

Screen Sketches

JK_222

Brandon Merrick

Carter Parks

Sullivan Fair

Tyler Vick

Flat Finder

Actors

Guests -

- View Listings: Can view available room listings and roommate profiles.
- Search Listings: Can perform basic searches to look for roommates or rental spaces.
- Sort Listings: Guests can sort room or roommate listings based on criteria such as price, location, or date posted.
- View Map: Can view a map interface to see the geographic locations of available rooms and rental spaces.
- View Reviews: May read reviews on roommates or properties to get an idea of what they could expect.

Registered Users -

- Create Profile: Can create a personalized profile detailing their lifestyle, preferences, and rental history.
- Advanced Search: Can use advanced filters and preferences to search for roommates and rental places.
- Get Matched: Receive automated suggestions for potential roommates or places to live based on their profile.
- Liked Listings: Can save listings to a unique "liked list" for later review.
- Chat: Use the built-in chat feature to talk to potential roommates or landlords.
- Write Reviews: Can write verified reviews for roommates or landlords they have interacted with.
- View Reviews: Can read verified reviews from other users.
- View Map: Can view a map interface to see the geographic locations of available rooms and rental spaces.

Landlords -

- List Property: Can list rooms or properties available for rent.
- Receive Applications: Receive applications from potential tenants.
- Manage Listings: Can edit, delete, or update room/property listings.
- View Tenant Profiles: Can see profiles of registered users who are interested in renting.
- Chat: Use the built-in chat feature to talk to potential tenants.
- View Map: Can view a map interface to see the geographic locations of available rooms and rental spaces.

Administrators -

- User Management: Can manage user accounts, including deletion and creation.
- Content Moderation: Responsible for taking down listings or reviews.
- System Monitoring: Troubleshoot issues and maintain the database.
- Report Analysis: Analyze user data and reports for improving the platform.

Non-Functional Requirements

- Performance and Response Time: The application should return search results and matching profiles within 5 seconds of a user query, ensuring a smooth user experience.
 - The application must be written with closed input loops and no bugs
- Scalability: The application must be capable of supporting a minimum of 10 active users.
 - Must be able to scale up to support more users in the future.
- Portability: The application must be fully functional on Android devices and across other platforms.
- Usability: The application's UI and functionality must be intuitive and user-friendly for all users.
- Compatibility: Users must be able to connect with people regardless of if they are on the same platform.
- Maintenance: The application's code must be written neatly with good comments to allow for updates and support down the line.
- Security: User's data must be saved in a secure database.

Tables and Fields

User: Information about registered users and landlords

- User ID - Primary Key
- Username
- Email
- Password
- Account Type (User or Landlord)
- Account Status (Active/Inactive)

User Profile: Details about the user's preferences and traits

- Profile ID - Primary Key
- User ID - Foreign Key to User table
- Lifestyle Traits
- Preferred Location
- Budget
- History ID - Foreign Key to Rental History table
- Reviews

Listing: Information about the rooms and properties available

- Listing ID - Primary Key
- Landlord ID - Foreign Key to User table
- Address
- Price
- Availability Status
- Amenities
- Chat: Stores chat history and messages
- Chat ID - Primary Key

Review: Stores reviews about landlords, properties, and roommates

- Review ID - Primary Key
- Reviewer ID - Foreign Key to User table
- Reviewed ID - Foreign Key to User or Listing table
- Content
- Rating
- Date Created

Favorite: User's "liked" listings

- Favorite ID - Primary Key
- User ID - Foreign Key to User table
- Listing ID - Foreign Key to Listing table

Administrator: Admin-specific information

- Admin ID - Primary Key
- User ID - Foreign Key to User table

- Permissions

Match: Information about matched roommates or properties

- Match ID - Primary Key
- User ID - Foreign Key to User table
- Matched User ID or Listing ID - Foreign Key to User or Listing table

Chat: Stores individual chat sessions between two users

- Chat ID - Primary Key: A unique identifier for each chat session.
- User1 ID - Foreign Key to User table: The ID of the first user in the chat.
- User2 ID - Foreign Key to User table: The ID of the second user in the chat.
- Chat Status: Indicates whether the chat is active or inactive

Roommate Match: This table records matches between roommates.

- Match ID - Primary Key
- User1 ID - Foreign Key to User table
- User2 ID - Foreign Key to User table
- Status: Indicates whether the match is pending, accepted, or declined.

