




AmazeCare – Hospital Management System

Smart & Secure Healthcare Platform

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Introduction

The AmazeCare system is a modern hospital management solution designed to streamline healthcare operations, ensure accurate patient care, and provide secure medical data handling.

- ☐ **Manual processes → Digital transformation**
- ☐ **Centralized system for doctors, patients, and admin**
- ☐ **Secure & scalable backend architecture**



Technologies Used

☐ Backend: Spring Boot

☐ Database: MySQL

🔒 Security: JWT (JSON Web Token)

⚙️ Frontend: Angular

☐ Testing: Postman, Mockito

🌐 Tools: STS, MySQL Workbench , GitHub

Core Modules

1

Patient Registration

Add & manage patient profiles

2

Doctor Registration

Specialty-wise doctor records

3

Appointment Booking

Book, view, cancel appointments

4

Consultation Records

Notes, diagnosis, treatment

5

Medical Records

History, prescriptions, reports

6

Admin Management

Role-based control

7

JWT Security

Authenticated API access

System Architecture



Database Design (ER Diagram)

Key Tables:

- patients(patient_id, name, gender, age, contact)
- doctors(doctor_id, name, specialization)
- appointments(app_id, patient_id, doctor_id, date, time)
- consultations(consult_id, app_id, notes, prescription)
- users(user_id, username, password, role)

✦ Relationships:

- One-to-many: Doctor → Appointments
- One-to-many: Patient → Appointments
- One-to-one: Appointment → Consultation

Features & Security

✓ Core Features

- Easy patient/doctor onboarding
- Real-time appointment handling
- Centralized consultation data

🔒 Security Measures

- JWT authentication
- Role-based API access
- Password encryption
- No direct DB access from UI

Conclusion & Future Enhancements

🎯 Conclusion: AmazeCare is a robust hospital management platform that ensures smoother operations, better care, and data security.

🚀 Future Enhancements

- Email/SMS notifications
- Live video call with patient
- Integration with wearable devices (IoT)

🙏 Thank You!