

Team H Stage Two

Lucas Longarini, Abel Tekeste, Josie Khampheng,
Joel Poirier, Maiah Rutledge

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1 Introduction

The project idea our team decided on is to design a Roommate Review app, wherein users can search for roommates and landlords based on their profiles on the app, which contain information about these users, personality types, personal information, and reviews from other users. The system will be used as a mobile phone application and can be downloaded by anyone, though its intended use is by individuals who are renters or landlords.

Overall, the system solves the problem of roommates and landlords often not knowing much about each other prior to consenting to live together, and it solves this by helping all stakeholders in a renter-landlord situation to have access to a much more detailed and diverse source of information.

2 Users & Stakeholders

Renters (User & Stakeholder):

- Renters who are looking to gain information about potential roommates/landlords. These renters would essentially want to find the best possible match for a roommate or landlord by using the app and seeing how their personal preferences and personality traits compare to those of other people on the app. This would be facilitated by the personality test that each user would have to use when starting the app.
- For renters that are already living with a roommate or have recently moved out and would like to rate their experience with them, this app can also be used to leave reviews of these roommates once the rental term ends so that they may advise future roommates of the person of what their experience was like, to overall increase the available information for these roommates.
- Renters must be able to use technology at least to the point where they can use the app proficiently. There is no need for them to have background knowledge on the app, but it would help to have some experience with it.
- Renters will complete a personality survey when they sign up for the app so that there is at least a little bit of information about them.

Landlords (User & Stakeholder):

- Landlords who are looking to gain information about potential renters. These landlords would essentially want to find the best possible match for a renter by using the app and seeing how each of their personal preferences and personality traits compare to those of other people on the app. This would be facilitated by the personality test that each user would have to use when starting the app.
- Landlords who would like to detail their experiences with past or current renters. The landlords would want to detail their experience with their current or past renters and also give them a rating. The app facilitates this by allowing them to fill out a review survey that would be visible to other people on their renter's profile page.

- Landlords must be able to use technology at least to the point where they can use the app proficiently. It is not mandatory, but the landlords should understand the features of the app and have background knowledge on the app in order to help renters with any problems they might encounter.
- Landlords must complete a personality survey when they sign up for the app.

Design Team (Stakeholder):

- Responsible for designing the system, consulting users, and reporting to supervisors.

Supervisors (Stakeholder):

- Responsible for ensuring the team stays on track and meets objectives through weekly meetings and periodic grade-based feedback.

3 User Research Methods

3.1 Surveys & Questionnaires

Justification:

- Surveys are a quick way to obtain information from a large number of users because they are easily accessible. It allows us to gain insight into our users' problems, and find suggestions for features we can implement. We also want their opinion on existing apps that solve similar issues.

Summary:

- Most participants had their friends or family members as roommates. The vast majority of users valued someone who is clean and quiet. Many of the users also enjoyed having someone with a similar or compatible personality. Dirty, loud, and rude were the most common deal breaker for users. Not being respectful of personal space or privacy was another common deal breaker. When meeting a roommate for the first time, approximately 82% of participants preferred meeting in person.
- Users had mixed opinions when asked if they would use an app similar to Tinder to find roommates. Users were more likely to use an app similar to Google Reviews to find roommates. Most users were concerned with bots and fake reviews in these apps.
- When users were asked if they would take a personality test to help match them with roommates, approximately 82% said yes. Profile page, reviews page and personality test were the features that users wanted most in our app. They wanted the ability to find and review landlords as well.

What went well:

- There were a fair number of participants, which gave us a good amount of information.
- The survey allowed us to better understand our users' problems.
- Gave us possible features for our design, and problems with pre-existing designs.

What went poorly:

- Could not find as many users to take the survey as we had hoped, since most people our age are still living with their parents.

What would you do differently:

- Find more people to take the survey, and make the survey more general so people who are not currently renting can take it.



Team member viewing survey results in a socially distanced environment.

3.2 Scenarios

Justification:

- Scenarios are a great way to think about varied specific user experiences. They can help designers to get a better perspective of what the user might experience using the system and helps them to think about how to address and accommodate for different user types and experiences among them.

Summary:

- Thought about how app usage would look, such as from the perspective of a new renter looking for roommates and a landlord, a current renter looking to review their roommates and landlord, and a landlord looking to choose a new tenant.
- Quickly found issues with our current vision of the app that we had not previously considered. An example of this was considering if one roommate wanted to leave a bad review of another, if they were in the middle of their lease it may create tensions and result in a negative experience. As a response to this Scenario, we decided that reviews for roommates should be left after the lease has ended, to avoid any conflicts.
- As a response to this Scenario, we decided that reviews for roommates should be left after the lease has ended, to avoid any conflicts or biases.
- Iterated on our app design to meet the needs of issues found through our Scenarios.

