Introduction

I decided to work on Problem 5: Finding an ideal room/housemate. The problem is briefly summarized as so: with the increasing urbanization of the world, city dwellers tend to spend a lot of their twenties living with room/house mates. Finding and keeping a good room (house) mate, however, gets harder as more people swarm into cities.

Hence, how do we design a mobile experience that appeals to millennials and makes it safe to find the ideal room/house mate in Singapore? Furthermore, how do we improve the room/house mate experience?

Target User Group

Millennials (age 24-39) who are looking to room/house with compatible room/housemates in Singapore that they can bond with.

User Needs

1. Find suitable room/house mates who are sufficiently **compatible** with themselves.

2. With existing room/house mates, **communicate** better with them.

Personas

I created two personas (one tenant and one renter) to guide me throughout the design process.

Daniel

A 26-year-old Singaporean man currently living with two other people in a rented HDB in the Singapore Central area. He graduated in a Bachelor of Science in Computer Science from Imperial College London and is now working to build his own start-up in Singapore. He is a seasoned traveler who loves couchsurfing and thus, is well acquainted with assessing people to live with. He had a very bad experience living with his roommates in university who were both inconsiderate and unsociable and thus, he is very cautious about the people he rooms with. He hopes to find a 4th roommate with bonds well with his current roommates' living habits and lifestyles.

Kimberly

A 24-year old female from China who came to Singapore to study Data Science at NUS. Given that she is on the Tuition Grant Scheme, she is looking to find a place to stay at upon graduation. She does not have many close friends from university, so she is hoping to find some like-minded people she can not only live amicably with but also become friends with. She is neat and generally keeps to herself.

User Journey Map

PERSONAS (1)

Daniel

A 26-year-old Singaporean man currently living with two other people in a rented HDB in the Singapore Central area. He graduated in a Bachelor of Science in Computer Science from Imperial College London and is now working to build his own start-up in Singapore. He is a seasoned traveler who loves couchsurfing and thus, is well acquainted with assessing people to live with. He had a very bad experience living with his roommates in university who were both inconsiderate and unsociable and thus, he is very cautious about the people he rooms with. He hopes to find a 4th roommate with bonds well with his current roommates' living habits and lifestyles.

