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VIRTUAL TREATMENT AND CONSULTATION SYSTEM

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Abstract: - The main motive of introducing these "Virtual Treatment and consultation system" is to promote online health care services. Because lack of specialists is major problem in small towns. But Virtual Treatment provides online services like online treatment. It will be beneficial for all those peoples located in small towns and the patients who have to take regular treatment, travel a lot where there is a lack of medical facilities. Virtual Treatment and Consultation System is a web-based project system which deals with online check-up through video conferencing & doctor gives online prescription. The project is very helpful to doctor, receptionist and public. People can book appointments online by approaching the website of Virtual Treatment and Consultation System. And People can discuss their health-related issues via video conferencing and get doctor useful prescription Virtual Treatment system is a computerized system designed and programmed to deal with day-to-day records like appointment, interaction and management activities. It also maintains patients records.

I. INTRODUCTION

The main objective is to develop internet applications particularly "Virtual Treatment and Consultation System". That covers all the sides of creating appointments for doctors. It allows health care provides to enhance operational effectiveness, cut back medical errors, reduce time consumption and enhance the delivery of quality of care.

This system facilitates the reduction of the issues that occur once using the manual system and helps patients to skip endless queues. The necessary factor is it'll become easier for the info record and retrieval. This website also stores all the patient details, patients' profiles, prescriptions, etc. This website allows doctors and clinic assistants to manage patient records and appointments. User will enter their details; update their profile and that they will choose doctors to form appointments. Apart from that, the system is user-friendly and it will help the clinic to manage their appointments.
The system helps to avoid creating duplicate appointments. Users will read accessible doctors and their timings and may create appointments consistent with it. Users also get a choice to cancel their appointments. Users will read their forthcoming appointments and past appointments are deleted automatically.

The system additionally permits doctors to log in. Doctors will edit their profile and look at their forthcoming appointments, patients, etc. They will even send prescriptions to their patients by choosing their patients from the dropdown list. The system also has an administrator section, wherever solely one person will manage the complete system. The administrator will add/remove patients, doctors, and departments and explore for appointments.

II. LITERATURE REVIEW

This system was developed for mobile streaming applications. The simulated results show that this method will perform streaming audio and video applications. Dominant and observation by the doctor contemporaries makes the system a lot of versatile and structured. Modern studies are required to enhance information mining and cloud-based M health management technology compared with the normal system. [1]

In this paper, efficient information delivery system with a secured networking authentication protocol named as Kerberos has been planned for software system software system virtual hospital systems. This paper additionally demonstrates with simulation results for a higher information delivery system with adequate networking security through Kerberos system for following generation good health care design. [2] This analysis paper focuses on the comparison of the performance of the paper-based patient record management systems and also the Patient e-Files on-line Health Record Management System (OHRMS). The performance analysis of 2 systems is with relation to the time spent on two basic register operations. These basic operations are the registration of a replacement patient and also the retrieval of existing+ patient records. The advantages of the OHRMS and also the disadvantages of the present paper-based systems are mentioned further. [3] This paper presents a review of the literature on multi-appointment planning issues in hospitals. In these

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issues, patients have to be compelled to consecutive visit multiple resource varieties in a very hospital setting so that they will receive treatment or be diagnosed. The results show that multi-appointment planning issues are getting more and more common. In fact, multi appointment programming planning in hospitals are presently gaining progressively increasingly more and a lot of more momentum issues educational literature. [4] This paper presents a review patient Appointment System (OAS), that represents one among the points of entry for patients to the health care system. We tend to have an interest within the contribution of knowledge Technology to the current field by proposing a abstract model articulating the creating of appointments on the net at intervals a patient-centric care (PCC) through a qualitative case study of hospitals in Morocco. [5] This paper Given an entire plan regarding the patients' demographic characteristics, nature of their health problem, time they spent before reaching the hospital, on the queue to check the doctor and with the doctor. It conjointly describes the patient's read regarding queue and their behaviour within the Queue. [6] This paper style to resolve patient waiting time drawback within the clinic or hospital. The matter is often with scheduling algorithmic program like round robin, Priority scheduling and shortest job 1st. [7] This analysis represents an Electronic paper less application designed with high flexibility and easy usage for Patients to book their appointment at intervals the scheduled appointment slots in step with Their preference. This method serves in managing appointments and provides patient to Cancel or schedule appointment by desegregation distributed clinical systems into a group of Consistent and convenient services accessible via an internet browser. [8] This describes the advance of patient's satisfaction towards health care services by reducing their waiting time, attending the patient in time and sympathetic approach can produce a positive image of hospital within the mind of individuals and conjointly can facilitate hospital image building within the community. [9] In this analysis android based mostly patient appoint planning and medication assortment System is developed. This method isn't supporting for come in patients further as Cancellation and rescheduling of appointment. [10]

III. PROBLEM STATEMENT

The problem studied during this report is said to the virtual appointment planning system is for each the emerging and nonemergent patient. Vision of this project is to form doctor patient handling management system that may facilitate patients to book doctor appointment and fulfil their prospects. During this system doctors are allowed to manage their booking slots in online, patients will create their appointment to book empty slots too. This is often the system of reservation for counsel by patient's name. This website manages totally different kinds of doctors at a time and patients will select their expected one for booking. In classical system patient got to visit the Hospital and wait within the queue to form a reservation and get an appointment this method is extremely a lot of time-consuming. The purpose of virtual appointment booking system that has patients or any user a simple approach of booking a doctor's appointment on-line. The aim is to alter existing system for helpful purpose therefore the medical reports are often hold on for extended amount with quick access and manipulating of same. Principally project focus in a way to offer smart facilities to the patients. Our present system isn't because the demand goes. So, we are able to recapitulate some drawback here; using totally different numbers of platform might not be enough for each patient to appointment with a doctor.there's some manual system to appointment, however this can be totally on-line based mostly. The person doesn't seem to be totally sure on on-line system, so they'll not get correct benefit from this technique. According to these issues, our system offers solutions that may facilitate patients. User will simply access the system anytime and anyplace. This technique is extremely easy and user-friendly; Few of them are: For Patients, help there's immense assortment of doctor info smart approach of appointment scale back the appointment delay will transfer prescription for future good price For Doctors, helps simply access to history of medication of a patient.

