Hotel Management System

User & Administration Manual

Florida International University

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1. Introduction

1.1. Project Overview

This Hotel Management System was developed as a Senior Capstone Project for the Florida International University College of Engineering & Computing. It is a comprehensive web-based application designed to provide the core functionalities required for the day-to-day operations of a property. Inspired by enterprise-level property management systems (PMS) like Hilton’s OnQ, this platform provides tools for managing bookings, rooms, staff, and finances, all within a secure, role-based environment.

1.2. About This Manual

This document serves as a complete guide for system administrators, hotel staff, and end-users. It covers everything from initial setup and installation to the daily use of its features.

2. Getting Started: Installation & Setup

This section provides detailed instructions for deploying the application on a local server.

2.1. Prerequisites

XAMPP: A local server environment containing Apache and MySQL. It can be downloaded from the official Apache Friends website.

2.2. Local Environment Setup

1. Clone the Project:

Navigate to the htdocs directory within your XAMPP installation (C:\xampp\htdocs\ on Windows or /Applications/XAMPP/xamppfiles/htdocs/ on macOS).

Clone the project repository from GitHub:

git clone https://github.com/emont017/hotel-management.git

2. Configure Apache Virtual Host:

Stop the Apache service in the XAMPP Control Panel.

Open the Apache virtual hosts file: xampp/apache/conf/extra/httpd-vhosts.conf.

Add the following block to the end of the file, adjusting the DocumentRoot path for your operating system:

# For Windows

<VirtualHost \*:80>

DocumentRoot "C:/xampp/htdocs/hotel-management/public"

ServerName hotel.local

<Directory "C:/xampp/htdocs/hotel-management/public">

AllowOverride All

Require all granted

</Directory>

</VirtualHost>

# For macOS

<VirtualHost \*:80>

DocumentRoot "/Applications/XAMPP/xamppfiles/htdocs/hotel-management/public"

ServerName hotel.local

<Directory "/Applications/XAMPP/xamppfiles/htdocs/hotel-management/public">

AllowOverride All

Require all granted

</Directory>

</VirtualHost>

Enable virtual hosts by uncommenting the following line in xampp/apache/conf/httpd.conf:

Include etc/extra/httpd-vhosts.conf

3. Configure Hosts File:

Open your system's hosts file with administrator privileges C:\Windows\System32\drivers\etc\hosts on Windows

/etc/hosts on macOS

Add the following line to the end of the file:

127.0.0.1 hotel.local

4. Start Services:

Start (or restart) the Apache and MySQL services from the XAMPP Control Panel. The application will now be accessible at http://hotel.local/

2.3. Database Configuration

1. Create the Database, navigate to http://localhost/phpmyadmin.

Click "New" on the left sidebar.

Enter the database name exactly as hotel\_management and click "Create".

2. Import the Schema:

Select the hotel\_management database from the sidebar.

Go to the "Import" tab.

Click "Choose File" and select the .sql file located in the db\_backup directory of the project.

Click "Go" to execute the import.

2.4. Default Login Credentials

Admin:

User: Test2

Password: Test123

Housekeeping:

User: Housekeeper1

Password: Test123

Accounting:

User: Accountant1

Password: Test123

3. System Roles & Permissions

The application employs a role-based access control system to ensure users can only access features relevant to their duties.

* Guest: Can create an account, book rooms, and view their own reservations.
* Front Desk: Has access to the dashboard, booking management, and upcoming stays.
* Housekeeping: Can view their assigned cleaning tasks and update the status of rooms they have cleaned.
* Accountant: Can access financial modules, including payment management and reporting.
* Manager: Has access to all staff-level features, including staff management, housekeeping assignment, and the night audit.
* Admin: Has unrestricted access to all system features, including user management, system settings, and audit logs.

4. Public & Guest Experience

4.1. Homepage & Site Navigation (index.php)

The main landing page serves as a portal for both guests and staff, providing a project overview and clear calls-to-action to either book a stay or log in.

4.2. Viewing Rooms & Hotel Info (hotel.php, rooms.php)

Hotel Info: A page dedicated to hotel amenities and location, complete with an embedded map.

Rooms & Suites: A showcase of the available room types, including images, descriptions, and standard pricing to attract potential customers.

4.3. Creating a Guest Account (register.php)

New users can register for a guest account. This allows them to log in and use the "My Reservations" feature.

