

Prescription Compiler And Appointment Booking Portal

Varun D Suvarna¹, Rakshit Hazrati², Samarth Bhutani³, Prabhu S⁴

SCOPE, VIT

VELLORE, TAMIL NADU-632014

Abstract- *The software prescription compiler will store a patient's medical prescriptions in the database which can be accessed by both patient and hospital and patients can also book an appointment online using this software. The patients can choose date of appointment and pay for it online and it will be confirmed on this software. After booking an appointment the patient will have two options either meet the doctor online on video chat or in real life. If the patient chooses video chat the doctor will decide if it is solvable online or he/she should come personally. It will save both time and money. After the meet with doctor the doctor will upload the medical prescription of the patient on the software which the patient can access anytime by just logging in with his/her credentials. This will help in solving many problems such as the legibility of handwritten prescriptions of doctor which many a times causes error in getting medicines. This will also help the patients to maintain the prescriptions as it is easy to lose or damage handwritten text, but these will be stored digitally so it can be accessed any time without any problems.*

Keywords- Hospital, HTML, Product, Software

I. INTRODUCTION

The scope is to provide the staff with organized patient's details to avoid information redundancy. This will help in solving many problems such as the legibility of handwritten prescriptions of doctor which many a times causes error in getting medicines. The hospital staff will be having a record of all the prescriptions which will reduce the loss of data and will curb any chances of fraud or corruption. This will also help hospital to maintain records and reduce data redundancy. In our project prescription compiler, we have tackled the problems of legibility of the hand-written prescription and now the patients and hospital do not need to manage the hardcopy of the prescription which an easily be lost or damaged. We are trying to make our project multipurpose this project will accomplish following purpose:

- To create a user-friendly online interface for patients to book appointments and view prescriptions.

- To create an online platform where staff can view patient's details and generate digital prescriptions of patients.
- To create a platform in which managers can view staff's details as well as patient's details and can share any important message through community message module.

We have developed this system after being inspired by the hospital management system. We added many different features in this main one is digital storing of prescription to be viewed by patients and staff and the function of booking appointment online by patients. We tried to make this software patient oriented, so it can efficiently help patients as well as the hospital.

II. RELATED WORKS:

Miguel Cruz A. et al proposed aviable product that came as the result of almost a decade long research work done at the ISPJAE University in Havana City by the Bioengineering Center (CEBIO). This work cover many aspects of Technological Management matter that were missing in current healthcare systems and it exists till today in Cuban and Latin America Healthcare networks. The utilization of the NTIC advantages to makesome applications in the Clinical Engineering topic, contributes to get more effective services at the branch. Nowadays, the exponential increasing of health application examples using the new technologies by Clinical Engineers has become a necessity, an obligation, rather than being another option [1].

Noura Bacchar et al proposed an architecture based on combined approach which is a part of a big e-health project currently under development. It enables the hospitals to manage the patients records, real time patient's monitoring of patient current state based on remote sensors connected to biometric signals of patients as well as indoor geo-localization for ease of home treatment for either patient or professionals involved with the treatment. The developed application uses combining architecture (n-tier and MVC2 model) which makes it extendible and ergonomic. The system is under

development, so it is hard to talk about comparative results till its implementation in real hospital environment [2].

Collins Mwesigwaet al proposed some technologies like IVR, Speech Recognition, web applications and SMS in the health sector that will provide the patients with update patients on scheduled doctor patient appointments, reactions or side effects to prescribed medication real-time management of illnesses, and make prescription reminders, provide survey data for medical research, facilitate access diagnosis from a physician and general medical assistance using a combination of speech recognition, some web services, IVR and SMS. It provides an opportunity for both private sector and the government hospitals to implement technologies that will impact on health service delivery (more and faster and efficient) to the populations. The complexity of speech processing, speech recognition, and pattern recognition, a considerable dataset of voice recordings from different cultures must be gathered to train the machine to listen to the recordings of voice to improve the efficiency of this application [3].

III. PROPOSED WORK

It is used by hospitals to maintain the staff, doctor and patient records and to check the availability of hospital facilities. The hospital staff can book bed or other facilities for the patient can keep the proper record of their patients with their online bills.

