Table of Contents

Problem	3
Target Audience	<i>3</i>
User Journey	3
Finding housemate /roommate	4
Roommate/Housemate Conflict	
Safety	5
Roommate applications/websites	5
Pain points	6
Deriving pain points	6
List of ideas	7
Addressing pain points	
Points to enhance the process after finding a room/housemate	8
Wireframe flow	<i>9</i>
Onboarding flow	9
Onboarding part 1 (Choose role & Basic info)	
Onboarding part 2 (Answer Interest & Lifestyle)	
Onboarding part 3 (Answer Preference & Verify)	10
Main Room/House Seeker User flow	
Room/House Seeker flow part 1 (View listing)	
Room/Home seeker flow part 2 (Fill form)	
Room/Home seeker flow part 3(Chat)	
Main Room/House Owner User flow	
Room /House Owner part 1 (Post listing)	
Room/House owner part 3 (Chat)	
Room/Home owner flow part 4 (Other Screens)	
High Fidelity Porotype (before critique)	17
Link to room/home seeker prototype	17
Link to room/home owner prototype	17
https://www.figma.com/proto/4wEs5qbfed6Q95AC3LMTvQ/Co-living-Old?node-id=81%3A126&scaling=scale-down	17
Key differences in onboarding	17
Key differences in room/house seeker user flow	18
Key differences in room/house owner user flow	18
Peer Evaluation	19
Changes made to address critique	21

Link to room/home seeker prototype	
Link to room/home owner prototype	21
Onboarding	21
Interest/Lifestyle	21
Profile Verification	21
Buttons	22
Order of buttons	
Chat System and Form	22
Improve intuitiveness and reduce complexity	
Reflection	24
Ideation	25
Radio buttons vs Dropdown	
Critique for Design Task 6	25

Problem

There is an increase in marriage age for both men and women, as a result city dweller spend most of their twenties living with room/house mates. Finding a good roommate, however is becoming a difficult task as more people swarm into cities.

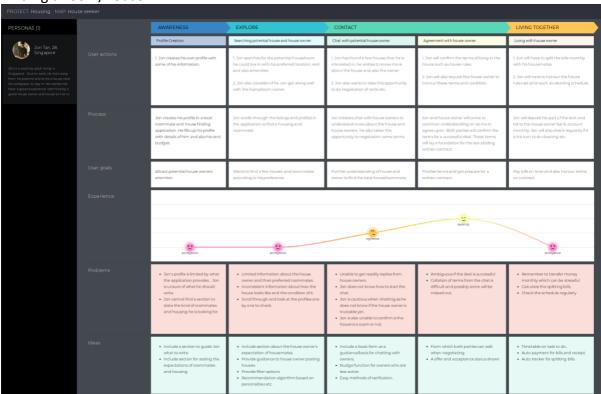
Target Audience

The target audience is millennials in Singapore. Some characteristics of people in this group includes:

- 1. More familiar and embracing towards technology such as Al.
- 2. Tech savvy.

User Journey

Finding a room/house

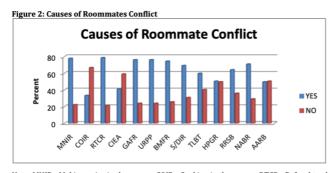


Finding housemate /roommate

Roommate/Housemate Conflict

A study conducted by University of Cape Coast in 2018 showed that the top few reasons for having roommate conflict are:

- 1. Refusal to clean room
- 2. Noise making in room
- 3. Gossiping about roommate
- 4. Using roommate's property without permission



Note: MNIR= Making noise in the room, COIR= Cooking in the room, RTCR= Refusal to clean room, CIEA= Note: MNIK= Making noise in the room, CUIR= Cooking in the room, RTCR= Refusal to clean room, CLIR= Competition in the use of electrical appliances, GAFR= gossiping about fellow roommate, URPP=Using roommate property without permission, BMFR= Bringing many friends to the room, S/DIR = Smoking/drinking in the room, TLBT= Turning on light during bed time, HPGR= Having prayer group activities in the room, RRSB= Refusal of some roommates to settle bills, NABR= Narrowing by some roommates, AARB= Arguments about religious beliefs.

