GLA University, Mathura

SYNOPSIS

Doctor's Appointment Booking System

Department of Computer Science & Applications

SUBMITTED TO :-

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Declaration

I hereby declare that the project work entitled "DOCTOR'S APPOINTMENT BOOKING SYSTEM" submitted to the GLA University, Mathura is a record of an original work done by us under the guidance of Mr. Akash Kumar Choudhary (Technical Trainee) of Department of Computer Science and Engineering.This project is submitted in partial fulfilment of the requirements for the award of the degree of Bachelors in Technology in Computer Science and Engineering.

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Acknowledgement

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Certificate

This is to certify that the Project Synopsis entitled "DOCTOR'S APPOINTMENT BOOKING SYSTEM" is submitted to SUPERVISOR Mr. Akash Choudhary(Technical Trainer) of the department of Computer Science and Engineering ,GLA University,Mathura in partial fulfillment for the award of the degree of Bachelor of Technology in Computer Science and Engineering is a record of Bonafide Certificate carried out by :

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INTRODUCTION

Abstract

It is only recently that technology has reached a level of stability, usability and affordability which permits its use in real life day to day scenarios rather than just research projects. The main advantages of online bookings are flexibility and accessibility. The purpose of this project is to automate the existing manual system by the help of computerized equipments and full-fledged computer software, so that the valuable data/information of patients and doctors can be stored for a longer period with easy accessing and manipulation of the same. The Doctor Appointment Booking System, as described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their activities rather than to concentrate on the record keeping. Thus it will help organization in better utilization of resources. Vision of this project is to create doctor patient handling management system that will help patients to book doctor appointment and fulfil their prospects.This is the system of reservation for counselling by patients name. This system manages different kinds of doctors at a time and patients can choose their expected one for booking. Helping people to search for doctors and get appointment is our main objectives. User can search doctors which can make sure to find specific doctor an easy task. It would be a platform where doctors can check patient's previous medical history for better checkup.

Motivation(Reasons for choosing this project)

The old manual system was suffering from a series of drawbacks.Since the whole of the system was to be maintained with hands,the process of keeping,maintaining and retrieving the information was very tedious and lengthy.The records were never in systematic order.There used to lots of difficulties in associating any particular transaction with a particular transaction with a particular context.If any information was to be found,it needed to go through the different regsiters,documents etc.There was unnecessary consumption of time and one of the buggest problems was finding errors while entering the records.Once the records were entered it was very difficult to update them.As a patient we face many difficulties when we want to get an appointment for a doctor in their chambers or places. When people get affected by illness they need to visit a doctor for checkup but they have to visit their chambers or hospital to get appointment. It is a lengthy process and wasting people's time. Sometimes people do visit doctor's chamber for health check but the doctor is not available some various reason. It's the only way to get to know when people just visited their places. It harasses people a lot. Besides people need an ambulance service to carry on patient to hospitals. Merely, people need to visit hospitals or clinics to hire ambulance, it is a time consuming process. Our motivation is, if we have an option to get this appointment very easily ,it would be best for all. Thus, we have planned to implement a Web-based doctor appointment system.

Problem Statement

The purpose of this project work is to develop an online system for booking doctor's appointments by the patients in an easy way which helps in saving time and effort of both the patient and the medical department.

Main Objectives of the project

- The main objective of this project is to develop an online platform for hassle free booking of appointments with doctors through a platform that can be used to track all the user activities such as previous medical records,upcoming appointments,detalils of current ailments,test reports etc.
- Helping people to search for doctors and get appointment after checking all the details of the doctors.
- User can search doctors which can make sure to find specific doctor an easy task.
- A platform where doctors can check patient previous medical history for better checkup.
- Doctors can approve or reject the appointment,overlook all their scheduled appointments and details of the patients.

Scope of the Project

Patients face some difficulties in booking appointment with doctors. Our present system isn't as par with the requirements. So, we can recapitulate some problems here :

➢ Using different numbers of platform may not be enough for every patients to appointment with a doctor.

➢ There is some manual system to appointment, but this is fully online based.