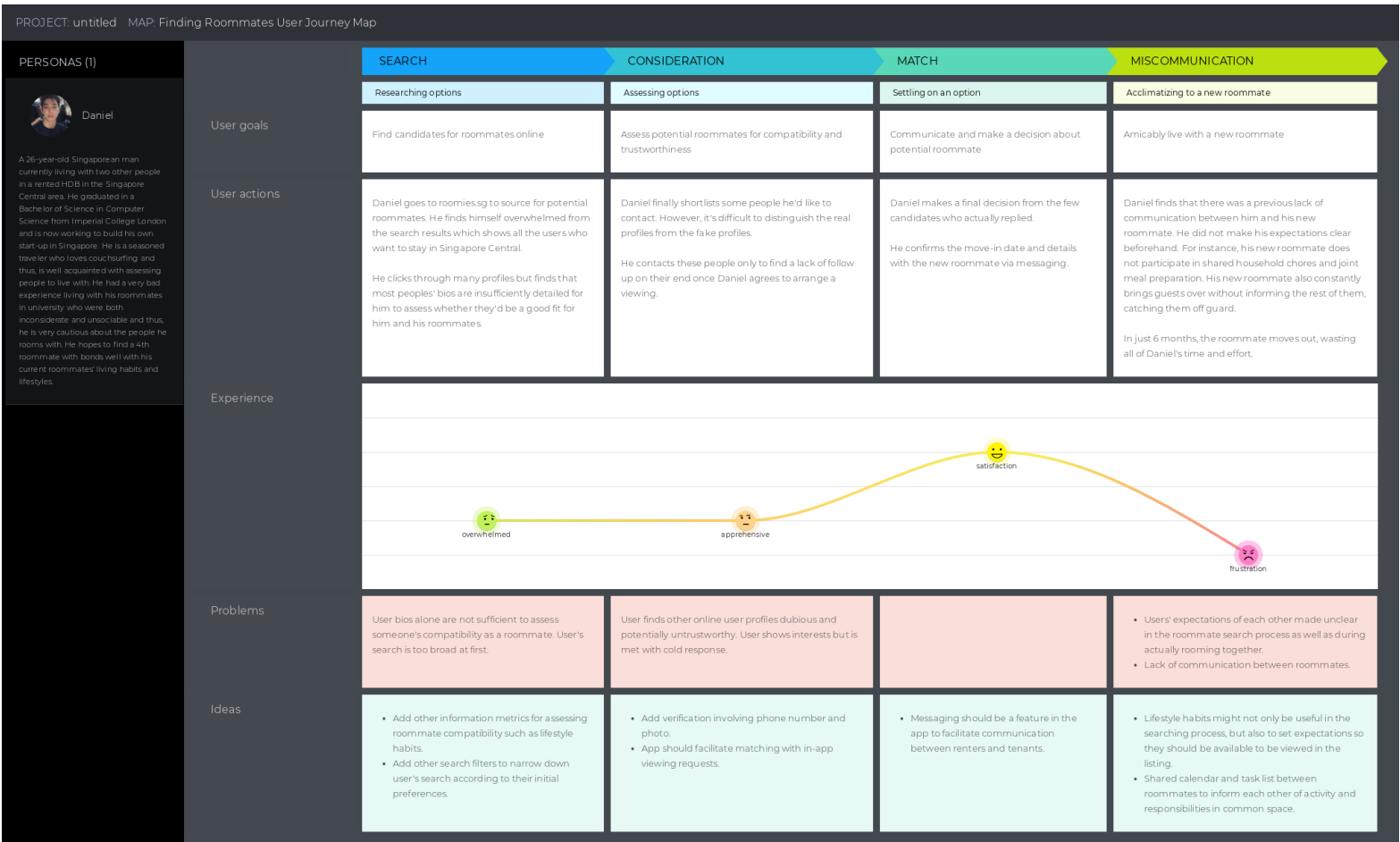|	SEARCH	CONSIDERATION	MATCH	MISCOMMUNICATION
	Researching options	Assessing options	Settling on an option	Acclimatizing to a new roommate
User goals	Find candidates for roommates online	Assess potential roommates for compatibility and trustworthiness	Communicate and make a decision about potential roommate	Amicably live with a new roommate
User actions	Daniel goes to roomies.sg to source for potential roommates. He finds himself overwhelmed from the search results which shows all the users who want to stay in Singapore Central. He clicks through many profiles but finds that most peoples' bios are insufficiently detailed for him to assess whether they'd be a good fit for him and his roommates.	Daniel finally shortlists some people he'd like to contact. However, it's difficult to distinguish the real profiles from the fake profiles. He contacts these people only to find a lack of follow up on their end once Daniel agrees to arrange a viewing.	Daniel makes a final decision from the few candidates who actually replied. He confirms the move-in date and details with the new roommate via messaging.	Daniel finds that there was a previous lack of communication between him and his new roommate. He did not make his expectations clear beforehand. For instance, his new roommate does not participate in shared household chores and joint meal preparation. His new roommate also constantly brings guests over without informing the rest of them, catching them off guard. In just 6 months, the roommate moves out, wasting all of Daniel's time and effort.
Experience	overwhelmed	apprehensive	satisfaction	frustration
Problems	User bios alone are not sufficient to assess someone's compatibility as a roommate. User's search is too broad at first.	User finds other online user profiles dubious and potentially untrustworthy. User shows interests but is met with cold response.		• Users' expectations of each other made unclear in the roommate search process as well as during actually rooming together. • Lack of communication between roommates.
Ideas	• Add other information metrics for assessing roommate compatibility such as lifestyle habits. • Add other search filters to narrow down user's search according to their initial preferences.	• Add verification involving phone number and photo. • App should facilitate matching with in-app viewing requests.	• Messaging should be a feature in the app to facilitate communication between renters and tenants.	• Lifestyle habits might not only be useful in the searching process, but also to set expectations so they should be available to be viewed in the listing. • Shared calendar and task list between roommates to inform each other of activity and responsibilities in common space.