Figure 1 Graph on roommate conflicts

Beyond these reasons, money could also be a main source of conflict especially if one party is forgetful or misses payment dateline for the rent which could result in stressful situation for both parties.

Conclusion from roommate/housemate conflicts

From this we can see that in order to find a good roommate or housemates, there are key areas to consider for both parties:

- 1. Hygiene
- 2. Noise acceptance
- 3. Payment

Additionally, there is a need to reduce gossip and also to lay down proper house rules on usage of products, cleaning etc before living together. Having talked about these issues will help potential roommates to select and filter people they want to and do not want to live with.

Safety

Living with a stranger can be daunting, hence safety should be a key consideration when it comes to finding a roommate or finding a place.

Furthermore, it is also crucial to check for scams as monetary transaction is involved.

Roommate applications/websites

I have visited a website, roomies.sg and an application, Roomi to check out how they provide a roommate finding or housing searching services for people living in Singapore. Common in both are:

1. In order to find a roommate, you will need to post a profile of yourself with some self-description and image.

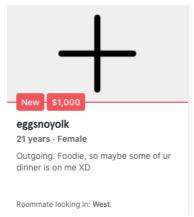


Figure 2 Image of my own post on roomies.sg

- 2. For people with houses and are looking for a roommate, their posts will have information about the houses and sometimes information about the other people you will be living with.
- 3. All further negotiation will have to be done by chat.

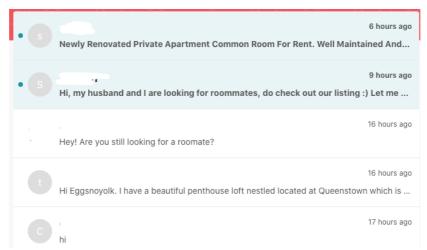


Figure 3 Image of chats received from roomies.sg. Identity of other users have been concealed.

Pain points

From the above sections, here are the pain points I have found that contributes to difficulty in finding a good room/house mate from both the seeker and owner's point of view:

- 1. **Inconsistent** and **little** information provided about potential living partner and the living area in the listings.
- 2. Both parties usually have to go through **extensive chatting** to know if this person is a good roommate or to get more information about the house they want.
- 3. Chat has no structure so it is not guaranteed that a good result with come out of the chat.
- 4. Scroll through many profiles to find suitable mates or house.
- 5. A low percentage of users actually opt for background or ID check hence there is no guarantee that the other party is legitimate.

Deriving pain points

Туре	What they require	What is provided	Pain point
Owner	Important information about room/house seekers such as: Their interest. Their lifestyle, hygiene and noise acceptance etc. Preference on people they want to live with and housing.	Self-description of room /house seekers which usually includes: Personal description. Little to no information about who they wish to live with. Little to no information about lifestyle. Housing expectations: Location Amount they are willing to pay for per month	 Inconsistent and little information provided about potential home/room seekers. Usually have to go through extensive chatting to know if the seeker is suitable and to get more information about the house they want. Scroll through many profiles to find suitable mates.

Seekers	House information: Location Furnishing Images of place House rules Price Important information about owner such as: Their interest Their lifestyle,	House information: • Location • Furnishing • Some images of the house Important information about owner: • Little to no information about the owner.	Similar to above Inconsistent information about the house.
	hygiene and noise acceptance etc. • Preference on people they want to live with.		
Both	 Something to facilitate communication for better understanding of expectations and agreement. Safety 	 Chat options provided by both platforms. Adding of credit cards as payment. ID and background verification usually requires money. 	 Chat is OTOT, with no structure so it is not guaranteed that a good result with come out of the chat. Low percentage of users actually opt for background or ID check. Social media verification seems to only be available when creating account.

List of ideas

Addressing pain points

Pain point	Idea	Evaluation of idea
Inconsistent and little information provided about potential room/housemates.	 Both: Go through a comprehensive and structured onboarding process to indicate preference and interest. 	 Should keeping the onboarding process short, filling only crucial details. Asking for user's preference will help to avoid conflicts.
Inconsistent and little information provided about the room and house.	 Owners: Fill in a guided listing for the house. Seekers: N.A 	 This will ensure that house owners will show all necessary areas of the house.