➢ The people are not fully trusted on online system so that they will not get proper benefit from this system. According to these problems, our system offers solutions that will help patients. Users can easily access the system anytime and anywhere. This system is very simple and user friendly

Few of them are:

For Patient's help:

- There is huge collection of doctor information
- Smart way of appointment booking
- Minimum time needed for various processing
- Security and accuracy of data
- Greater efficiency and better service
- User friendly and interactive
- Find doctor based on rating or area
- Reduce the appointment delay
- Can upload prescription for future
- Reduce cost

For Doctor's help:

- No need any assistant for appointment

- Easily access to history of medication of a patient.
- Can know acceptability by rating of patient
- Can add working hours for different days according to his/her schedule and thus help in managing working hours and time for personal chores.

Feasibility Study

Feasibility study includes consideration of all the possible ways to provide a solution to the given problem.The proposed solution should satisfy all the user requirements and should be flexible enough so that future changes can be easily done based on the future upcoming requirements.

Economical Feasibility

This is a very important aspect to be considered while developing a project.Wedecide the technology based on minimum possible cost factor
All hardware and software components has to be borne by the developer organization.

Technical Feasibility

This includes the study of function,performance and constraints that may affect the ability to achieve an acceptable system.For this feasibility study,we studied complete functionality to be provided in the system,as described in the system requirements and checked if everything was possible using the different types of frontend and backend platforms.

Operational Feasibility

No doubt the proposed system is fully GUI based that is very user friendly and all inputs to be taken all self-explanatory even to a layman.Besides,a proper testing and training has been conducted to let the users know the essence of the system.

Working methology of the project

This system is an online doctor's appointment booking system.There are separate interfsces for the patient and doctor.For using it,first the user needs to register using his details.On successful registeration, the user will login using the correct credentials.After login,a dashboard page appears.The user can update his/her information in the profile section,book appointments which will be reflected in the appointments section.The user can also search for doctors and access their details such as name,qualifications,available time and fees etc.The user can overlook new activities using the notification section.For the doctors,the registeration and login process is same.The doctors can create a public profile,decide their available time slots,accept or reject appointments and can access their patient's data such as previous ailments and medication records,present status of appointment and ongoing treatments etc.

Software and Hardware Requirements

Software Requirements:

- MySQL Server
- HTML
- CSS
- JavaScript
- BootStrap
- M.E.R.N.
- VS Code

Hardware Requirements:

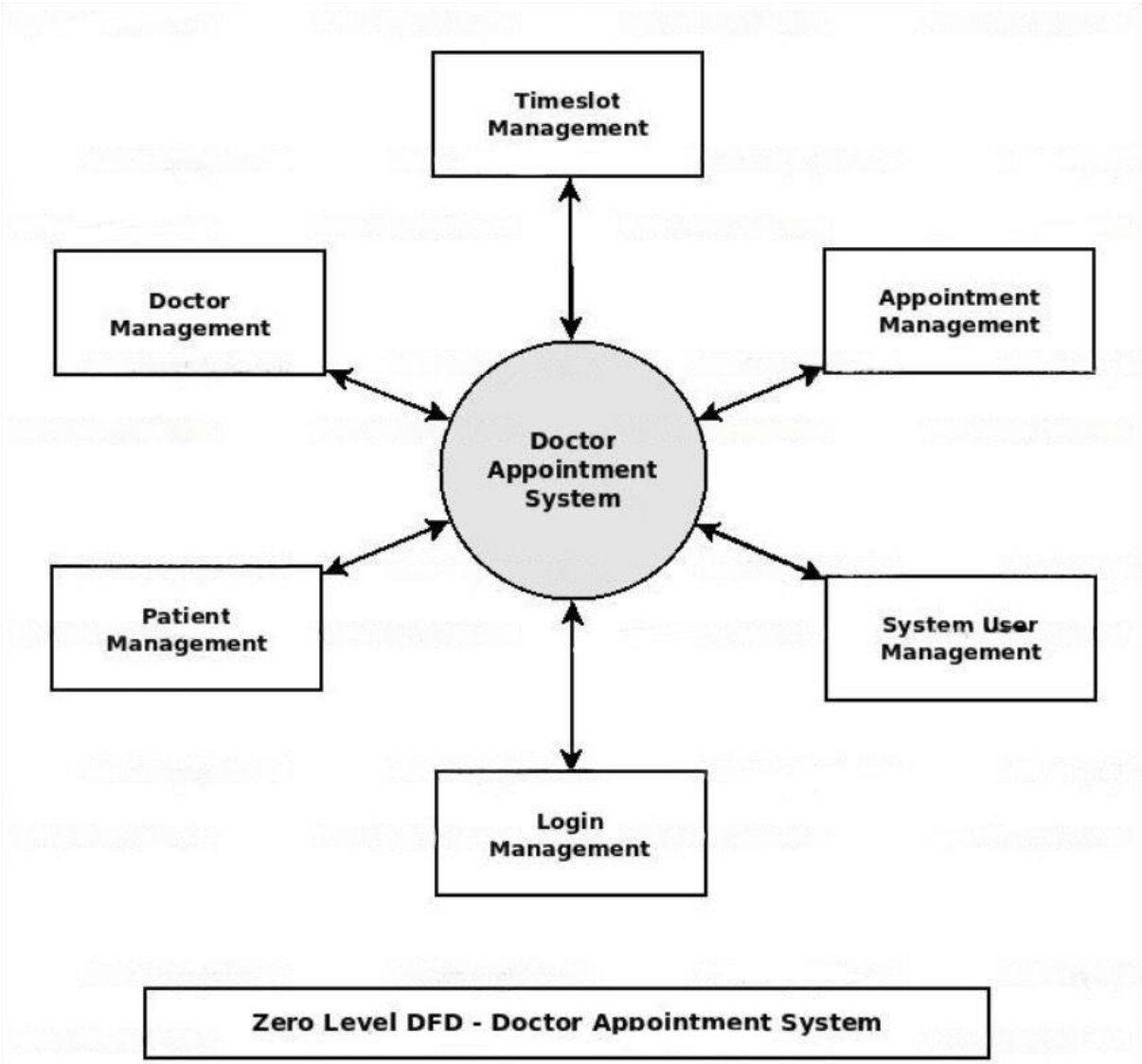
- Windows 10 and above
- 512 mb RAM
- I3 processor and above