Figure 1 (Appendix A): Daniel's User Journey Map for finding a new roommate and communicating with them.

I thought that Kimberly's process for finding a room with roommates she could compatibly live with might have looked very similar to Daniel's process for finding a roommate. Hence, I did not make a user journey map for her.

1st Iteration List of Ideas

From my user journey map and personas, I generated and accumulated a list of ideas.

Problem	Idea
Searching for a new roommate is very broad	• Add search filters based on living habits and interests to narrow down search process
Searching for a roommate is a long arduous process because you must tap on every profile to find out compatibility	• Present user profiles in easily digestible cards • Summarize compatibility information i.e. number of interests in common as well as living habits match percentage so user can easily and efficiently scan through user profiles
Sending many people messages in the indicating interest stage of searching is tiring	• Create "viewing requests" which easily indicate interests as well as facilitate setting up a time to meet • Have ready-made and customizable message templates so that users can easily find out more information without typing out the same question 10 times
It is difficult to discern the trustworthy good roommates from the not so trustworthy ones	• Add verification of user profiles to provide sense of security to the user • Add references feature which allow users to recommend each other (similar to Carousell) so that users can easily read recommendations from real users to better facilitate decision-making process

Sketches

I then did a series of sketches to visualize and concretize my ideas.
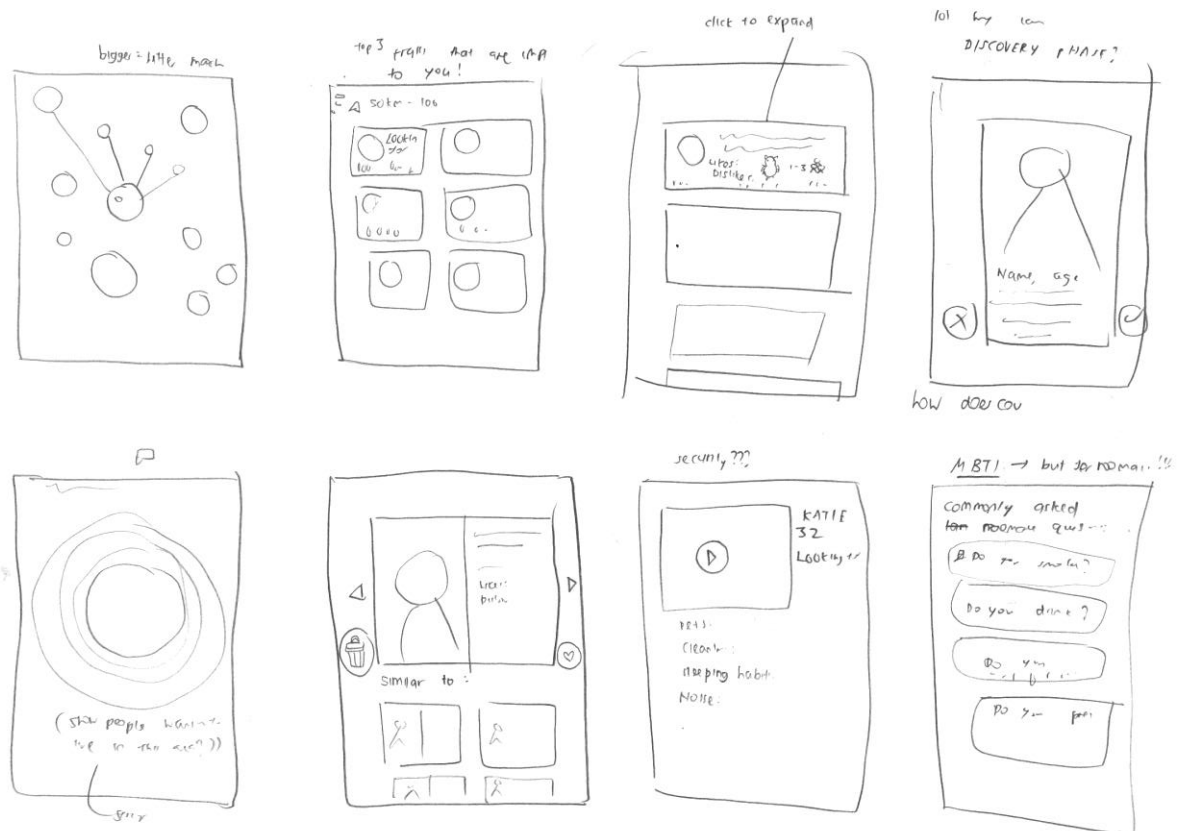
Figure 2 and Appendix B: Crazy 8s for roommate search

