

## SafeHouse Release Plan – CSE 115A

**Product name:** SafeHouse

**Team name:** SafeHouse

**Release name:** Release 1.0

**Release date:** Nov 21, 2024

**Revision #2 - 10/14/2024**

### High Level Goals

- Be able to have personalized feeds for all end users
- Have a safe and secure messaging system implemented
- Be able to handle database queries and aggregate data properly
- Implement advanced search functionality to help users find compatible roommates.
- Properly implement API layers to connect all our microservices together.
- Implement authentication services to keep users' information private and safe
- Design an intuitive interface with features like advanced filters, interactive maps, and detailed listings to enhance the user experience

**User Stories:** (As a {user role}, I want {goal} [so that {reason}])

- As a renter, I want search functionality so I can get more personalized listings
- As a seller, I want renters to be able to contact me/chat with me through the website
- As a seller, I want to be able to know who I am talking to
- As a renter, I want to be able to communicate with the seller with ease
- As a renter, I want to be able to find affordable listings
- As a renter, I want to be able to see listings on a map
- As a student, I want my housing to be accessible to campus by walking, biking, or taking the bus, so that I don't have to travel far to get to campus.

### Sprint 1

- User story 1: As a user, I want to see listings from multiple rent websites on one application to simplify the housing search process [10]
- User story 2: As a renter, I want to have my own curated feed of listings that is geared toward my housing search specifications [12]
  - Goal: Streamline the housing search process
- User Story 3: As a renter, I want search functionality so I can find listings in my city [11]
- Spike: Get familiar with coding in typescript and deploying Next.js code on Vercel
- Infrastructure:
  - Setup github repository for version control and CI/CD
  - Ensure everyone has the same dependencies installed before editing codebase

### Sprint 2

- {High priority} User Story 1: As a renter, I want to be able to see listings on a map for ease of access
  - Goal: Design interactive maps, and specific filters to enhance the rental search experience
- User story 2: As a user, I want the app to remember my housing preferences so that I don't have to enter them in every time I open the app, making the housing search faster overall
  - Goal: Implement a dashboard that allows users to toggle settings and alerts
  - Create user account
- User Story 3: As a user, I want to make sure that my account is secure
  - Goal: Create user authentication so that user accounts will have an extra layer of security
- User Story 4: As a landlord, I want to post my own listings and allow college students to see them on the listings page.
  - Goal: Create an interface that allows landlords to create and edit their own listings.
- Spike - Keep on learning TypeScript and follow good practices, learn any additional web frameworks/libraries needed for future sprints (TBD)
- Infrastructure
  - Setting up websockets in TS environment
  - Adding any additional web frameworks that might be useful (TBD)

### **Sprint 3**

- Story 1: As a renter, I want a chat function, so that I can contact sellers
  - Goal: Have a safe and secure messaging system implemented
- Story 2: As a seller, I want to be able to effectively track and manage my listings
  - Goal: Create an easy-to-use interface for sellers to manage their listings, with automated reminders when new listings are posted.
- Spike - Research secure messaging protocols (e.g., WebSockets, encryption methods) and evaluate third-party chat APIs (e.g., Twilio, Pusher). Investigate automated reminder systems and UI/UX best practices for listing management.
- Infrastructure
  - Set up real-time messaging infrastructure (WebSocket server or third-party API) and ensure database support for chat and listing management.
  - Implement job scheduling for automated reminders (e.g., cron jobs, background workers) and notification infrastructure.

### **Sprint 4**

- User Story 1: As a student, I want my housing to be accessible to campus by walking, biking, or taking the bus, so that I don't have to travel far to get to campus.
  - Goal: Implement an advanced filter to show listings by proximity to bus routes

- User Story 2: As a user, I want a platform without bugs and glitches so that I can find housing listings with ease.
  - Goal: Improve performance and stability through debugging
- Spike - Aggressively test all aspects of the platform and learn how to use debugging tools
- Infrastructure
- Implement logic to obtain location information
- Set up an API route to handle filtering logic
- **Product backlog:**
  - APIs to connect to different realtor platforms
  - Be able to collect and store data from realtor APIs to show the user
  - Be able to understand the users housing needs and display listings based on their needs
  - Have a built in messaging platform for the user
  - User should be able to see location with an interactive map
  - User should be able to search for listing by distance/radius
  - Be able to host realtor listings originating on our platform
  - Be able to host multiple users who each have their own accounts

### More user stories

- As a seller, I want a chat function, so that renters will be able to contact me
  - **Task 1** Design and code a chat ui system that's safe and secure (6 hours)
- As a renter, I want a dashboard with my information.
  - **Task 1:** Design and code a dashboard ui under the user page (3 hours)
  - **Task 2:** Allow users to edit profile information and configure their search settings. (1 hour)
- As a renter, I want a price filter so I can find affordable listings
  - **Task 1:** Implement a price filter feature on the listings page (2 hours)
- As a renter, I want to be able to see listings on a map for ease of access
  - Task 1:** Use Google Maps API to implement a map with icons marking properties for lease (2 hours)
  - Task 2:** Add a pinpoint feature to save certain areas of the map to the user dashboard (2 hours)
- As a student, I want my housing to be accessible to campus by walking, biking, or taking the bus, so that I don't have to travel far to get to campus.
  - **Task 1:** Add content in each listing that has a rating score and shows match rating to end user (3 hours)

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- **Web Scraping on backlog**

## **MVP**

- **Create an easy-to-use interface for landlords to post, update, and manage their listings, with automated reminders when listings are posted or updated.**

## **High level goals**

- **Make FB group listings to be on here**

## **Sprint 2**

- **Create our own listings**
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