Module Description

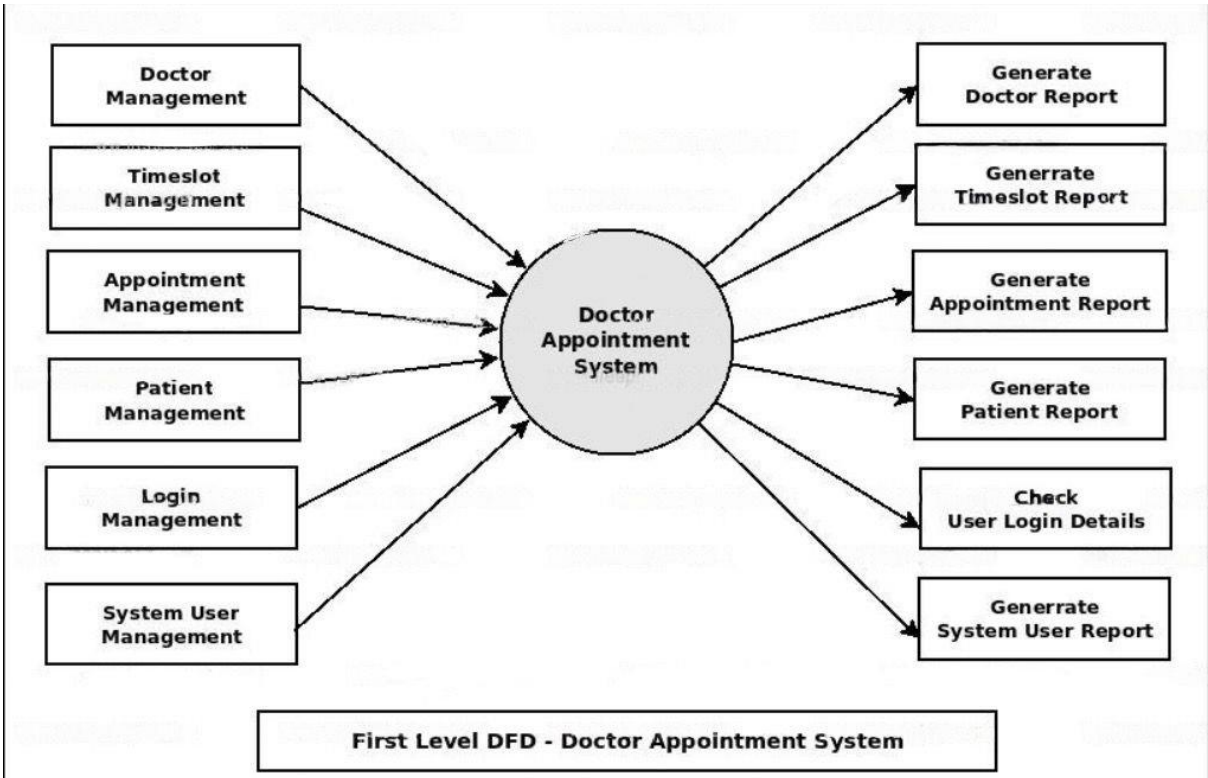
The roles of the modules are as follows:

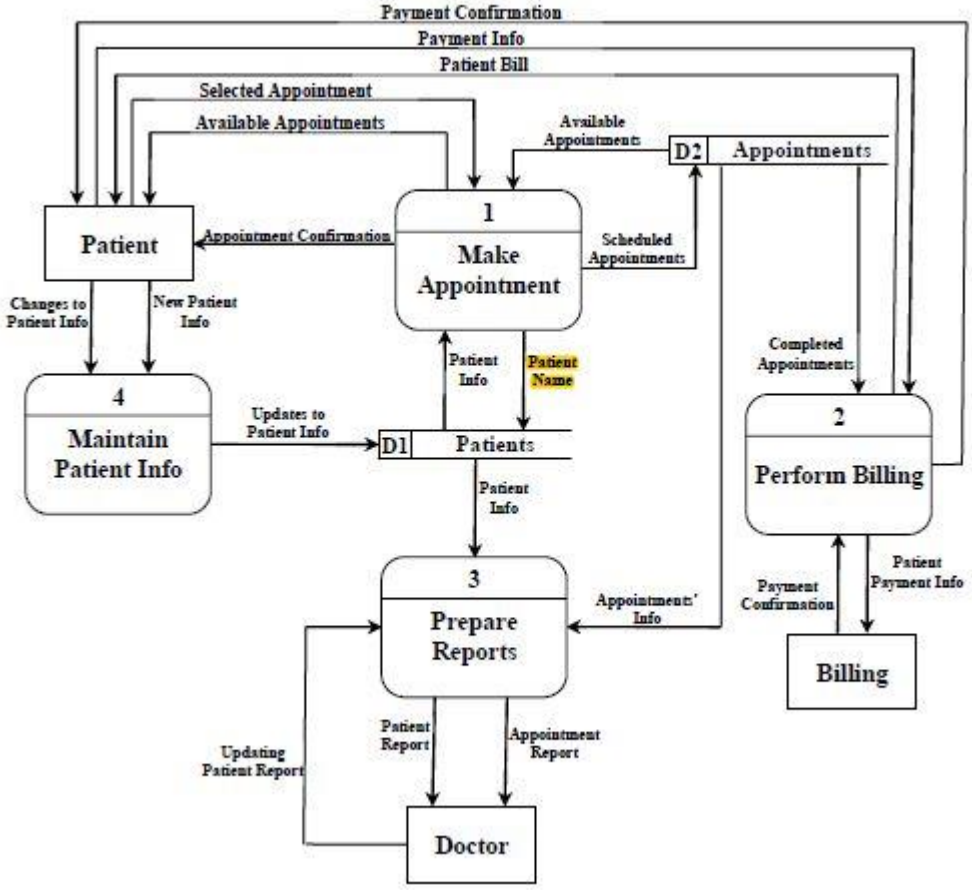
- Doctor Management Module:Used for managing the details of doctors
- Testings and Report Module:Used for managing the details of the tests conducted
- Appointment Managemant Module:Used for managing the details of the appointments made by the users.
- Patients Module:Used for managing the details of all patients
- Bookings Module:Used for managing the Booking information of all doctors
- Login and Registeration Module:Used for storing the details required for registeration and login for all users.

