EAST WEST UNIVERSITY

Project

CSE 479: Web Development

Section: 03

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Abstract

The Online House Renting System is a web based application developed using PHP, MySQL, HTML, CSS, and JavaScript. The system provides a simple and secure platform where house owners can publish rental listings and users can browse, search, and request houses for rent. An admin panel is included to manage users and approve listings. The project focuses on core web development concepts such as authentication, role based access control, CRUD operations, and database connectivity.

1. Introduction

Finding rental houses manually is time consuming and inefficient. This project aims to digitize the house renting process by offering a centralized online platform. House owners can easily list properties while renters can view details and communicate through the system. The application is suitable for small scale rental management and academic learning purposes.

2. Objectives

- To design a simple and user friendly house renting platform
- To allow users to register and log in securely
- To enable house owners to create, update, and delete listings
- To allow renters to browse and view house details
- To provide an admin panel for managing users and approving listings
- To practice PHP MySQL integration and MVC like folder organization

3. System Overview

The system is divided into three main user roles:

- Guest users who can browse listings
- Registered users who can manage profiles and listings
- Admin users who control system level operations

The application follows a modular structure with separate folders for configuration, public pages, admin pages, assets, and database scripts.

4. Technology Stack

- Frontend: HTML5, CSS3, JavaScript
- Backend: PHP
- Database: MySQL
- Server: Apache
- Containerization support: Docker

5. Project Structure

The project is organized as follows:

- public: Contains user facing pages such as login, register, listings, profile, and listing details
- admin: Contains admin dashboard, user management, and listing approval pages
- config: Includes database configuration, environment variables, paths, and error handling
- includes: Reusable components such as header, footer, authentication, and middleware
- assets: CSS, JavaScript, and uploaded listing images
- sql: Database schema
- docker: Dockerfile and Apache configuration

This structure improves maintainability and code reuse.

6. Functional Requirements

6.1 User Authentication

- Users can register using a valid email and password
- Secure login and logout functionality
- Session based authentication

6.2 User Profile Management

- Users can view and update their profile information

6.3 House Listing Management

- Owners can create new house listings
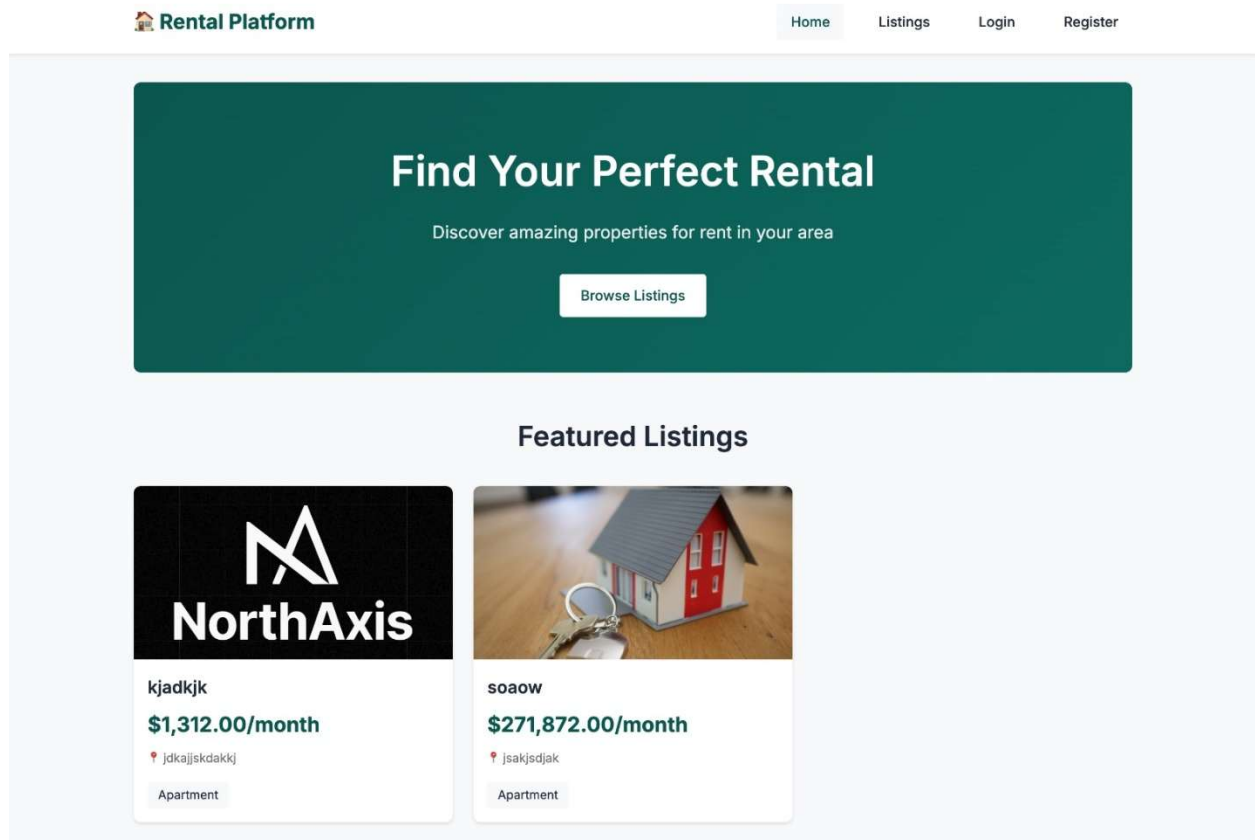- Listings include title, description, price, and image

- Owners can edit and delete their own listings

6.4 Browsing and Viewing Listings

- All users can browse available houses
- Detailed view page for each listing

6.5 Admin Features

- Admin dashboard with overview information
- View and manage registered users
- Approve or reject house listings before publication

Register

Full Name *

Email *

Phone

Address

Password *

Minimum 6 characters

Confirm Password *

Register

Login

Email

Password

Login

Forgot Password?