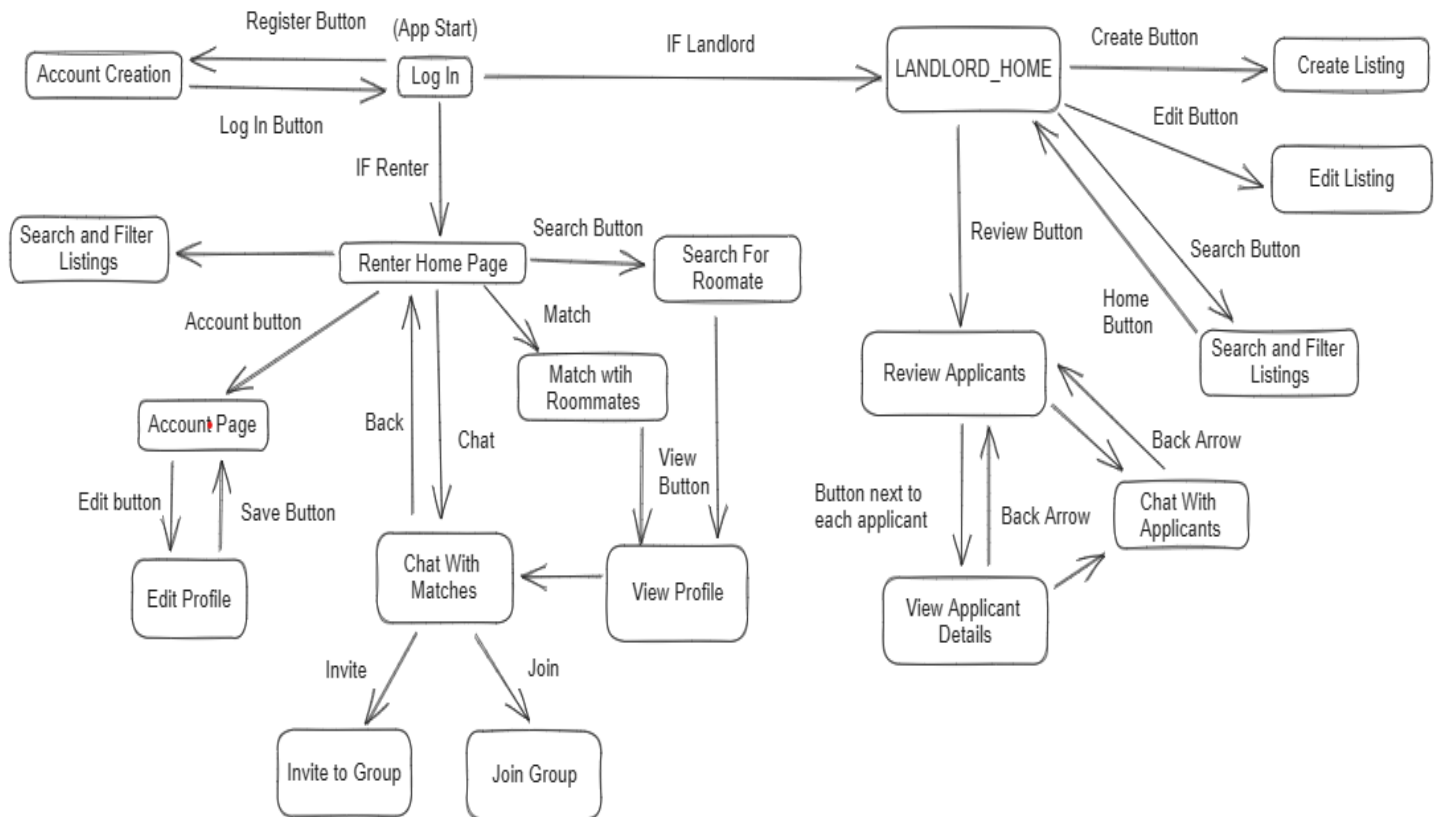
Listing Match: This table records matches between tenants and listings.

- Match ID - Primary Key
- User ID - Foreign Key to User table
- Listing ID - Foreign Key to Listing table
- Status: Indicates whether the match is pending, accepted, or declined.

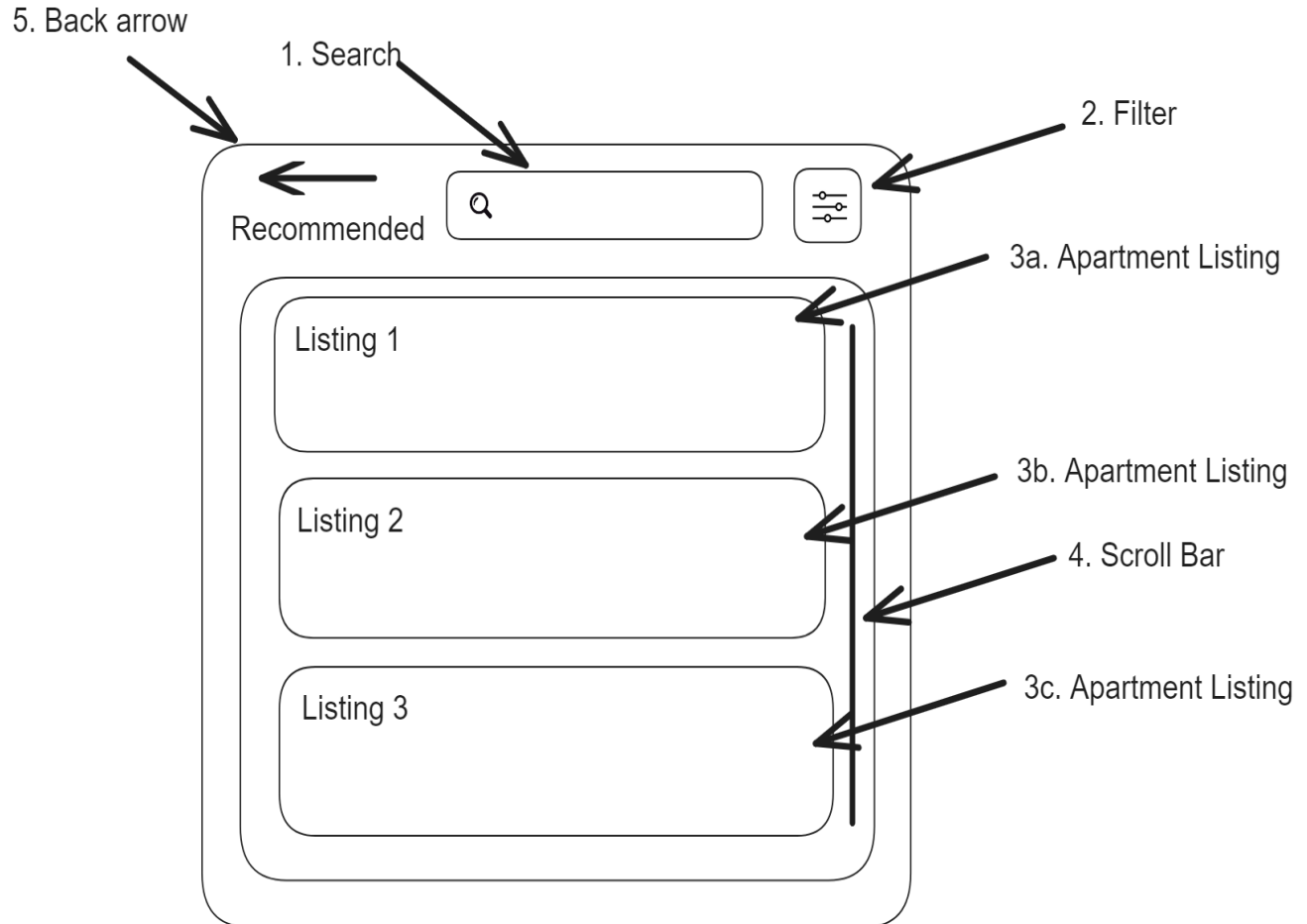
Rental History: This table records information between a user and their rental history.