Both parties Owners: N.A Form will allow owners to usually have to go know what needs to be Seekers: A pre-chat through extensive negotiated even before form to fill prior to chatting to know if chatting. starting to chat, setting the this person is a tone for the chat. suitable Will want to keep the form room/housemate clean and simple, since it is or to get more an added step, want to information about make sure that users benefit the house they without too much addon want. burden. Chat has no Both: Details on pre-Will want to keep the form structure so it is chat form to serve as clean and simple, since it is not guaranteed common ground for an added step, want to that a good result make sure that users benefit chatting. with come out of without too much addon Both: Nudge function to the chat. burden. bump less active house mates or house owners. • Offer and acceptance system Both: Offer/Acceptance gives clarity. status shown if chat results in agreement. Scroll through Both: Recommendation Prioritises those that are many profiles to algorithm based on have higher matching find suitable mates details given during percentage, hence reduce and house. scrolling for users. onboarding. Both: Apply filters. A low percentage Both: Easier method of Will help to give users some of users actually verification without assurance. opt for hassle of ID or Easier method hence more background or ID background checking. users will get verified. check.

Points to enhance the process after finding a room/housemate

Enhance	Idea	Evaluation of idea
Ensure transparency and timeliness of payment.	 Seeker: Set up an auto payment feature that deducts amount at the same time each month. Sends the home owner the receipt. Owner: Auto pushes a bill to the roommate monthly. Tracker for splitting of bills between room/housemates. 	 Reduces financial conflict when living together. Takes away the monthly due date stress. Tracker for split bills allows both parties to know how the split bills are calculated.

Ensure that everyone honour the house rules and duties such as cleaning and laundry.	Both: Timetable about the tasks both parties have to do.	 Reduces conflict coming from cleaning of room or houses. Delegation of responsibility.
Facilitate communication to reduce gossip	Both: Alert function to get the other parties attention to talk about misunderstandings etc.	 Quick method to get other party's attention. Users do not need to spend time thinking how to start a conversation which can be awkward especially when they are in argument.

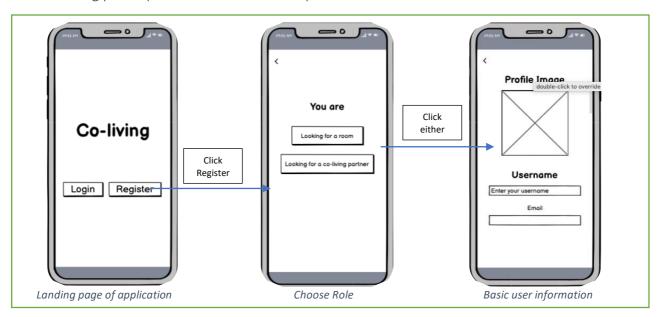
Wireframe flow

Onboarding flow

The registration process is similar for both room/house seeker and owner.

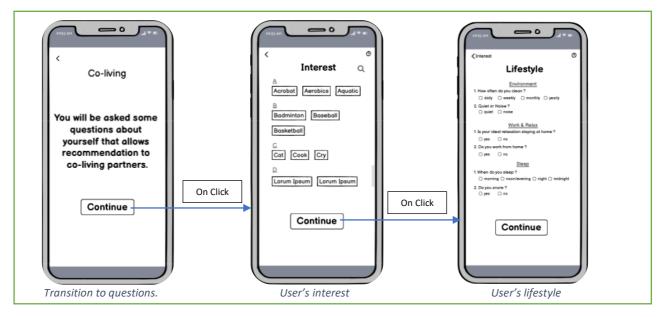
- 1. Click Register on the landing page of application.
- 2. Choose role, either finding room/house or finding roommates/housemates
- 3. Complete the onboarding process compromising of the following:
 - a. Basic user information
 - b. Questions about the user's Interest and Lifestyle
 - c. Question about their Preference
 - d. Getting verified

Onboarding part 1 (Choose role & Basic info)



