Implementation of Web Application Online Doctor Appointment

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Abstract— **The aim of the web Doctor Appointment System is to automate the prevailing manual system with the assistance of computerized equipment and full-fledged computer software, fulfilling their requirements, so as that their valuable data/information are often stored for an extended period with easy accessing and manipulation of an equivalent. The required software and hardware are easily available and straightforward to figure with. Doctor Appointment System, as described above, can cause error-free, secure, reliable, and fast management system. It can assist the user to consider their other activities rather consider the record keeping. Thus it'll help an organization in better utilization of resources. The organization can also maintain computerized records without redundant entries. That means that one needn't be distracted by information that's not relevant while having the ability to succeed in the knowledge. The main aim of this project is to automate existing manual user operate the system by the assistance of computerized equipment and full-fledged computer software, fulfilling their requirements, so as that their valuable data/information are often stored for an extended period with easy accessing and manipulation of an equivalent. Basically the project describes the way to manage permanently performance and better services for the clients.**

Keywords—— **Doctor, Patient, Appointment System.**

I. INTRODUCTION

The application has been developed to override the problems prevailing in the practicing manual system. This software has supported eliminating and in some cases reduce the hardships faced by this existing system. Moreover, this technique is meant for the actual need of the corporate to hold out operations during a smooth and effective manner.

The application is reduced the maximum amount as possible to avoid errors while entering the info. It also provides data related error message while entering invalid data. No formal knowledge is required for the user to use this technique. Thus by this all, it proves it's user-friendly. Doctor Appointment System, as described above, can cause error-free, secure, reliable, and fast management system. It can assist the user to consider their other activities rather consider the record keeping. Thus it'll help an organization in better utilization of resources.

Every organization, whether big or small, has challenges to beat and managing the information of Appointment, Doctor, Booking, Test, Medicine. Every Appointment System has been build with different doctor needs, therefore we have designed exclusive management systems that are adapted to your managerial requirements. This is designed to help in strategic planning and can assist you to make sure that your organization is provided with the proper level of data and details for your future goals. Also, our systems accompany remote access features for those busy executives who are always on the go, which can allow you to manage your workforce anytime, within the smallest amount times. These systems will ultimately allow you to raised manage resources.

II. PROBLEM STATEMENT

The old manual system was affected by a series of drawbacks. Since the whole of the system was to be maintained with hands the method of keeping, maintaining, and retrieving the knowledge was very tedious and lengthy. The records were never wont to be during a systematic order. there wont to be many difficulties in associating any particular transaction with a specific context. If any information was to be found it had been required to travel through the various registers, documents there would never exist anything like report generation. There would always be unnecessary consumption of your time while entering records and retrieving records. One more problem was that it had been very difficult to seek out errors while entering the records. Once the records were entered it had been very difficult to update these records.

The reason behind it's that there's a lot of data to be maintained and need to be kept in mind while running the business. For this reason, we've provided features Present system is partially automated (computerized), actually, existing system is sort of laborious together has got to enter the same information at three different places.

III. EXISTING SERVICES

Refer to the literature review, observation, interviews, and questionnaires as explained in chapter three it should be noted that at Hospital doctor maintenance we were ready to analyze existing systems as discussed below.

The current system was manual where data is written on different papers and transferred to the numerous departments, human errors were vulnerable since it had been paper-based and retrieval of files was time-consuming as that they had to manually locate patient a number of which were even lost and thus finding such information was hard. Per the statistics carried 90% of the users weren't contented with the system reason that's wasn't secure in terms of security and storage because it was prone to damages like loss of important information, wiped out papers, an outbreak of fire, The speed of recording and retrieval Patients information was average yet 10% were some comfortable with the system reason that the paperwork can use for future reference.

The users recommended that the proposed system should be user friendly, multipurpose enough to handle kind of users at a go, could generate feedback when the request is submitted, and use of passwords which could deny access to unauthorized users of the system which ensured security. Context diagrams, Data flow diagrams, and Entity Relationship Diagram where used in the analysis and design of the system.