I started off doing a quick Crazy 8s exercise for how the main interface of searching for a roommate could look like. From this, I thought that cards might be most suitable for quick and easy browsing. I considered stimulating Tinder's discovery cards but thought that the association to dating apps as well as the limited overview (i.e. only one per time) might be disconcerting as well as slow down the browsing process.

LOG IN PAGE

FINDING A ROOMMATE

Katie, 32

Katie, 32

Katie too, 32

Profile setting

search page

Budget

Dealbreaker?

Home Me

Katie, 32
Me

Name*

Katie, 32
Female, 32

How often do you have guests?

How neat do you keep your space?

How much do you drink?

How much do you smoke?
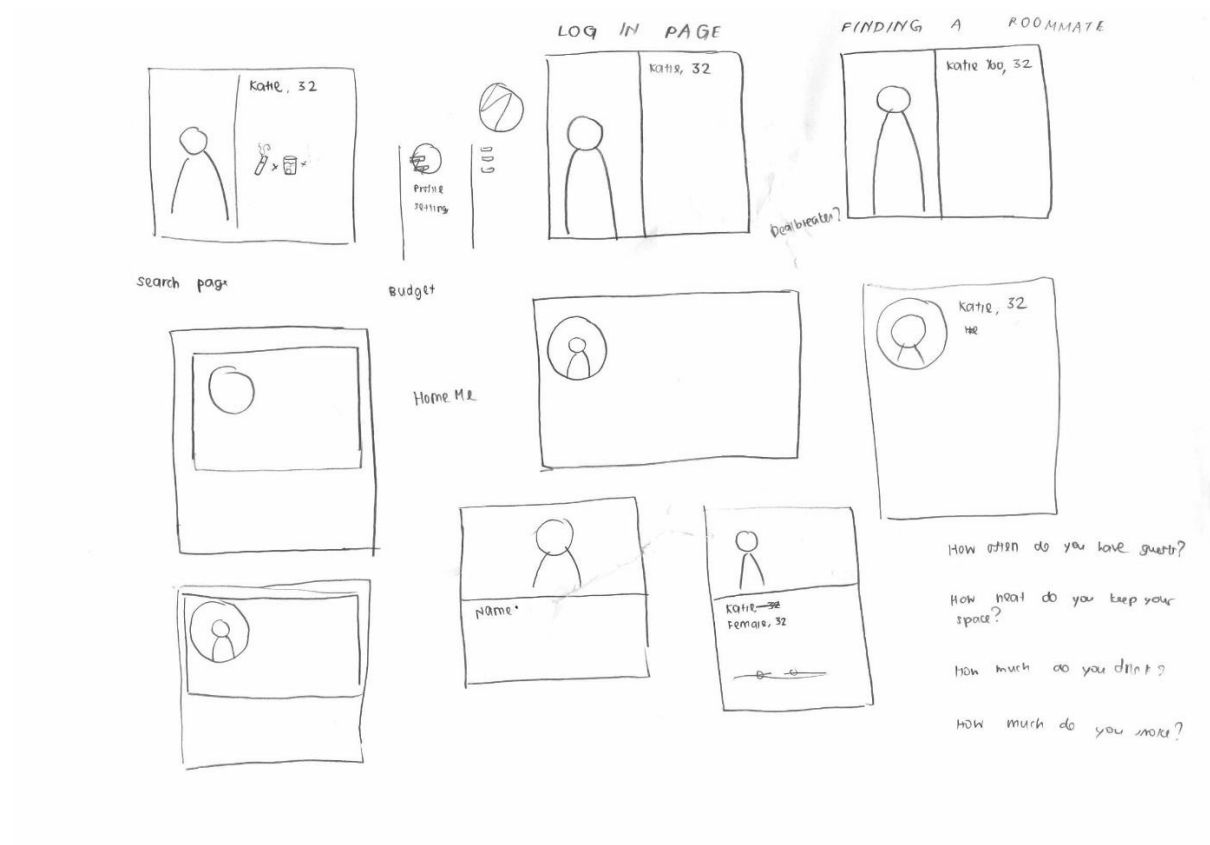
Figure 3 and Appendix C: User Profile Card Sketches