- History ID - Primary Key: A unique identifier for each rental history entry.
- User ID - Foreign Key to User table
- Landlord ID - Foreign Key to User table
- Address
- Rating

Screen Flow Diagram

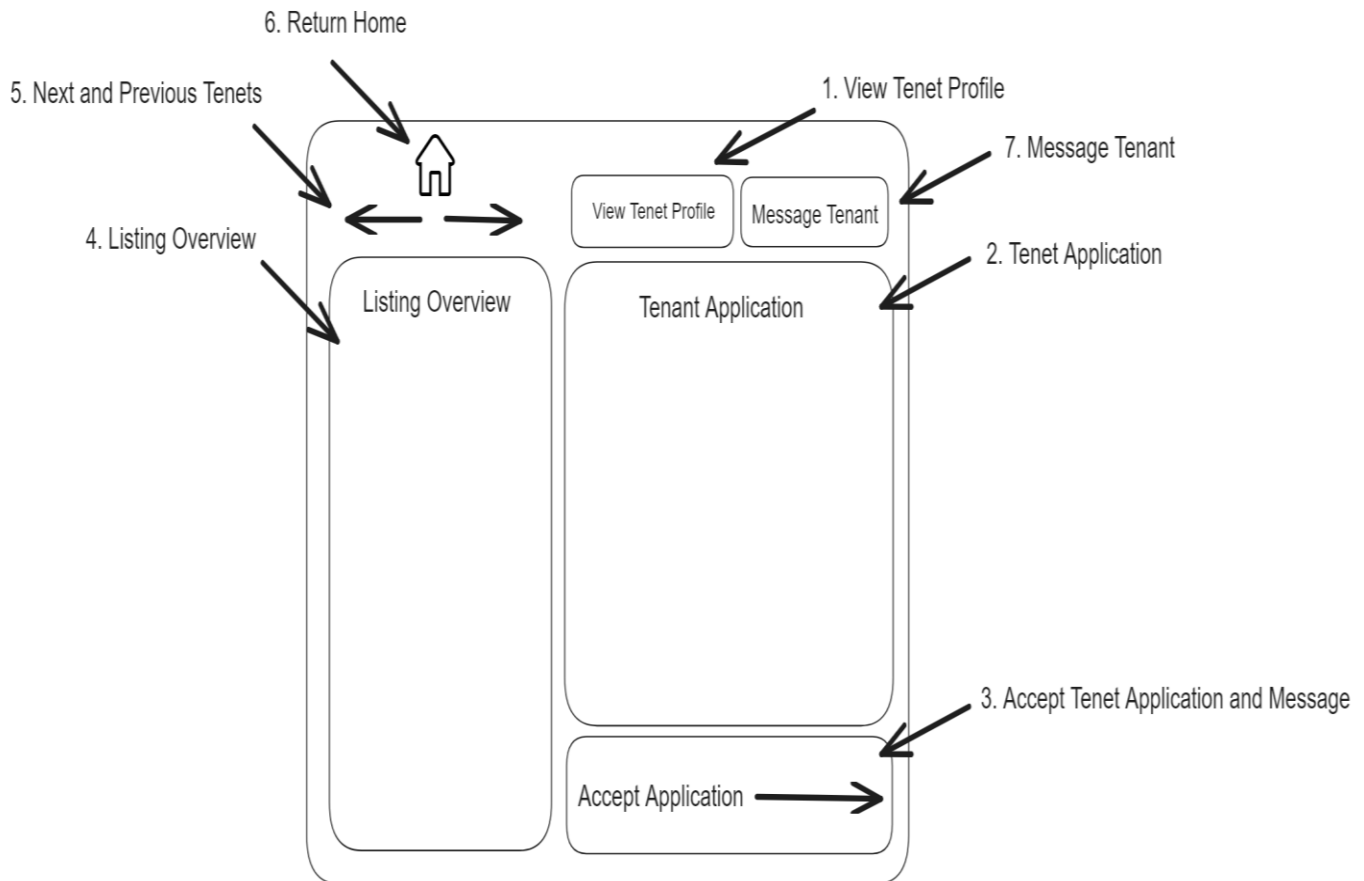


Recommended Listing Screen – Sullivan Fair



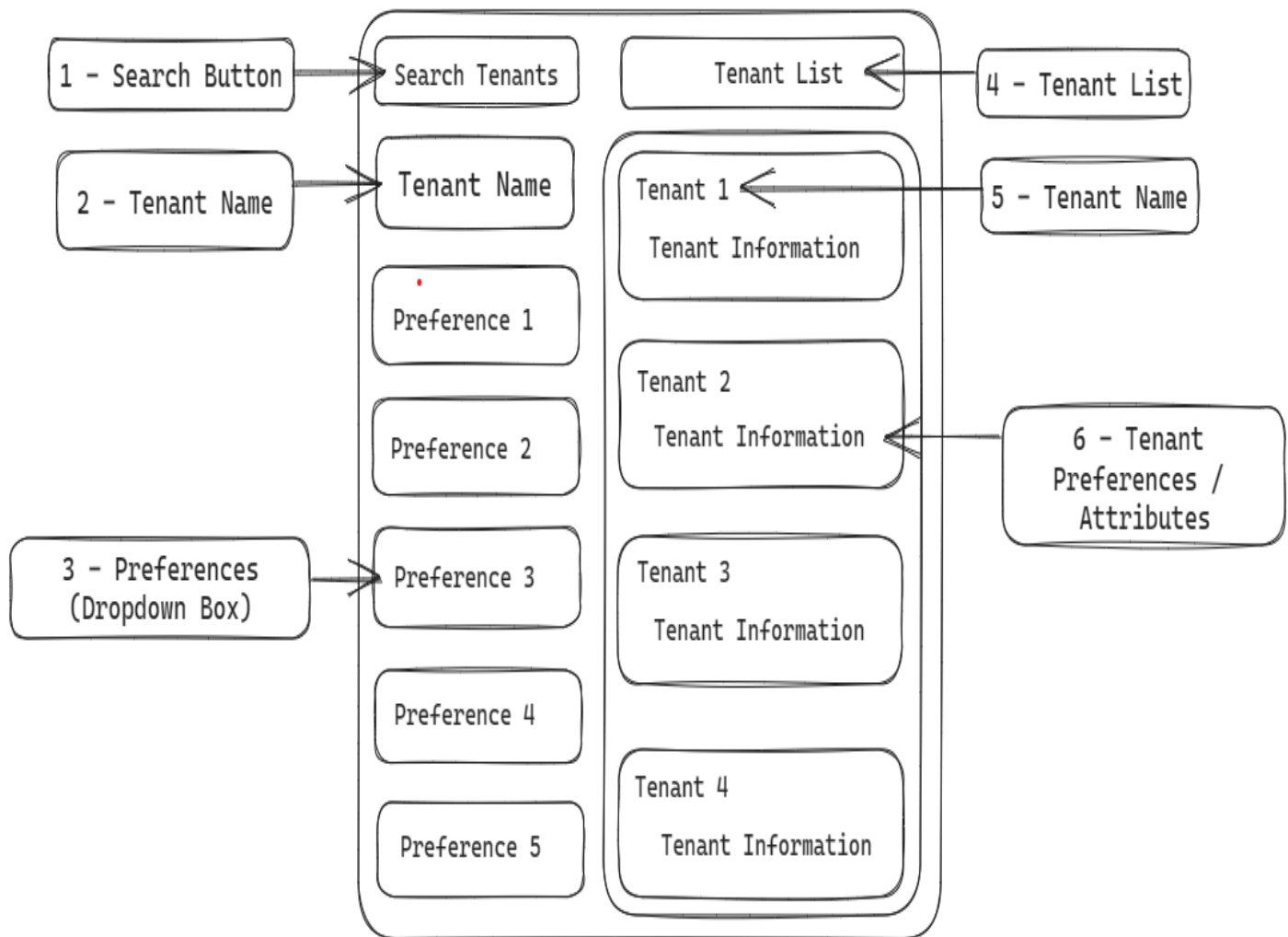
The recommended page will allow a generic user to search, filter, and otherwise find a listing that aligns with their interests. The user can view recommended listings (3a-3c), filter apartments by price, location, etc. (2), and search for specific locations or buildings they are interested in (1). The scroll bar (4) will allow the user to view additional listings that may not have matched as well with their preferences as the initial apartments. The user can return to the home screen via the back arrow (5).

