

# Rental Management System — Project Report

## 1. Introduction

The **Rental Management System** is a web-based platform to simplify house or flat rental processes for landlords and tenants. It manages property listings, digital agreements, rent tracking, and reminders to make rental management more transparent and efficient.

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## 2. Requirements

### Functional Requirements:

- User registration/login (Landlord, Tenant, Admin).
- Landlords can create and manage property listings.
- Generate and store rental agreements (manual or e-sign).
- Track rent payments and send reminders.
- Tenants can view payment history, receipts, and agreements.
- Complaint/dispute system for tenants.

### Technical Requirements:

- Built using **CakePHP Framework** with **MySQL** database.
- Secure authentication, role-based access, and file uploads.
- Cron jobs for reminders.
- Deployed on **cPanel hosting** with SSL.

## 3. Technology Choice

- **Backend:** CakePHP (MVC framework for PHP).
- **Database:** MySQL.
- **Frontend:** CakePHP templates with Bootstrap/Tailwind CSS.
- **Payments:** Stripe or PayPal integration.
- **Hosting:** cPanel (Apache, PHP, MySQL).
- **Email/Notifications:** SMTP or SendGrid.

## 4. Architecture

- **Presentation Layer:** Views (HTML/CSS/JS).
- **Application Layer:** Controllers handle business logic.
- **Database Layer:** Models interact with MySQL.
- **Integrations:** Payment, Email, and E-signature APIs.
- **Deployment:** CakePHP app hosted on cPanel with SSL; cron jobs for reminders.

## 5. Discussion

CakePHP provides quick development using MVC and built-in authentication. MySQL ensures reliable data storage. The system improves transparency, reduces manual errors, and saves time for both landlords and tenants. Security measures (HTTPS, CSRF protection, and input validation) ensure data safety. Future features can include a mobile app or analytics dashboard.

## 6. Conclusion

The Rental Management System streamlines rental operations with digital agreements, payment tracking, and automated reminders. Developed with CakePHP and MySQL, it is secure, efficient, and easily deployable on cPanel hosting, providing a complete solution for digital property management.