with academic frameworks while addressing real needs. This synthesis of theoretical insights and practical solutions ensures that UniSwap is efficient, secure, and user centered.

## 4 GATHERING OF USER REQUIREMENT

We employed a combination of questionnaires, interviews, and low-fidelity prototypes to inform our design of UniSwap. Questionnaires were distributed online to capture quantitative data directly from our users efficiently. Unstructured interviews were conducted to complement the survey data by providing in-depth experiential insights. Lastly, we designed low-fidelity prototypes to demonstrate basic platform functionality and facilitate communication with users and within our group.

Our findings were structured around four primary user categories: budget-conscious students, international students, students with disabilities, and eco-conscious students.

Security emerged as a dominant concern, with 65% of participants identifying safety as a top priority. Many users expressed a strong preference for university credentials verification, and on-campus "safe exchange zones" were also suggested to further enhance safety during transactions. Convenience and accessibility were equally emphasized through the desire for location-based search functionality which was especially critical for mobility-impaired users

and those with demanding schedules. Sustainability was another key point, with one-third of participants stating environmental impact as one of their motivations for using this kind of platform. While the concept of a point-based system was generally well-received, clear guidelines and instructions were recommended for point allocation, and initial point allotment was encouraged.

In terms of the design for the interface, participants valued advanced search filters, integrated messaging, and user review systems to streamline interactions and ensure transparency.

Although the study was limited to the small sample size and potential bias, it provided useful feedback about future designs, ensuring that UniSwap will be inclusive, secure, and user-centered, tailoring to the diverse needs of its university community.
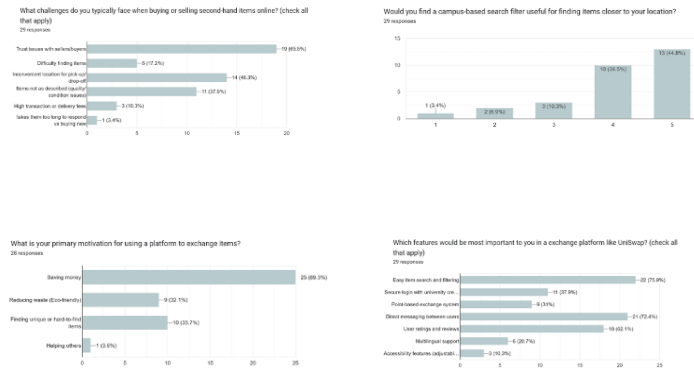


Figure 1: Selected Questionnaire Results

## 5 PROTOTYPE

Our interactive prototype demonstrates a clean, intuitive interface that aligns with the needs identified during the user requirement gathering phase. The prototype was designed in Figma, focusing on three primary tasks:

1. Task 1: Sign-Up and Verification
   New users log in using their university credentials with two-factor authentication. Profile setting was followed, where users input essential information. The process concludes with a confirmation message and access to the homepage.
2. Task 2: Complete Transaction
   Users can filter search results by category, location, and points, and view detailed item descriptions. Before placing a transaction, users can contact the seller through the in-app messaging system and confirm the pickup arrangement. Transactions are completed using the platform's points system, and users are encouraged to provide ratings and reviews post-exchange.
3. Task 3: Posting an Item for Exchange

Users can list items for exchange via the "Post" section, entering details like title, description, images, condition, availability, point value and an available date. Using the calendar, they select exchange dates and submit the item, receiving a confirmation message upon successful posting.

The prototype emphasizes clarity, usability, and accessibility through several key features such as the consistent navigation bar, advanced search functionalities, integrated messaging, and rating system. Additionally, clear prompts and visual feedback enhances overall ease of use and ensures smooth user experience.

# 6 USABILITY STUDY

## 6.1 Methodology: Semi-structured Interviews

We selected semi-structured interviews as our usability evaluation method for the UniSwap prototype. This approach combines structured tasks with open-ended exploration, allowing us to capture both quantitative and qualitative insights into user experiences. The flexibility of this method enables probing into specific usability issues while maintaining consistency across participants.

For this study, we interviewed 6 university students from different majors. Participants were recruited through personal connections and the campus community. This ensured they were familiar with the context of campus life, which aligns with UniSwap's target audience. This convenience sampling provided a relevant yet accessible participant pool for the prototype evaluation.

Participants were first guided through specific tasks on the UniSwap prototype which were designed to mimic typical user actions. Afterward, they were encouraged to freely explore the app, providing unstructured feedback.

## 6.2 Study Environment

The study was conducted in informal settings, such as university common areas, ensuring participants were in a relaxed and familiar environment. This choice helped promote natural interactions with the prototype, encouraging authentic feedback. Moreover, these spaces reflected typical user environments, further validating the relevance of our findings to UniSwap's target audience.

We evaluated the following tasks that are same with the tasks in prototype:
1. Task 1: Sign Up and Verification
2. Task 2: Complete a Transaction
3. Task 3: Post an Item for Exchange

After the participants finished exploring the prototype, participants provided feedback on their experience, answering the following questions:
- How would you rate this app on a scale of 1 to 10?

- What questions or concerns did you have while completing the tasks?
- What mistakes did you make, if any?
- Why did you find certain aspects confusing?
- Were you able to complete the tasks successfully?
- What difficulties did you encounter?
- What suggestions do you have for improvement?

## 6.3 Analysis and Results

This usability study involved six participants who evaluated the UniSwap prototype by completing three primary tasks: signing up and completing verification, completing a transaction, and posting an item for exchange. Each interview session lasted approximately 30 minutes and included specific task-focused questions, allowing for detailed identification of task-specific issues. Participants provided both quantitative ratings and qualitative feedback, enabling a thorough assessment of the interface's usability, pinpointing pain points, and gathering actionable insights for refinement.

   All participants are university students. Participants demonstrated a high level of comfort with mobile apps and digital platforms, with all participants expressing familiarity with interactive systems, though their frequency of use varied. Additionally, the majority (5/6, 83%) had prior experience using item exchange or second-hand platforms such as Facebook Marketplace, while one participant (1/6, 17%) was new to such systems.

   Table 1 summarizes the overall completion rates, average satisfaction scores, and key issues identified across the three tasks, providing a comprehensive overview of user performance and feedback.

Table 1: Overall results shown as a table

| Task | Completion Rate | Average Score (/10) | Common Issues |
|---|---|---|---|
| Sign-up and Verification | 6/6 | 7.7 | Redundant fields, Unclear required inputs, Navigation errors |
| Completing a Transaction | 5/6 | 7.8 | Checkbox confusion, Ambiguity in Point system, Transaction history access |
| Posting an Item | 5/6 | 7.7 | Single date frustration, Unorganized design, Missing Category Input Field |

   For the sign-up and verification task, all six participants completed the process successfully, yielding a completion rate of 100% (6/6). The task received an average satisfaction score of 7.7 out of 10. Participants generally found the sign-up flow intuitive, but several issues emerged. Ambiguities in the location field were noted by 50% of participants (3/6), who were unsure of the required specificity (e.g., city, university, or postal code). Additionally, redundant inputs, such as the "university" field, were flagged by 33%

of participants (2/6). Navigation inconsistencies, where clicking the "back" button returned users to the initial page rather than the previous step, were raised by 33% of participants (2/6). Despite these issues, participants praised the familiarity of the workflow and the inclusion of security features like two-factor authentication. Suggestions for improvement included implementing tooltips, visually distinguishing mandatory fields, and enabling an autosave function during profile setup.