4.4. Booking a Room (bookings.php)

A guided, three-step process allows any user to book a room:

1. Select Dates: Choose check-in and check-out dates.
2. Choose Room: The system displays only the available room types for the selected dates, with the total price calculated.
3. Enter Details & Confirm: After selecting a room, the user provides their contact information to finalize the booking. A confirmation email is sent automatically.

4.5. Managing Existing Reservations (manage\_reservations.php)

Registered guests who have logged in can view a list of their past and upcoming bookings, providing them with a convenient way to track their stays.

5. Staff & Management Portal

5.1. Staff Login & Welcome Page (login.php, welcome.php)

* Login: A secure portal for staff to access the system.
* Welcome: After logging in, users are directed to a welcome page that provides a role-specific greeting and quick links to their most relevant tools.

5.2. The Dashboard (admin\_dashboard.php)

The central hub for hotel operations, providing a real-time overview of:

* KPIs: Occupancy, Average Daily Rate (ADR), Revenue Per Available Room (RevPAR).
* Daily Movements: Today's scheduled arrivals and departures.
* Revenue Chart: A 7-day visualization of revenue trends.
* Action Lists: Quick lists of arriving guests with links to their booking details for easy check-in.

5.3. Upcoming Stays (room\_plan.php)

A visual tool that displays room occupancy on a 7-day timeline. Staff can see at-a-glance which rooms are vacant, confirmed, or checked-in, and identify the guest in each occupied room. The chart also color-codes vacant rooms by their housekeeping status.

5.4. Booking Management (admin\_bookings.php)

A comprehensive module for managing all reservations. Staff can search for bookings, view full details, and perform actions like check-in, check-out, or editing dates and rooms.

5.5. Housekeeping Operations

* Master List (housekeeping.php): Managers can view all rooms and filter them by status (Clean, Dirty, Occupied, Maintenance). They can also manually update a room's cleaning status.
* Assign Tasks (admin\_housekeeping\_assign.php): Managers can assign rooms that need cleaning to specific housekeepers.
* My Tasks (housekeeping.php): Housekeepers see a simplified list of only the rooms they are assigned to clean. They can mark tasks as complete, which automatically updates the room's status.
* Daily Task Monitoring (housekeeping\_tasks.php): Managers can view a list of all pending tasks for the day, grouped by housekeeper, to monitor progress.

5.6. Accounting & Payments (payments.php)

This module allows authorized staff to manage financial transactions. They can look up a booking, view the balance due, and record payments against a guest's folio. A full history of all recorded payments is also available.

5.7. Reporting (reports.php)

The system can generate performance reports for any given date range. These reports include a summary of KPIs (Total Revenue, Occupancy Rate) and breakdowns of bookings by status and revenue by room type.

6. System Administration

These features are restricted to Manager and Admin roles.

6.1. Staff Management (users.php)

This page provides full control over staff user accounts. Admins can:

* Create new staff members with a specific role.
* Filter the list of active staff by role.
* Edit an existing user's details, role, or password.
* Deactivate a user's account, preventing them from logging in.

6.2. Room Inventory Management (admin\_rooms.php)

Allows for the management of the hotel's physical rooms. Admins can edit room numbers, types, and capacity, or place a room into 'Maintenance' status, making it unavailable for booking.

6.3. Night Audit (night\_audit.php)

Process that closes the hotel's business for the day. The audit performs several automated actions:

* Posts daily room and tax charges to all checked-in guests.
* Changes the status of "no-show" reservations to "cancelled".
* Advances the system's business date.
* Logs the completion of the audit for accountability.

6.4. Notifications & Alerts (admin\_notifications.php)

A control panel for monitoring system health and manually triggering automated processes, such as sending low-inventory alerts.

6.5. Audit Log Viewer (audit\_log\_viewer.php)

For security and accountability, this page displays a chronological log of all significant actions performed within the system, such as a Night Audit being run or a booking being cancelled.

7. Automated System Processes

7.1. Daily Reminder Script (send\_reminders.php)

This is a command-line script designed to be run automatically by the server once per day (e.g., via a cron job). It performs essential automated tasks without manual intervention:

* Send email reminders to guests who are checking in within 1 day.
* Send email reminders to guests who are checking in within 3 days.
* Checks for low room inventory and sends an alert email to the hotel administrator if a room type is close to selling out.