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ONLINE DOCTOR APPOINTMENT SYSTEM

Pralipsa Sahoo Computer Science And Engineering Gandhi Institute For Technology, India
pralipsa2021gift@edu.in
Ankita Mishra Computer Science And Engineering Gandhi Institute For Technology, India
ankita.mishra2020@gift.edu.in

ABSTRACT

The purpose of Doctor Appointment System is to automate the existing manual system by the help of computerized equipments and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. The required software and hardware are easily available and easy to work with.

Doctor Appointment System, as described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus it will help organization in better utilization of resources. The organization can maintain computerized records without redundant entries. That means that one need not be distracted by information that is not relevant, while being able to reach the information.

The aim is to automate its existing manual system by the help of computerized equipments and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. Basically the project describes how to manage for good performance and better services for the clients.

1. INTRODUCTION

The "Doctor Appointment System" has been developed to override the problems prevailing in the practicing manual system. This software is supported to eliminate and in some cases reduce the hardships faced by this existing system. Moreover this system is designed for the particular need of the company to carry out operations in a smooth and effective manner.

The application is reduced as much as possible to avoid errors while entering the data. It also provides error message while entering invalid data. No formal knowledge is needed for the user to use this system. Thus by this all it proves it is user-friendly. Doctor Appointment System , as described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus it will help organization in better utilization of resources

1.2 Objectives

The main goal of doctor appointment app development is to provide efficient health services and eliminate lengthy queues. Patients can quickly schedule an appointment with the doctor of their choice using the most dependable healthcare providers

1.3 Problem Statement

If anybody is ill and wants to visit a doctor for a check-up, he or she needs to visit the hospital and wait until the doctor is available. The patient also waits in a queue while getting an appointment. If the doctor cancels the appointment for some emergency reasons then the patient is not able to know about the cancellation of the appointment unless or until he or she visits the hospital. This becomes tedious for all the involved individuals

1.4 Project relevancy, feasibility

After doing the project Doctor Appointment System analyzing all the existing or required functionalities of the system, the next task is to do the feasibility study for the project. All projects are feasible - given unlimited resources and infinite time.

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.

A. Economical Feasibility

This is a very important aspect to be considered while developing a project. We decided the technology based on minimum possible cost factor.

- All hardware and software cost has to be borne by the organization.
- Overall we have estimated that the benefits the organization is going to receive from the proposed system will surely overcome the initial costs and the later on running cost for system.

B. Technical Feasibility

This included 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 Requirement Specification (SRS), and checked if everything was possible using different type of frontend and backend plaformst.

C. 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 training has been conducted to let know the essence of the system to the users so that they feel comfortable with new system. As far our study is concerned the clients are comfortable and happy as the system has cut down their loads and doing.

2.LITERATURE SURVEY

The earliest general hospital was built in 805 CE in Baghdad by Harun Al-Rashid. By the tenth century, Baghdad had five more hospitals, while Damascus had six hospitals by the 15th century and Córdoba alone had 50 major hospitals, many exclusively for the military.

The Government General Hospital, Madras was started by them on November 16, 1664, as a small hospital to treat the sick soldiers of the East India Company. Later on, in 1750, it was declared open to the native population. In Bombay, the first hospital was opened in 1676 and Calcutta in 1707-08.

