Project Design Phase
Solution Architecture

1. Introduction

Project Name: Househunt: finding your perfect rental home

Date: June- 22- 2025

Team ID: LTVIP2025TMID57110

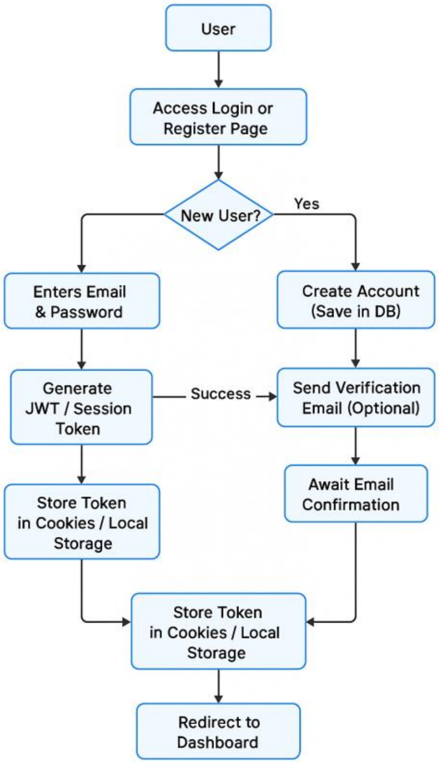
Version Control: GitHub Repository

2. Functional Requirements

2.1 User Registration & Login

FR-1: Users can register using their email and password.

FR-2: Users can log in using their registered email and password.


User
Access Login or Register Page
New User?
Yes
Enters Email & Password
Create Account (Save in DB)
Generate JWT / Session Token
Success
Send Verification Email (Optional)
Store Token in Cookies / Local Storage
Await Email Confirmation
Store Token in Cookies / Local Storage
Redirect to Dashboard

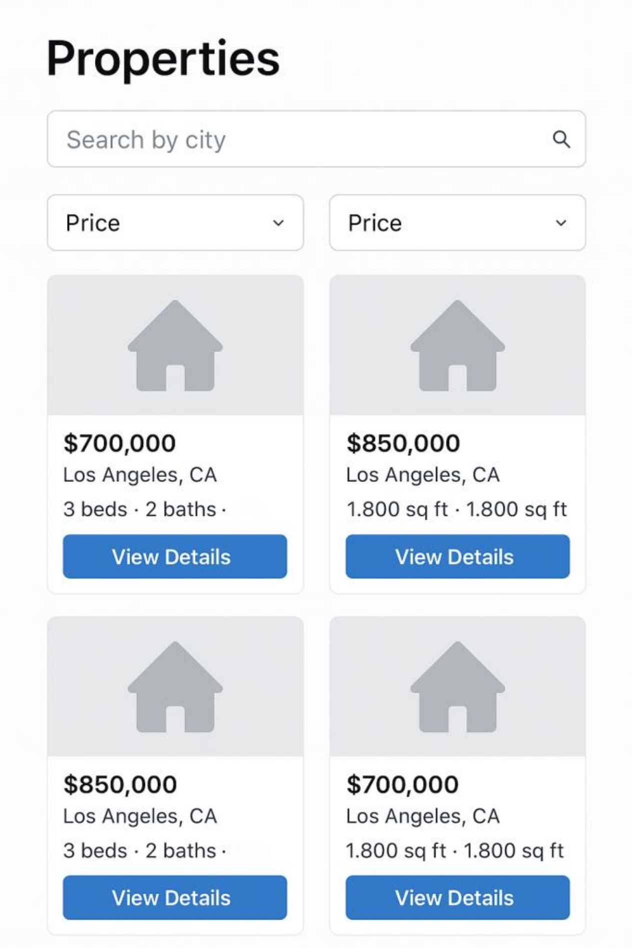
2.2 Product Discovery & Browsing

FR-3: Users can view a list of available properties.

FR-4: Users can filter properties by various criteria (e.g., price, location).

FR-5: Users can search for properties by category or keywords.

FR-6: Users can view detailed information about each property.