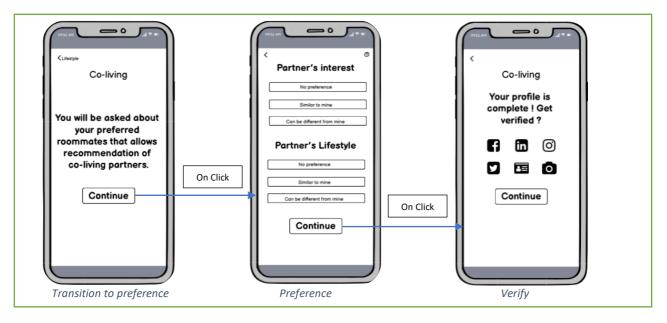
It is worthy to note that the basic user information page differs slightly for seekers and owners. However, the user flow remains the same.

Onboarding part 2 (Answer Interest & Lifestyle)



After filling in basic information, user will answer some questions. Before asking user for their interests and lifestyle, the app will prompt a transition explaining the rationale behind asking these questions.

Onboarding part 3 (Answer Preference & Verify)



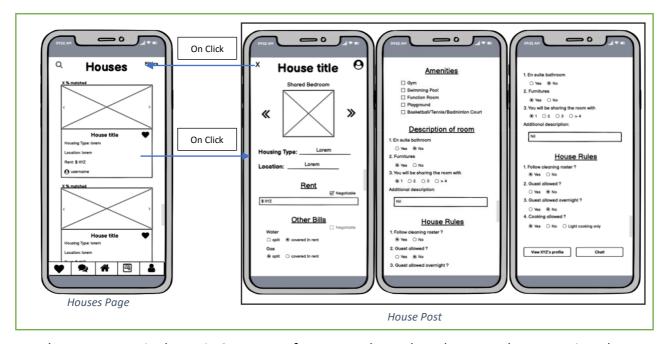
Similar to above. Before asking for user's preference, the app will prompt a transition explaining the rationale behind asking these questions. It is worthy to note that for the room/home seeker additional questions about their preferred house will be asked as well. However, the user flow remains the same.

Main Room/House Seeker User flow

This is the flow of events once the user has successfully completed the onboarding process.

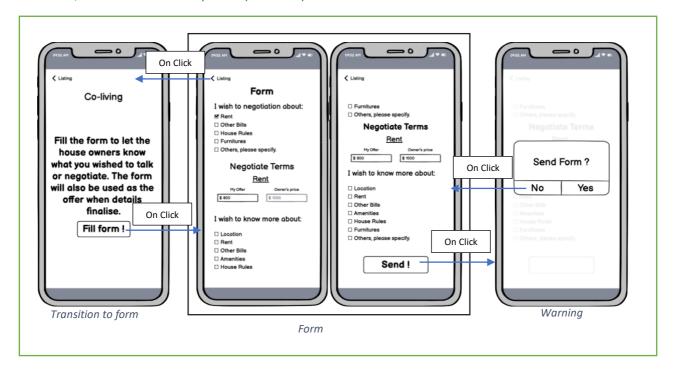
- 1. Enter the Houses page
- 2. Click on a post in the Houses page
- 3. View the information about the house
 - a. Click view owner's profile
 - b. Click chat, go to step 4
 - c. Else if not chatting or viewing profile, go back to step 1
- 4. Fill a form before chatting
- 5. Send form to owner
- 6. Chat with owner and chat status is offer
- 7. Send offer and chat status changes to offered
- 8. Chat status change to accepted or decline as owner accepts or declines offer
 - a. If offer declined, it will return to step 6
- 9. Click back to view all chats.
- 10. View bills, roster that are shared with owner

Room/House Seeker flow part 1 (View listing)



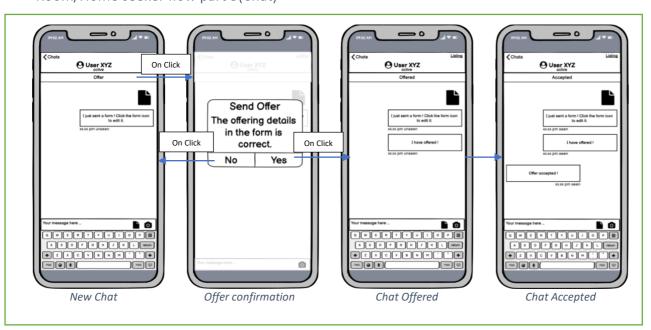
The House Post is shown in 3 separate frames. At the end, seekers can choose to view the profile of the owner or chat.