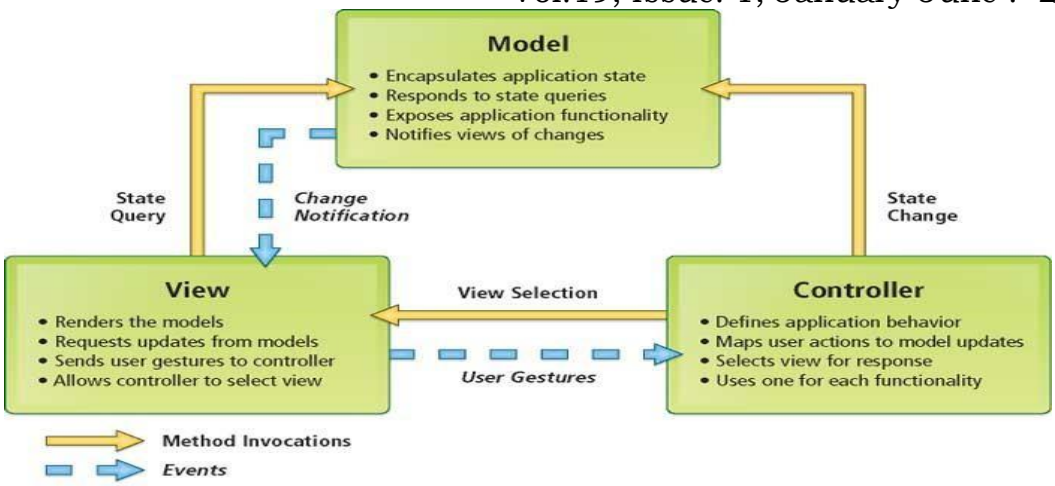
The first medical consulting website in the US was WebMD,[17] founded in 1996 by Jim Clark (one of the founders of Netscape) and Pavan Nigam as Healthscape. Currently, its website carries information regarding health and health care, including a symptom checklist, pharmacy information, drug information, blogs of physicians with specific topics, and a place to store personal medical information. As of February 2011, WebMD's network of sites reaches an average of 86.4 million visitors per month and is the leading health portal in the United States.

In Australia HealthDirect is the free health advice and information service provided by the government with advice offered 24 hours a day via telephone. Medicare began funding online consultations for specialists on 1 July 2011 which has seen a slow but steady increase in volumes.

3.METHODOLOGY

Model View Controller or MVC as it is popularly called, is a software design pattern for developing web applications. A Model View Controller pattern is made up of the following three parts:

1. **Model** - The lowest level of the pattern which is responsible for maintaining data.
2. **View** - This is responsible for displaying all or a portion of the data to the user.
3. **Controller** - Software Code that controls the interactions between the Model and View. MVC is popular as it isolates the application logic from the user interface layer and supports separation of concerns. Here the Controller receives all requests for the application and then works with the Model to prepare any data needed by the View. The View then uses the data prepared by the Controller to generate a final presentable response. The MVC abstraction can be graphically represented as follows.



3.1 Requirement Analysis

The Software Requirements Specification is produced at the culmination of the analysis task. The function and performance allocated to software as part of system engineering are refined by establishing a complete information description, a detailed functional and behavioral description, an indication of performance requirements and design constraints, appropriate validation criteria, and other data pertinent to requirements.

3.2 Design

In this phase, a logical system is built which fulfils the given requirements. Design phase of software development deals with transforming the clients's requirements into a logically working system.
Normally, design is performed in the following in the following two steps:

1. Primary Design Phase:

In this phase, the system is designed at block level. The blocks are created on the basis of analysis done in the problem identification phase. Different blocks are created for different functions emphasis is put on minimising the information flow between blocks. Thus, all activities which require more interaction are kept in one block.

2. Secondary Design Phase:

In the secondary phase the detailed design of every block is performed

3.3 Implementation

Designing an online doctor appointment system involves several key components, including user registration, appointment scheduling, doctor availability management, and communication channels. Here's a high-level outline of how you might implement such a system:

- User Registration and Authentication:

Allow users (patients) to create accounts with basic information like name, email, contact number, and medical history.
Implement authentication mechanisms to ensure secure access to user accounts.

- Doctor Registration and Profile Management:

Allow doctors to register and create profiles with their specialties, available time slots, consultation fees, and any other relevant information.
Verification mechanisms may be implemented to ensure that only licensed doctors can register.

3.4 Testing

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- Doctor Registration and Profile Management:

Allow doctors to register and create profiles with their specialties, available time slots, consultation fees, and any other relevant information.

