

# FINAL YEAR PROJECT PROPOSAL

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Project title: Hospital Management System

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## **1. Introduction**

The Hospital Management System (HMS) is a web-based solution designed to streamline the operational and administrative functions of hospitals. The system will manage patient records, appointments, billing, staff schedules, and pharmacy inventories. With a user-friendly interface and secure backend, the HMS reduces paperwork and improves efficiency. By integrating all hospital departments into one platform, it enhances coordination and speeds up patient care delivery.

## **2. Problem Statement**

Many hospitals still depend on manual record-keeping or partially digital systems. This leads to:

- Delays in patient processing
- Medical errors due to missing information
- Inefficient billing and appointment management
- Lack of integration between departments

A centralized, automated system is necessary to ensure smooth operations and better healthcare services.

### **3. Objectives of the Project**

- Digitize patient registration and medical records
- Manage appointments and doctor schedules
- Track pharmacy stock and medical inventory
- Automate billing and payment records
- Generate reports for administration
- Reduce paperwork and human error

### **4. Scope of the Project**

The HMS will include:

- Patient Registration
- Doctor Management
- Appointment Booking
- Pharmacy and Inventory
- Billing and Payment System
- Report Generation
- Integration with labs and insurance
- Optional: Mobile App (for Android/Web)

### **5. Tools and Technologies**

- Frontend: HTML5, CSS3, JavaScript
- Backend: PHP / Python / Node.js
- Database: MySQL / MongoDB
- IDE: VS Code / PyCharm
- Platform: Web-based with optional mobile support

## **6. Expected Outcomes**

- Fully functional HMS application
- Fast and secure patient data access
- Better hospital staff productivity
- Improved patient experience
- Error-free reports and billing
- Paperless workflow and eco-friendly impact

## **7. References**

- Hospital Management System design concepts
- DBMS (Database Management System) tutorials
- Web Development documentation (W3Schools, MDN)
- Research papers on digital healthcare systems