DOCTOR APPOINTMENT SYSTEM FOR HOSPITAL

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Abstract. In today's computerized age, the importance of a Doctor Appointment System for hospital cannot be exaggerated. The Doctor Appointment System (DAS) for hospital is outlined to modernize healthcare administrations by giving a centralized online stage that rearranges arrangement administration for patients and hospital staff. The DAS is a platform designed to manage various functions related to scheduling and managing doctor appointments. It handles all processes involved in booking and managing appointments efficiently. This project provides comprehensive information about doctors, departments, available tokens, and patient records. It offers numerous flexible and convenient features, allowing patients to easily book appointments and administrators to manage schedules seamlessly.

Keywords: hospital, appointment system, patients, users

INTRODUCTION

The DAS is developed using PHP, focusing mainly on core operations such as adding new doctors, updating information, searching schedules, and managing appointments. On the administrative side, the DAS empowers hospital staff to manage doctor profiles, department details, and appointments. Patients can book appointments, view appointment history, and manage their bookings without a cancellation option. The system allows patients to search for doctors by name, department, or availability, view detailed doctor profiles, and book appointments with just a few clicks. The combination of user-friendly design and robust functionality makes the DAS a vital tool for improving the efficiency and effectiveness of healthcare services, ensuring that patients have quick and easy access to the care they need.

PROBLEM

The doctor appointment system for hospitals is designed to provide a convenient and efficient platform for patients, particularly those seeking timely medical consultations. Often, patients face long waiting times, difficulties in scheduling appointments, and uncertainty about the availability of doctors. This system addresses these issues by allowing patients to book appointments with doctors easily and at their convenience. The healthcare system is an essential part of life, as timely access to medical services significantly improves patient outcomes. Ensuring smooth and efficient scheduling helps maintain a well-functioning hospital system and enhances patient satisfaction. This system allows patients to access information regarding doctors' availability, specializations, and appointment slots. It also facilitates the

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management of patient records and ensures that the appointment process is streamlined. In this design, we aim to create a system where patients can book their appointments effortlessly, ensuring a more efficient healthcare experience for both patients and medical professionals.

APPROACH

This system consists of three roles. They are administrator, user and doctor. In this system, the user must log in first. After logging in, the user can search for doctors and schedules. The user can then book appointments, view appointment history. Figure 1 shows the system flow diagrams for user and admin, representing data flow within the system. The admin system flow diagram presenting administrative functions and data flow from the admin perspective. Figure 2 depicts the system flow diagram for doctors. Doctors can log in to the system to view their schedules and patient details, allowing them to efficiently manage their appointments.

