HOSPITAL MANAGEMENT SYSTEM

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GitHub link of the Proposal

https://github.com/Akhila-Battula/HospitalManagementSystem

1. Motivation

One of the most running industries in the world today is the hospital systems. From the past two to three years, the rise in Hospital needs and management in the world has increased tremendously. Covid virus has impacted the world in a bizarre way which was not expected by any of us. The limited hospital managements systems in the place lead to many people not getting proper treatment for the issues they were facing. Looking at the need for more interactions with the digital hospital management, we are developing an online Hospital Management System.

Although there are manual records of patients and doctors' entries, we decided to make an online system which helps in digitalized entry of the patients and doctors and schedule their appointments based on their availability. The social distancing prospect encouraged to come up with this idea of digital Hospital Management System to book appointments and save the time of either parties.

2. Significance

The digital design of the Project is important as the existing systems have the paper forms to fill out the information of the patients. These can be lost in the transit or in any means of the paper stack. The digitalized platform provides with data stored at the backend in the database and retrieve any records which are stored on file. The crucial part for developing this project is that it can timely retrieve larger information when in need of require which cannot be done during manual entries. This information of retrieving form the database system can be of patient's medical history, staff entries and various other stuff of the hospital. To manage the information of the hospital doctors and patients and staff, it should be done in an efficient manner with cost management. Hospital Management System helps in managing the confidential information in an effective manner. Thus, our hospital management system helps in for storing and booking appointments online and storing the data which is necessary to be filed up for. This online management system purely aims at the data scrutiny and standardizing its data with integrity.

Hospital Management System is designed to provide effective decision making for the patient and hospital administration in a systematic flow. It is a web site handler designed to improve the quality of the management. As we know that managing the process efficiently makes the hospital more success, we developed our system to help the hospitals to make the effective way out of the technology.

3. Objectives

This project aims at creating an easy interface for the management to add, remove employee details, access prescriptions of patients which reduces the manual effort on the doctor's end to write for each patient. Earlier when patient and employee records were all maintained on paper it had issues of maintenance and overloaded the Doctor, Administrator and Receptionist of the hospital with additional responsibility of storing the information.

In this application the access to different aspects in a hospital is given based the role of the user. The roles that the application handles are Doctor, Receptionist and Administrator. Administrators will be able to add, search and delete employee records. Receptionist will be able to add new patient information, search from patients list and add them to the queue, also as a receptionist once the doctor prescribes a prescription to a patient it can be viewed in the list. Doctor will be able to view queue and remove the patient from queue, doctor will be able to view the history of an existing patient and will also be able to record the observations, prescribe medicines using the application.

4. Features

The web application we are developing is built on the JavaScript files along with MySQL and Java. To run the MySQL database from the IDE, we are using Tomcat server for the application to be run on the local server of our systems.

- *Reduce efforts*:
  Users can make use of the application and perform actions like addition, search and updating details easily which eliminates the use of huge registers.
- *Quick access and saves time:*
  This application makes data accessible for the users at a much faster rate.
- *Open Source:*
  The application is developed using open-source technologies making it free of cost and accessible to everyone.
- *Flexible:*
  This is a web application which provides the ability to customize the design, look and feel for the users.
- *Environment friendly:*
  As we progress to use web application instead of the traditional pen and paper methods, it reduces the usage of paper which contributes in saving nature.

5. References

[1] MocDoc, "HospitalManagementSyatem," 2021.

[2] A. Voznaya, "Hospital Management Software Development: Key Features and Benefits," 15 October 2021.

[3] Yan Likarenko, "Hospital Management System: All-In-One Guide," 2022.