



Hotel Management System

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PROBLEM

Hotels face significant challenges in managing bookings, room availability, and overall operations due to reliance on manual processes or outdated systems. Issues such as double bookings, miscommunication, and errors in room allocation negatively affect customer satisfaction. The absence of a centralized management solution complicates tasks like updating room details, pricing, and ensuring secure transactions. These inefficiencies result in increased operational costs, wasted resources, and diminished revenue opportunities. A modern, user-friendly system is essential to streamline operations and enhance user experience.

OBJECTIVE

Develop an automated, user-friendly system to manage room bookings, customer records and financial data.

TECHNOLOGY BRIEF

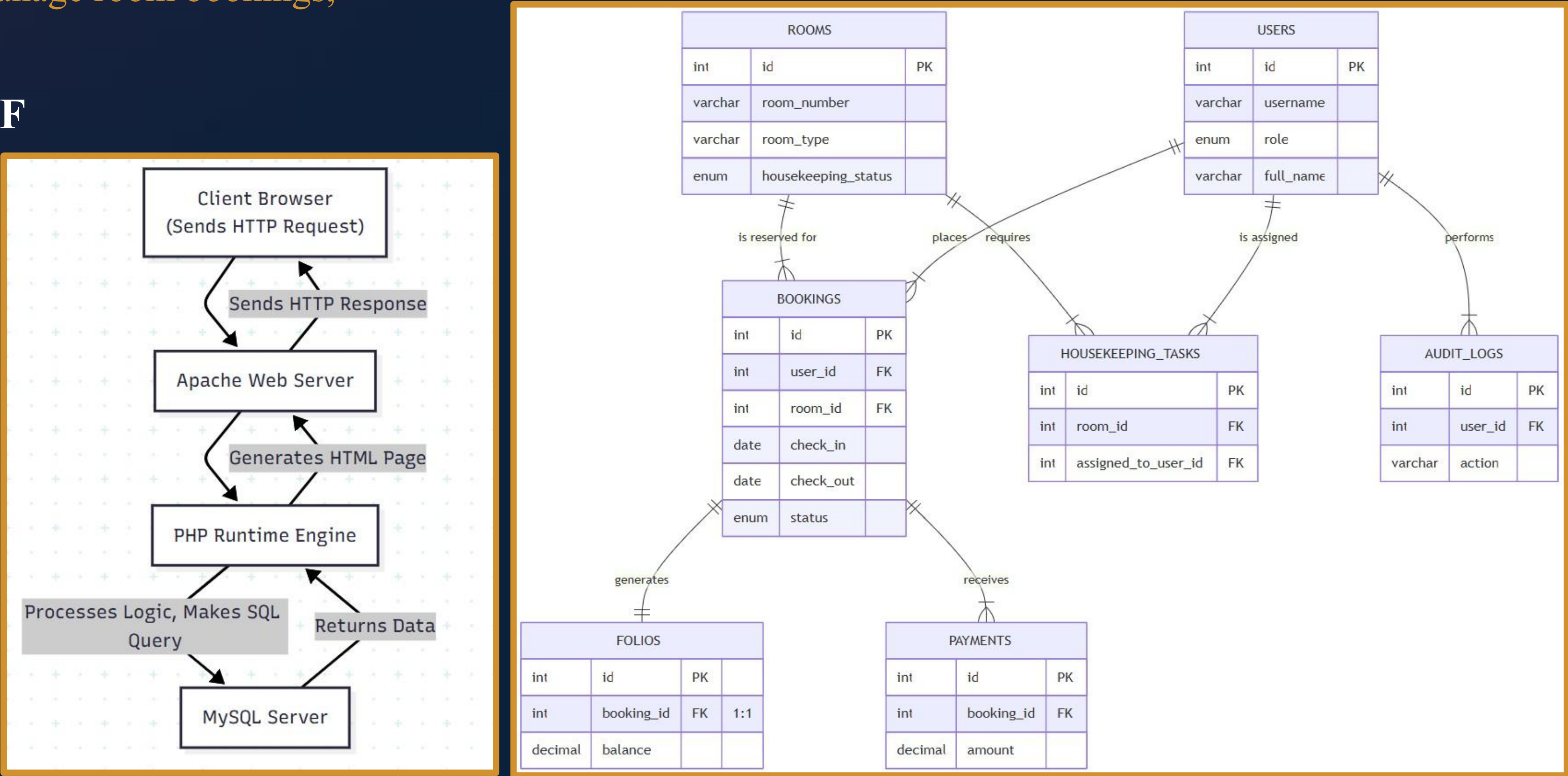
- Development: XAMPP Server Suite
- Web Server: Apache
- Database: MySQL
- Backend Language: PHP
- Frontend Languages: HTML, CSS, JavaScript
- Version Control: GitHub
- JavaScript Libraries: Chart.js, FullCalendar
- PHP Libraries: PHPMailer



SUMMARY

Our Hotel Management System is a web application designed to simplify and improve the way hotels manage bookings and room availability. The system allows users to register, log in, and book rooms, while administrators can manage room details and pricing through a secure, user-friendly interface. Using role-based access control and secure authentication, we’ve created a tool that not only reduces errors but also makes the process more efficient for both customers and hotel staff.

SYSTEM ARCHITECTURE



FEATURES AND FUNCTIONALITY

Core Features

- ❖ Room booking and availability tracking
- ❖ Guest and employee management
- ❖ Check-in and Check-out
- ❖ Housekeeping management
- ❖ Room inventory management
- ❖ Role-based access control

Advanced Features

- ❖ Billing
- ❖ Reporting and analytics

CHALLENGES & FUTURE SCOPE

Challenges

- ❖ Scalability and data security
- ❖ Integration with existing systems in hotels

Future Scope

- ❖ Support for multi-branch hotel chains
- ❖ Advanced analytics and reporting features
- ❖ Mobile app integration
- ❖ Payment gateway integration

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