Room/Home seeker flow part 2 (Fill form)



Before chatting, users will be prompt to fill a form. After the form is completed and ready to be sent, a confirmation warning will appear to alert the seeker. If seeker clicks yes, the form will be sent to the owner and they will start chatting.

Room/Home seeker flow part 3(Chat)



When offering, an offer confirmation will appear to remind users to check that form details are correct. Upon offering, seeker will need to wait for owner's respond to accept or decline their offer.

Room/Home seeker flow part 4 (Other pages)



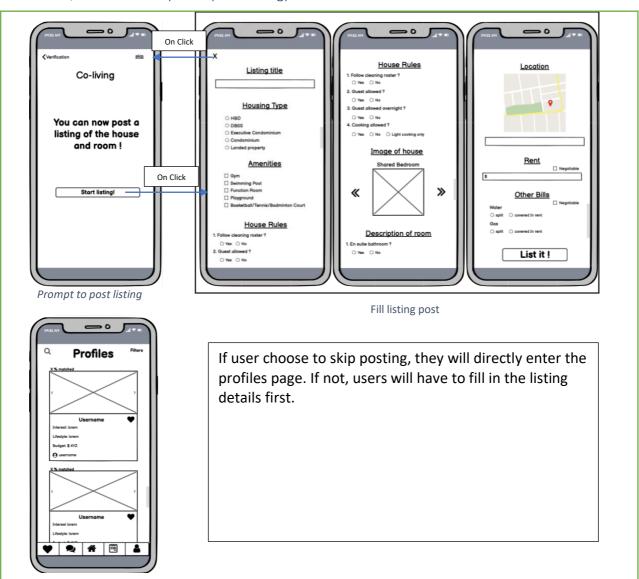
Clicking the chat button at the top of chat will bring owner back to the main chat page. While not explicitly shown, these parts are accessible to one another via the bottom navigation bar. It is worthy to note that bills and roster are shared by both the seeker and owner.

Main Room/House Owner User flow

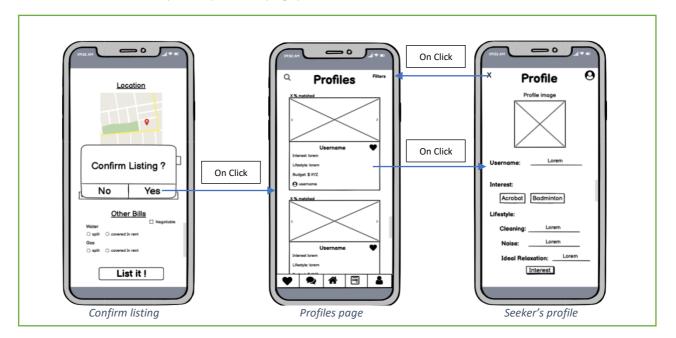
This is the flow of events once the user has successfully complete the onboarding process.

- 1. Prompt to post their first listing
 - a. If skip listing, go to step 2.
 - b. Else, fill in listing details
- 2. Enters the profiles page
- 3. Click to view a profile
 - a. Express interest to profile if it is a suitable roommate
 - b. Else, go back to step 2
- 4. Wait for seeker to send form before chatting can occur
- 5. Chat with seeker
- 6. Wait for seeker to offer
- 7. Accept or decline seeker's offer which changes chat status to accepted or declined
 - a. If declined, go back to step 7
- 8. Go back to view all chats
- 9. View bills, roster that are shared with owner

Room / House Owner part 1 (Post listing)

