

# Ideation Phase - House Rental System

## 1. Problem Statement

Finding rental properties is often time-consuming and inefficient. Both tenants and landlords lack a dedicated, easy-to-use digital platform that facilitates property rentals with detailed listings and effective communication.

## 2. Goal

To create an efficient, user-friendly platform that bridges the gap between tenants looking for houses and landlords offering properties for rent.

## 3. Target Audience

- Individuals looking to rent homes or apartments.
- Property owners and landlords who want to list their properties.
- Real estate agents managing rental properties.

## 4. Key Features Brainstorm

- Property Listings with Photos and Descriptions
- Advanced Search and Filters (by price, location, type, amenities)
- User Authentication (Login, Registration)
- Favorites/Wishlist feature
- Contact Landlord or Request Viewing
- Admin Panel for moderation
- Reviews and Ratings for properties (future enhancement)

## 5. Technology Brainstorm

- Frontend: React.js or Next.js for a dynamic user interface.
- Backend: Node.js with Express or Firebase Functions.
- Database: MongoDB Atlas or PostgreSQL for storing user and property data.
- Hosting: Vercel for frontend deployment; Render, Heroku, or Railway for backend.
- Authentication: Firebase Auth or Auth0.

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## 6. Potential Challenges

- Ensuring data accuracy and avoiding fake listings.
- Handling a large number of users and listings efficiently.
- Providing a smooth, mobile-optimized user experience.
- Implementing secure user authentication and data protection.

## 7. Future Enhancements (Ideas)

- Online Booking & Rent Payment
- Virtual Tours / 360° Views
- AI-based Property Recommendations
- Push Notifications for new listings