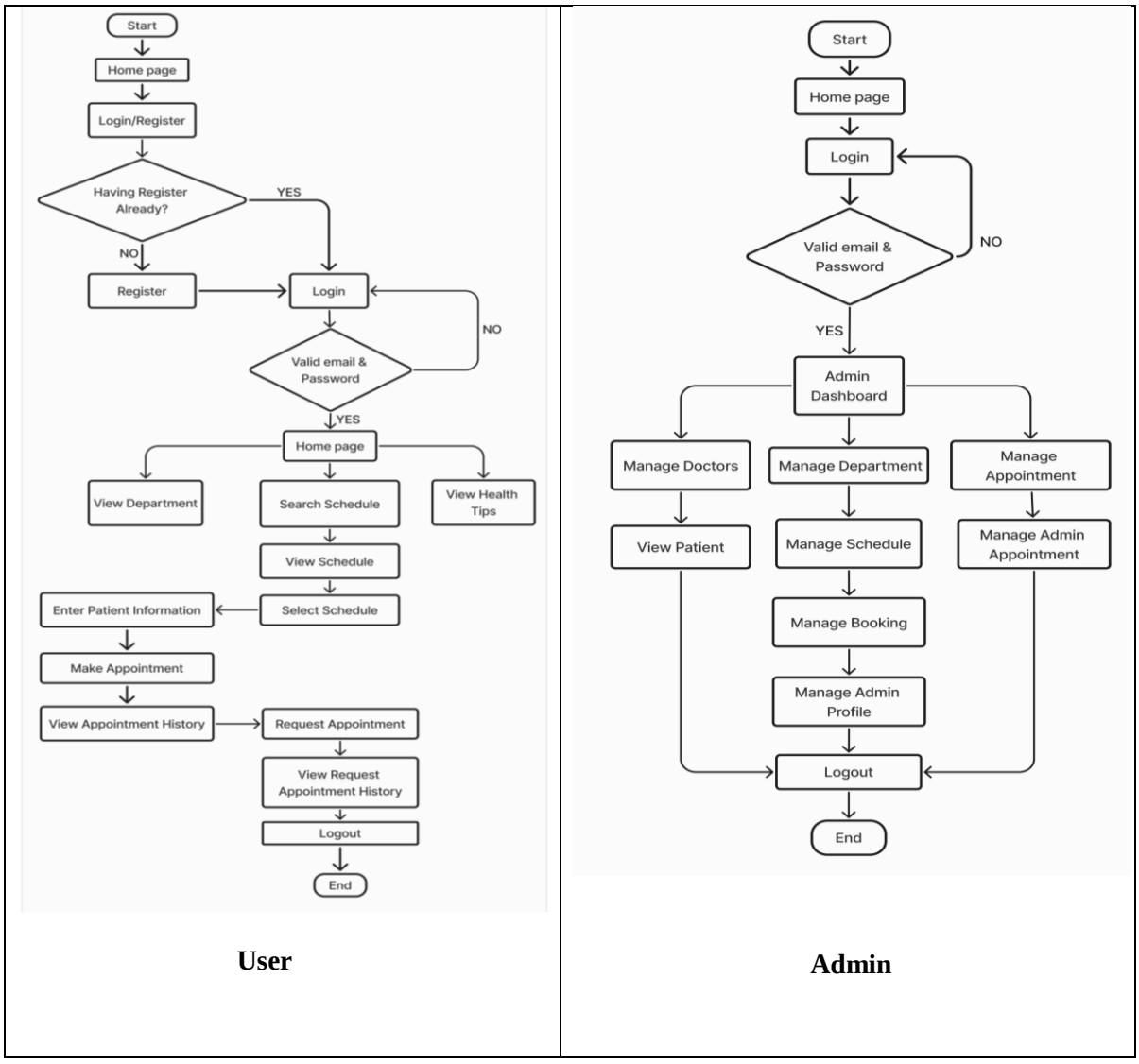

Figure 1: System Flow Diagrams for User and Admin

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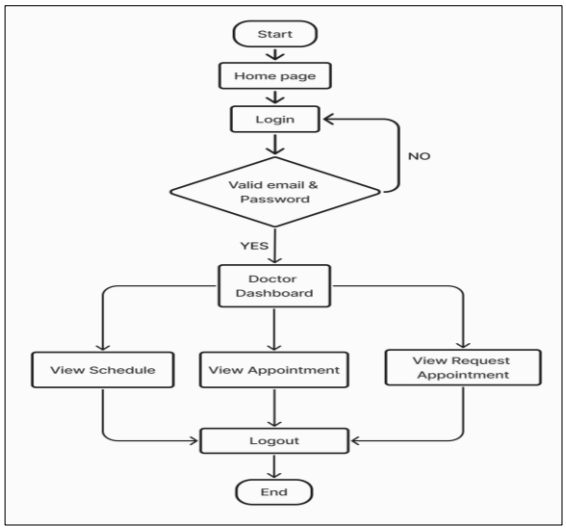