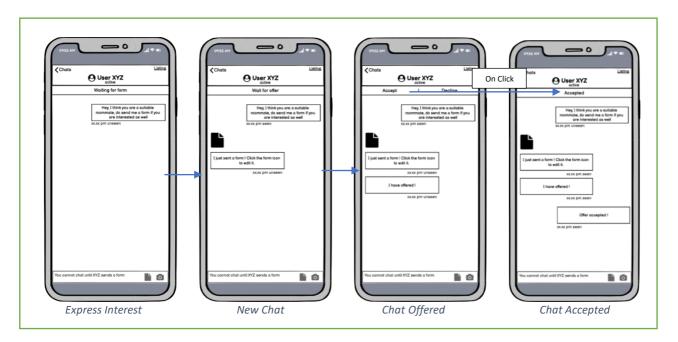


Room/House owner part 2 (Profiles page)



Before listing, the application will prompt a confirmation warning. After owner lists the post, the application will bring the owner into the main page of the app, the profile page. Owner will express interest if they want to chat with seekers.

Room/House owner part 3 (Chat)



After owner expressed interest at seeker's profile, a message will be sent to the seeker. However, owner cannot chat with the seeker yet. Chatting will be allowed only after seeker has sent the form.

Room/Home owner flow part 4 (Other Screens)



Clicking the chat button at the top of chat will bring owner back to the main chat page. While not explicitly shown, these parts are accessible to one another via the bottom navigation bar. It is worthy to note that bills and roster are shared by both the seeker and owner.

High Fidelity Porotype (before critique)

Link to room/home seeker prototype https://www.figma.com/proto/4wEs5qbfed6Q95AC3LMTvQ/Co-living-Old?node-id=81%3A178&scaling=scale-down

Link to room/home owner prototype

https://www.figma.com/proto/4wEs5qbfed6Q95AC3LMTvQ/Co-living-Old?node-id=81%3A126&scaling=scale-down

Key differences in onboarding





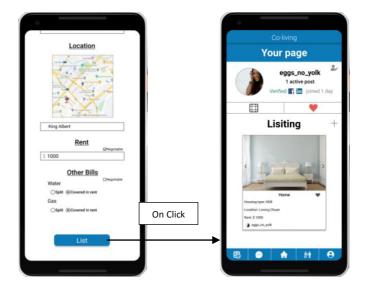
I have included a top bar which indicates to user which stage of the registration process they are at. The current stage they are at is in white and other stages are in dark blue to make it less eye catching. Stages which have been completed will be in green. This will give users a better sense of where they are in the registration process and makes navigation easier.

Key differences in room/house seeker user flow



Instead of being directed to the houses pages after verification as seen in room/houseseeker user flow part 1, a welcome page will appear to hint to the user that their onboarding process has completed.

Key differences in room/house owner user flow

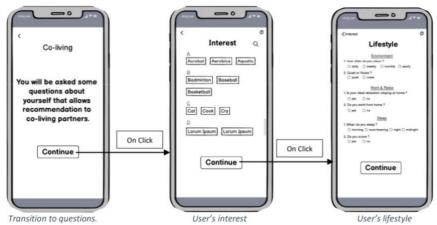


Instead of being directed to the profiles page shown in room/house owner part 3 after posting the listing , owners will be directed to their page which shows their information and listings. Hence the owners will know that there listings have been successfully posted.

Peer Evaluation

During the registration onboarding process, I actually missed the part on "you will be asked some questions about **yourself**..." in the first screen. As such, when I was looking at the second and third screens, I was rather confused as to whose interest/lifestyle information I am filling out. It will be good to label the title of the screens as "Your Interests/Lifestyle" to clearly indicate to the user that they are to fill out their interests/lifestyle details on the second and third screens.

I also noticed that you have included a back button in the screens for easy reversal of user actions in your wireframe, and that has already replaced with Back & Continue buttons in your high-fidelity screens. Having back/continue buttons helps to ease undoing/redoing actions, so that is really good!



On seeing the profile verification screen (left image below), I initially thought that clicking the Continue button will lead me to another screen that lets me verify my account. But after clicking around, I noticed that the icons were meant to be clickable, which was not immediately apparent to me as a user. Perhaps one way to improve this is to either inform the user to "tap on the icons below to verify your profile", or to put the icons within buttons so that users know that they need to tap on it. Also, I am unsure if I have a need to verify my profile before continuing. I think it would be better to inform the user why they should verify their profile.

