

Student Housing Website

A platform that helps university students find affordable, verified housing near their campus, with reviews, landlord contacts, and location details.

Description

1. Vacant rooms available
2. Type of house (single room, bedsitter, one-bedroom, shared room)
3. Sample pictures of the property
4. Reviews from past tenants (students)
5. Location with map & directions
6. Verified landlord details

Functionality

Users:

1. Landlords
 - Register & login
 - Upload house listings
 - Update house status (vacant, occupied, renovation)
 - Manage profile
 - Chat with students
2. Students (Customers)
 - Register & login
 - Search for houses (location, type, price range, gender preference)
 - Save houses to favorites
 - View verified landlord contacts (premium)
 - Leave reviews and ratings
 - Chat with landlords
 - Find roommates (optional feature)
3. Admin
 - Authenticate with RBAC
 - Verify house listings
 - Manage user accounts (activate, suspend, verify)
 - Monitor platform activity (basic logs)
 - Manage subscriptions

Business Model

- Freemium → free access to search & browse houses
- Premium (low-cost, student-friendly) → unlock contacts, save favorites, roommate finder
- Advertisements → student-focused ads (food delivery, internet providers, campus services)
- Partnerships → with universities, student unions, hostels

Technical Structure

- Backend: Node.js, TypeScript, Prisma, Zod
- Frontend: React (TypeScript, Vite), mobile-first
- Database: PostgreSQL/MySQL
- Storage: Cloudinary / AWS S3 (for images)
- Maps Integration: Google Maps / Leaflet
- Payments: M-Pesa, PayPal (for premium)
- Auth & Security: JWT with refresh tokens, bcrypt password hashing

Database Tables

users.auth (id, email, password, username, role)
 users.details (id, userId, name, gender, phone, verified, subscriptionPlan)
 users.reviews (id, userId, houseId, rating, comment, createdAt, updatedAt)
 users.history (id, userId, viewedHouses, postedHouses)
 houses.details (id, landlordId, title, roomType, roomsNumber, vacantUnits, location, description, pricing, utilities, rentDeadline, status)
 houses.pictures (id, houseId, imageUrl)
 subscriptions (id, userId, plan, startDate, endDate)
 messages (id, senderId, receiverId, houseId, message, createdAt)

API Endpoints

General Users: Register, Login, Refresh Token, Logout, Change Password, Delete Account
 Students: Search houses, Save to favorites, View landlord contacts (premium), Chat with landlords, Review a house, Roommate finder
 Landlords: Add house, View houses, Update details, Manage profile
 Admin: Authenticate, Manage users, Verify listings, Monitor logs, Manage subscriptions

Frontend Pages

All Users: Login/Register, Update Profile, Change Password, Recover Account
 Students: Search houses, House details, Dashboard, Favorites, Chat, Payment page, Roommate Finder
 Landlords: Add listing, View houses, Update house, Respond to chats
 Admin: View users, Verify listings, Manage accounts, Activity logs
 General Pages: Landing, About Us, Contact Us, Premium Subscription