What went well:

- Scenarios made it easy to view the app from the perspective of a user, rather than just thinking about it as designers. This helped us to quickly and easily think about the current pros and cons of our design to address issues within the design.

- Allowed the team to empathize with the users which helped to inspire design changes in a much deeper way than would be done acting just on our existing ideas.

What went poorly:

- Scenarios were limited by what we could think of in a brainstorming session. During the real usage of the app, there would likely be edge cases not previously considered.
- Scenarios were limited due to user types of a renter and a landlord.

What would you do differently:

- To address limited scenarios, it would have been good to consider more how different demographics within those categories may use the app.



The team members in a socially distanced meet-up discussing various Scenarios

3.3 Activity Analysis

Justification:

- Activity analysis is a great way to analyze the activities involved in learning about a roommate/landlord. This method helped us analyze all the activities we could think of, which brought to light some unanticipated concerns and challenges. This method also helped us identify stakeholders and users to interview and tied nicely into the two previous methods.

Summary:

- We started by thinking of ways people look for roommates, landlords, and tenants and the activities involved. This lead us to think about which attributes people want to learn about potential roommates and ways in which they discover this.

- Brainstorming these ideas helped us discover areas that work and areas that could be improved. This gave us insight into potential solutions our app could provide for users.

What went well:

- Brainstorming activities that potential users of our app go through today, helped think of possible solutions and “nice-to-haves”. This method brought to light a couple of concerns and needs that were unanticipated initially.
- This also allowed the team to empathize with users of the app and think of more creative and deeper ideas that had not been discovered yet.

What went poorly:

- No team members involved in this method had the actual experience of looking for a roommate/landlord. This made it more challenging to think of every activity involved since we didn't have the same experience as our users.

What would you do differently:

- It would have been better to use real users/stakeholders to help with this research method. Actual users would have been able to give us a better picture and reduce the risk of any false assumptions we may have made.
- Completing this researched method before the Surveys Questionnaires method would help incorporate the results we discovered into the surveys



Re-enactment of team member jotting down notes.

4 User Task Descriptions

Must be included:

- Roommates/landlords are able to rate and review each other
- Users can search for potential roommates and landlords
- Users have a public personal profile containing information about themselves
- Users can take a personality test to help match them to similar roommates

Important:

- Users can message potential roommates
- Users can create and join groups which contain members of the same household
- Link landlords/roommates with a property address
- Users can filter potential roommates and landlords by specific preferences or rating

Could be included:

- Each user has a friends list and can add other users as friends
- Roommates can chat with landlords through the app
- App can recommend potential matches automatically through similarities between users

Online repository: <https://github.com/LucasLongarini/CPSC-481-Project>

Online portfolio: <https://lucaslongarini.github.io/CPSC-481-Project/index.html>

Appendices

A Surveys & Questionnaires

Survey can be viewed at <https://forms.gle/VhGEReZ57i6Y89E59>

1. What is your relationship with past/current roommates before you moved in?

- Family: 3 (27.2%)
- Friends: 6 (54.4%)
- Acquaintance: 2 (18.2%)
- Stranger: 2 (18.2%)
- Significant other (18.2%)

2. What do you look for in a roommate?

- Clean, Friendly, Gender isn't relevant but it's nice being roommates with other queer people, similarish age/place in life, open minded to weird art projects/music/etc.
- Someone who is clean, keeps the place quiet, friendly and respectful.
- Clean and i should get along with them
- attitude
- Friendly, quiet and clean
- Clean, quiet
- Willingness to compromise/Some cleanliness
- Clean, responsible, quiet at night
- Clean and does not make a lot of noise.
- Similar schedules, respect privacy, someone I'm comfortable with
- Cleanliness, willingness to split chores

3. What are your deal breakers in a roommate?

- If they absolutely ignore me as a human, they leave messes for a long time, party animals who are too loud and not respectful, racist/homophobic/rude
- Messy, Loud, Rude, Respects personal space
- Messy
- personality
- Messy
- Dirty, loud (especially late at night), abrasive personality, likes small talk
- Not respecting my property
- Dirty, rude, loud
- People that don't care about personal space.
- Cross boundaries, heavy smokers/drinkers, keep me up at night
- Dirty, lazy