The transaction task, which required users to complete an exchange with another seller, had a completion rate of 83.3% (5/6) and an average satisfaction score of 7.8 out of 10. However, 67% of participants (4/6) were confused about the purpose of checkboxes for selecting pickup time and location during chat. Moreover, 50% of participants (3/6) reported difficulties with the transaction history, including challenges in using the interface, difficulty locating transaction statuses, and confusion finding the review page. Furthermore, 33% (2/6) expressed uncertainty about the point system due to a lack of guidelines. Despite these challenges, users praised the helpfulness of filters, particularly for narrowing results by category and location, as well as the integration of a scheduling calendar. Recommendations included providing step-by-step guidance on transaction workflows, offering suggested point ranges to streamline decision-making, and enhancing filters with time-based and keyword-specific options.

The posting of an item task, which focused on creating and listing an exchangeable item, was completed by five participants, achieving a completion rate of 83.3% (5/6) and an average satisfaction score of 7.7 out of 10. Frustrations arose from 50% of participants (3/6) because of the difficulty of selecting multiple days, as participants were required to select each day individually rather than have the option to choose a range of dates. Additionally, the dense and unorganized design of the posting interface was highlighted by 50% (3/6). Unclear requirements for item descriptions were raised by 67% (4/6), while missing category fields when posting the item were raised by 33% (2/6). Despite these challenges, participants found the overall process functional and appreciated the option to upload photos. Suggestions included allowing time ranges for availability, providing examples or templates for item descriptions, and introducing a preview function for listings.

Overall, the study revealed high task success rates and positive feedback, such as 100% (6/6) of participants reflect trust in the university verification system and 83% (5/6) of participants found the sign-up process intuitive. However, several key areas require attention to enhance usability as mentioned in Table 2. These findings demonstrate that while the application excels in fostering trust and providing foundational functionality, improvements in navigation flow, feature clarity, and interface flexibility are critical. By addressing the issues identified in Table 2, UniSwap can significantly enhance its usability and user satisfaction.

Table 2: Top common issues from the highest to the lowest percentage

| Top Common Issues | Number of Participants (n/6) | Percentage (%) |
|---|---|---|
| Confusion with Pickup Checkboxes in Chat | 4 | 67 |
| Ambiguity in Input Requirements for Location and Item Description Fields | 4 | 67 |
| Dense/Unorganized Design in Posting Interface | 3 | 50 |
| Missing Transaction Status and Visible Review Button | 3 | 50 |
| Difficulty Selecting a Date Range for Availability | 3 | 50 |
| Missing Category Input Field during Item Posting | 2 | 33 |
| Redundant Input Fields | 2 | 33 |
| Navigation Inconsistency | 2 | 33 |
| Lack of Point System Guidelines | 2 | 33 |

## 6.4 Limitations

This study provided valuable insights into the usability of the UniSwap prototype, but several limitations should be acknowledged to improve the robustness of future research:

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### 6.4.1 Sample Size and Participant Demographics

The study involved only six participants, a small sample size that limits the generalizability and statistical reliability of the findings. Additionally, the participant group lacked diversity, particularly in terms of accessibility needs, as students with disabilities were not included. This gap restricts the inclusivity of the results and may leave significant usability barriers unaddressed.

### 6.4.2 Task Scope

The tasks tested in this study were focused on foundational functionalities, such as signing up, completing a transaction, and posting an item. However, other important features, such as wallet management and profile settings, were not explored. This narrow scope may have overlooked additional usability issues.

### 6.4.3 Limitations of the Interview Method

The interview-based approach relied on subjective feedback, which may have been influenced by initial reactions, biases, or question phrasing. This reduces data objectivity and makes it harder to draw unbiased conclusions about user behavior or preferences.

*6.4.4 Limited Iterative Testing*

The study was a one-time assessment, making it unclear whether the suggested improvements would effectively address the identified issues. Without multiple testing rounds, validating changes and refining the design is challenging.

*6.4.5 Context of Use*

Participants followed predefined tasks rather than exploring the system organically, limiting the study's ability to capture natural user behaviors like multitasking or unstructured navigation. The 30-minute sessions were insufficient for identifying nuanced issues such as navigation fatigue or feature redundancy. Additionally, real-life scenarios, such as working under time constraints or encountering unexpected errors, were not simulated, restricting the scope of usability insights.

*6.4.6 Data Collection Consistency and Standardization*

The lack of a standardized interview protocol led to inconsistencies in how questions were asked, resulting in variability in participant responses. For example, some participants gave detailed scores and feedback for individual tasks, while others offered only general impressions or overall ratings. These inconsistencies complicated task-specific analysis and reduced the precision of the findings, limiting the reliability of the overall results.

## 7  FUTURE WORK

### 7.1 Improvements to the Prototype

To enhance the item posting process, the interface will be reorganized for clarity and usability. Fields will be grouped under headers like "Item Details," "Condition," and "Availability," with added spacing to reduce clutter and improve alignment. A "Preview Post" button will be introduced, allowing users to review their listing before submission. Additionally, a category selection input field will be added using a dropdown menu with predefined categories (e.g., "Textbooks," "Electronics") and a free-text "Other" option for uncategorized items. Furthermore, enhanced placeholder text will be added to all input fields to provide clearer guidance, such as for location (e.g., "Enter city, university, or postal code"). Moreover, an icon will be added next to the "Item Description" field that displays a popup with detailed explanations and examples (e.g., "Gifted item, minor scratches, fully functional") to help users provide more complete and accurate information. To enhance usability even further, the current date picker will be replaced with a range selector, enabling start and end dates to be selected in one action, with clear labels or tooltips highlighting multi-day selection options, ensuring users can easily understand and utilize this feature.

For navigation and transaction processes, the Back button will be redesigned to consistently return users to the previous page rather than the initial page, ensuring a smoother and more intuitive navigation flow. Additionally, a "Transaction Completed

Successfully" page will be introduced to confirm completion and prominently prompt users to leave reviews. The transaction history page will also be updated to display the status of each transaction (e.g., "Pending," "Completed") and include a clearly visible review button for completed transactions, making feedback easier to provide. To further simplify the interface, the pickup checkboxes in the chat, which caused confusion and lacked practical functionality, will be removed entirely to streamline the user experience.

Furthermore, redundant inputs like the "University" field in the profile setting section will be removed to simplify the input process. Required fields will be marked with asterisks, and users will be encouraged to upload multiple-angle images for better item representation. A filter icon will be added to enhance the search interface for improved clarity, while seller ratings will be displayed on item pages. Users can also view seller profiles by clicking on their avatars, promoting transparency and trust.

Lastly, we will add a "Point System Overview" in the transaction interface and include a step in the onboarding tutorial to explain what points are, how they are earned (e.g., successful exchanges), and how they are used.

These improvements aim to address identified usability issues, ensuring a more intuitive and user-friendly experience on the UniSwap platform.

## 7.2 Broader Directions for Future Usability Studies

Future studies will expand the participant pool to include users with diverse technical skills, cultural backgrounds, and accessibility needs. A unified and standardized interview script will be implemented to ensure consistency in participant feedback and enable more reliable task-by-task analysis.