Data Flow Diagrams

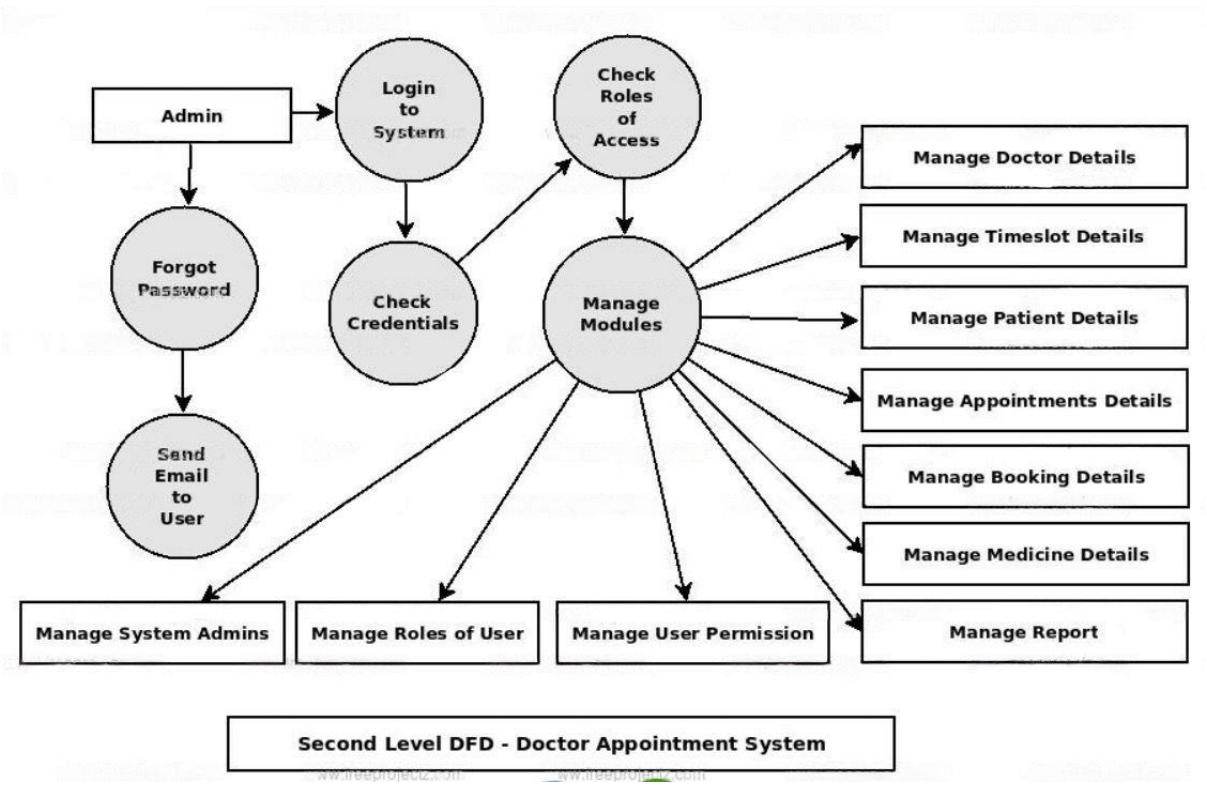


Zero Level DFD - Doctor Appointment System





Level 1 DFD for Patient Management



Second Level DFD - Doctor Appointment System

Future Scope of the Project

In a nutshell,it can be summarized that the future scope of the project circles around maintaining information regarding :

- We can add printer in future
- We can give more advanced software including more facilities such as comparison between two or more doctors
- We can host the platform on online servers to make it accessible worldwide
- We can integrate multiple load balancers to distribute the loads of the system
- Implement the backend mechanism for taking backup of codebase and database on regular basis

Conclusion

Our project is a very humble venture to satisfy the needs to manage the appointment booking system more efficiently and easily for both the patients and the doctors.This platform can prove to be a powerful platform in handling the requirements of various types of users who wish on cutting time in scheduling appointments.This website will provide a hassle free experience to all users provided that it is managed and updated from time to time according toh the needs of the users.At the end,it is concluded that,we understand the problem domain and are able to create a model of the system which fulfils the operations required by the system.We included features and operations in detail and designed the user interfaces and solved security issues related to the system efficiently.Finally,the system is implemented and tested according to test cases.

Reference Websites:

1. https://code.visualstudio.com
2. https://nodejs.org/en/
3. https://developers.google.com
4. https://github.com
5. https://reactjs.org/

GitHub Repository link:

https://github.com/ns-2002/Doc-appointment-website-MERN.git