

# **Online Property Rental System**

A Comprehensive Overview

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## Introduction

This **Online Property Rental System** is designed to create an easy-to-use platform for renting properties online, with features for owners, tenants, and administrators. The key objectives are:

1. Simplify property rental management.
2. Provide secure user authentication.
3. Enable seamless property searches, bookings, and payments (still in development).
4. Facilitate property reviews and ratings.

## Key Features

The key features of the system are as follows:

1. User Registration & Authentication: Secure login and profile management.
2. Owner Features: Manage property listings and rental details.
3. Tenant Features: Browse, search, and book properties.
4. Admin Features: Oversee platform activities, manage users.
5. Search & Filter Functionality: Advanced search options for tenants.
6. Rating and Review System: Allow users to rate and review properties.

## Tools & Technologies

Technologies used in the system include:

1. Backend: Spring Boot, Hibernate ORM, JWT for authentication.
2. Database: PostgreSQL (pgAdmin4)
3. Security: Spring Security for user authentication
4. Build Tool: Apache Maven
5. API Testing Tool: Postman

# Database Design

## Entities:

1. User (Owner, Tenant, Admin)
2. Property & PropertyPicture

## Relationships:

1. One-to-many: Owner -> Property
2. Many-to-many: Tenant -> Property (through rental agreements)

## **System Workflow**

1. User registration and login process.
2. Owners list their properties.
3. Tenants browse and book properties.
4. Admin oversees platform activities and manages users.

## **Conclusion**

The Online Rental System simplifies property rental management for owners, tenants, and admins. Future enhancements will include integrated payment method, artificial intelligence integration, third party media management services(Cloudinary), property maintenance requests, and improved search features.