Review Applicant Screen – Sullivan Fair



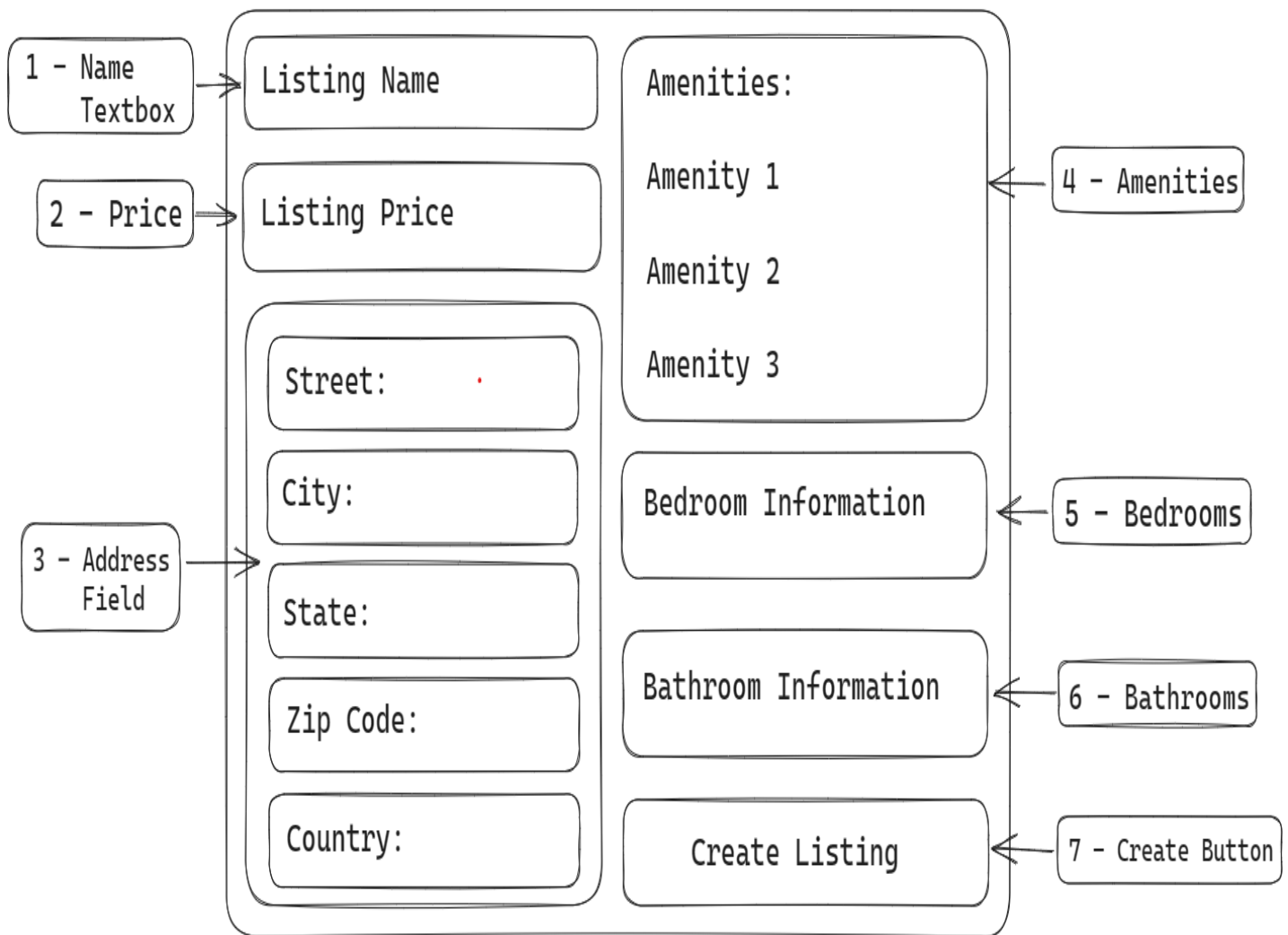
This screen will be used by a landlord to review and manage tenant applications. The landlord can review the tenant application (2) and general profile (1), accept/confirm the application and message the tenant regarding the status (3, 7), and review the listing for which the application was sent for (4). The landlord can also navigate through tenant applications via the next and previous buttons (5). The home screen can be reached with the home button about the navigation arrows (6).

