

Ranthatch

Case Study

Overview

Ranthatch is a real estate rental marketplace that connects Landlords (who offer rental properties) and Tenants (who are searching for a place to live). The platform is designed to simplify property discovery, listing, and communication between the two roles.

It provides a secure, user-friendly environment with OTP-based authentication, flexible listing management, and subscription-based monetization for landlords.

Methodology

The proposed methodology involves the following steps:

- Feature Development

Ranthatch includes a variety of features for both Landlords and Tenants. Landlords can register, list properties (room, entire place, roommate), manage their listings, upload documents for verification, and subscribe to premium plans for additional listings. Tenants can register, search for properties using filters (budget, type, location), view detailed property information with image galleries, and connect with landlords via messaging. Both roles benefit from OTP-based login, password reset via email verification, profile management, and secure account settings.

- Integration of Data Sources:

The platform integrates multiple data sources to enhance the rental experience. Mapbox APIs are used for geolocation and address selection. AWS S3 and Media handle property media storage and optimization. Payment integration through Stripe allows landlords to purchase subscription plans (Silver, GoldX, PlatinumX). Magic Link provides easy access for users.

- Data Analysis and Visualization

Ranthatch leverages filters, search, and sorting mechanisms to deliver curated property results. Listings can be sorted by newest or oldest, and filtered by budget, property type, and amenities. This enables tenants to quickly narrow down their choices. Landlords benefit from dashboard insights on property performance and verification status.

- User Experience and Accessibility

Ranthatch is designed with a React + Next.js frontend, providing a modern and intuitive interface. The tenant dashboard simplifies property discovery, while the landlord dashboard organizes listing management. Interactive property detail pages with image galleries, clear amenities display, and easy-to-use messaging ensure that both roles have a seamless experience. The platform also provides multilingual support with i18next and next-intl for accessibility across regions.

Use Cases:

- Landlord Property Listing

Landlords can add new properties, upload images, and define details like bedrooms, bathrooms, smoking rules, and parking. They can manage listings via their dashboard and subscribe for additional slots beyond the free first listing.

- Tenant Property Search

Tenants can explore listings based on location and budget, apply filters, and view detailed property pages. They can directly message landlords for inquiries or negotiations.

- Profile Verification

Landlords upload documents for admin verification. Once approved, a verified badge appears on their profile, increasing trustworthiness in the marketplace.

- Messaging & Communication

Both landlords and tenants can communicate directly via a secure messaging feature, ensuring smoother negotiations and faster decision-making.

- Subscription Management

Landlords choose between Silver, GoldX, or PlatinumX monthly subscription plans to unlock additional listing slots, providing flexibility and scaling options.

- Account Security & Settings

Both roles can change passwords, manage profiles, or delete accounts permanently, ensuring user control over data and privacy.

Feature

Common Features (Both Roles)

- User Authentication:
 - Register / Login

- Forget/Reset password using OTP email verification

- OTP-based email verification

Landlord Features

1. Service Selection

- Choose type of rental to offer:
- Room
- Entire Place
- Roommate

2. Property Management

- Add Property Form: Create listings with details such as:
 - Number of rooms, bedrooms, bathrooms
 - Smoking policy
 - Parking availability
 - Property images (image gallery)
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- My Listings Dashboard: Manage all listings with Edit/Delete options.

3. Monetization

- On new registration → 1 free listing.
- To add more listings → Must buy a plan:
- Silver
- GoldX
- PlatinumX (Monthly subscription plans).

4. Communication

- Messaging feature: Chat directly with tenants.

5. Verification

- Document Upload Feature:
- Submit ID or property verification documents.
- Admin approves/rejects.
- Once approved → Get a Verified Badge on profile.

6. Settings

- Change password.
- Delete account permanently.

Tenant Features

1. Service Selection

- Choose what they are looking for:

- Room
- Entire Place
- Roommate

2. Property Search

- Home Dashboard:
- Search based on location.
- Filter by budget, type, and amenities.
- Sort by newest or last added listings.

3. Property Interaction

- Property Detail Page:
- Image gallery.
- Property details (rooms, bathrooms, smoking, parking, etc.).
- Option to Send Message to the landlord.

4. Communication

- Messaging feature: Chat directly with landlords.

5. Profile

- Edit personal profile.

6. Settings

- Change password.
- Delete account permanently.