We will broaden the scope of usability studies by incorporating real-world scenarios, such as multitasking and working under time constraints, to better reflect authentic user experiences. Additionally, we will test more features, including wallet management and profile settings, to address potential usability challenges beyond the foundational tasks. To diversify our methods, we will include focus groups and heuristic evaluations alongside interviews, ensuring a more comprehensive approach to identifying usability issues and gathering user insights.

Furthermore, longitudinal studies will be conducted to observe user behavior over extended periods, providing a deeper understanding of how the application is used in unstructured, real-world contexts. This will be complemented by iterative testing, allowing us to validate and refine design improvements based on user feedback. To enhance data accuracy, we will integrate automated tools, such as click tracking and error logs, which will supplement qualitative feedback with objective insights. Finally, accessibility testing will be prioritized to address the specific needs of users with disabilities, ensuring the application is inclusive and user-friendly for all.

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# A    APPENDICES

## A.1    Sample Consent Form

**Interview Consent Form**

**Title of the Study**: UniSwap User Requirements

Researchers:

Name: Qiushi Chen, Cheryl Zhang, Yuqi Gao, Siyun Gu, Xinyu Liu, Shanni Li

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Affiliation: University of Toronto Scarborough

**Purpose of the Study**:

You are being invited to participate in an interview as part of a research project. The goal of this study is to gather insights about university students' experiences with peer-to-peer item exchanges.

**What Will Be Asked of You**:

If you agree to participate, you will be asked to answer questions about your experiences using item exchange platforms or your views on sustainability at universities. The interview will last approximately 30 minutes and will take place in person.

**Voluntary Participation**:

Your participation is completely voluntary, and you may withdraw at any time without penalty or explanation. You can also choose not to answer any questions you do not feel comfortable with.

**Confidentiality**:

The information you provide will be kept confidential. Your responses will be anonymized, and no identifying information will be used in any reports or publications resulting from this study. Only the researcher(s) will have access to the interview data, which will be securely stored.

**Risks and Benefits**:

There are no known risks associated with this interview. While there are no direct benefits to you, your responses may contribute to valuable insights in enhancing peer-to-peer exchange platforms.

**Contact Information**:

If you have any questions or concerns about this study or your rights as a participant, you may contact:

- Researcher: Qiushi Chen, Cheryl Zhang, Yuqi Gao, Siyun Gu, Xinyu Liu, Shanni Li

**Consent**:

By signing below, you are acknowledging that you have read and understood the information provided and that you agree to participate in this interview.

Participant's Name: _____

Participant's Signature: _____

Date: _____

Researcher's Signature: _____

Date: _____

## A.2   Interview Transcripts

### A.2.1   Interview conducted by Cheryl

Cheryl: Could you tell me a bit about yourself?

Interviewee:I'm a second year student studying psychology at University of Toronto Scarborough.

Cheryl: Great. Could you go through task 1-3? Afterwards please explore the app freely. Please let me know if you have any questions throughout this experience. Interviewee: Ok.

Interviewee: So what can I click on?

Cheryl: So anything that is highlighted in blue when you click on the screen are the areas/buttons that are interactive.

Interviewee: Sounds good.

Cheryl: Alright so let's go through task 1 first.

Interviewee: So I can only choose from these universities?

Cheryl: Yep since it's a prototype we only added a few options but in the future there will be a lot more universities you can choose from.

Interviewee: Wait, not all universities use the acorn system to login so how are you going to accommodate different schools?

Cheryl: The way it works is that we will just use whatever authentication system that university uses to verify the user's identity. We chose acorn here because we are showing the example of if the user goes to UofT.

Interviewee: Ok got it.

Cheryl: Ok so now let's go through task 2.

Interviewee: Sure, so what's the reason the app has a point system instead of just using normal currency?

Cheryl: We have points because we wanted to gamify our app. Gamification leverages extrinsic motivation such as receiving points to encourage sustained engagement and action by users effectively making using our app more rewarding and enjoyable. Interviewee: Oh okay. I think adding a tutorial/introduction page on what the point system was and how it works would be good.

Cheryl: Ya I agree thanks for the feedback.

Cheryl: Ok so finally let's go through the final task.

Interviewee: Ok. Oh I like the item usage part in the post an item flow that's a nice touch.

Cheryl: Thanks!

Cheryl: So now that you have successfully completed all the task flows and explored the app, how would you rate the user experience of this app out of 10?

Interviewee: 7/10.

Cheryl: Did you understand each of the flow's purpose?

Interviewee: Ya I did.

Cheryl: Did you feel like you were ever lost in the app's prototype? Interviewee: Nope.

Cheryl: Did you make any mistakes?

Interviewee: I don't think so.

Cheryl: Did you face any difficulties?

Interviewee: Not really.

Cheryl: Do you have any improvement suggestions?

Interviewee: Ya when I was "logging in" the UTORid box has an auto filled input, but the password does not have an auto filled input so I think making sure the autofilled input is consistent would be a nice touch.

Cheryl: Noted.

Interviewee: Also I think in the future having a Money Back Guarantee feature similar to the one ebay has would be nice.

Cheryl: Ya good idea I agree.

Cheryl: Anything else?

Interviewee: The transaction page didn't have a back button so I had to go back by pressing the profile again but I think adding a back button on that page would be good. Cheryl: Oh true that's a good point.

Interviewee: Also I think having the search feature in the toolbar instead of having to go through the home page would improve usability?

Cheryl: Ok sounds good.

Interviewee: Also the back button in the chat page feels sort of unnecessary because I can just press the home button instead.

Cheryl: Ya true.

Interviewee: Also, I think it would be nice if there were more colors incorporated. I feel like just having white and purple is a bit plain.

Cheryl: Ok.

Interviewee: Oh also I think you can consider having a report feature for misuse and a return policy in the future.

Cheryl: Ya those are all good ideas.

Cheryl: I think that's all my questions so thank you for your time!

Interviewee: Ya no problem.

*A.2.2   Interview conducted by Qiushi*

Qiushi: Okay, what I am about to show you and letting you test with is an App called "Uniswap", designed for university personals, especially for college students, to exchange their items that themselves do not need anymore.

Participant: OK. (start observing the initial login screen of the Uniswap prototype). Should I input anything?

Qiushi: You may input whatever you like.

Participant: Ok (selected the University of Toronto through the selection box, followed the instructions, and went to the set up profile screen). Wait… why can I choose my identity as "student", "staff", and "other" at the same time? Can I be of 3 different identities at the same time?

Qiushi: Technologically, you cannot.

Participant: Humm. Also, why do I select university when I log in, and now I have to reset my university in the setup profile? I can blend in with students from other universities? (Selected UofT on setup page). Okay, profile successfully set up.

Qiushi: Okay, now you can try "Find nearby items" by any means.

Participant: Okay, where is the search bar? I cannot find it at the home page. (Clicked "Search Items ->") Oh, so this search bar only pops up when I click this button? This is kinda confusing. (typing on keyboard) I tried typing "laptop" in the search box, but nothing happened.

Qiushi: Well, that's because what I've shown you is a prototype, which can express some basic operations, but the code level stuff about searching, typing specific complex strings, and so on hasn't been done. You can consider clicking on the input box as if your search is complete.