IV.OBJECTIVE

The system helps to avoid creating duplicate appointments. Users will read accessible doctors and their timings and may create appointments consistent with it. Users also get a choice to cancel their appointments. User will read their forthcoming appointments and past appointments are deleted automatically.

V. SYSTEM ARCHITECTURE

A. User

1) registration process:

- Book appointment: patient need to choose between offline appointment and online appointment.
- Choose Doctor: choose doctor according to their preference
- Make payment: need to pay through online or offline mode.

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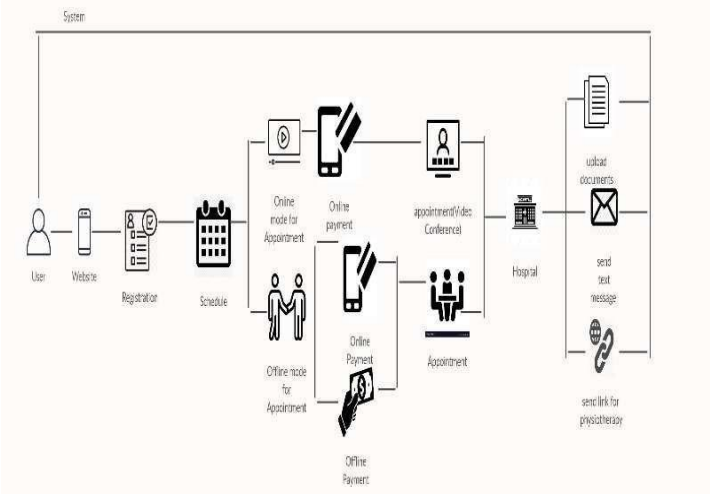

Fig: System Architecture

3)Registration Process*:* Adding Patients: VTCS enables the staff in the front desk to approve appointment of patients to the system. Check payment: Staff needs to check payment and send confirmation.

4) Database**:** Mandatory Patient Information: Every patient has some necessary data like phone number, their first and last name, postal code, country, address, city etc. Updating information of the Patient: The hospital management system enables users to update the information of the patient as described in the mandatory information included.

VII CONCLUSION

Virtual Treatment and Consultation system may be a very exciting topic to figure. once longing the work, we tend to face several difficult tasks. Day by day health care system becomes a very important part of our society. So, we've got determined to make this system. We researched numerous systems that showed us the direction a way to develop our system. we tend to move with those that what style of drawback they facing. They were very happy to require this system because it is giving them some relief in the modern age. After all, it's a type of web-based system thus, in reality, each doctor and patient follow the exploitation rules otherwise its goal is failing.

VIII. REFERENCES

[1]. Osong Public Health Res Perspect 2012 3(3), 165e169 Doi: 10.1016/j.phrp.2012.04.008 pissn 2210-9099 Eisen 2233-6052.

[2]. 978-1-5090-0744-8/16/$31.00 ©2016 IEEE Efficient and Secure Data Delivery in Software Defined WBAN for Virtual Hospital.

[3]. IST-Africa 2016 Conference Proceedings Paul Cunningham and Miriam Cunningham (Eds) IIMC International Information Management Corporation, 2016 ISBN: 978-1-905824-55-7

[4]. Joren Marynissen, Erik Demeulemeester, Literature review on multi appointment scheduling problems in hospitals, European Journal of Operational Research (2018), Doi: 10.1016/j.ejor.2018.03.001

[5]. International Conference on Control, Decision and Information Technologies (codit'19) | Paris, France / April 23-26, 201 [6]. Nidhi Malik, O. K. Belwal (2016): "Application of Queuing Theory to Patient Satisfaction at Combined Hospital, Srinagar Garhwal Uttarakhand", International Journal of Science and Research, Volume 5, Issues 4, ISSN: 2319-7064.

[7]. Kamna Sharma (2015): "Scheduling Algorithm to Solve Problem in Ophthalmology", HCTL Open International Journal of Technology Innovations and Research, Volume 14, ISBN: 978-1-62 951-946-3.

[8]. S. Sri Gowthem1, K.P. Kaliyamurthie (2015): "Smart Appointment Reservation System", International Journal of Innovative Research in Science, Engineering and Technology, Volume 4, Issue 6, ISSN: 2347-6710.

[9]. Aswar Nandkeshav R, Kale Kalpana M, Rewatkar Mangesh P, Jain Akanksha, Barure Balaji S (2014): "Patients' Waiting Time and Their Satisfaction of Health Care Services Provided at Outpatient Department of Government Medical College, Nanded (Maharashtra, India)", International Journal of Health Sciences and Research, Volume 4, Issue 4, ISSN: 2249-9571.

[10]. Swabik Musa Abdulla Wani, Suresh Sankara Narayanan (2014): "Intelligent Mobile Hospital Appointment Scheduling and Medicine Collection", International Journal of Computer and Communication System Engineering, Volume 1 No. 02, ISSN: 23127694