



ONLINE HOUSE RENTAL SYSTEM APP

*Authors: Ganaranjan Nayak, J. Akash, P. Chiranjeevi, L. Suresh, Y.Rajesh.
Under the Guidance of: Mrs. Amala Devi, Assistant Professor Department of
Computer Science and Engineering
Visakha Institute of Engineering and Technology, Visakhapatnam*

Abstract

The House Rental System is an advanced digital platform aimed at revolutionizing the way individuals rent, lease, or find properties such as houses, shops, PG hostels, or bachelor rooms. The system eliminates the need for manual intervention by digitizing the rental process—from registration to agreement—ensuring ease of use, transparency, and efficient communication between tenants and property owners.

It encompasses functionalities like property listing, search and filter options, property booking, and automated payment processing. The system also incorporates modules for user authentication, profile management, and data validation. With an intuitive UI/UX and secure database, it provides a scalable solution to the increasing demand for real estate digitization, especially in urban areas.

1. Introduction

With the rise in urban migration and the dynamic nature of property rentals, there has been a significant demand for an automated solution that simplifies the property rental process. Traditional systems involve brokers and offline documentation, which can be time-consuming and inefficient.

The proposed House Rental System brings all the involved parties—owners and tenants—under a single platform, offering features such as listing properties, checking availability, booking online, digital agreements, and direct communication.

2. Objective

- To reduce dependency on intermediaries in the house rental process.
 - To offer a platform where users can search for houses, PGs, hostels, or shops for rent.
 - To allow property owners to list and manage properties.
 - To facilitate online bookings and rent payment.
 - To implement a digital agreement process to save time and reduce paperwork.
 - To make the rental process more transparent, secure, and reliable.
-

3. Literature Review

Existing platforms like Housing.com, 99acres, and MagicBricks provide rental solutions but often lack end-to-end automation. They still rely on offline documentation and intermediaries. Key limitations in current systems include:

- Lack of real-time communication
- Limited digital agreement processing
- Broker dependency
- No provision for short-term rentals or bachelor accommodations

The proposed system fills these gaps through automation, integration of e-signatures, and digital KYC. It supports diverse rental needs and uses modern web and database technologies to ensure ease of access, scalability, and performance.

4. System Architecture

This system uses a 3-tier architecture:

- **Presentation Layer** – Interface for users
- **Business Logic Layer** – Handles core operations like booking and agreements
- **Database Layer** – Stores property and user data securely

5. Modules

- **User Authentication**
 - **Property Listing & Management**
 - **Search and Filter**
 - **Booking and Agreement Handling**
 - **Payment Gateway**
 - **Admin Controls**
 - **Chat and Notifications**
-