Participant: Okay. Not presenting the search bar at the first place do makes it more difficult to keep up with. Generally speaking, there should be a filter for me to sort different items, but I can't find the filter sign where is…Oh, I see. The categories, location and point columns on the screen are filters for items. I thought they represented different categories of objects. It would be nice to have an icon or something like that, and then, like Amazon does, give the filters on the left side of the screen so that I can understand them more easily. (clicked the icon of item1 and observing the item's information page). "Buy"… "Pick up time"… So for pick up location and time, you can enter whatever information you want? What if the information I input is inconsistent with the time of the item owner?

Qiushi: The item owner enters the time and place where he is available, and you may negotiate those information during the chat.

Participant: In this case, perhaps I should select from several times and places given by the item owner in the pick up location and pick up time of the place transaction interface, instead of having to enter them myself.

Qiushi: Makes sense.

Participant: Whatever. Okay, "chat", oh that is where we talk about the pick up location and time, I see.. (clicked the "back" button of the chat and goes to chat records page). From what I've seen in this prototype, it looks like I've talked to a lot of people, haha…You can find anyone you've talked to and click on that chat, right?

Qiushi: Yes, that is how you enter the specific chat with somebody.

Participant: So what if you talk to a lot of people, like ABCDE, and then one day you want to talk to A that you chatted with a long time ago? Can you search A's name to find your chat history with A?

Qiushi: Oof, we haven't thought about that…

Participant: Right? Anyway I'mma proceed to check out. "Buy", "Place transaction", oh it is placed. "Back", hmmm "My transactions".. How do I know which transaction has been completed? After all, I just placed a transaction to the item owner, and I haven't got it yet, but in those transaction history, I can only see my transactions' record without knowing whether the transaction has been completed or not. (clicked 1 of the transactions). "How well did this experience go? "Why is there only one scoring system? I want to know the details of the transaction I clicked on, including the information about the item and the owner of the item.

Qiushi: The information you're talking about is in transaction history on the previous page. But indeed, those information should also be presented when you click into a transaction record.

Participant: "Rate the experience…" oh so you can rate them right? But I remember when I looked at the specific information page for the item (Scrolling to corresponding page), I cannot see the score of this item owner. if there is a liar who often deceives, gives bad things, and people give him a rating of 1 out of 5, but I can't see it, isn't that bad?

Qiushi: Yes, that is bad. Now you have tried enough as a item-seeker, you may try post your own items for swap.

Participant: Okay. "Post", "Title", "Description", "Usage condition", "Post pictures"… hmmm, why does this "select avaliable day" require you to click out all of your free time one by one? Can't I drag and select a whole row?

Qiushi: Welp, yeah, adding this feature does make the operation easier.

Participant: And it only allows me to choose the whole day, not whether it's morning or evening or whatever. Anyway, post an item… Oh so this is where you view your posted item history. But why can't I check it in my profile? That's not good. Moreover, I found that this post history can only be read, but not clickable. I can't know who I gave it to, and there is no specific information about this posted item, such as the chat between the opposite side and me, or the score I got here.

Qiushi: Yeah, these information should be added and refined.

Participant: Okay, "Done".

Qiushi: So, you completed your tasks of login & verify, searching an item by filter, search bar, and you have talked to an item owner in chat, placed a transaction, and posted an item of your own to swap. How would you rate your experience out of 10?

Participant: I give it a score of 7. 3 out of that is because you are my friend, and 4 out of that is due to the interactive pages and the various features of this prototype. But there were some problems when I used it.

Qiushi: Haha… appreciate that, so what are the problems you encountered during the usage?

Participant: First, when I try searching item by filter, I cannot find the filter. The three-column filter is striking, but its meaning is ambiguous, and I initially thought it represented other item-related features. If I were you, I would consider adding a filter icon next to it, like a hopper or something, such that user would know what those bar stands for.

Second, when I view the details of an item, the item owner's rating is not displayed on this page, which does not protect me from some low rating users. Oh, and while I'm at it, you should also add a blocking feature to chat, because if someone is annoying and harassing you in chat, you should have a blacklist to block them.

Third, in transaction history, I can't know if my transaction is complete. After clicking on a transaction, the page will jump directly to the score, which is not good. I think you should click on a transaction first and then enter the detailed information page to tell you whether the transaction is completed. If it is completed, click the complete button and then jump to the score page.

Also, for post item, I hope that when I select available day, I can: select a specific period of the day, and I also want to be able to select a large number of days at once by dragging, rather than one by one.

And for sign-in, I do not think that letting me choose my university again is a good idea. The selection of university should be done at the verification part, and it should be automatically filled-in as I setting up my profile, or else students from other colleges can also goes to UofT for item exchange isn't it?

Qiushi: Thank you, your suggestions are very valuable for us.

Participant: Haha, you sound like a scotia agency.

Qiushi: Anyway, so I think this is it.

*A.2.3   Interview conducted by Xinyu*

Interviewer (I): Hi. Thank you for participating in this study. Before we begin, I'd like to remind you that this session will last about 30 minutes, and everything you share will remain confidential. I'll also be recording the session, with your consent, to help with data analysis. Is that okay with you?

Participant (P): Yes, that's fine.

I: Great! Let's begin by understanding your background. Are you currently a university student? Have you ever used an app to exchange or sell items before?

P: Yes, I'm a student. I've used Facebook Marketplace to sell textbooks, but I haven't used an app specifically for item exchanges.

I: That's helpful to know. On a scale of 1 to 5, how comfortable are you with using mobile apps for buying or exchanging items?

P: I'd say a 4. I use apps for most things, but I'm still cautious about meeting people or trusting others online.

I: Great! Let's start with your first task: Sign up and complete verification. Please go ahead and complete the signup process and let me know your thoughts as you do.

P: (Navigates the app.) Didn't I just choose my university on the previous page? Hmm, for the location field, should I put my city, university, or a specific address? It's not clear what level of detail is needed. I'll just put my city for now.

I: Thanks for noting that. Anything else about the signup process?

P: The verification step was easy, but I'm not sure how specific I should be for the location. Is it school, province, city, or even postal code? I'm confused. I'd also like to see an indicator showing how long the verification might take.

I: Great feedback! Let's move to the second task: Complete a transaction for SampleItem1.

P: (Looks at the interface.) Okay, I found the item and clicked on it. The transaction process is a little unclear. Oh, I see a checkbox—what is this for? I thought it would open a popup, but it didn't do anything.

I: That checkbox is meant to remind you to make agreement on the transaction details during the chat. Was it unclear?

P: Yes, it wasn't obvious. I expected it to give me more information, like a suggested meeting time or location for the exchange. The app can make recommendations according to both parties' location profiles. This would be easier, I think. Also, after confirming, I think it should show a clearer transaction summary with the details of both parties, like names or profiles, to make me feel more confident about the process.

I: That's a good point. Anything else?

P: Yes. It would be nicer if I can check the seller's credit or more information. I might need more information to tell if it is reliable to make the transaction.

I: Get it! Moving on to the final task: Post an item. Imagine you want to post a textbook for exchange. Please go ahead.

P: (Navigates to the "Post Item" section.) Writing the description is tricky. What kind of details should I include? It might help if there were examples or guidelines, like "Include the condition, price, and pickup location."

I: That's helpful feedback. Anything else you noticed?

P: Also, I think adding a location-specific filter while posting items would help, like category shown on the main page.

