

# Requirement Analysis - House Rental System

## 1. Introduction

The House Rental System is a web-based platform designed to help users find rental properties, such as apartments, villas, and houses. It aims to streamline the rental search process and allow property owners to list their rentals effectively.

## 2. Objective

- To provide an intuitive platform for tenants to browse and rent properties.
- To enable property owners to list properties for rent.
- To offer users detailed property information and a seamless experience.

## 3. Scope

- Tenants can browse listings by location, price, property type, and amenities.
- Landlords can add, edit, and manage property listings.
- Admins manage user accounts and oversee listings.
- Future integrations for booking and payment can be incorporated.

## 4. Functional Requirements

- User Authentication (Login, Sign Up)
- Property Listings
- Property Detail Pages
- Search and Filters (by price, location, type)
- Add/Edit/Delete Properties (for landlords/admins)
- Save Properties (for tenants)
- Responsive Web Design (mobile and desktop friendly)

## 5. Non-Functional Requirements

- Performance: Fast loading times for listings and property pages.
- Security: Secure login and data protection.
- Usability: Simple and clean interface for all users.

# Requirement Analysis - House Rental System

- Scalability: Ability to add more properties and users without system degradation.

## 6. User Roles

- Guest User: Can view listings without an account.
- Tenant: Can create an account, save favorite properties, and contact landlords.
- Landlord: Can list new properties and manage existing listings.
- Admin: Can manage users, approve or reject listings, and maintain platform integrity.

## 7. System Architecture Overview

- Frontend: React.js or Next.js
- Backend: Node.js with Express or any other lightweight server
- Database: MongoDB, PostgreSQL, or Firebase
- Hosting: Vercel (currently used)

## 8. Assumptions

- All users have internet access.
- Users are familiar with basic web navigation.
- Payment and booking integrations are future enhancements.