Project Title

RentSmart: A Simple Home Renting Web Application

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Background and Problem Statement

In many urban areas, the process of finding rental homes remains inefficient and unreliable. Tenants often rely on informal channels such as social media posts or local advertisements, which are frequently outdated, unverified, or incomplete. Similarly, landlords face challenges in reaching genuine tenants efficiently.

The absence of a centralized, simple, and reliable web-based platform creates delays, misinformation, and unnecessary complexity in the renting process. This project addresses this problem by proposing **RentSmart**, a web application designed to directly connect landlords and tenants through an organized and transparent system.

Project Goal and Objectives

Goal:
To design and develop a responsive web-based home renting application that simplifies property listing and rental inquiries for landlords and tenants.

Objectives:

- To develop a functional web application using PHP, MySQL, HTML, CSS, and JavaScript
- To enable landlords to register and post property listings with images and descriptions
- To allow tenants to browse, search, and send rental inquiries
- To provide an administrative interface for managing users and property listings
- To ensure the application is user-friendly and responsive across different devices

Scope of the Project

In Scope:

- User registration and authentication for landlords, tenants, and admin
- Property listing, searching, and filtering
- Booking inquiry functionality
- Basic admin dashboard for system management
- Responsive web design

Out of Scope:

- Online payment processing
- Mobile application development
- Real-time chat functionality
- Advanced recommendation or AI-based features

Methodology and SDLC Model

The project will follow the **Rapid Application Development (RAD)** model. RAD is chosen due to its emphasis on quick prototyping, iterative development, and continuous user feedback, making it suitable for student projects with limited time and resources.

Tools and Technologies

- **Frontend:** HTML, CSS, JavaScript
- **Backend:** PHP
- **Database:** MySQL
- **Development Tools:** Visual Studio Code, XAMPP
- **Design Tools:** Figma, Draw.io
- **Version Control:** Git and GitHub

Expected Outcome

The expected outcome of the project is a fully functional web application that allows landlords to list properties and tenants to search and submit rental inquiries efficiently. RentSmart will demonstrate practical application of full-stack web development concepts and software engineering principles.

Significance of the Project

This project enhances practical understanding of system analysis, database design, web development, and teamwork. It serves as a real-world simulation of a rental management system and strengthens hands-on experience in applying the software development life cycle.