Tenant Search Screen – Tyler Vick

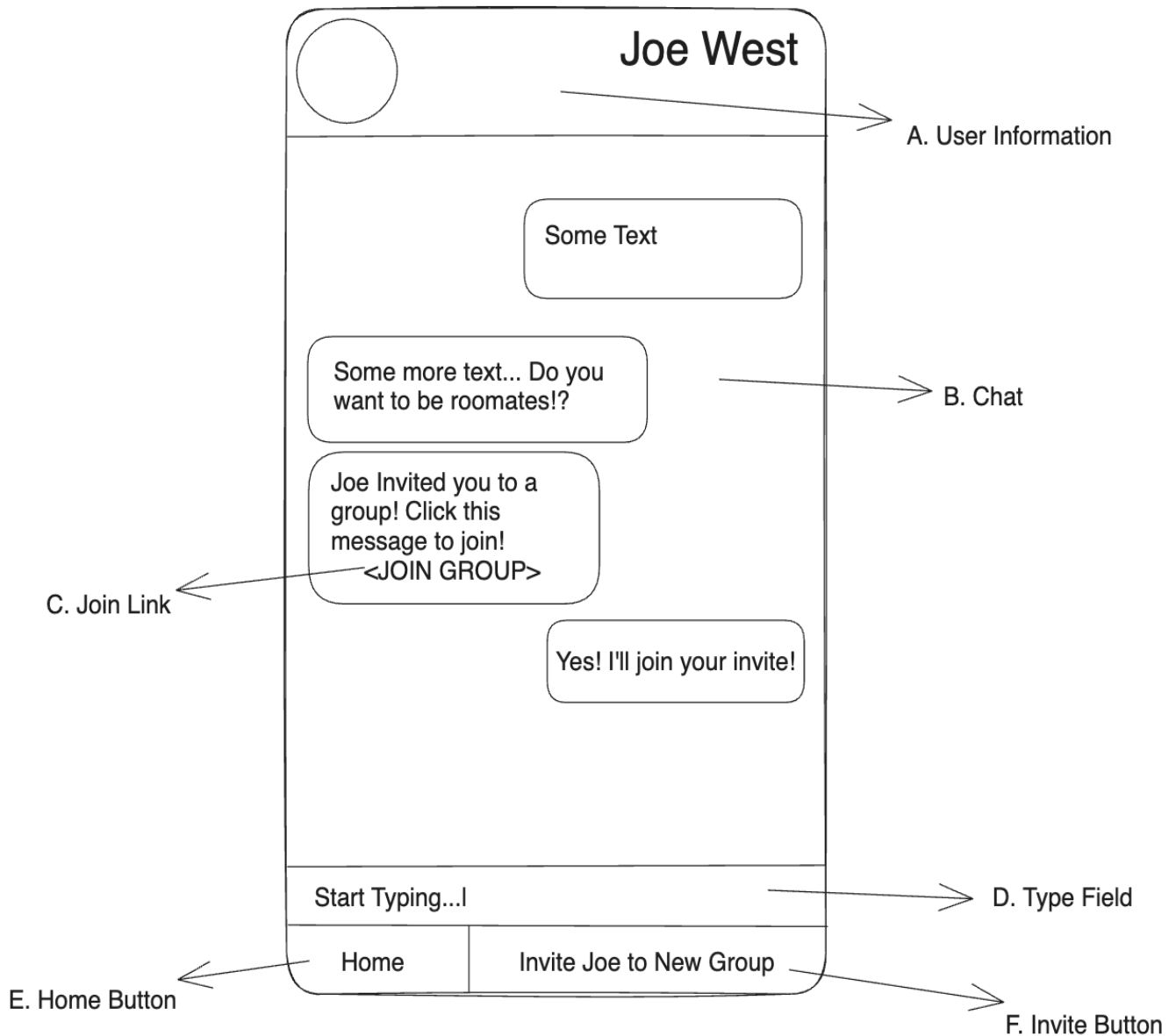


The tenant search screen is designed to be used by all users in the process of finding suitable tenants and roommates by offering various interactive and informational elements. The Search Button (1) serves as the initiating point for the search process, gathering results based on criteria entered into the Tenant Name Box (2) and the Preference Dropdown Box (3). Users can input specific names in the Tenant Name Box (2) for a targeted search and/or select attributes from the Preference Dropdown Box (3) to filter results. These filtered results are then displayed under the Tenant List Title (4), which serves as a header to identify the resulting tenant list. Each Tenant Name (5) in the list is clickable, providing a path to more detailed information about the tenant's preferences and attributes, which are also displayed in the Tenant Information section (6). Through the combination of these elements, the screen allows users to efficiently identify, filter, and engage with prospective tenants and roommate,

