HOUSE RENTAL MANAGEMENT SYSTEM USING PHP & MYSQL

1. INTRODUCTION

1.1 Project Overview

This web-based application simplifies the house rental process by managing tenant information, rental payments, and property listings. It is built using PHP, MySQL, HTML, CSS, JavaScript, and Bootstrap.

1.2 Purpose

The goal is to digitalize rental workflows, reduce manual errors, and provide a centralized system for tracking tenants and payments.

2. IDEATION PHASE

2.1 Problem Statement

Landlords face difficulties managing rental data using manual systems like paper records or spreadsheets, leading to errors, missed payments, and poor tracking.

2.2 Empathy Map Canvas

THINK & FEEL: Wants automation | Worries about rent

SEE: Others using software | Cluttered paper records

HEAR: Tenant complaints | Market competition

SAY & DO: 'I need a better system' | 'Too much to track manually'

2.3 Brainstorming

What if landlords had a dashboard?

What if tenants could be tracked by house?

What if payment status was visible in one click?

3. REQUIREMENT ANALYSIS

3.1 Customer Journey Map

1. Landlord logs in
2. Adds a house type and house
3. Registers a tenant
4. Enters rental payment
5. Views reports for income tracking

3.2 Solution Requirement

Functional: User login, house/tenant/payment management, reports

Non-functional: Security, accessibility, responsiveness

3.3 Data Flow Diagram

Level 0: [User] -> [House Rental System] <--> [Database]

Level 1: [User] -> [Login], [Manage Data], [View Reports] <- [System Output]

3.4 Technology Stack

Frontend: HTML, CSS, Bootstrap, JavaScript

Backend: PHP

Database: MySQL

Other: AJAX, Modals

HOUSE RENTAL MANAGEMENT SYSTEM USING PHP & MYSQL

4. PROJECT DESIGN

4.1 Problem Solution Fit

A web system is the most efficient way to manage rentals with real-time updates and access.

4.2 Proposed Solution

A PHP-MySQL based portal with dashboards, forms for adding data, and reports for tracking.

4.3 Solution Architecture

Client (Browser) -> Frontend (HTML/CSS/JS/Bootstrap) -> Backend (PHP) -> MySQL Database

5. PROJECT PLANNING & SCHEDULING

5.1 Project Planning

Week 1: Requirement gathering

Week 2: Database design

Week 3: Frontend development

Week 4: Backend integration

Week 5: Testing and bug fixes

Week 6: Documentation & Deployment

6. FUNCTIONAL AND PERFORMANCE TESTING

6.1 Performance Testing

Tested CRUD operations for houses, tenants, and payments.

System performs smoothly with up to 1000 records.

SQL queries optimized using indexing.

7. RESULTS

7.1 Output Screenshots

Include screenshots of:

- Login Screen
- Admin Dashboard
- Tenant List
- Add Payment Screen
- Report Generation Page

8. ADVANTAGES & DISADVANTAGES

Advantages

- Easy to use
- Fast data access
- Reduces paperwork
- Organized payment tracking

Disadvantages

- No SMS/email alerts
- No tenant login module
- Payment gateway not integrated

9. CONCLUSION

This system enhances the rental management process by offering an intuitive and structured platform for house owners and staff.

10. FUTURE SCOPE

- Add tenant login portal
- Integrate online rent payments
- Mobile app version
- Add notification system

11. APPENDIX

Source Code: Available upon request or hosted on GitHub

Dataset Link: Not applicable

GitHub & Project Demo Link: https://github.com/your-repo (replace if available)