**Hospital Management System (HMS) User Manual**

# 1. Introduction

Welcome to the Hospital Management System (HMS), a console-based application designed to streamline the management of patients, doctors, and appointments. This manual serves as a complete guide to help you understand, set up, and use the application's key features. The HMS is built with a layered architecture, ensuring the separation of concerns for the user interface, application logic, and data storage. It utilizes an embedded SQLite database to manage all user and appointment data persistently.

# 2. Getting Started

## Prerequisites

Before running the application, please ensure you have the following installed on your system: ● **Java Development Kit (JDK) 8 or higher**

● A Java Integrated Development Environment (IDE) like VS Code, IntelliJ IDEA, or Eclipse

## Installation

1. **Clone the Repository:** Open your terminal or Git Bash and clone the project from GitHub.

git clone <https://github.com/HXF1Z/HospitalManagementSystem.git>

1. **Open the Project:** Open the cloned HospitalManagementSystem folder in your IDE.
2. **Configure Dependencies:** The project requires the SQLite JDBC driver. You can find the necessary .jar file in the lib/ folder. Please add this file to your project's classpath in your IDE.

## Running the Application

The application requires a one-time setup of its database before you can use it.

1. **First-Time Setup:** Run the DatabaseManager.java file once. This will create a new hms.db file and populate it with initial test data (including an admin, a doctor, and a patient).
2. **Daily Use:** For all future sessions, simply run HospitalManagementApp.java. The application will automatically connect to the existing database.

# 3. Application Walkthrough

When you start the application, you will be presented with the main menu.

|  |  |
| --- | --- |
| Option | Description |
| **1. Login** | Use this option to log in as a Patient, Doctor, or Administrator. |
| **2. Register New Patient Account** | Use this option to create a new patient account. |
| Option | Description |
| **3. Exit** | Use this option to exit the application. |

# 4. Role-Based Guide

## A. Patient Manual

* **To Log In:** Use the Login option with the following credentials:
* **Username:** patient
* **Password:** patientpass
* **Patient Menu:** After logging in, you will be directed to the patient dashboard.
  + **Book Appointment:** View available doctors and their time slots to book a new appointment.

○ **View My Appointments:** See a list of all your scheduled appointments.

○ **Cancel My Appointment:** Select an appointment by its number to cancel it.

○ **Edit My Profile:** Update your personal information, such as your mobile number or email address.

## B. Doctor Manual

* **To Log In:** Use the Login option with the following credentials:
  + **Username:** doctor

○ **Password:** doctorpass

* **Doctor Menu:** After logging in, you will be directed to the doctor dashboard.
  + **Doctor Check-in:** A simple function to confirm your presence for a shift.

○ **Set My Availability:** Add new time slots to your schedule for patients to book.

○ **View My Appointments:** See a list of all your scheduled appointments.

○ **Cancel Appointment:** Cancel a patient's appointment from your schedule.

○ **Edit My Profile:** Update your professional details, such as your specialty or contact information.

## C. Administrator Manual

* **To Log In:** Use the Login option with the following credentials:
  + **Username:** admin

○ **Password:** adminpass

* **Admin Menu:** After logging in, you will be directed to the administrator dashboard.
  + **Add Doctor Account:** Create a new user account with a DOCTOR role and a corresponding doctor profile.

○ **Remove Doctor Account:** View a list of all doctors and delete a specific doctor's account from the system.

○ **View All Appointments Report:** See a comprehensive report of every appointment in the system.

# 5. Conclusion

The Hospital Management System is a robust, well-structured, and functional application. With this manual, you should be able to navigate the system and utilize its features effectively.