4. When meeting a potential roommate, how do you prefer to communicate?

- In person: 9 (81.8%)
- Text: 1 (9.1%)
- Video Call: 1 (9.1%)

5. Would you take a personality test to help match you with roommates?

- Yes: 9 (81.8%)
- No: 1 (9.1%)
- Prefer to personally know my roommates prior to moving in: 1 (9.1%)

6. Consider dating apps like Tinder, Bumble, etc. How likely are you to use a similar app to find roommates?

- 1: 1 (9.1%)
- 2: 3 (27.3%)
- 3: 2 (18.2%)
- 4: 3 (27.3%)
- 5: 2 (18.2%)

7. Consider review apps, like Google Reviews, Yelp, etc. How likely are you to use a similar app to review roommates?

- 1: 1 (9.1%)
- 2: 0 (0%)
- 3: 4 (36.4%)
- 4: 4 (36.4%)
- 5: 2 (18.2%)

8. What do you like or dislike about these apps?

- Google reviews can be biased based on peoples lived experiences so I don't hold too much stock. Dating app type could work, very niche but could work. I'd be worried it would be gamified for finding someone.
- Apps like tinder, bumble, etc.. are simple to use and easy. Review apps are a bit more complicated with more information and usually a less pleasing UI
- Idk
- bots fake profiles
- An app would be easy to talk to and meet people. Google reviews seem like mostly people complaining and fake reviews
- Prevalence of bots
- Dating apps let you make quick matches, so you can quickly find roommates. Review pages gives you an idea of what the person is like, but can be filled with fake reviews.
- Reviews might be fake sometimes.
- I like that I can see the feedback of other users to give a general impression. I dislike that sometimes people can have different perspectives of the criteria for what is good and what is bad, so may rate more negatively/positively than I might.
- Examples like tinder would be too impersonal

9. Would you use this app to find/review landlords?

- 1: 1 (9.1%)
- 2: 0 (0%)
- 3: 0 (0%)
- 4: 7 (63.6%)
- 5: 3 (27.3%)

10. What features would you like to see in this app?

- Friends list: 1 (16.7%)
- Profile page: 6 (100%)
- Personality test: 5 (83.3%)
- Reviews page: 6 (100%)
- Household groups: 3 (50%)
- Messaging: 4 (66.7%)

B Scenarios

- Roommate searching for other roommates (join/find)
- Landlord looking for tenants
- Roommate(s) looking for landlord
- People reviewing you might not have been in same household and just randomly found you
 - Need some verification between roommates
 - Rating only happens if all parties accept that they are in the same household
 - Also verification should happen at start of moving in so that no bad blood prevents any user from verifying each other
- Leaving a bad rating for a roommate
 - Should happen after the term has ended to avoid tensions between roommates
- A user with bad reviews wants to delete the app and make a new account
 - Name and phone number should be tied to an account so that users can't just keep making new accounts
- Users might get their friends to rate them positively
 - Hard to avoid this, even happens on Google Reviews
- Landlord may or may not be on app
 - Not necessary to confirm household for ratings, but if the landlord is on the app you can create house groups and messaging between users in the group

C Activity Analysis

- When searching for a roommate, someone will:
 - Post ads or ask friends/family to find someone
 - * Solution: Would be nice to have a place to look (like a job board)
- To discover information about a potential roommate, someone will:
 - Talk/meet the potential roommate
 - Ask others about that roommates personality
 - * Solution: Would be nice to see others reviews/comments about the potential roommate.
- Types of information someone would want to learn about a roommate:
 - Personality
 - * Solution: Personality tests could help
 - Attributes
 - * Solution: Clean/Rude rating metrics
 - * Solution: Clean/Messy rating metrics
 - * Solution: Loud/Quiet rating metrics
- When searching for a landlord, someone will:
 - Usually just contact the number of the property they are interested in
- To discover information about a landlord, someone will:
 - Find out by experience, meet them, or get information from a past tenant.
 - * Solution: Would be nice to see others reviews/comments about the potential landlord
- Type of information someone would like to learn about a landlord:
 - Attributes
 - * Solution: Friendly/Strict rating metrics
 - * Solution: Communication rating metrics
- Landlords looking for roommates will:
 - Usually just reply to applications
- How do landlords get information about potential tenants?
 - Go off past experience/references
 - * Learn by experience
 - * Solution: Would be nice to see the same reviews that roommates can see about people.