Don't have an account? Register

My Profile

Profile Information

Name *

Test

Email

test2@t.ca

Email cannot be changed

Phone

38182

Address

kaljkjasjkj

Update Profile

Change Password

Current Password *

New Password *

Confirm New Password *

Change Password

My Listings

Create New Listing

Admin Dashboard

TOTAL LISTINGS	PENDING APPROVAL	APPROVED	TOTAL USERS
3	0	2	3

Review Pending Listings   **Manage Users**

Recent Listings

ID	Title	Owner	Price	Status	Created	Actions
4	kjadkjk	Test	$1,312.00	APPROVED	Dec 14, 2025	View
3	hjdahdj	Dummy	$512,625.00	REJECTED	Dec 14, 2025	View
2	soaow	Dummy	$271,872.00	APPROVED	Dec 14, 2025	View

Create New Listing

Title *

Description *

Price per Month ($) *

Property Type

Select Type

Address *

Bedrooms

Bathrooms

Area (sq ft)

Images

Update Profile

My Listings

Create New Listing

APPROVED

NorthAxis

kjadkjk

$1,312.00/month

📍 jdkajjskdakkj

Edit   Delete

🏠 **Rental Platform**   Home   Listings   Login   Register

Browse Listings

Filters

Keyword

Search...

Min Price

Max Price

Location

City, State

Property Type

All Types ▾

Apply Filters

Clear

2 listing(s) found

kjadkjk

$1,312.00/month

📍 jdkajjskdakkj

Apartment

🛏 3 bed

soaow

$271,872.00/month

📍 jsakjsdjak

Apartment

🛏 3 bed

🏠 **Rental Platform**   Home   Listings   Profile   Admin   Admin User   Logout

Approve Listings

Review and approve or reject pending listings

Some

Owner: Test (test2@t.ca)

Price: $1,000.00/month

Location: ajskjsakjs

Type: Apartment

Bedrooms: 3

Created: Dec 17, 2025 16:25

Some

Approve   **Reject**   **View Full Details**

	Table	Action						Rows	Type	Collation	Size	Overhead
☐	houses	⭐	🔲 Browse	🔧 Structure	🔍 Search	🔹 Insert	🗑 Empty	⊘ Drop	2	InnoDB	utf8mb4_general_ci	16.0 KiB	-
☐	users	⭐	🔲 Browse	🔧 Structure	🔍 Search	🔹 Insert	🗑 Empty	⊘ Drop	1	InnoDB	utf8mb4_general_ci	32.0 KiB	-
	2 tables	Sum						3	InnoDB	utf8mb4_general_ci	48.0 KiB	0 B

↑ ☐ Check all   With selected: ▾

Extra options

←T→				▾ id	owner_id	title	location	rent	rooms	description	image_path	created_at
☐	✏ Edit	🔧 Copy	⊖ Delete	1	1	test	Aftabnagar	10000.00	2	fgdgfwbjvnkkjh		2025-12-14 13:26:39
☐	✏ Edit	🔧 Copy	⊖ Delete	2	1	test	Aftabnagar	10000.00	2	fgdgfwbjvnkkjh		2025-12-14 13:31:01

↑ ☐ Check all   With selected: ✏ Edit   🔧 Copy   ⊖ Delete   🖼 Export

←T→				▾ id	name	email	phone	password				created_at
☐	✏ Edit	🔧 Copy	⊖ Delete	1	Alzana	alzana@example.com	12345678900	$2y$10$Ee7OWeM47J6iLhh3MU801e2EL0GwXxkkJfsy2CYwJ2w...				2025-12-14 13:23:19

↑ ☐ Check all   With selected: ✏ Edit   🔧 Copy   ⊖ Delete   🖼 Export

7. Database Design

The database schema is defined in the schema.sql file. The main tables include:

- users: Stores user and admin account information
- listings: Stores house listing details
- roles or status fields to differentiate admin and normal users

Primary and foreign keys are used to maintain data integrity.

8. Security Considerations

- Passwords are stored using hashing techniques
- Authentication middleware restricts unauthorized access
- Admin pages are protected from normal users
- File upload directory is separated from core logic

9. Error Handling

A centralized error handler is used to manage application errors. This improves debugging and user experience by preventing raw error output.

10. Deployment and Configuration

- Environment variables are managed using env.php
- Database connection is configured in database.php
- Docker support allows easy deployment and testing in isolated environments

11. Limitations

- No real time chat between users
- Payment system is not implemented
- Search and filtering features are basic
- Email verification and password recovery are limited

12. Future Enhancements

- Advanced search and filter options
- Integrated online payment system
- Messaging system between renters and owners
- Email and SMS notifications
- Improved UI with modern frameworks

13. Conclusion

The Online House Renting System successfully demonstrates a complete PHP and MySQL based web application. It fulfills the core requirements of a rental listing platform while maintaining a clean and modular code structure. This project is suitable for academic submissions and as a foundation for more advanced real world rental systems.

14. References

- PHP Official Documentation
- MySQL Documentation
- Apache Web Server Documentation