IV. DATA FLOW
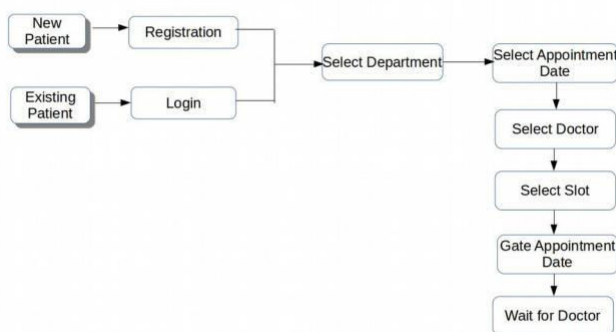
V. PROPOSED SYSTEM

The proposed project may be a smart appointment booking system that gives patients or any user a simple 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 the 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 efficient solution where users can view various booking slots available and choose the well-liked date and time. The already booked space are going to be marked yellow and can not be available for anyone else for the required time. This system also allows users to cancel their booking anytime. The system provides an additional feature of calculating the monthly earnings of a doctor. The doctor has got to just feed the system regularly with daily earnings and therefore the system automatically generates a report of total amount earned at the top of the month. The application uses Asp.net as a front-end and SQL database as the back-end.

Advantages -

> This system helps to reduce the waiting time of the patient.

> User can select the appointment time according to his preference.
> Available and booked slots are shown in effective graphical user interface.

VI. LITERATURE REVIEW

Dr Nirmalya Manna, Dr Md Samsuzzaman, Dr Saikat Das (2014): "A Time Motion Study in the OPD Clinic of a Rural Hospital of West Bengal", IOSR Journal of Dental and Medical Sciences, Volume 13, Issue 7, ISSN: 2279-0861. The author conduct the time motion study to know the time taken in different service delivery point in OPD and to assess the perception of beneficiaries regarding the total time spent in the OPD. Time Motion study is required for proper time management in different health care delivery system and subsequent remedial steps can be taken accordingly.

Sreekala P, Arpita Dan, Elizabeth M Varghese (2015): "Patient Waiting Time in Emergency Department", International Journal of Scientific and Research Publications, Volume 5, Issue 5, ISSN 2250-3153. This research paper present study to determine the average waiting time of patients reported in the emergency

department and to assess the factors responsible for the waiting period of patients in emergency department.

Obulor R., Eke B. O. (2016): "Outpatient Queuing Model Development For Hospital Appointment System", International Journal of Scientific Engineering and Applied Science, Volume 2, Issue 4, ISSN 2395-3470. This research presents an efficient queuing model for proper appointment system to give the solution to the long waiting times in the hospitals. This system provides better utilization of resources and reduces patients waiting times in the general OPD before consultation with the Doctor.

VII. APPLICATIONS

This on-line appointment booking is fully functional and flexible. The website acts as an office that is open 24/7.

It provides custom features development and support with the software.
Eco-Friendly: The monitoring of Patient activity

The registered user can upload his prescription documents.

 The System is the design and developed in such a way that it to overcome all the prescribed problem.
 The system being an on-line system will give accurate information regarding the clinics which helps to view all the

stuff information directly from anywhere

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VIII. FUTURE SCOPE

In a nutshell, it are often summarized that the longer term scope of the project circles around maintaining information regarding:

We can add a printer in the future.We can give more advance software for Doctor Appointment System including more facilities We will host the platform on on-line servers to form it accessible worldwide Integrate multiple load balancers to distribute the hundreds of the system Create the master and slave database structure to scale back the overload of the database queries Implement the backup mechanism for taking backup of codebase and database on a regular basis on different servers

 The above-mentioned points are the enhancements that can be done to increase the applicability and usage of this project. Here we will maintain the records of Doctor and Appointment. Also, as it can be seen that nowadays the players are versatile, i.e. so there's a scope for introducing a way to take care of the Doctor Appointment System. Enhancements are often done to take care of all the Doctor, Appointment, Patient, Booking, Medicine.

 We have left all the choices open in order that if there's the other future requirement within the system by the user for the

enhancement of the system then it is possible to implement them. In the last, we might wish to thanks all the persons involved within the development of the system directly or indirectly. We hope that the project will serve its purpose for which it is developed thereby underlining success of process.

IX. CONCLUSION

Our project is merely a humble venture to satisfy the requirements to manage their project work. Several user-friendly coding have also adopted. This package shall convince be a strong package in satisfying all the wants of the varsity. The objective of software planning is to supply a framework that permits the manager to form reasonable estimates made within a limited time-frame at the start of the software project and will be updated regularly because the project progresses.

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