Verification mechanisms may be implemented to ensure that only licensed doctors can register.

3.5 Maintenance

Maintaining an online doctor appointment system is crucial for its continued functionality, security, and user satisfaction. Here are some key aspects to consider for maintaining such a system:

- Regular Updates:

Keep the system up-to-date with the latest software patches, bug fixes, and security updates to address any vulnerabilities and improve performance.

- Database Maintenance:

Regularly optimize and clean up the database to ensure efficient data storage and retrieval. This includes archiving old records and optimizing database queries for better performance.

4.RESULT

The results/outputs have screenshots below:

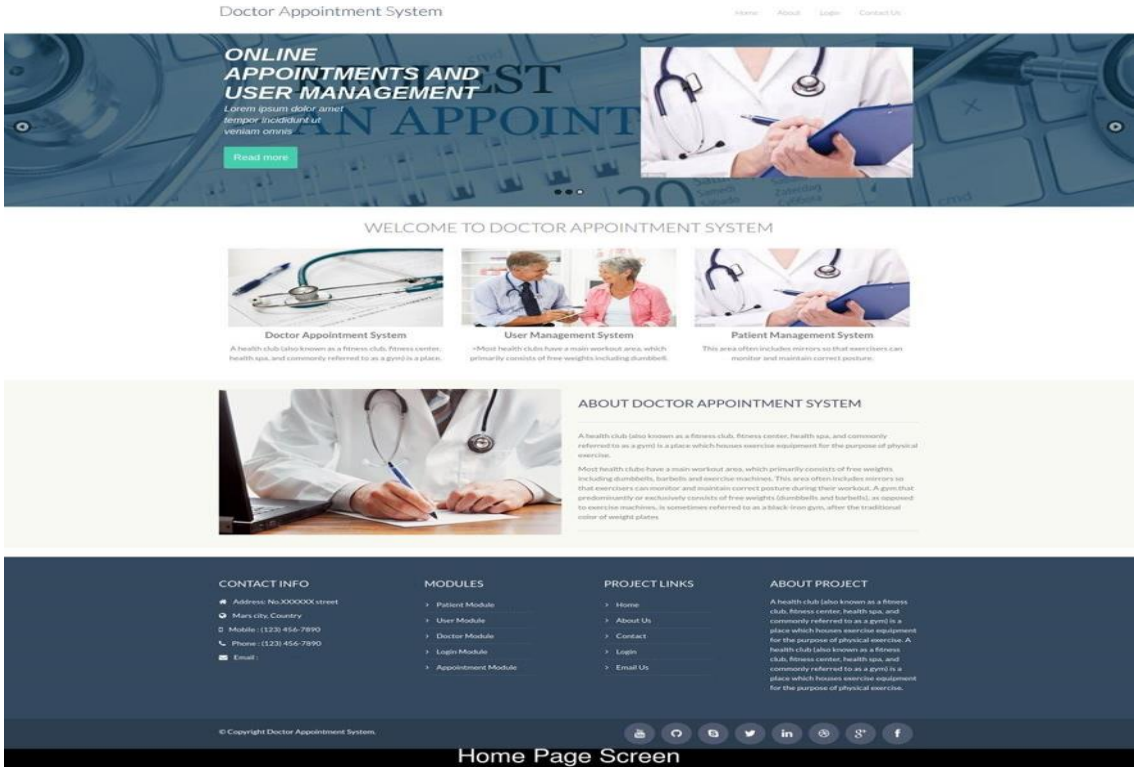
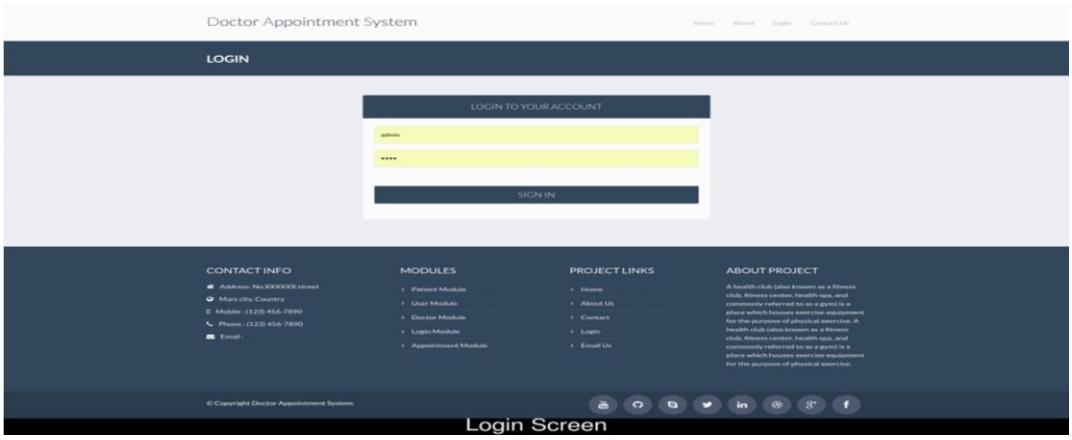
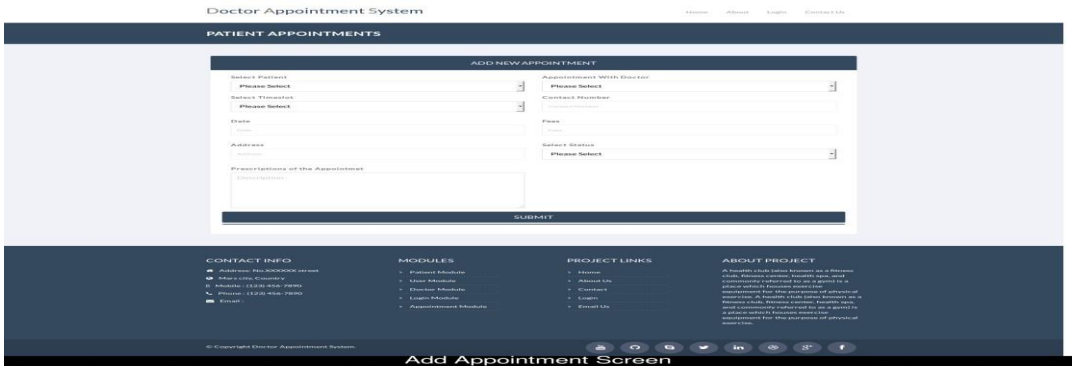