Properties

$700,000
Los Angeles, CA
3 beds · 2 baths ·

$850,000
Los Angeles, CA
1.800 sq ft · 1.800 sq ft

$850,000
Los Angeles, CA
3 beds · 2 baths ·

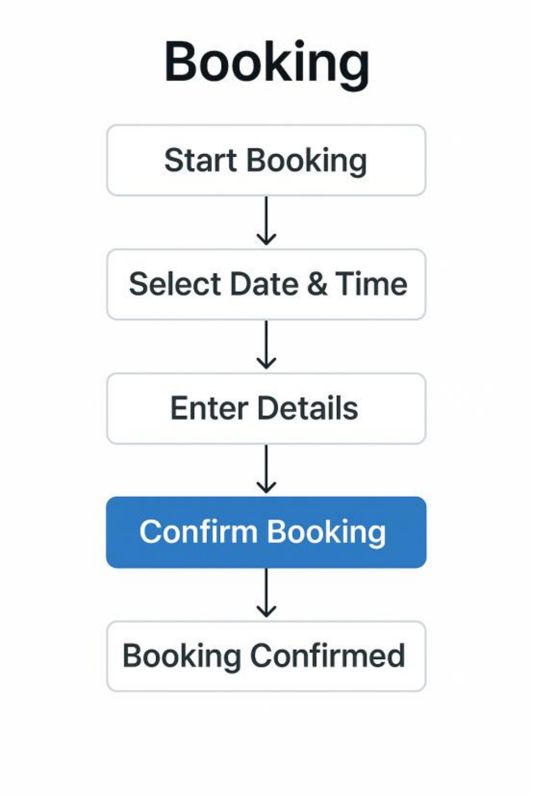
$700,000
Los Angeles, CA
1.800 sq ft · 1.800 sq ft

2.3 Cart & Order Placement

FR-7: Users can add properties to their cart.

FR-8: Users can update the quantity of properties in their cart.

FR-9: Users can proceed to checkout to finalize their booking.



2.4 Order Management (Admin/Seller Panel)

FR-10: Admins can view incoming orders and their statuses.

FR-11: Admins can update the status of orders (e.g., confirmed, canceled).

FR-12: Admins can manage inventory and property listings.

2.5 Product Management (Admin)

FR-13: Admins can add new properties to the catalog.

FR-14: Admins can update existing property details.

FR-15: Admins can delete properties from the catalog.

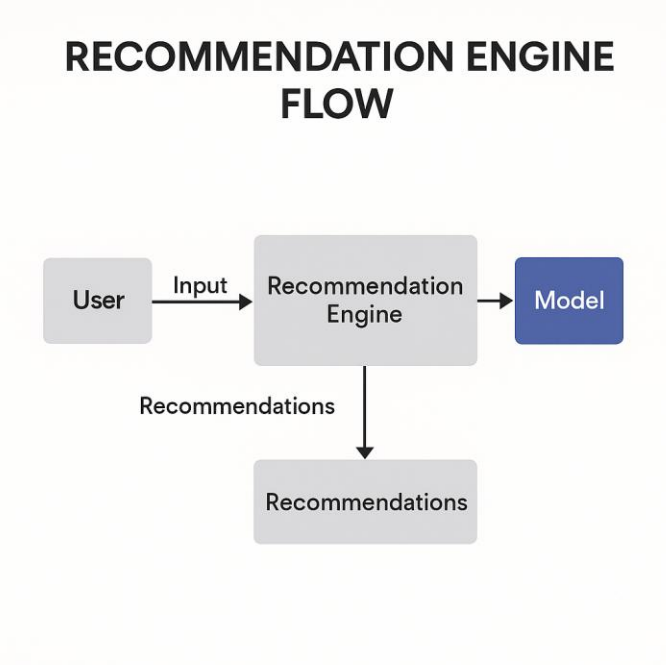
2.6 Order Tracking & History

FR-16: Users can view the status of their current orders.

FR-17: Users can check their past order history.

2.7 Product Recommendations

FR-18: The system provides personalized property suggestions based on user preferences and browsing history.



