SOFTWARE REQUIREMENTS SPECIFICATION (SRS) HOTEL MANAGEMENT SYSTEM 1. PROJECT OVERVIEW The Hotel Management System is a web-based platform built with PHP and MySQL that automates hotel operations such as booking, customer check-in/check-out, room management, billing, and reporting. The goal is to minimize manual processes and provide a seamless experience for customers and hotel administrators. 2. OBJECTIVES - Simplify room booking and reservation process. - Track customer details, payments, and stay duration. - Allow hotel staff to manage rooms and availability efficiently. - Generate billing receipts automatically. -Provide admin-level control for managing users, rooms, and reports. 3. FUNCTIONAL REQUIREMENTS - User registration and authentication. - Room listing and availability check. -Booking management (create, modify, cancel). - Payment management. - Room check-in/check-out tracking. - Admin dashboard for reporting and analytics. 4. NON-FUNCTIONAL REQUIREMENTS - Responsive user interface. - Secure data handling (password hashing, validation). - Reliable and scalable PHP backend. - MySQL database with relational integrity. -User-friendly navigation and error handling. 5. USER ROLES 1. Admin - Manage all rooms, bookings, and users. - View reports and generate analytics. 2. Receptionist / Staff - Handle check-in/check-out. - Update room status and customer records. 3. Customer - Browse available rooms. - Make reservations and payments online. 6. DATABASE SCHEMA (MySQL) Tables: users(user_id, name, email, password, role) - rooms(room_id, room_type, price, status) bookings(booking_id, user_id, room_id, check_in, check_out, status) - payments(payment_id, booking_id, amount, payment_date, method) Sample: users: (1, 'John Doe', 'john@mail.com', 'hashed_pass', 'customer') rooms: (101, 'Deluxe', 150, 'Available') bookings: (1, 1, 101, '2025-02-12', '2025-02-15', 'Confirmed') 7. DIRECTORY STRUCTURE hotel_management/ ■ ■■■ index.php ■■■ login.php ■■■ register.php ■■■ dashboard.php ■■■ admin/ ■ ■■■ add_room.php ■ ■■■ manage_users.php ■ ■■■ view_reports.php ■ ■■■ staff/ ■ ■■■ checkin.php ■ ■■■ checkout.php ■ ■■■ customer/ ■ ■■■ book_room.php ■ ■■■ view_booking.php ■ ■■■ includes/ ■ ■■■ db_connect.php ■ ■■■ functions.php ■ assets/ ■ ■■■ css/ ■ ■■■ js/ ■ ■■■ images/ ■ ■■■ README.md 8. MVP FEATURES - User authentication. - Room listing and booking. - Admin dashboard. - Check-in/check-out management. - Payment recording. 9. ADVANCED FEATURES - Email notifications for bookings. - PDF invoice generation. - Data analytics for occupancy trends. - Integration with external payment gateways. 10. USER JOURNEY 1. Customer visits homepage \rightarrow views available rooms. 2. Registers or logs in \rightarrow selects room → confirms booking. 3. Staff handles check-in/check-out and updates room status. 4. Admin views all activities and generates reports. 11. TECHNOLOGY STACK Frontend: HTML5, CSS3, Bootstrap, JavaScript Backend: PHP 8+ Database: MySQL Server: Apache (XAMPP/WAMP) Version Control: Git/GitHub This document provides a foundational structure for developing a Hotel Management System using PHP and MySQL.