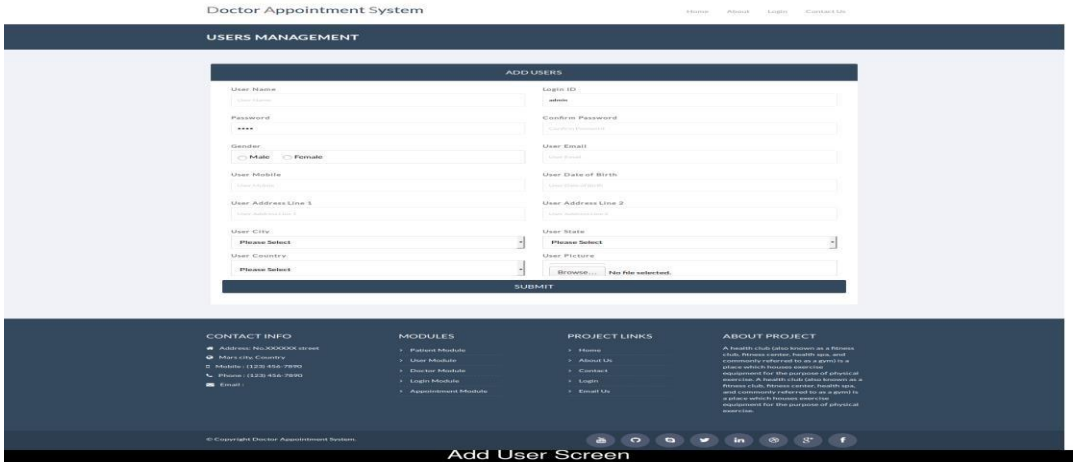
Fig 1: Home Page

Fig 2: User Registration



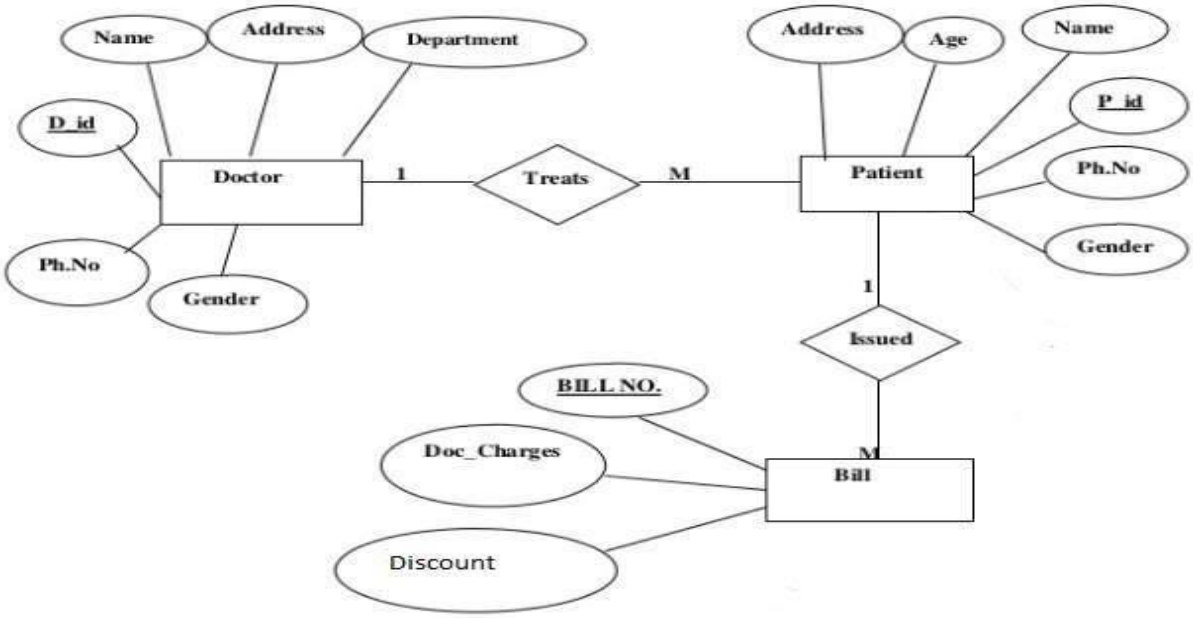


Add Appointment Screen



Add User Screen

5.ER DIAGRAM



6. CONCLUSION

Our project is only a humble venture to satisfy the needs to manage their project work. Several user friendly coding have also adopted. This package shall prove to be a powerful package in satisfying all the requirements of the school. The objective of software planning is to provide a frame work that

enables the manger to make reasonable estimates made within a limited time frame at the beginning of the software project and should be updated regularly as the project progresses.

7. FUTURE SCOPE

It may help collecting perfect management in details. In a very short time, the collection will be obvious, simple and sensible. It will help a person to know the management of passed year perfectly and vividly. It also helps in current all works relative to Doctor Appointment System. It will be also reduced the cost of collecting the management & collection procedure will go on smoothly.
Our project aims at Business process automation, i.e. we have tried to computerize various processes of Doctor Appointment System.

- In computer system the person has to fill the various forms & number of copies of the forms can be easily generated at a time.
- In computer system, it is not necessary to create the manifest but we can directly print it, which saves our time.
- To assist the staff in capturing the effort spent on their respective working areas.
- To utilize resources in an efficient manner by increasing their productivity through automation.

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