3. Non-Functional Requirements

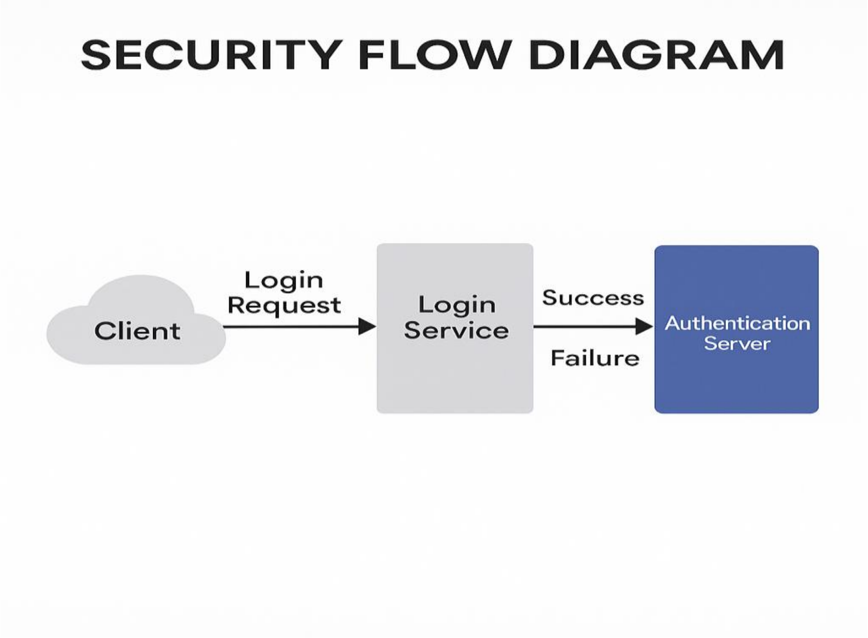
3.1 Usability

NFR-1: The application should have an intuitive and user-friendly interface, ensuring smooth navigation.

3.2 Security

NFR-2: All user authentication and data should be encrypted (e.g., HTTPS, JWT).

NFR-3: Must follow industry best security practices.



3.3 Reliability

NFR-4: Ensure consistent and crash-free experience.

3.4 Performance

NFR-5: Interactions (search, booking) should respond within 2 seconds.

NFR-6: Property listings should load instantly.

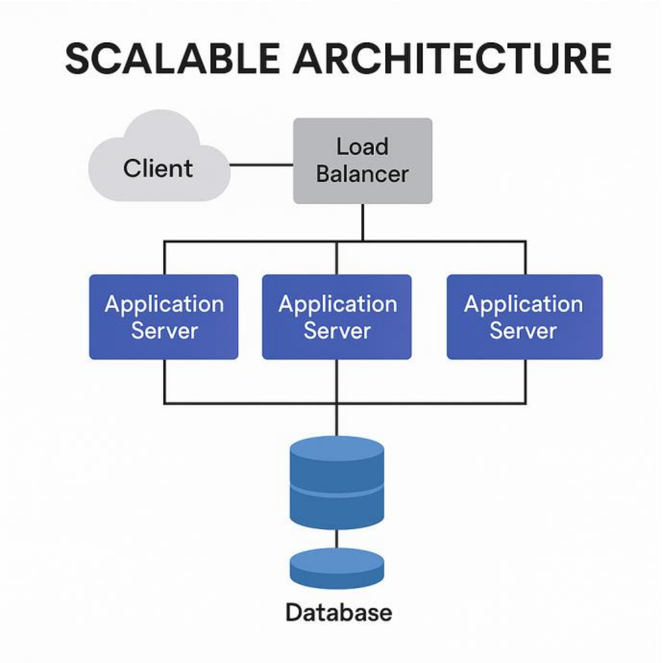
3.5 Availability

NFR-7: Ensure 99.9% uptime with global accessibility.

3.6 Scalability

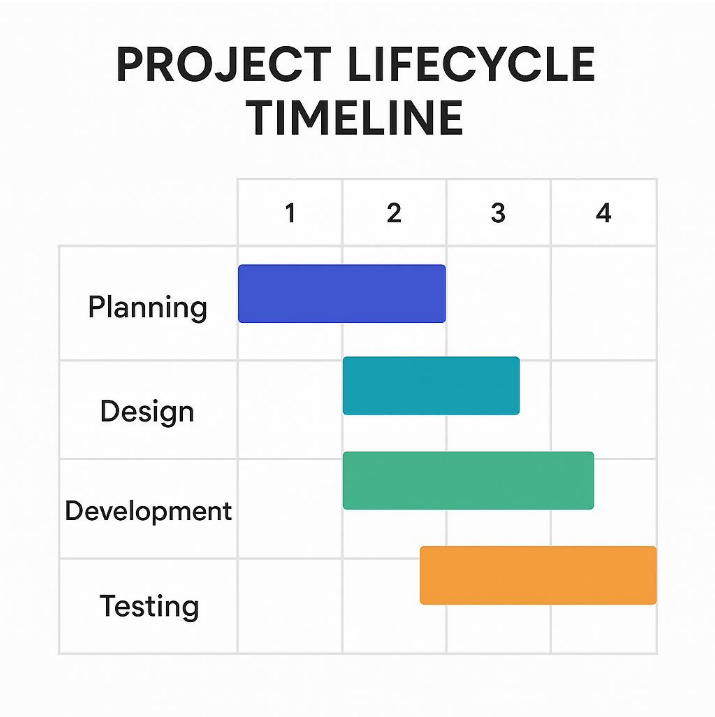
NFR-8: Should handle more users/bookings without lag.

NFR-9: Designed for modular future upgrades.



4. Conclusion

This document outlines the core functional and non-functional requirements for HouseHunt. These will ensure the platform remains secure, scalable, and user-friendly as development progresses.



PROJECT LIFECYCLE TIMELINE