Besides that, I found the Yes/No button placement for "Confirm Image" and "Send form" dialogs (middle/right images below) to be confusing since I have been seeing Back/Continue or Delete/Confirm, which suggests that the confirmation or 'success' button is always being placed on the right. It would be better to swap the placement of the Yes/No button for consistency.



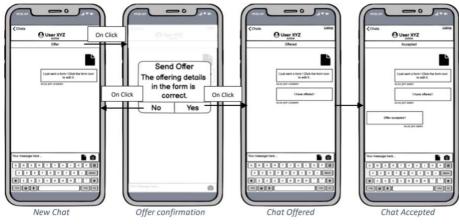
You may also want to reconsider the design for the chat system (wireframe screens below). I find the current chat system to be overly complex and unintuitive. Currently, for a home seeker to chat with the home owner, he/she first needs to fill out and send the form. Similarly, a home owner needs to first indicate interest to chat with the other party before any chat communication can take place.

You mentioned that "chat has no structure so it is not guaranteed that a good result with come out of the chat" as a pain point, and I suppose the chat system is being designed to provide structured communication. The chat form appears to function like a request form, which is strange because it would be much more natural and faster for a person to just ask questions directly to the house owner e.g. "can I know more about the location and nearby amenities?".

You can also consider allowing the house owner to fill out the form the house seeker sent and sending the completed form to the house seeker to the chat form more useful (i.e. capturing the information the house seeker is requesting for and presenting it to the house seeker). It would be great if the interaction for chat can be further simplified so that it becomes more intuitive to use.

Another problem I think you may want to consider addressing is that when the form is being edited, the house owner also needs to scroll back to the first message to be able to click on the form to view the details (unless they can also click on the "I have just edited the form" message to view it, but users will be unaware that they can do so since there are no instructions informing them that tapping on the message displays the form).

Home Seeker -> Home Owner



Home Owner -> Home Seeker



Changes made to address critique

Link to room/home seeker prototype https://www.figma.com/proto/Agg423C5YoySRPXAQaD55O/Co-living?nodeid=81%3A178&scaling=scale-down

Link to room/home owner prototype https://www.figma.com/proto/Agg423C5YoySRPXAQaD55O/Co-living?nodeid=81%3A126&scaling=scale-down

Onboarding

With reference to the critique of the Interest/Lifestyle and also Profile Verification, the following changes have been made.

Interest/Lifestyle

To reduce confusion and reliance of the transition to guide users, I changed the title of the pages from "Interest" to "Your Interest" and "Lifestyle" to "Your Lifestyle". While not mentioned in the critique, I changed the title of Preference page to "Your Preference" to maintain uniformity throughout. The images below will show the changes in Interest page.



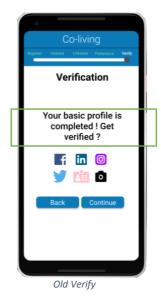


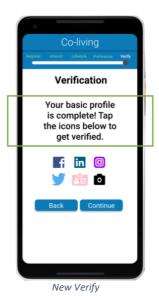
Old Interest screen

New Interest screen

Profile Verification

To make it apparent to users that the icons are clickable, I have added the statement "Tap the icons below to get verified." The images below will show the change.





Buttons

With reference to critique on the <u>warning buttons</u>, the following change has been made.

Order of buttons

I have swapped the placement of buttons to be uniform with other parts of the application.





Old Placement

Chat System and Form

With reference to critique on <u>the chat system</u> and the <u>form</u>, the following changes have been made to improve intuitiveness, reduce complexity and to improve the access to form.

Improve intuitiveness and reduce complexity

Form

The message sent when seeker sends the form is made more intuitive, for example if seeker ticks "rent" under "I want to negotiate" section, "I want to negotiate rent" will be part of the message. Furthermore, a clickable form icon and the word "Click" has been added to the messages.





Old Message New Message

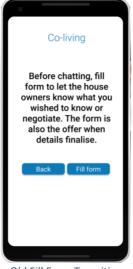
The form has added capabilities to record the owner's answer to seeker's query and removed the "offer" form role. This reduces complexity as the form now serves only 1 purpose, which is to record query and answer.