It can also keep a record of staff or doctor if they are present or not on a day we can add new records or delete the old ones.

We can assign a certain doctor to a certain patient as per patient demand or take feedback on staff and doctor or condition and facilities of the hospital when the patient is healthy again.

In our project prescription compiler, we have tackled the problems of legibility of the hand-written prescription and now the patients and hospital do not need to manage the hardcopy of the prescription which an easily be lost or damaged.

The hospital staff will be having a record of all the prescriptions which will reduce the loss of data and will curb any chances of fraud or corruption.

We have developed this system after being inspired by the hospital management system. We added many different features in this main one is digital storing of prescription to be

viewed by patients and staff and the function of booking appointment online by patients. We tried to make this software patient oriented, so it can efficiently help patients as well as the hospital.

Login Form

The login form is essential to secure the patient data or the hospital data. The login form contains a password and a user name. Whenever the adminenters the username and password then the entire information essential to the admin will be displayed. If the user is a doctor, then doctors will get the data related to themselves, other data will be hidden from them.

Home Page

Homepage form contains list of the entire data include in the project different modules can be seen and each module contains the respective forms the modules include in the project are patient, staff, bill, report, etc. the homepage contains all this. If we click on the staff we get the nurse form, doctor form, and other forms (accountant, workers, etc).

Staff Detail

We get the detailed information of the hospital staff in this section. The staff module contains the data about the nurse, doctor, and other people who work in the hospital such as peons, accountant, sweepers, waiters, etc. In staff module we can add the list of hospital workers, list of doctors and another staff members. We can delete or modify the data of staff in login if we want to change the data. Staff can modify the patient list in staff login if they need to update the current data of the patients currently connected to hospital.

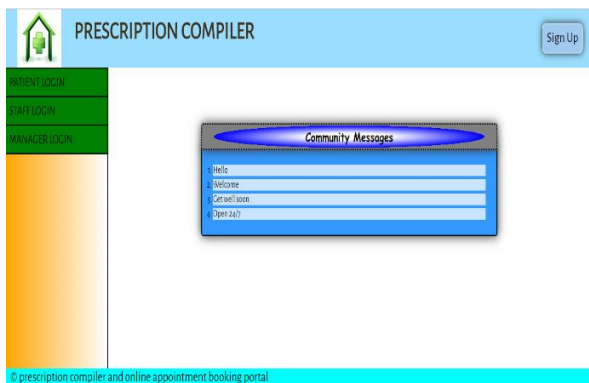
Patient

Medical records that are handwritten often comes with poor legibility/ understanding which the lead contributor to medical error, the standardization of abbreviations encourage to improve reliability of paper's medical records. Digitization of the form facilitates collection of the data for the hospital studies. Duplication of the lab test records and other hospital services can be prevented by any type of good record-keeping. But, because the database records can be available at many location sat once, awareness of duplication and integration of services can be reduced. Database management system enables such organization to access the old records instantly, further allow the hospitals to send specialists to match any patient needs in case of an emergency. The procedure involved in our current system is like, when a

patient visits the hospital for their medical checkup, the patients will be given an admit card first which contains name and other information needed, and card identification number.

Conference and Exhibition (IST-Africa), 2013 (pp. 1-7). IEEE.

IV. RESULT



We have successfully implemented an online platform for the patients to book appointments directly from the hospital through our platform. The platform can be used easily providing several features for different kind of users. All the functional requirements as well as the non-functional requirements were successfully implemented in the platform providing good user interface and helping the cause

REFERENCES

- [1] Cruz, A. M., Limia, A. T., Gonzalez, A., Denis, E. R., & Sanchez, M. C. (2003, September). Website for hospitals technological management system support. In Engineering in Medicine and Biology Society, 2003. Proceedings of the 25th Annual International Conference of the IEEE (Vol. 4, pp. 3669-3671). IEEE.
- [2] Baccar, N., & Bouallegue, R. (2014, October). A new web-based e-health platform. In Wireless and Mobile Computing, Networking and Communications (WiMob), 2014 IEEE 10th International Conference on (pp. 14-19). IEEE.
- [3] Mwesigwa, C. (2013, May). An e-Health tele-media application for patient management. In IST-Africa