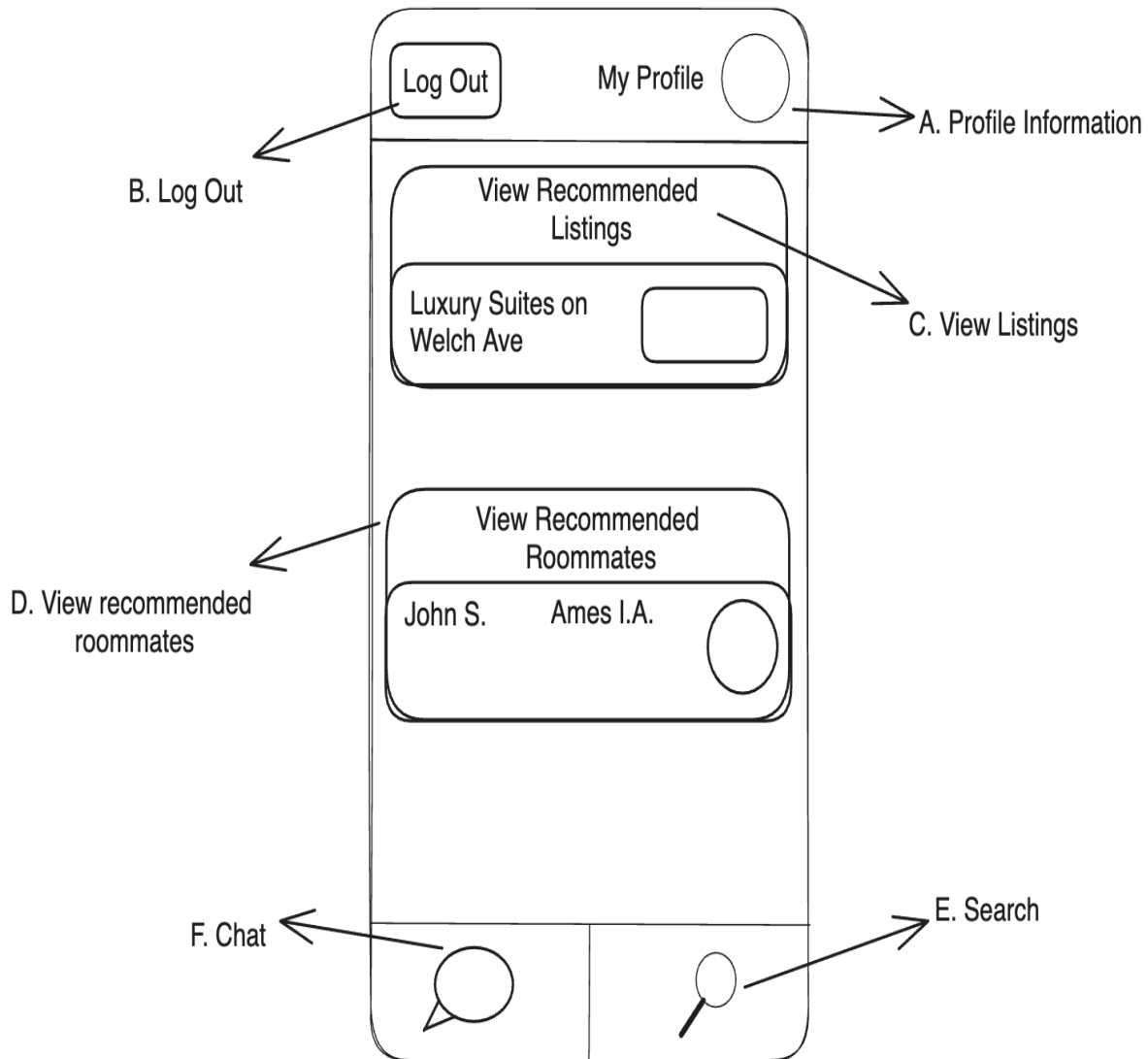
Create Listing Screen – Tyler Vick



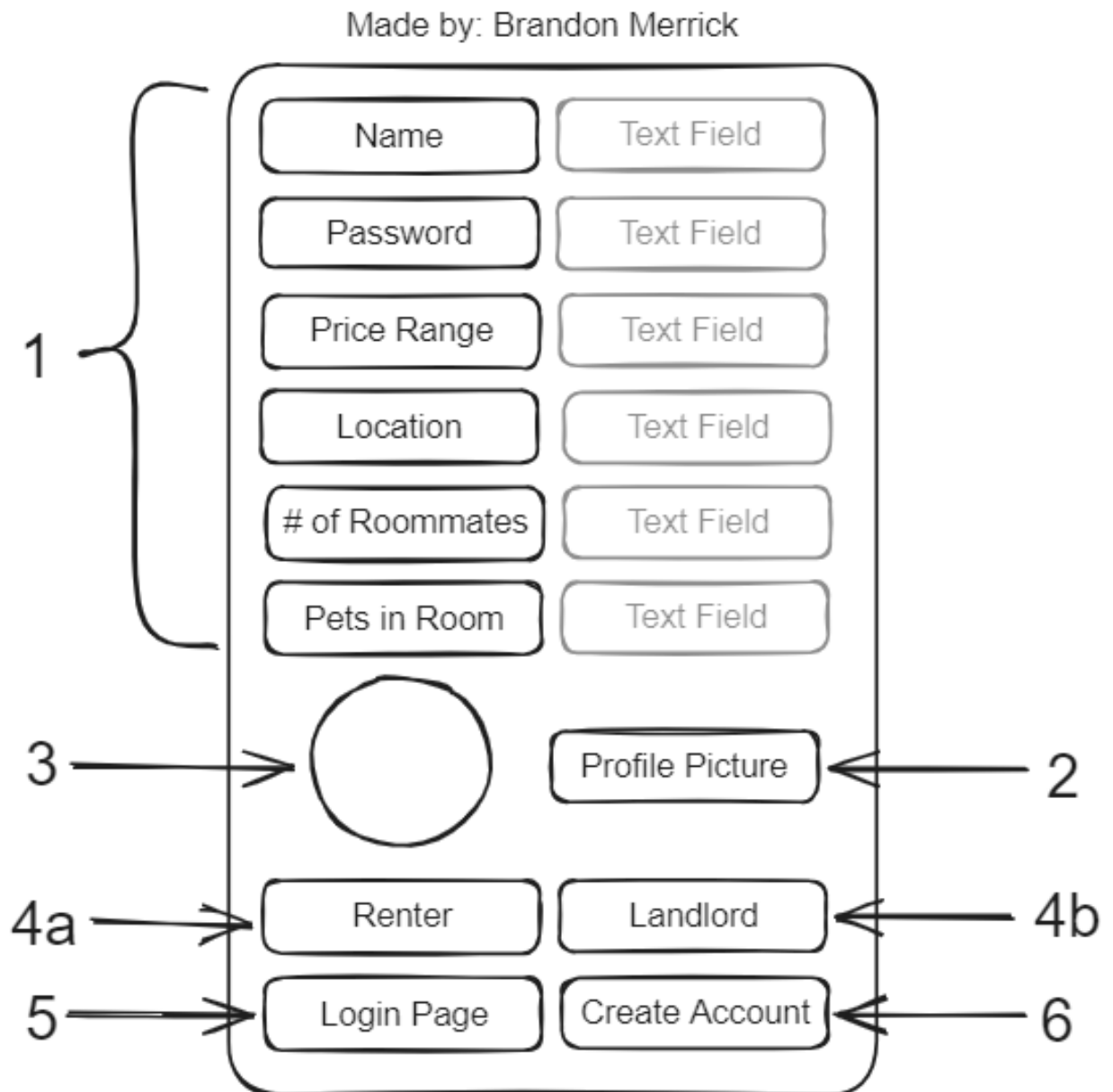
The Create Listing screen provides landlords with a comprehensive yet straightforward interface for adding a new property or room listing to the Flat Finder platform. At the top left of the screen is the Name Textbox (1), where landlords can enter the title or name for their listing, providing the first point of identification for prospective tenants. The Price Box (2) allows landlords to set the rental price, offering an immediate and general cost indicator for those searching. Address information is collected in the Address Field Box (3), providing geographical information for the listing. The Amenities Box (4) offers a space to list available amenities such as Wi-Fi, a gym, or a swimming pool, allowing landlords to make their listing more attractive. The Bedroom Box (5) and Bathroom Box (6) let landlords indicate the number of bedrooms and bathrooms. Then, at the bottom right corner of the screen, there is a Create Listing Button (7) which will add the new listing to the platform. The functionalities of these boxes and screen aim to simplify the listing creation process for landlords and to ensure that tenants have all the essential information they need to make an informed decision.