Figure 4 and Appendix D: Second Round of User Profile Card Sketches and Message Sketch

I then continued to refine how the user profile card might look like with interest filters and living habits matching in mind. This iterative evolution of design led me to figure out a suitable user card profile design which are shown in my wireframes:
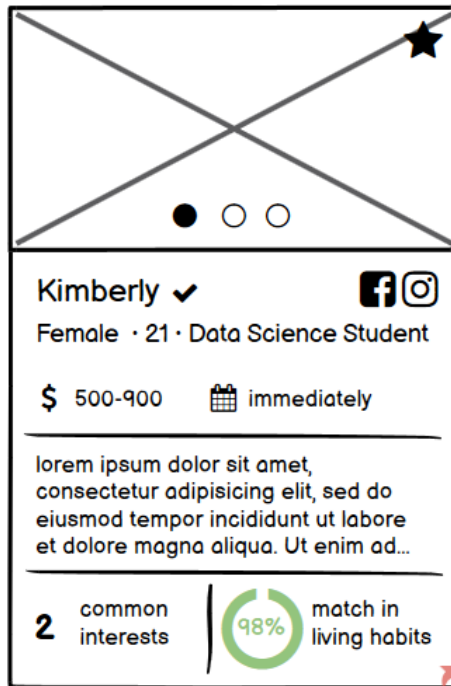
Figure 5: User Card Profile Wireframe
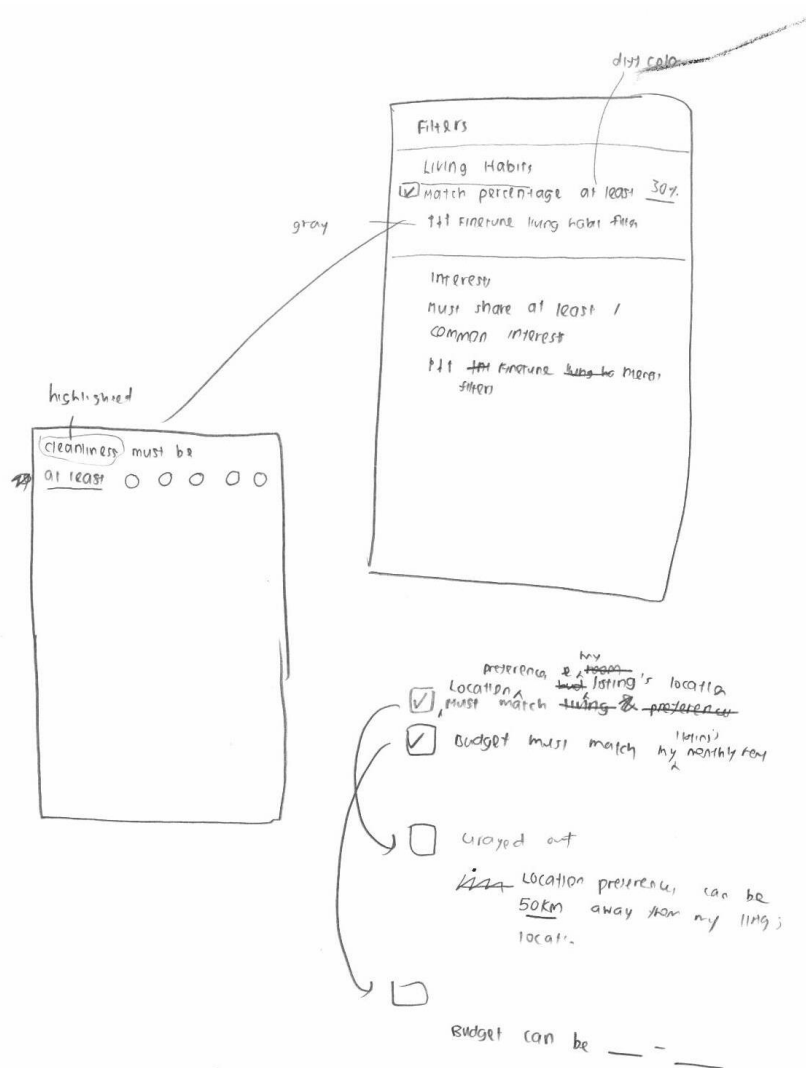
Figure 6 and Appendix E: Filters Sketch

