

# **Palm Paradise Hotel Management System Documentation**

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# Introduction

Palm Paradise Hotel Management System is a comprehensive web-based application designed to streamline hotel operations, booking management, and customer service. The system provides an intuitive interface for both administrators and users to manage room bookings, event hall reservations, and other hotel services efficiently.

## System Requirements

### Hardware Requirements

- **Processor:** Intel Core i3 or equivalent (minimum)
- **RAM:** 4GB (minimum), 8GB (recommended)
- **Storage:** 10GB free space
- **Internet Connection:** Broadband connection (minimum 1 Mbps)

### Software Requirements

- **Operating System:** Windows/Linux/macOS
- **Web Server:** Apache 2.4+
- **Database:** MySQL 5.7+ or MariaDB 10+
- **PHP Version:** PHP 7.4+
- **Web Browser:** Chrome 80+, Firefox 75+, Safari 13+, Edge 80+

# Technology Stack

## Frontend

- HTML5
- CSS3
- JavaScript
- Bootstrap 4.6
- jQuery 3.6.4
- AdminLTE 3 Dashboard Template
- ApexCharts for data visualization
- DataTables for dynamic tables
- Font Awesome for icons

## Backend

- PHP 7.4+
- MySQL/MariaDB
- PDO for database operations

## Security

- Session Management
- Password Hashing (bcrypt)
- Prepared Statements
- Input Sanitization
- CSRF Protection

# Features & Functionality

## Core Features

### 1. User Management

- User registration and authentication
- Profile management
- Password recovery
- Session management

### 2. Room Management

- Multiple room categories
- Room availability tracking
- Dynamic pricing
- Room details and images

### 3. Event Hall Management

- Multiple hall types
- Capacity management
- Pricing structure
- Hall details and images

# User Roles & Access Control

## Admin Role

### Credentials:

- Email: admin@gmail.com
- Password: admin@123

## User Role

### Sample Credentials:

- Email: jaygoyani939@gmail.com
- Password: Jay@12345

## Database Structure

The system uses a relational database with the following key tables:

- users
- rooms
- event\_halls
- room\_bookings
- hall\_bookings

## Installation Guide

```
# Clone repository
git clone [repository-url]

# Configure Apache
sudo a2enmod rewrite
sudo service apache2 restart

# Set permissions
chmod -R 755 /var/www/html/palmparadise
chown -R www-data:www-data /var/www/html/palmparadise
```

## Security Features

- Secure password hashing using bcrypt
- Session-based authentication
- Prepared statements for all queries
- Input validation and sanitization
- CSRF token protection
- XSS prevention

## Proposed Enhancements

- Implementation of REST API
- Mobile application development
- Real-time notifications using WebSockets
- Integration with payment gateways
- Room service management
- Staff management system

## Conclusion

The Palm Paradise Hotel Management System successfully implements a comprehensive solution for hotel operations management. The system provides efficient booking management, secure authentication, real-time availability tracking, and comprehensive administrative controls. It is built with scalability in mind and can be enhanced with additional features as per future requirements.

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