I: Thank you! Let's wrap up with a few overall questions. On a scale of 1 to 10, how would you rate the ease of completing these tasks?

P: I'd give it a 7. It's functional, but there's room for improvement in clarity and guidance.

I: What did you like most about the app?

P: The interface is simple and easy to navigate. I also like the idea of connecting with other students—it feels safe.

I: And what would you suggest improving?

P: Add more guidance for descriptions and categories. Also, make the transaction confirmation more detailed, including visuals and specific information about the other party. Lastly, clarify the location requirements during signup and item posting.

I: Thank you for your time and detailed feedback. This will really help us make UNISWAP better for users like you. Do you have any final comments?

P: No, that's all. Thanks for letting me test it!

I: Thank you! Have a great day.

### A.2.4 Interview conducted by Shanni

Interviewer: Hi! Thank you so much for taking the time to test UniSwap today. Before we dive in, could you share your initial impression of the app concept?

User: Sure. I think it's a great idea. Students always have extra stuff lying around—things they don't need anymore—and it feels like such a waste to throw them away. Plus, moving often means leaving useful items behind. For example, I'm about to graduate and have a lot of items at home that I don't need anymore. Using this platform to handle them would be a great way to avoid waste.

Interviewer: That's exactly what we're hoping to achieve. We'll be asking you to complete three tasks today: signing up and verifying your account, completing a transaction, and posting an item for exchange. I'd like you to describe your experience along the way. Feel free to point out anything you find confusing or anything you think we could improve. Let's start with the first task: signing up and verifying your account. Please go ahead.

User: Alright, I'm opening the app… The Login-in page looks clean. It's asking for my UTORID—which makes sense, since this is for students. Okay, I've entered my UTORID and password. Oh, now there's a verification step. That seems reasonable, especially if this is in collaboration with the university—it helps ensure the reliability and security of exchanges. But maybe you could add a quick message explaining that verification ensures secure exchanges. Other than that, this part was easy to follow. Now I'm setting up my profile. I think this step is fine, but there's one part where it asks for my university again. That feels unnecessary and a bit repetitive. Also, do we really need a "description" for a profile on a transaction platform? I feel like the description part occurs more often in a dating app.

Interviewer: First of all, thank you for acknowledging the verification feature. It's indeed designed to ensure security by reducing the chances of fraudulent transactions or scams. With university authentication, transactions are more localized and convenient. Secondly, I agree with you that the university text box can be removed, as users are verified by their university account so that we should be able to know their university in advance and no need

to ask again in profile setting. Finally, as for the description feature, it's meant to give users a space to share their preferences or availability in general. For instance, a user could write about their preferred pickup times, response times, or even what types of items they might be looking for or planning to post soon.

User: Oh, that makes sense. This task is overall easy to follow and has a good structure.

Interviewer: Thank you, that's good feedback. Let's move on to the second task: completing a transaction. Please find an item you're interested in and go through the steps to claim it.

User: (navigating) Hmm, the homepage looks a bit crowded. There are so many items and buttons—it's hard to know where to start. Okay, let me check out the categories. Oh, these categories feel a bit broad. I'd prefer more specific ones, like kitchenware or even something as detailed as spatulas.

Interviewer: That's helpful to know. Do you think having more specific categories would improve the experience?

User: Definitely. It would be easier to find what I'm looking for that way. Okay, I'm going to search for something I want and try to claim it… Hmm, this process is smooth. Alright, I've completed the transaction.

Interviewer: OK, Now you can leave a review for your transaction.

User: A review? Let me find where to do that. What's the purpose of the review feature?

Interviewer: The review allows users to know whether the buyer or seller is trustworthy.

User: Oh, that makes sense.

Interviewer: Now that you've completed Task 2, do you have any comments?

User: The whole process was clear and straightforward. The steps were easy to follow, but it took me longer than it should have because, at first, I wasn't sure how the system worked. The homepage has too much content, like the "items you might need" section, which made it unclear where I should start. I think some buttons are unnecessary, like the "recommend item" feature. This is a second-hand trading platform, and users are more likely to only look for things they need. You should really evaluate whether each feature or button is necessary and whether it adds real value.

Interviewer: That's good to know. We'll definitely think this through. Do you think simplifying the interface would help?

User: Absolutely. Right now, it feels a bit overwhelming. You don't need so many features on the homepage. Just displaying a search bar would be enough.

Interviewer: Great feedback. We believe showcasing all the features on the homepage makes it easier for users to navigate quickly, but we'll consider simplifying it. Let's move on to the third task: posting an item for exchange. Can you start this task?

User: Sure. Let me start… Oh, the interface says it only requires me to upload at least one picture. I think this part could be improved. For a transaction platform, you should require users to upload multiple photos from different angles to ensure the item is genuine and

improve transaction efficiency. That way, buyers won't need to ask sellers for additional photos later.

Interviewer: That's a good point. Do you think this requirement might discourage users from posting items?

User: Probably. Students are busy, and they might not want to spend extra time taking multiple photos. But I still think this is an important feature for ensuring the quality of transactions. Also, I noticed there's no clear explanation of whether exchanges are handled in person or through delivery when I post it. Are items exchanged on campus? Do you collect and distribute the items as a middleman?

Interviewer: Good question. We don't offer a middleman service. When posting an item, there's no specific option for delivery or pickup. However, when buyers make a purchase, they can choose the method of exchange. Since this is university-based, users usually arrange a convenient location near campus. This makes it easier to find a suitable pickup spot.

User: That makes sense. By the way, is the transaction done with money, or is it free?

Interviewer: Neither. We use a point system instead of real money. Points are the platform's virtual currency and can be earned through certain activities, like listing items. For example, when you list an item and someone takes it, you earn points. You can then use these points to claim other items.

User: Oh, I see. That wasn't very clear. I had no idea throughout the process. I assumed it was either real cash or completely free. You should explain the point system more clearly, maybe with a pop-up or a quick tutorial when someone first signs up. Otherwise, it's confusing.

Interviewer: That's incredibly helpful feedback. Could you rate your overall experience out of 10?

User: I'd give it an 8. The overall process is smooth, and the structure and concept are solid.

Interviewer: Thank you. Do you have any final suggestions?

User: I think you should conduct more market research to confirm whether students actually need this platform. Understanding market demand would help ensure that every feature has a clear purpose. Also, consider adding more detailed categories to improve navigation. Most importantly, simplify the interface and make sure every component is truly necessary.

Interviewer: That's very useful advice. We'll work on these improvements! Thank you so much for your time and insights today. Have a great day!

User: You're welcome. Good luck with the project!

*A.2.5 Interview conducted by Siyun*
Introduction

Interviewer(I): Can you tell me a bit about your background and your experience with similar systems or apps (e.g., item exchanges, marketplaces)?

User(U): I'm an international student studying at UTSC and have used to a couple of second-hand sites like "Xianyu" in China. I also bought a used bicycle here from Facebook's marketplace.

I: How often do you use platforms for item exchange or browsing/searching for items?

U: About once every six months here. But I use these platforms quite frequently back in China.

I: Why don't use these platforms as frequently as back in China?

U: I don't really trust the existing platforms here.

I: What expectations do you usually have from such systems when signing up, browsing items, or posting content?

U: Provide accurate keyword search results and show as detailed information for the items as possible.

