

Project Title: Hospital Management System (HMS)

Overview:

This is a web-based hospital management application developed using Python (Flask). It enables administrators, doctors, and patients to manage hospital operations efficiently – including patient records, appointments, doctor availability, and medical histories – all from a centralized platform.

Key Features:

User Authentication: Secure login and registration for Admins, Doctors, and Patients.

Role-based Dashboards:

Admin: Manage doctors, patients, appointments, and view reports.

Doctor: View assigned patients, manage availability, and update medical records.

Patient: Book appointments, view history, and manage personal profile.

Appointment Booking:

Patients can schedule, reschedule, or cancel appointments with available doctors.

Medical Records:

Doctors can add, update, and review patient medical histories.

Admin Management:

Admins can add or remove doctors and patients, approve appointments, and perform maintenance actions (like purging data).

Dynamic Templates:

Jinja2-based HTML templates for each role with responsive layout.

Technologies Used:

Backend: Python 3, Flask

Frontend: HTML, Jinja2, CSS

Database: SQLite (hospital.db)

Template Engine: Jinja2

Environment: Flask Virtual Environment (venv/)