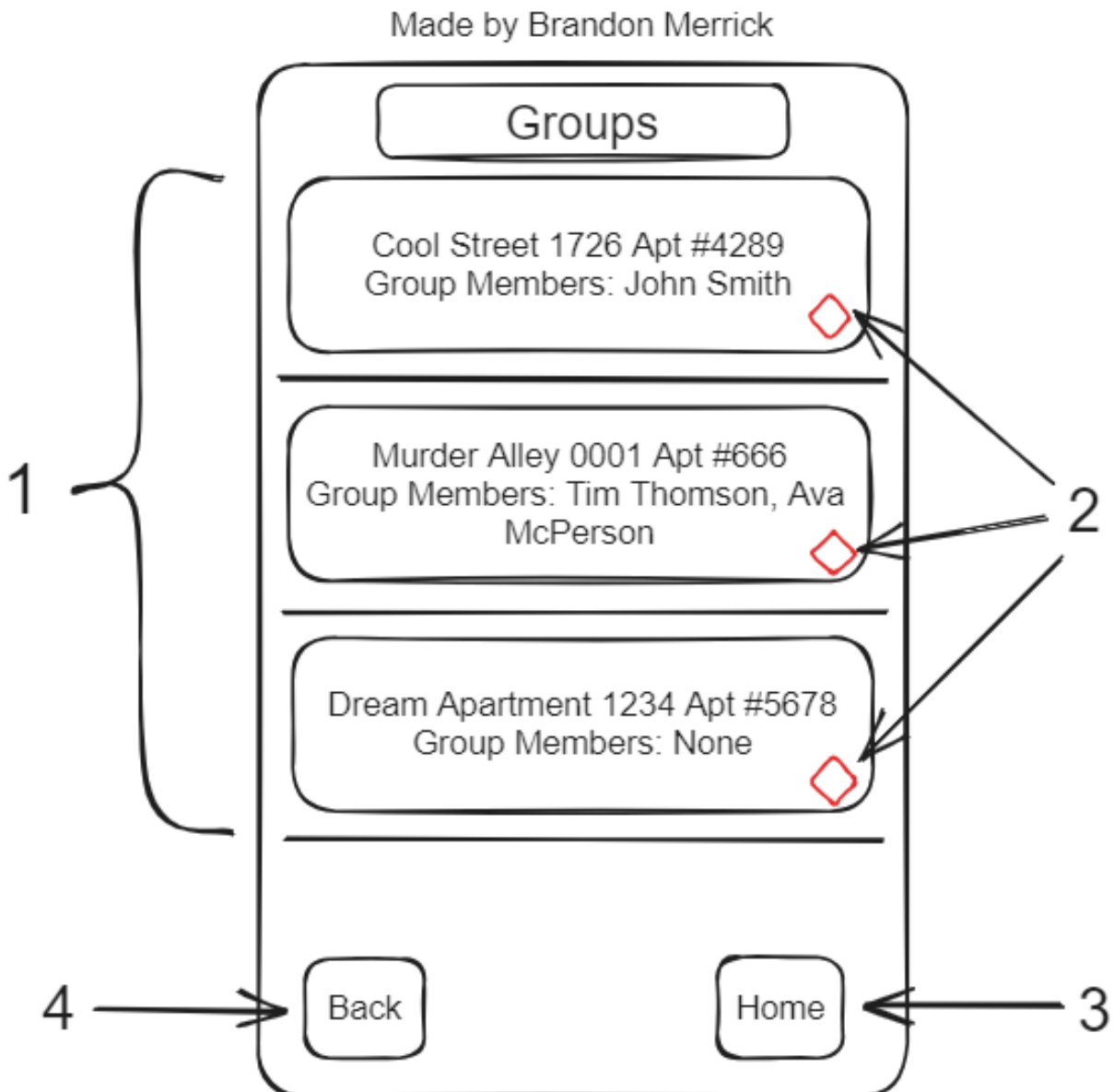
This screen is used by prospective tenants to get to know each other. A: Quick access user information is shown at the top of the screen to indicate who the user is chatting with. Users can also tap this section to view detailed information about the other user. B: This section is trivial but allows users to view previously sent chats. C: When a user invites another user to a group, a message will be sent to the second user which they can tap to join the group. D: This is where users will tap to start typing messages. E: This button simply takes the user back to home. F: Users can press this button to invite the other user to a group.



This screen is used as prospective tenants' home screen. From here, users can access all the functionality provided for renters. A: Users can view and edit their profile information and preferences here. B: Users can log out by pressing this button. C: Users can instantly view the top listing recommended for them, as well as click to view (and filter) all listings in order of how well they match the user's preferences. D: Similarly, users can see their top recommended roommate, as well as view other users who have similar preferences. E: Here, users can search for listings and other users by name. F: Here, users can open their chats with other users.



The Registration page is used to set up an account on the app. In order to create the profile information about the user is needed. This page will be reached through a button on the login page. This is collected in section 1 with the Type of info wanted on the left and a text box on the right. Section 2 can be a spot to upload an image to act as your profile picture. Where section 3 will then display a preview. 4a and 4b will be mutually exclusive options so we know whether to give a renter or landlord view when they log in. 5 will navigate the user back to the login page, and 6 will submit the entered information to the server creating a new account.



The groups page is used to easily see and manage groups you have created. This page will be reached from the renter's home page. Section 1 is used to see the apartment this group is for and any members that are in the group. Clicking on the groups will send you to the page to chat with them. The buttons labeled 2 are what you can click in order to leave the group. Button 3 will send you back to the home page while button 4 will send you back to the page you were on before