

Student Health  
Innovations

# Hospital Management System

Built by students using React technology



# Challenges in Hospitals

Traditional hospitals face **significant hurdles** affecting patient satisfaction and operational efficiency through outdated processes and communication barriers.

01

Long queues lead to **frustration** for both patients and staff.

02

Delays in lab results hinder timely **medical decisions** and patient care.

03

Lack of digital communication results in **inefficient interactions** between patients and healthcare providers.





# Role-Based Digital Hospital Platform

Streamlining workflows and minimizing physical movement for enhanced healthcare efficiency and communication



**Our platform revolutionizes hospital management through role-specific access and features.**

By implementing a **role-based** approach, each user group—Admin, Doctor, Nurse, Lab Technician, and Patient—can efficiently access tailored dashboards, improving communication and reducing unnecessary **physical interactions** within the hospital environment.

# Key Functionalities of the Hospital Management System

Explore the essential features of our system:

- Easy appointment booking based on medical specialty
- Convenient digital prescriptions accessible to patients
- Fast lab report sharing through the platform
- Enhanced doctor-patient interaction for better care



# Role-Based Access Overview

| Feature / Action       | Admin | Doctor | Nurse | Lab Tech | Patient |
|------------------------|-------|--------|-------|----------|---------|
| Manage Users           | ✓     | ✗      | ✗     | ✗        | ✗       |
| Schedule Appointments  | ✓     | ✓      | ✓     | ✗        | ✓       |
| View Patient Records   | ✓     | ✓      | ✓     | ✓        | ✓       |
| Update Patient Records | ✗     | ✓      | ✓     | ✗        | ✗       |
| Upload Lab Results     | ✗     | ✗      | ✗     | ✓        | ✗       |
| Access Lab Results     | ✓     | ✓      | ✓     | ✓        | ✓       |
| Prescribe Medication   | ✗     | ✓      | ✗     | ✗        | ✗       |
| View Prescriptions     | ✓     | ✓      | ✓     | ✗        | ✓       |
| Internal Messaging     | ✓     | ✓      | ✓     | ✓        | ✓       |
| Generate Reports       | ✓     | ✓      | ✗     | ✓        | ✗       |



# Patient Journey Timeline



## Appointment Booking

Patients can easily book appointments through the user-friendly digital platform.

## Consultation

Patients consult with doctors via a secure, digital communication channel.

## Treatment

After consultation, patients receive prescriptions and treatment plans digitally.

# Technologies Behind Our System

React, JSX, JavaScript, and essential development libraries empower our platform.

Our team utilized **React** for its component-based architecture, **JSX** for efficient UI rendering, and **JavaScript** for robust functionality along with other relevant tools for optimal performance.



# Transforming Healthcare Through Technology

Reduced waiting time, enhanced communication, streamlined operations, scalability.

Our Hospital Management System significantly **reduces waiting times** while enabling **better communication** between patients and healthcare providers, enhancing overall operational efficiency and scalability for future growth.





# Future Plans for Hospital Management System

Exploring innovative features for enhanced patient care and operational efficiency in healthcare services.

Our vision includes implementing **telemedicine** for remote consultations, **payment integration** with M-Pesa, and **AI scheduling** to optimize patient appointments effectively.



# Get in Touch: We'd Love Your Support!

Phone

+25479-399-6201

