PROJECT REPORT

ON

HOSPITAL MANAGEMENT SYSTEM

SUBMITTED TO

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1. Introduction

The **Hospital Management System (HMS)** is a simple and user-friendly Java Swing desktop application designed to digitalize basic hospital operations.
The system supports **three user roles:**

1. **Admin**
2. **Staff**
3. **Patient/User**

Each role has its own dashboard and functions.

The main objective of the system is to maintain doctor records, staff approval of appointments, and allow patients to book appointments easily.

2. Objectives

- To create a simple and effective hospital management application.
- To maintain doctor, staff, and patient records.
- To allow users to book appointments.
- To help staff approve or reject appointments.
- To provide an admin panel to manage doctors and view all hospital records.

4. User Roles and Features

4.1 Admin Features

Admin logs in with:

- **Username:** admin
- **Password:** admin123

Admin Dashboard Options:

1. **View All Patients**
   Displays full list of registered users.
2. **View All Doctors**
   Shows all registered doctors.

3. **View All Staff**

   Shows staff members.

4. **Add Doctors**

   Admin can add doctor details:

   - Name
   - Department
   - Fee
   - Phone Number
   - Available Time

5. **Remove Doctors**

   Admin can remove a doctor.

6. **View All Appointments**

   Displays:

   - Approved appointments
   - Pending appointments

7. **Logout**

   Returns to login page.

4.2 Patient/User Features

After login, the user dashboard contains:

1. **View All Doctors**

   Shows doctor details.

2. **View All Appointments**

   Displays:

   - Appointment date
   - Time
   - Status (Approved / Pending / Rejected)

3. **Book Appointment**

   User can book a new appointment by selecting:

   - Doctor
   - Date
   - Time

   Status remains **Pending** until staff approves.

4. **Logout**

4.3 Staff Features

After login, the staff dashboard contains:

1. **Appointments**

   Staff can:
   - Approve appointments
   - Reject appointments

2. **Doctors**

   Staff can view all doctor details.
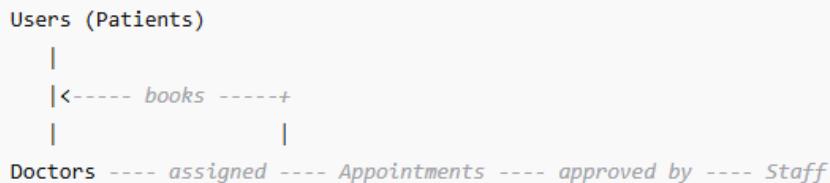
3. **Logout**

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5. Database Design

5.1 ER Diagram (Simplified)

```lua
Users (Patients)
   |
   |<----- books -----+
   |                  |
Doctors ---- assigned ---- Appointments ---- approved by ---- Staff
```

5.2 Database Tables

1. users Table

Column	Type
id	INT (PK)
username	VARCHAR(100)
password	VARCHAR(100)
role	VARCHAR(20)

2. doctors Table

Column	Type
id	INT (PK)
name	VARCHAR(100)
department	VARCHAR(100)
fee	VARCHAR(50)
phone / number	VARCHAR(50)
available_time	VARCHAR(100)

3. staff Table

Column	Type
id	INT (PK)
username	VARCHAR(100)
password	VARCHAR(100)

4. appointments Table

Column	Type
id	INT (PK)
patient	VARCHAR(100)
doctor	VARCHAR(100)
date	VARCHAR(50)
time	VARCHAR(50)
status	VARCHAR(20)

6. Flow of the System

6.1 Admin Flow

- Login → Dashboard → Manage doctors → View patients → View staff → View appointments → Logout

6.2 Patient/User Flow

- Register → Login → View doctors → Book appointment → Wait for approval → Logout

6.3 Staff Flow

- Login → View pending appointments → Approve/Reject → Logout

7. System Screenshots (Add Yourself)

- Login Page
- Admin Dashboard
- User Dashboard
- Staff Dashboard
- Add Doctor Form
- Appointment Page

8. Conclusion

The **Hospital Management System** successfully automates basic hospital operations.
It manages patient, doctor, and staff information efficiently and maintains smooth communication between them through appointment management.

This project is simple, easy to understand, and suitable for academic submissions.

9. Future Enhancements

- Add billing module
- Add prescription module
- Add search and filters
- Add online payment system
- Improve UI with JavaFX