I also sketched a very basic outline of how I envisioned the filters to look like which formed a centralized part of the search feature.

Design Critique

With the first iteration of my design completed using Balsamiq Wireframes to create a lo-fi prototype with working interactions, I sent my design to my classmate to be critiqued. Please find his full design critique in Appendix F. I will summarize his criticism of my design in my critique evaluation below.

Changes Made to Address the Critique

Peer Evaluation Key Points	Ideas/Changes
"Include more features to improve that users can use after finding roommates"	- Ideated "Homemail" feature which is a centralized platform to improve roommate communication - Add shared tasks or delegate tasks to other roommates - Create collaborative notes for shopping lists or meal preparation or any other use such as party planning - Add events to a shared calendar such as guests coming over or roommate get-togethers
"Would also like to be able to know the location of the house at first glance"	Moved addresses to the main room browsing cards as well
"It would be good If I can have a filter input where I write down my choice starting and ending dates that I want to rent the place for, and the app to filter the best matched listings of places to rent for me. "	Added date listing filter to the room search
"As a host, it could also be helpful to include some rules/restrictions imposed on the tenants."	Added a section for house rules on room listings (which helps convey expectations of renters)
"I find that the filter feature is quite limited as I can only filter through location, budget, living habits and interest. Some essential factors that hosts might want to filter includes gender, age, race and religion. It could also be good to include dietary restrictions."	- Added demographic filters which include gender, age, dietary restrictions, race, and religion - Added a warning so that users can become aware of potential racial profiling

Brief Reflection on How Lessons Learned in Design Task 1 are Applied to Design Task 2

In Design Task 1, I had done my wireframes on paper. Although this was more efficient, I felt that it had made my design choices more unclear had I not used a digital application instead.

By reading the general critique, I learnt to be more purposeful with my sketches as well as conveying my design decisions. I found that laying out the context with creating a user journey map as well as deciding the target user group was helpful for me in guiding my design choices as well as narrowing the scope of my design. By listing out my design ideas in conjunction with the problems they were meant to solve, it helped me make sure that every design decision was centered around solving a potential user pain point.

