

Jobra Hospital Management System

Full Stack DBMS Project

6th Semester DBMS Project Report

February 10, 2026

Overview

Jobra Hospital Management System is a full-stack DBMS project built to digitalize core hospital workflows for a small/medium clinic. It supports separate experiences for:

-  Admin
-  Doctor
-  Patient

covering authentication, appointments, reports, and complaints.

1 Features

Highlights

Authentication & Authorization

- JWT-based secure login
- Role-based middleware protection

Admin Portal

- Manage doctors, patients, admins
- View appointments complaints

Doctor Portal

- View appointments
- Create medical reports

Patient Portal

- Book appointment
- Submit complaints

2 Tech Stack

Frontend

- React + React Router
- Axios
- Context API
- Custom CSS

Backend

- Node.js, Express
- MySQL (mysql2)
- JWT + bcrypt

3 Project Structure

```
Jobra-Hospital-6th-Semester-Project/  
  backend/  
    controllers/  
    middleware/  
    routes/  
    server.js  
  frontend/  
    src/  
      pages/  
      context/  
      services/  
  database.sql
```

4 Database Design

Database Name: `jobra_hospital`

Tables

- `jh_admins`

- jh_doctors
- jh_patients
- jh_appointments
- jh_reports
- jh_complaints
- jh_logins

5 Getting Started

Backend

```
cd backend  
npm install  
npm run dev
```

Frontend

```
cd frontend  
npm install  
npm start
```

6 User Flows

Patient

- Register → Login
- Book appointment
- Complaint submit

Doctor

- Manage reports
- View appointments

Admin

- Manage all users
- Monitor system

7 Future Improvements

- Analytics dashboard
- Pagination
- Better validation

8 License

Academic project for educational purposes.