I: What are your initial impressions of this prototype based on your interactions so far?
Simple and clear.

U: How does it compare to other systems you've used?

U: Compared to the ones I've used; the pages here are relatively simple and exclude useless information.

I: How do you feel about the prototype? Score out of 10

U: 8/10

Task-Specific Questions

Task 1: Sign-up and Verification

I: How did you feel about the verification setting?

U: The steps are quite familiar.

I: Then you must think it is simple due to the familiarity?

U: Yes, it is quite simple.

I: How about the instructions, are they clear and simple as well?

U: Yes, very.

I: How would you describe the flow of this task?

U: It is quite natural and intuitive, the same with most of the apps.

I: Did the steps feel logically connected, or were there any disruptions in the flow?

U: It's strongly connected, but there were some disruptions. For example, when I press "Back" at the Duo verification page, I was navigated to the initial page rather than the former page asking me for school account information. Same for the "Go Back" button at the welcome page.

I: How long did the process feel, and was it faster or slower than expected?

U: Just normal sign-up things.

I: Were there any points in the process where you felt frustrated or unsure?

U: Yes, I was not sure about which information is necessary, and I need to type in my university twice which is a bit repeated.

I: Were the features easy to locate and use?

U: Yes.

I: Were there any errors or unexpected issues you encountered while performing the task?

U: Yes, I don't

I: Did the system provide helpful feedback (e.g., error messages, confirmations)? How did the system's feedback support or hinder you?

U: I don't think the current system provides any feedback, but it is quite necessary

I: Was there anything about the design that you particularly liked or disliked?

U: I think the page of setting the profile can be more aligned.

I: Was there anything you felt was missing or could be improved in this task?

U: Indicate if the input filed is required or optional, and if the information can be modified later. Also, if possible, adding an autosaving function should help.

Task 2: Complete Transaction (Browse or search for nearby items, Initiate an item exchange)

I: How would you rate the functionality?

U: 9.3/10

I: How did you find the process? How simple or complicated was it?

U: It is easy, but since the function is not really working so for now it is simple and easy to use.

I: Did you think the filters are sufficient for narrowing down to the items you want?

U: They are quite sufficient, but maybe you can still add another filter of "Time".

I: How would you describe the navigation through the different parts of this task?

U: It is smooth and intuitive as well.

I: Did the steps feel logically connected, or were there any disruptions in the flow?

U: No, quite smooth.

I: How long did the process feel, and was it faster or slower than expected?

U: Quite normal.

I: Were there any points in the process where you felt frustrated or unsure?

U: At the chat page with a seller, the checkboxes of pickup time and location are a bit confusing, maybe an instruction of them working as reminder would help.

I: Were the features easy to locate and use?

U: Yes

I: Were there any errors or unexpected issues you encountered while performing the task?

U: No.

I: Did the system provide helpful feedback (e.g., error messages, confirmations)?

U: Yes, the confirmation for the transaction is good. But an additional instruction for checking the transaction can be added to the page, like pointing out I can find it through "Profile -> Transactions".

I: Was there anything about the design that you particularly liked or disliked?

U: The list inside each filter is not well aligned.

I: Was there anything about the design that made the task easier or more difficult?

U: I like the design of the parts of "Search Items", "Recently Viewed", "Items you might need", but the size of each part can be modified to enlarge the first two parts and make the last one smaller.

I: Was there anything you felt was missing or could be improved in this task?

U: When searching with keywords, providing related recommendations would be good.

Task 3: Post an item for exchange

I: How would you rate the functionality?

U: 8/10

I: Were there enough options to describe or categorize your item accurately (e.g., title, description, images)?

U: Not really. I think item category should be required, and providing some tag options for efficient search is quite necessary for me.

I: How did you find the process? How simple or complicated was it?

U: It's easy.

I: Were the instructions clear and easy to follow?

U: Easy as well.

I: Navigation and Flow

I: How would you describe the navigation through the different parts of this task?

U: After clicking "Done", navigating to my profile page should be better.

I: How long did the process feel, and was it faster or slower than expected?

U: Normal.

I: Were there any points in the process where you felt frustrated or unsure?

U: Yes, choosing a specific date makes me feel a bit frustrated. I would prefer to choose a time range like within 3 days, or within 7 days from today.

I: Were the features easy to locate and use?

U: Yes, they are all on the same page.

I: Did the system provide helpful feedback (e.g., error messages, confirmations)? How did the system's feedback support or hinder you?

U: There's no confirmation for posing an item I suppose all I got is a simple "successfully posted" message.

I: Was there anything about the design that you particularly liked or disliked?

U: The page is somehow too dense for me, and each component is of different size and width making it unorganized visually.

I: Was there anything else you felt was missing or could be improved in this task?

U: I think I've all mentioned.

General Feedback and Suggestions

I: What did you enjoy most about using the prototype?

U: I like the homepage the most, especially "recently viewed".

I: What was the most intuitive part of the system across all tasks?

U: Still the home page.

I: Which task or feature did you find the most challenging to complete, and why?

U: The checkboxes on the chat page.

I: How would you describe the overall look and feel of the prototype?

U: It's neat, but I think purple is too calm for a platform of this kind. Maybe brighter colors like orange or yellow could stimulate people's desire to transact more.

I: How does this prototype compare to your expectations or similar systems you've used?

U: Quite the same, but since it's more trustworthy with the university verification.

I: If you were to describe this system to someone else, how would you summarize it?

U: A C2C second-hand platform for university students.

I: Do you have any additional feedback or suggestions for improvement?

U: I don't know if there's any protection for information closure since it's related to our school account.

### A.2.6   *Interview conducted by Yuqi*

Interviewer (I): Hello Interviewee, thank you so much for taking the time to join us today for this user testing session of our UniSwap app prototype.

Interviewee (Z): Hi! Thank you for having me. I'm excited to see what you've been working on.

I: Great to hear! Before we begin, could you tell me a little bit about yourself?

Z: Sure. I'm (name is hidden), a fourth-year student at the University of Toronto. I'm majoring in Literature and Media Studies. I'm particularly interested in how digital platforms are changing the way we communicate and share resources.

I: That's fascinating. Your background in media studies will provide valuable insights for us. Have you used any item exchange platforms before?

Z: Yes, I've used platforms like Facebook Marketplace and Kijiji to buy and sell items locally. I also tried using some university-specific groups on social media for textbook exchanges.

I: Excellent. That experience will be helpful. Today, we'll be testing UniSwap, an app designed specifically for university communities to securely exchange items. We'll go through a series of tasks, and I'd like you to think aloud as you navigate the app. Please share any thoughts, questions, or feedback you have along the way.

Z: Sounds good! I'm ready to dive in.

Task 1: Sign Up and Verification

I: Let's start with the first task: signing up and verifying your account. Please imagine you're opening UniSwap for the first time. Go ahead and open the app.

Z: Alright, tapping on the UniSwap icon. The app is launching... I see a welcome screen with the UniSwap logo and a tagline that says, "Connecting your campus community."

I: What do you see on the screen?

Z: There's a dropdown menu asking me to select my university. The options include University of Toronto, University of Waterloo, and a few others. I'll select "University of Toronto" since that's my school. Below that, there's a big "GO!" button.

I: Great. Please proceed.

