Secure Web Application for Online Doctor Appointment System

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Abstract:
Make my doctor appointment is a web application which explains about how a patient can book a doctor appointment. The proposed project is a smart appointment booking system that provides patients or any user an easy way of booking a doctor’s appointment online. This is a web based application that overcomes the issue of managing and booking appointments according to user’s choice or demands. The task sometimes becomes very tedious for the compounder or doctor himself in manually allotting appointments for the users as per their availability. Hence this project offers an effective solution where users can view various booking slots available and select the preferred date and time. The already booked space will be marked yellow and will not be available for anyone else for the specified time. This system also allows users to cancel their booking anytime. The system provides an additional feature of calculating monthly earnings of doctor. Doctor has to just feed the system regularly with daily earnings and the system automatically generates a report of total amount earned at the end of the month. The application uses Asp.net as a front-end and sql database as the back-end. The main objective of the Doctor Appointment System is to manage the details of Doctor, Patient, Test, Medicine, and Booking Number. It manages all the information about Doctor, Appointment, Booking Number, and Doctor. The project is totally built at administrative end and thus only the administrator is guaranteed the access.

1. INTRODUCTION
In Australia, medical practitioners are distributed unevenly across the country that the practitioners in remote areas are 40% shortage compared with the average level in the country [1]. However, in some remote areas, such as Great Western and Southern of New South Wales, this ratio could only reach 1/8 of the average level [2]. Thus, patients always find it difficult with accessing to health care services in these areas. For example, a study in Wagga Wagga finds that a patient could wait up to 55 days for a routine appointment to see a General Practitioner (GP) [3]. Despite the shortage of workforce, one of the main reasons for this difficulty is that the way practice takes appointments (appointment model) mainly accounts providers’ static schedule.

2. OVERVIEW OF THE SYSTEM

MODULES:
The system has 3 modules namely:

1. Administrator:
He has full authority over the application. He can access all the patients’ records and make changes to the application. He will send over the updates to the users.

He will receive the feedback and queries from the users and respond to them accordingly.

He sends the appointment confirmation to the users.
2. **Patient:**

   He must first register and then login to the web application and then he can access the features like check for doctor availability and appointment availability.

   He can also check the doctor’s profile and the address of the doctor’s clinic or hospital.

   He needs to upload his previous medical records so that he can get proper treatment.

3. **Doctor:**

   He must register first and then login to the web application and he can access its various features. Whenever a patient books an appointment with him, he will gain access to the patient’s information and medical records. Doctor then provides the patient with where the medicines will be available.

4. **SYSTEM DESIGN**

   ![Diagram](image)

   **Fig 3.1: Sequence Diagram**

   **Fig 3.2: Class Diagram**

   **Fig 3.2: SYSTEM USE CASE DIAGRAM**

4. **OUTPUT SCREEN SHOTS**

   ![Doctor Login Page](image)

   **Fig 4.1: Doctor Login Page**

   ![Doctor Home Page](image)

   **Fig 4.2: Doctor Home Page**
CONCLUSION AND FUTURE ENHANCEMENT

It has been a great pleasure for me to work on this exciting and challenging Development of an application for Secure Web Application for Online Doctor Appointment System project. It also provides knowledge about the latest technology used in developing web enabled application and client server technology that will be great demand in future. This will provide better opportunities and guidance in future in developing projects independently.

BENEFITS:

The project is identified by the merits of the system offered to the user. The merits of this project are as follows:

- It’s a web-enabled project.
- This project offers user to enter the data through simple and interactive forms. This is very helpful for the client to enter the desired information through so much simplicity.
- The user is mainly more concerned about the validity of the data, whatever he is entering. There are checks on every stages of any new creation, data entry or updating so that the user cannot enter the invalid data, which can create problems at later date.
- Sometimes the user finds in the later stages of using project that he needs to update some of the information that he entered earlier. There are options for him by which he can update the records. Moreover there is restriction for his that he cannot change the primary data field. This keeps the validity of the data to longer extent.
- User is provided the option of monitoring the records he entered earlier. He can see the desired records with the variety of options provided by him.
- From every part of the project the user is provided with the links through framing so that he can go from one option of the project to other as per the requirement. This is bound to be simple and very friendly as per the user is concerned. That is, we can sat that the project is user friendly which is one of the primary concerns of any good project.
- Data storage and retrieval will become faster and easier to maintain because data is stored in a systematic manner and in a single database.
- Decision making process would be greatly enhanced because of faster processing of information since data collection from information available on computer takes much less time then manual system.
- Allocating of sample results becomes much faster because at a time the user can see the records of last years.
- Easier and faster data transfer through latest technology associated with the computer and communication.
- Through these features it will increase the efficiency, accuracy and transparency,
LIMITATIONS:

The size of the database increases day-by-day, increasing the load on the database back up and data maintenance activity.
Training for simple computer operations is necessary for the users working on the system.

6. REFERENCES

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