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Next-Gen Healthcare Management Guide & Student Details

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ABSTRACT

Next-Gen Healthcare Management focuses on automating the administration and management of hospitals. The system streamlines hospital operations, allowing admins to manage doctors and patient records efficiently. Doctors can view patient details, manage appointments, and upload reports, while patients can book appointments and download reports. The system is developed using Java with MySQL as the backend for data management.

Keywords: Next-Gen Healthcare Management, Hospital Management System, Patient Record Management, Online Appointment Booking, Healthcare Automation, Doctor–Patient Interaction, Java, MySQL.

I. INTRODUCTION

Healthcare management plays a crucial role in ensuring efficient patient care and hospital administration. Traditional hospital management involves manual appointment scheduling, patient record-keeping, and report management, leading to inefficiencies. The Next-Gen Healthcare Management system automates these processes, improving accessibility, reducing wait times, and enhancing the overall hospital experience. The system uses Java for the frontend and MySQL for database management, ensuring secure and efficient data handling.
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II. LITERATURE SURVEY

R. Agarwal, 'Digital Transformation in Healthcare', Healthcare Management Review, 2019.
K. Smith, 'Advances in Hospital Management Systems', Journal of Health Informatics, 2021.

III. EXISTING SYSTEM

In the existing system, patients must physically visit hospitals and wait for appointments, which leads to delays in treatment. Manual record-keeping also increases the chances of errors, and there is no centralized system for tracking patient records.

Advantages:
Immediate attention in emergency cases.
Face-to-face consultation.

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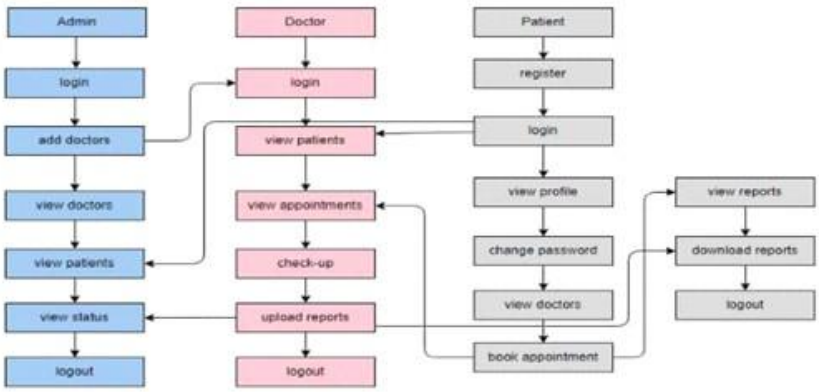
Disadvantages:
Manual process.
Requires more time.

IV. PROPOSED SYSTEM

To overcome the drawbacks of the existing system, we propose an online healthcare management system. This system enables online appointment booking, secure record-keeping, and efficient doctor-patient interactions.

Advantages:
Online appointment booking saves time.
Reduces manual errors in patient records.
Centralized data management.

Architecture / Data Flow Diagram
The system follows a multi-tier architecture with the following key components:
Frontend: Java-based user interface for patients, doctors, and admins.
Backend: Java application handling business logic.
Database: MySQL for secure and efficient data management.



Modules

Admin:
Admin can log in, add doctors, manage patient records, and oversee the system. Admin can view patient details and report status. Admin can log out after completing tasks.

Doctor:
Doctors log in with credentials provided by the admin. Doctors can view patients, appointments, and upload reports. Doctors can log out after completing tasks.

Patient:

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Patients register with personal details and log in with credentials. Patients can view doctors, book appointments, and download reports. Patients can update their profile and log out.
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V. CONCLUSION

The Next-Gen Healthcare Management system enhances hospital efficiency by integrating digital appointment scheduling, automated patient record management, and secure data handling. By reducing manual processes, it improves patient experience and facilitates better healthcare services.

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