Post-mortem

I most definitely misunderstood the scope of this task and created a hi-fidelity Figma prototype with way too many screens and complete working interactions (as I did not understand the implications of the final deliverable being a single PDF). I should have double checked by checking the Design Task 2 specifications as well as clarifying with the CS3240 teaching team if I had any doubts – this would have helped saved me many hours. Although I have neatly compacted my deliverables in a single PDF, I encourage you to cursorily visit my [Figma prototype](.).

Appendix

Appendix A

Please find the link [here](#).

Appendix B

Please find the link [here](#).

Appendix C

Please find the link [here](#).

Appendix D

Please find the link [here](#).

Appendix E

Please find the link [here](#).

Critique

Overall, I feel that the visual design of the application is quite nice. The process of finding either a host or a roommate is quite clear as well. As a user who is looking for a room to rent, I also find it helpful to see the prices, dates as well as duration of stay when finding a room. However, I find that the application is lacking some features essential to renting a room. Such features include the choice of house location address, It was not clear how tenants can find homes that fits their choice of location. Moreover, I feel that this application should include more features to improve that users can use after finding roommates, such as a scheduler for roommates to facilitate planning of activities to do together.

Finding a Place
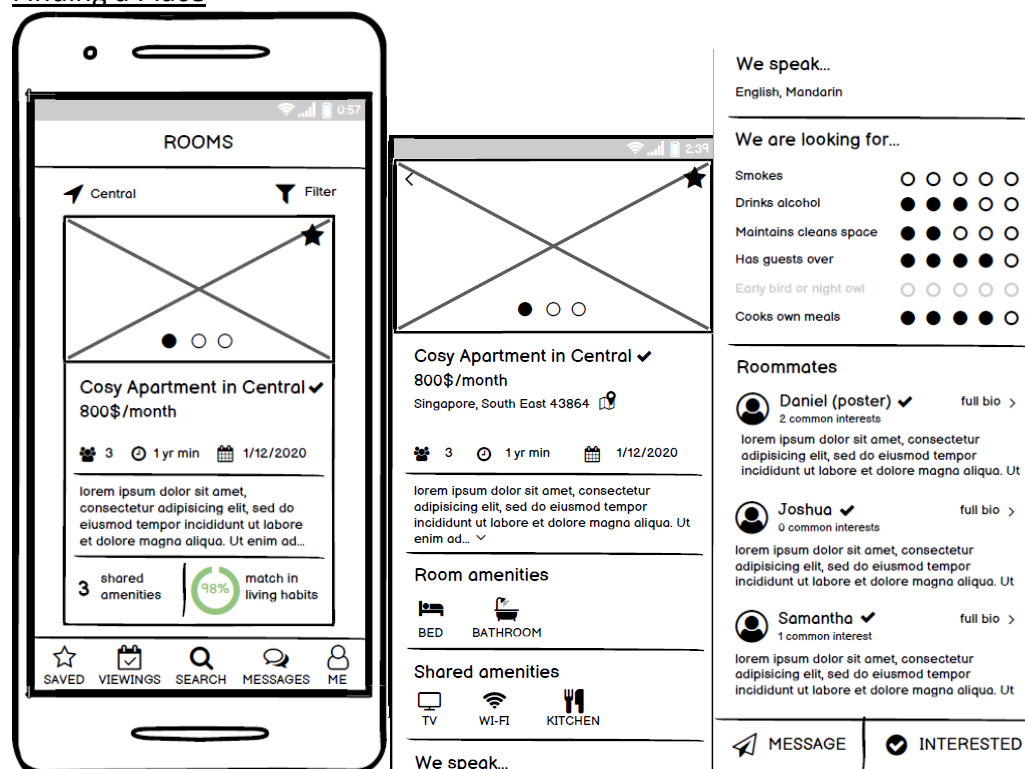
Highlights

I like that when browsing for a place to stay in, I can see essential information of the house such as number of people staying, amenities, as well as the pictures of the house. I also like that the application is able to match living habits of the tenants and the host.

