Hospital Management System

Design and implement a secure authentication and authorization system for a Hospital Management System (HMS) using **JWT (JSON Web Token)**. The system should support three distinct user roles: **ADMIN**, **DOCTOR**, and **PATIENT**, each with specific access rights and functionalities.

1. Authentication:

- Users must be able to register and log in.
- o On successful login, a JWT should be issued to the user.
- o The JWT should be required for accessing all protected endpoints.

2. Role-Based Authorization:

- o ADMIN:
 - Can manage (add/update/delete/view) doctors and patients.
- o **DOCTOR**:
 - Can view only their assigned patients and appointments.
- o **PATIENT**:
 - Can book new appointments and view their existing ones.

3. Security:

- Protect endpoints based on user roles using Spring Security.
- Ensure stateless session management using JWT.
- JWT tokens must be verified on each request to access protected resources.
- o Token expiration and renewal strategy must be implemented.

4. Endpoint Access Control (Sample):

- o /admin/** → Accessible by ADMIN only
- o /doctor/** → Accessible by DOCTOR only
- o /patient/** → Accessible by PATIENT only
- o /auth/** → Public (for login and registration)