6. Technologies Used

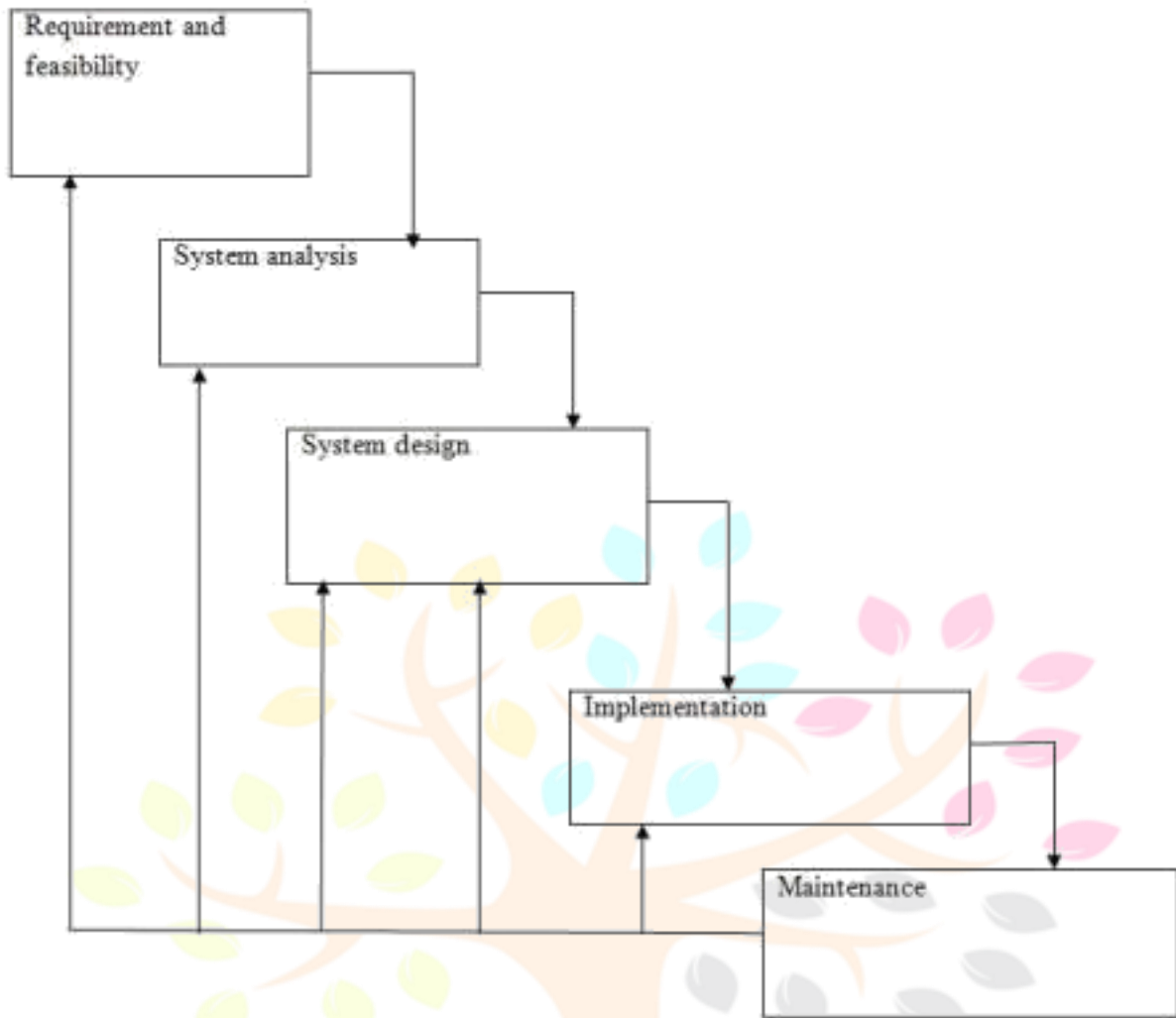
- **Frontend:** HTML, CSS, JavaScript
 - **Backend:** PHP or Python
 - **Database:** MySQL
 - **Frameworks:** Laravel, Django
 - **Payment Integration:** Razorpay, Paytm
 - **Security:** SSL, password hashing
-

7. Advantages

- No broker required
 - Transparent rental process
 - Efficient documentation
 - Fraud prevention with verified listings
 - Scalable and easy to use
-

8. Limitations

- Requires internet access
 - Initial user trust might be low
 - Legal acceptance of digital agreements varies by region
-



International Research Journal

9. Future Enhancements

- AI-based property recommendations
- Blockchain for secure contracts
- Mobile application
- Virtual property tours
- Voice assistant support

Research Through Innovation

Conclusion

The House Rental System offers a powerful solution for digitizing and streamlining the rental process. It supports various types of properties and enables both tenants and owners to interact in a secure, efficient, and transparent manner. With ongoing advancements in AI and blockchain, the system is future-ready and well-positioned for wide-scale adoption.

References

1. Housing.com - <https://housing.com/>
 2. 99acres - <https://www.99acres.com/>
 3. MagicBricks - <https://www.magicbricks.com/>
 4. Razorpay - <https://razorpay.com/>
 5. Laravel Framework - <https://laravel.com/>
 6. Django Framework - <https://www.djangoproject.com/>
 7. MySQL Database - <https://www.mysql.com/>
-