Z: Clicking on "GO!". Now it's redirecting me to a login page. It looks like the official University of Toronto login portal. It says "University of Toronto Login" at the top.

I: Correct. We integrate with the university's authentication system for security. Please log in using your university credentials.

Z: That's reassuring. I'll enter my university email, xxx@mail.utoronto.ca, and my password. Typing that in... Now clicking "Log In".

I: What happens next?

Z: It's prompting me for two-factor authentication. It says, "For added security, please complete two-factor authentication." There's an option to receive a Duo Push, a passcode, or other methods. I'll select "Send me a Duo Push".

I: Perfect.

Z: Just received a notification on my phone. Approving the login request... The app now says "Verification Successful" with a checkmark.

I: Excellent. Please proceed.

Z: The app has now taken me to a welcome screen. It says, "Welcome to UniSwap! We noticed that you're new here. Let's get your profile set up for the best experience!" There's an "OK" button at the bottom.

I: Please tap "OK" to begin setting up your profile.

Z: Tapping "OK". Now I'm on the profile setup page. It asks for my full name, gender, profile picture, university role, phone number, birthday, email address, university affiliation, location, and a short description about myself.

I: Yes, please fill out the required fields. Feel free to share your thoughts as you go.

Z: Alright. Starting with my full name—typing "Interviewee name". Gender options are "Female", "Male", "Non-binary", "Prefer not to say", and "Other". Good to see inclusive options. I'll select "Female".

I: We aimed to be inclusive in our design.

Z: Uploading a profile picture—clicking on the camera icon. It gives me the option to take a photo or choose from the library. I'll select a photo from my gallery. Selected. It's showing a preview of the picture now.

I: Great.

Z: Next, university role—options are "Student", "Staff", "Faculty", "Alumni", and "Other". I'll choose "Student". Phone number—entering my number. Birthday—selecting my birth date from the date picker: March 15, 1999.

I: Perfect.

Z: Email address is already filled with my university email conveniently. University affiliation is set to "University of Toronto" by default. Location—it seems to detect my current location. It says "Toronto, ON". That's correct.

I: Yes, the app uses location services to enhance certain features.

Z: Finally, a short description about myself. I'll write, "Fourth-year Literature and Media student passionate about digital storytelling and community engagement."

I: That's a great bio.

Z: Thank you. I think that's everything. There's a "Next" button at the bottom. Clicking "Next".

I: What happens now?

Z: A screen appears saying, "Profile Successfully Set Up! Thank you for completing your profile setup. You're all set to explore and enjoy UniSwap! Start browsing or listing items now." There's a "Go to Home Page" button.

I: Please tap "Go to Home Page".

Z: Tapping it now.

I: Before we proceed to the next task, could you share your thoughts on the sign-up and verification process?

Z: Overall, it was smooth and intuitive. I appreciate that it uses the university's login system — it makes me feel secure knowing that only verified university members can access the platform. The two-factor authentication adds an extra layer of security, which is important to me.

I: That's great to hear. Did you encounter any difficulties or confusion during the process?

Z: Not really. Everything was straightforward. I did notice that the gender options were inclusive, which I appreciate.

I: Thank you. On a scale of 1 to 10, how would you rate the ease of the sign-up process?

Z: I'd give it a 9 out of 10.

I: Excellent. Is there anything that could be improved to make it a 10?

Z: Perhaps adding tooltips or information icons next to certain fields for additional guidance. For example, explaining why certain information is needed or how it will be used.

I: That's a valuable suggestion. We'll consider adding that. Any other thoughts before we move on?

Z: No, I think that's it for now.


Task 2: Complete a Transaction

I: Great. Let's move on to the next task. Imagine you're looking to acquire an item through UniSwap. From the home page, please navigate to the item listings and find something you'd be interested in.

Z: Alright. On the home page, I see options like "Search Items", "Post an Item", and some featured items. I'll tap on "Search Items".

I: Good.

Z: Now I'm on the Explore page. There are various items listed with images, titles, and point values. I see a search bar at the top and filter options.

I: Please use the filters to find an item that interests you.

Z: Sure. Tapping on the "Filter" icon. I can filter by Category, Location, and Points. For Category, options include Electronics, Books, Furniture, Clothing, and more. I'm interested in finding some textbooks for my Media Studies course. Selecting "Books".

I: Okay.

Z: For Location, there's a slider to set the radius. Since I prefer items close by, I'll set it to "Within 2 km". Points—I see a range from 0 to 100. I'll set the maximum to 30 points.

I: Excellent.

Z: Applying the filters now. The item list has updated. I see titles like "Introduction to Media Studies", "Modern Literature Anthology", and "Digital Communication Trends".

I: Please select an item to view more details.

Z: "Introduction to Media Studies" sounds useful. Tapping on it. Now I'm on the item detail page. There's a larger image of the book, a detailed description that reads, "Lightly used textbook for MDS101. No highlights or notes inside." The seller is "Emma Li". The item is listed for 25 points.

I: What options do you have on this page?

Z: I can "Chat with Seller", "Add to Wishlist", or "Proceed to Exchange". There's also information about the seller's rating—Emma has a 4.8 out of 5 rating from 12 reviews.

I: Great. What would you like to do?

Z: I'd like to ask the seller a few questions first. I'll tap on "Chat with Seller".

I: Go ahead.

Z: The chat interface opens up. It's similar to a messaging app. There's a message history area and a text input field at the bottom.

I: Please send a message to the seller.

Z: Typing, "Hi Emma, is 'Introduction to Media Studies' still available?" and sending. The message appears in the chat.

I: Let's assume Emma replies promptly.

Z: A new message pops up from Emma: "Hi Interviewee! Yes, it's still available."

I: How would you proceed?

Z: I'd like to arrange a meeting time and place. Typing, "Great! Would you be available to meet on campus sometime this week?" Sending.

I: Emma replies, "Sure! I'm free on Wednesday and Friday after 2 PM."

Z: "Wednesday at 3 PM works for me. Does that time suit you?" Sending.

I: Emma says, "Yes, that works! Let's meet at the Robarts Library entrance."

Z: "Perfect. See you then!" Sending.

I: Excellent. Now, please proceed to confirm the transaction.

Z: Looking at the top of the chat, there's an option to "Confirm Exchange". Tapping on that.

I: What do you see?

Z: It's a confirmation page that summarizes the exchange details: Item, Points, Meeting Time, and Location. It asks me to confirm these details.

I: Please review and confirm.

Z: Everything looks correct. I'll tap "Confirm Exchange".

I: What happens next?

Z: A confirmation screen appears: "Exchange Confirmed! You have agreed to exchange 25 points for 'Introduction to Media Studies' with Emma. Please meet at Robarts Library entrance on Wednesday at 3 PM." There's an option to "Add to Calendar" or "View My Exchanges".

I: Would you like to add the meeting to your calendar?

Z: Yes, tapping "Add to Calendar". It opens my phone's calendar app with the event details pre-filled. That's convenient. Saving the event.

I: Great. How do you feel about this process?

Z: I think it was seamless. The integration with the calendar is a nice touch. It makes it easy to keep track of exchanges.

I: Were there any parts that were unclear or could be improved?

Z: In the chat, it might be helpful to have quick response suggestions or templates for common messages, like proposing meeting times.

I: That's an interesting idea. We'll consider adding that feature.