Areas of Improvement

I would also like to be able to know the location of the house at first glance. As I went through the flow of finding a place to rent, I have to tap into the apartment listing to be able to see the address of the location. It can be troublesome if I were to browse through a list of listings to make my choice. It would be great if the user can also view the location through an interactive map as it can be easier them to visualise where the location is.

Another pain point is that as a user who wish to find a place to rent, I would want to filter the listing based on the date of rental. As I went through the process of finding a place, I can only see the dates displayed in the listing. It would be good If I can have a filter input where I write down my choice starting and ending dates that I want to rent the place for, and the app to filter the best matched listings of places to rent for me.

As a host, it could also be helpful to include some rules/restrictions imposed on the tenants.

Finding Roommates Filter
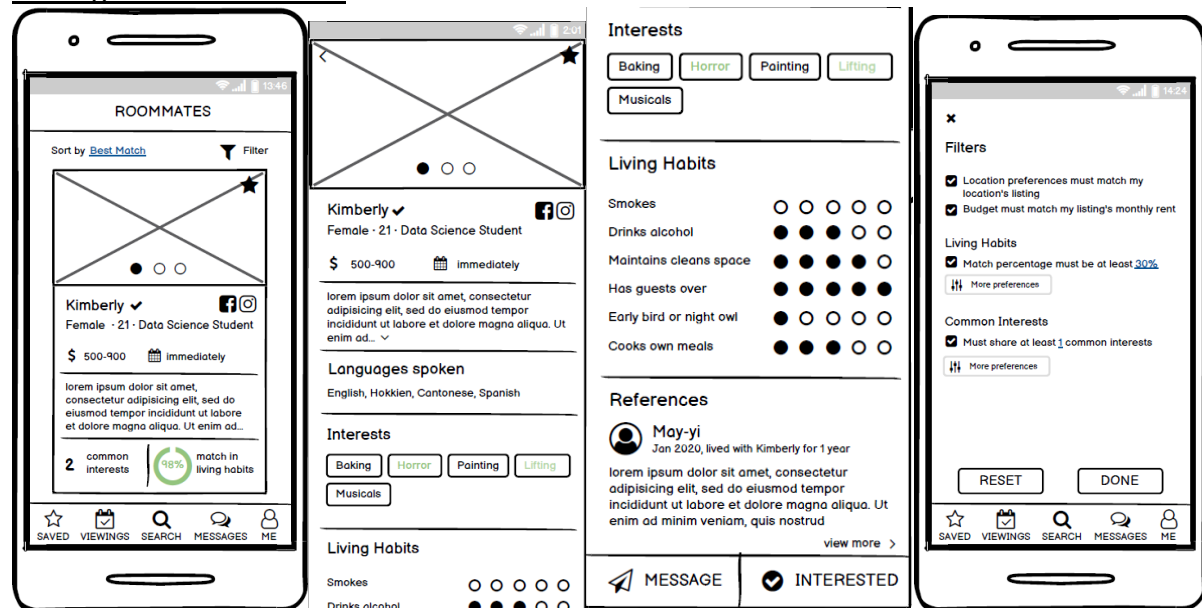
Highlights

When finding roommates, I like the fact that the app shows the hosts the profiles of potential roommates which indicates the information of the tenant that includes occupation, availability, language spoken, habits as well as reviews of the person. I also like that the filter feature is able to allow me to find roommates who matches with my lifestyle or interests.

Areas of Improvement

As I went through the process of finding a roommate, I find that the filter feature is quite limited as I can only filter through location, budget, living habits and interest. Some essential factors that hosts might want to filter includes gender, age, race and religion. It could also be good to include dietary restrictions.

After the process of selecting a roommate and agreeing with the tenant, I do not find the option to confirm the rental of the apartment/room. I do not see how the application is able to match and facilitate the process of rental. It would be good if the application is able to allow hosts to send request and the roommates to accept to finalise the match up. This applies to the "Finding a room" feature as well where the tenant is able to send rental request and the host to accept to finalise the match up.