# Hospital Management System Using Java, JSP, and MySQL

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## Introduction

#### 1.1 Overview

The Hospital Management System is a comprehensive software designed to help hospitals efficiently track and manage patient records, doctor appointments, and hospital staff operations. It provides real-time insights and automates many of the manual processes involved in hospital management.

## 1.2 Purpose

The purpose of this software is to streamline hospital management processes, reduce errors, and improve overall operational efficiency. By using this system, hospitals can ensure they provide excellent service to their patients.

#### 1.3 Key Features

- Real-time Patient Tracking: Monitor patient admissions and discharges in real-time.
- Staff Management: Manage doctor and staff schedules and availability.
- Appointment Management: Simplify the process of booking and managing patient appointments.
- Medical Records: Maintain a detailed record of all patient histories.
- Reporting: Generate detailed reports on hospital operations and patient management.

# Installation and Configuration

## 2.1 System Requirements

Requirement	Specification
Operating System	Windows 10 or later, macOS 10.15 or later
Processor	Intel i5 or equivalent
Memory	8 GB RAM
Storage	1 GB available space
Internet Connection	Required for initial setup and updates

Table 2.1: System Requirements

## 2.2 Installation Steps

- 1. Download: Download the installer from the official website.
- 2. Run Installer: Run the installer and follow the on-screen instructions.
- 3. Initial Setup: Once installed, launch the software and complete the initial setup wizard, which includes creating an admin account and configuring basic settings.

#### 2.3 Configuration

1. Open Settings: Open the settings menu from the main dashboard.

- 2. User Preferences: Configure user preferences such as language, time zone, and notification settings.
- 3. Hospital Settings: Set up categories for departments, appointment limits, and bed availability.
- 4. Save Changes: Save changes and restart the software if necessary to apply the new settings.

## User Guide

#### 3.1 Main Dashboard

The main dashboard provides an overview of hospital status, recent activities, and key performance indicators.

### 3.2 Managing Patients

- 1. Navigate to Patients: Go to the "Patients" tab.
- 2. Add New Patient: Click "Add New Patient" and fill in the required details such as name, age, medical history, and department.
- 3. Save Patient: Save the patient information to add it to the system.

#### 3.3 Managing Appointments

- 1. Create Appointment: Go to the "Appointments" tab and click "Create New Appointment."
- 2. Enter Details: Enter the patient's name, doctor's name, and appointment time.
- 3. Confirm Appointment: Save the appointment to confirm the booking.

#### 3.4 Generating Reports

1. Access Reports: Navigate to the "Reports" tab.

- 2. Select Report Type: Choose the type of report you need, such as patient history, doctor activity, or department workload.
- 3. Generate Report: Generate the report and export it in your preferred format (e.g., PDF, Excel).



Figure 3.1: interface

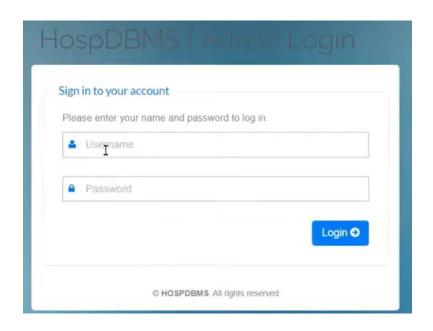


Figure 3.2: login

## Troubleshooting and Support

#### 4.1 Common Issues

#### 4.1.1 Database Connection Error

- Cause: Incorrect database credentials or server down.
- Solution: Verify the database credentials and ensure the server is running.

#### 4.1.2 Application Crashes

- Cause: Insufficient system resources or software bugs.
- Solution: Check system requirements and update the software to the latest version.

#### 4.1.3 Patient Record Not Found

- Cause: Patient not added or incorrect search criteria.
- Solution: Ensure the patient is added to the system and verify the search criteria.

## 4.2 Support

For further assistance, contact our support team at support@hospitalmanagement.com or visit our support portal at https://support.hospitalmanagement.com.

# Glossary

- Patient Records: A database of all patients and their medical histories.
- Appointment Scheduling: The process of managing appointments between patients and doctors.
- Medical History: A record of a patient's past medical conditions and treatments.

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