Z: Also, perhaps a map view when selecting the meeting location would be helpful, especially for new students who might not be familiar with all campus spots.

I: Noted. Did you have any confusion regarding the points deduction?

Z: I noticed that my point balance decreased by 25 points after confirming the exchange. It was clear, but maybe a notification explaining the deduction would be helpful.

I: That's a good suggestion.

I: On a scale of 1 to 10, how would you rate this transaction process?

Z: I'd give it an 8.5 out of 10.

I: Thank you. What influenced your rating?

Z: The process was smooth, but I think adding features like suggested messages and map integration would enhance the user experience.

I: Understood.

Task 3: Post an Item for Exchange

I: Now, let's move on to posting an item you'd like to offer for exchange.

Z: Alright.

I: From wherever you are in the app, please navigate to the "Post an Item" section.

Z: Looking at the navigation bar at the bottom, I see a "+" icon labeled "Post". Tapping on that.

I: Great.

Z: I'm now on the item posting page. The fields include Title, Description, Upload Photos, Category, Condition, Available Dates, and Points.

I: Please go through the process of listing an item, thinking aloud as you do.

Z: Sure. For Title, I'll enter "Hardcover Collection of Shakespeare's Plays".

I: Nice item.

Z: In Description, I'll write, "A beautifully bound hardcover collection of all Shakespeare's plays. Slightly used, in excellent condition. Great for literature enthusiasts."

I: Excellent.

Z: Upload Photos—tapping on "Add Photos". It allows me to select multiple images. I'll choose three photos from my gallery: front cover, inside pages, and back cover. Photos uploaded and thumbnails are displayed.

I: Good.

Z: Category—selecting "Books & Media". Condition—options are "New", "Like New", "Good", "Fair", "Poor". I'll select "Like New".

I: Okay.

Z: Available Dates—there's a calendar interface. I'll select dates when I'm available: Thursday and Friday this week, and Monday next week.

I: Understood.

Z: Points—I'm not sure how to price this. Is there a guideline?

I: Generally, users assign points based on the item's value or demand. You can consider how many points you would accept in exchange.

Z: Since it's a comprehensive collection in great condition, I'll set it at 40 points.

I: Sounds reasonable.

Z: There's an option to "Allow Negotiation". I'll toggle that on.

I: Good feature.

Z: At the bottom, there are buttons for "Preview" and "Post Item".

I: Please preview your listing.

Z: Tapping "Preview". It shows how my listing will appear to others. The images look good, the description is formatted nicely, and all the details are correct.

I: Would you like to make any changes?

Z: No, everything looks fine.

I: Please proceed to post the item.

Z: Tapping "Post Item". A confirmation message appears: "Your item has been successfully posted! You can manage your listings in 'My Listings'."

I: Excellent. How was the experience of posting an item?

Z: It was user-friendly. The interface is clean, and the steps are logical. Uploading multiple photos was easy.

I: Any areas for improvement?

Z: Maybe adding a suggested points range based on similar items would help users price their items appropriately.

I: That's a great suggestion.

Additional Features

I: Now, I'd like you to explore the "Profile" section and any other features that catch your interest.

Z: Sure. Navigating to "Profile" via the navigation bar. I see my profile picture, name, university affiliation, and bio. Below that, there are options like "My Listings", "My Exchanges", "Wishlist", "Feedback", and "Settings".

I: Please explore "My Listings".

Z: Tapping on "My Listings". I see the Shakespeare collection I just posted. There's an option to edit or delete the listing.

I: Good.

Z: Going back and selecting "My Exchanges". It shows the exchange I have with Emma for the textbook. Details are displayed, and there's a status indicator showing "Scheduled".

I: Excellent.

Z: In "Wishlist", I see that I can add items I'm interested in. Since I didn't add any earlier, it's empty now.

I: Yes.

Z: Going to "Feedback". It shows ratings and reviews from other users. Since I'm new, I don't have any yet.

I: Correct.

Z: In "Settings", I can adjust notifications, privacy settings, and account information.

I: Feel free to adjust any settings as you see fit.

Z: I'll check the notification settings. I see options for push notifications for messages, exchange updates, and announcements. I'll make sure they're all enabled.

I: Great.

Feedback and Questions

I: Now that you've explored the app, I'd like to ask a few more questions.

Z: Sure.

I: Did you encounter any mistakes or confusion during any of the tasks?

Z: The only minor confusion was about setting the points for my item. I wasn't sure what's considered high or low in the context of the app.

I: Understood. You've suggested adding guidelines or suggested ranges. We'll work on that.

Z: Yes.

I: Were you able to complete all the tasks without assistance?

Z: Yes, I was able to navigate through everything on my own.

I: Did you find any part of the app difficult to use?

Z: Not particularly. The interface is intuitive. The design is clean and modern, which makes it easy to find what I'm looking for.

I: Do you have any other improvement suggestions for us?

Z: Perhaps incorporating a messaging notification badge or indicator on the navigation bar when there's a new message. Also, integrating a map feature when arranging meet-up locations would be helpful.

I: Those are valuable suggestions.

Z: Another idea is to have a community forum or bulletin board within the app where users can post about items they're looking for or organize group exchanges.

I: Interesting concept. We'll consider how that could fit into our platform.

I: How would you rate your overall experience with UniSwap out of 10?

Z: I'd give it a 9 out of 10.

I: That's wonderful. What factors influenced your rating?

Z: The app is well-designed, user-friendly, and caters to the needs of the university community. The only reason it's not a 10 is because there's always room for small improvements, like the ones we've discussed.

I: Thank you for your honesty.

I: Do you have any questions about the app or its features?

Z: Yes, I'm curious about how disputes are handled. For instance, if someone doesn't show up for an exchange or if the item isn't as described.

I: Good question. We have a support system in place. Users can report issues directly through the app. Our team reviews the reports and mediates between users. Repeated offenses by a user can lead to suspension or banning from the platform.

Z: That's reassuring.

Z: Also, how are points refunded if an exchange doesn't happen?

I: If an exchange is canceled by either party before the scheduled meeting, the points are automatically refunded to the respective accounts.

Z: Understood.

I: Any other questions?

Z: Is there a way to earn points besides exchanging items? For example, through referrals or participating in app activities?

I: Currently, points are primarily earned through offering items. However, we are exploring additional ways to reward users, such as referral programs and participating in community events within the app.

Z: That would be a great incentive for users to engage more.

I: Agreed.

Final Thoughts

I: Before we conclude, is there anything else you'd like to share about your experience with UniSwap?

Z: Overall, I think UniSwap has a lot of potential. It's tailored to the university community, which makes it feel safer and more trustworthy than general marketplaces. The integration with university login and the focus on campus locations are big pluses.

I: Thank you. We appreciate your positive feedback.

Z: I'm looking forward to seeing how the app evolves. I'd definitely use it to exchange items with fellow students.

I: That's great to hear. We'll keep you updated on our progress and any new features we implement.

Z: Please do.

I: Thank you so much for your time and valuable feedback, Interviewee. Your insights will help us improve UniSwap significantly.

Z: You're welcome. It was a pleasure testing the app.

I: If you're interested, we'd like to invite you to participate in future testing sessions as we continue to develop the platform.

Z: I'd be happy to help.

I: Fantastic. We'll be in touch. Have a great day!

Z: You too!