

Team 6 - Project Backlog Angel(Jiayi) Kou | Danny Zou | Michael Judd | Marlo Delatorre

Problem Statement

Have you ever had trouble finding the right roommate? Do you always end up with people you don't want to share a room with? College can be a difficult place to adjust to, especially if you attend a school with a particularly diverse demographic. Your dorm mates are usually the first people you will get to know and become friends with, which is why you'll want to get it right the first time. By selecting people based on your social preferences, our app aims to be a unique solution for students looking for people that fit their personality and lifestyle.

Background Info

Audience

It has always been a struggle to find the right roommate, especially for first year college students and those who have just moved into a new city. Our app is designed to assist the inevitable roommate selection process and make it more enjoyable and intuitive. For people who already have a place to live, they can easily find a roommate using the app. For people who do not have a living space, they can match with those who do or they can get recommendations for housing in that area.

Similar Platform / Limitations

There are a variety of online services that allow users to find roommates. However, the primary limitation of these services is that they only provide the required information when registering, which does not offer enough insight to the user's personality. To get to know a person better, it is necessary to take an indepth look at his/her social profile and online presence. By integrating social media profiles and the ability to customize user profiles to their personality, our app will focus on the social aspect of matching roommates which will provide the users with a more natural experience of finding the right match.

Requirements

Functional

As a user:

- ❖ I would like to be able to register for a user account with my basic information
- ❖ I would like to be able to login to the website with my account credentials
- ❖ I would like to be able to customize and manage my personal profile
- ❖ I would like to be able to link social media profiles/information to my account
- ❖ I would like to be able to reset my password in case I forget it
- ❖ I would like to be able to close my account / profile when I no longer need it
- ❖ I would like to be able to search for a roommate with specifications
- ♦ I would like to be able to view all the roommate search results as a list
- ❖ I would like to be able to filter search results based on specific characteristics
- I would like to be able to share my housing information with other users searching for roommates
- ❖ I would like to be able to search for housing recommendations
- ❖ I would like to be able to post housing reviews and recommendations
- ❖ I would like to be able to rate and comment on my past roommates
- ❖ I would like to receive ratings and comments from my past roommates
- ❖ I would like to view ratings and comments of potential matches
- ❖ I would like to share and view personal living habits and personalities
- I would like to search and upload the accurate location of my place when I'm searching for a roommate
- ❖ I would like to be able to delete my posting
- I would like to be able to update my posting
- ❖ I would like to be able to upload pictures of the living space
- ❖ I would like to be able to let users know of my interest in being roommates
- ❖ I would like to have a way of quickly contacting my potential roommates
- ❖ I would like to ensure my information is secured and confidential unless I have authorized Froomie to share it with another user

Non-Functional

Architecture / Performance

We are going to be using meteor as our backend framework with React front-end. The reason for using React is because Froomie can potentially become a mobile app and React is a perfect front-end for building a hybrid app. The main emphasis on performance would be the efficiency of the search algorithm, which will depend on how the backend is structured (how the program will store and retrieve data and processed).

Scalability

Ideally, this app should be built in a way that is easily scalable with additional services such as a way of handling housing contracts for the user as well as processing payments. Further features include a way of providing floor plans, amenities, nearby points of interests and advice for any users. On the backend, we can expand on the search algorithm to find available housing that takes into account the user's personality. For example, if the user enjoys swimming and tanning, the app will suggest a location by the beach.

Usability

The app should be user friendly and intuitive as to allow the user to easily navigate and complete their search. Users should not have to skip back and forth to figure out which step of the search process they are on; rather, they should be able to stick to a single path throughout their search to easily find a match. User profiles should be clean so other users can get an idea of the person's characteristics as well as their basic information. We plan to incorporate social media into the app so the interface should be organized into unique sections based on the profiles. While the app will mainly be used from a web standpoint, it should also be accessible from a mobile device.

Security

Security should be emphasized during the development of the app, since it will contain information on the user's life, personality and housing situation. Users should be required to register for an account with their verified information before being able to access other user profiles / social media links. Users should also be able to decide on the visibility of their profile and limit where

they are matched (ex. Only be matched with students studying the same major or attending the same university), as some information may be confidential. Additional security measures would have to be taken if further features such as online payment processing were implemented.

Hosting / Deployment

Heroku provides a Paas service which allows for a quick and easy solution to hosting and deployment. Since our app does not rely too heavily on data storage and processing, Heroku's functionality is enough for us to manage our user and posting data.