Seekers POV of chat system

The chat system now allows seekers to skip filling the form if they do not find it intuitive, giving seekers control on what they prefer.





Old Fill Form Transition

New Fill Form Transition

Owners POV of chat system

Owners have to the indicate interest as chatting is prevented until seekers initiate a chat. However, it is now done via in-app notification instead of chat message to make this clearer. Owners can have many listings, thus allowing them to initiate chat can complicate the chat system. In many marketplace applications or websites, it is rare that sellers (akin to owners) can start a chat with buyers as it is unintuitive and can be annoying to buyers. **Thus, the big picture of how the chat system works remain the same.**



yo, male

Interest

Aerobics Cook

Lifestyle

I clean: Daily

I prefer: Noise

Ide

Express Interest

We

Send a notification indicating to house
reads they are the prefer to the parent

Fall mousing type: HoB

En suite bathrooms: No

Furnitures: Yes

Location: Central

Budget: S 800

Old Express Interest

New Express Interest

Reflection

The following shows how lessons learnt in design task 1 is applied to design task 2.

Ideation

In both design tasks, I have looked at the current market solutions to give me some inspirations. However, in design task 1, I only studied the functionalities the applications have provided. Hence, wireframing and setting up the user flow took a long time as I did not know what would be a layout and flow users are comfortable with. Thus, many trial and error took placed. In design task 2, I went to use the application to check out the user flow from registration to getting a house or house mate and also looked at how the applications layout their content to get inspiration and see what users are familiar with.

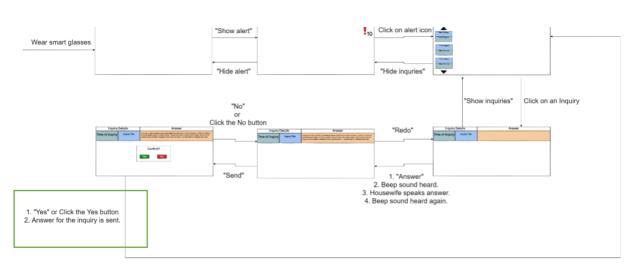
Radio buttons vs Dropdown

I have taken note to use radio button instead of dropdown especially if there is no default choice and the number of choices are limited. If there are a lot of choices, then I will use a dropdown to reduce clutter.

Critique for Design Task 6

I found the wireframe workflow to be straightforward, however I am not sure if the design of the interface screen shown in the flow is spanning across both or just one of the lens.

It seemed that the smart glasses is heavily dependent on speech commands instead of using the ring mouse. I see that the speech commands are used to address User Needs #2. However, this of concern to me because as mentioned in the question, speech recognition has an error rate of around 5%. This mean that user's speech command can be misinterpreted or not understood by the smart glasses occasionally. Hence, you might want to consider adding a recovery mechanism either via speech and/or the ring mouse during the Figma prototyping stage.



I would like to bring attention to the boxed up area as well. It seemed that after user sends a message, the smart glasses automatically returns to the Inquiry screen with no indication of whether the message has being sent successfully. In a regular messaging application, there will always be a clear indication of whether messages have been sent successfully which assures users. Hence, as a user of the smart glasses, I could feel uneasy without such an indication especially since it is concerning my business.

I see that you have changed the icon for unread inquiries from the chat icon in the sketches to an alert icon in the wireframe, an alert icon may not be applicable since it is not used to represent anything urgent or of particular importance. I would think that a chat icon is more relatable and applicable. The term Answer has been used to indicate user's reply. While it does not confuse me, terms such as reply or your message might be better as they have a clearer meaning to it.

You have chosen to use the Inquiry screen with inquires displayed on the far left instead placing it at the top and that is really good, displaying the inquiries at the side is similar to how messaging applications display messages which is a layout more familiar to users.

Lastly, on the Answer screen, it is unnatural to me that the Inquiry and the Answer sections are displayed side by side. This might be an attempt to address User Needs #3 where the empty space at the bottom of the glasses allow users to look their surroundings. You might want to consider how the Inquiry screen can look like spanning across both lens.

Overall, this is an interesting product and I think that it is great that the workflow is simple and straightforward with some details that can be improved upon.