Figure 2: System Flow Diagram for Doctor

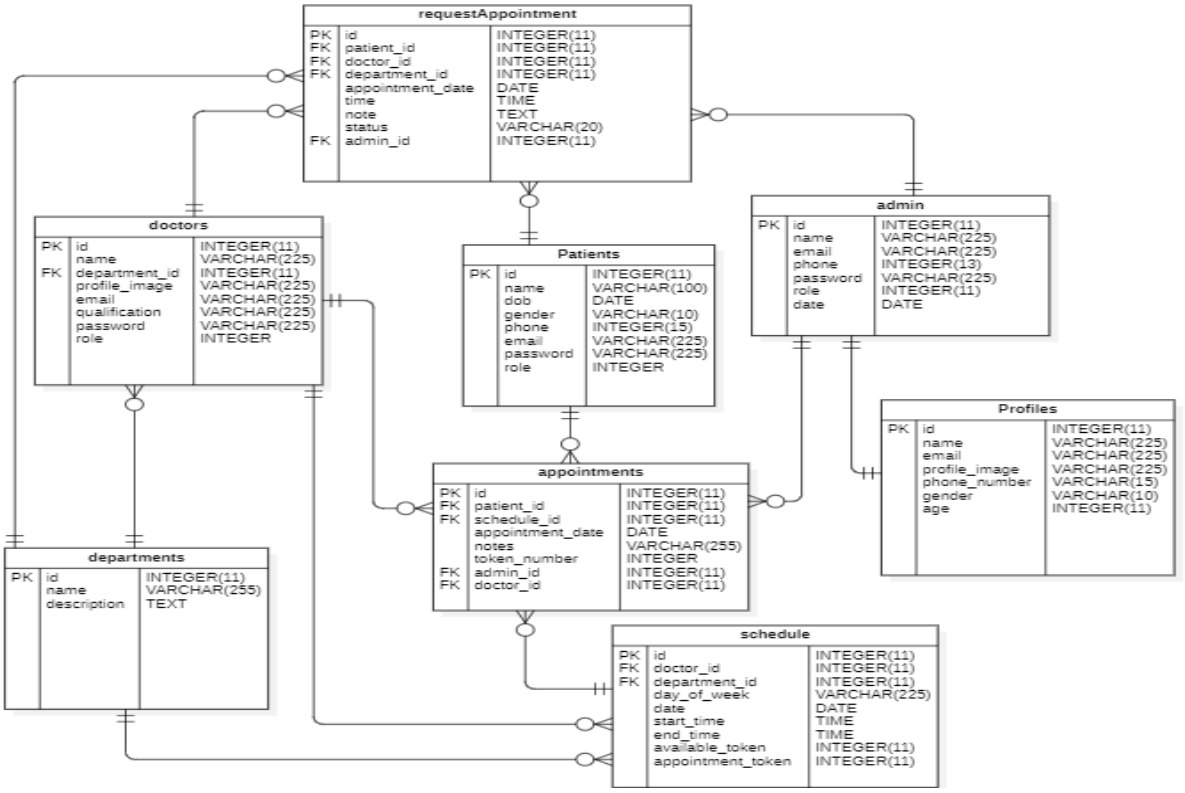

Figure 3: Database Design

In the design of the doctor appointment system, an Entity-Relationship (ER) diagram has been constructed to represent the data architecture and relationships among various entities involved in the system. In the database, there are eight data tables. The tables are users, patients, schedule, department, profile, appointments and doctors. The ER diagram for doctor appointment system is presented in Figure 3.

RESULTS

The DAS is developed using PHP, focusing mainly on core operations such as adding new doctors, updating information, searching schedules, and managing appointments. On the

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administrative side, the DAS empowers hospital staff to manage doctor profiles, department details, and appointments. Patients can book appointments, view appointment history, and manage their bookings without a cancellation option. The system allows patients to search for doctors by name, department, or availability, view detailed doctor profiles, and book appointments with just a few clicks. The combination of user-friendly design and robust functionality makes the DAS a vital tool for improving the efficiency and effectiveness of healthcare services, ensuring that patients have quick and easy access to the care they need.

Figure 4: Implementation of the system

CONCLUSION

The Internet has become a vital resource in modern life; consequently, a Doctor Appointment System has gained significance from both administrative and user perspectives. For administrators, the system generates new opportunities to streamline hospital services and operations, while for users, it makes comparing and selecting appointment schedules more convenient. This system offers numerous advantages, such as reducing paperwork, labor, and expenses involved in hospital operations, improving the quality of services, enhancing user satisfaction and convenience, creating digital records of appointments, and enabling remote access to booking services. The Doctor Appointment System benefits administrators and users by making the entire process more efficient and user-friendly.

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