

DOCTOR APPOINTMENT FIXING SYSTEM

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Abstract - Life is becoming too busy to get medical appointments in person and hospitals. Manually consulting doctors will consumes precious time of the patient. And also if the doctor wants to cancel his/her schedule, the patient does not know unless if she/he goes to the clinic. And also without knowing the due date of the medicines peoples are taking it. The objective of this project is to build a system that will ease the process of booking appointment of the doctor using GPS and to generate e-prescription to the pharmacy and also for the patient. The patient can book their appointment via patient's mobile phone. The doctor will come to know the number of patients he has to attend in a day with help of that doctors can allot their schedule of the patients. While consulting to the doctor e-prescription is made on the basis of patient condition.

Key words: Appointment scheduling, Android-java, Due-date, E-prescription, OTP, Pharmacy.

I. INTRODUCTION

The formation and enhancement of the doctor patient interaction system is a very necessary requirement for peoples, especially now when the mobile communication technology is developing rapidly. The advantages of this system is it can save the precise time of the patient and also it decrease the distance gap between doctors and patients and provide fast and adequate medical services. Through the connection between mobile terminals and the specific service, both doctors and patients are able to obtain required data to achieve a better interaction between them. The system manages the appointment data for multiple doctors and patients of various date and times. Each time a user visits to doctor and medical details will be is stored in the database. Next time when the user logs in the patient may view their entire medical history as and when needed. Every information will be maintained by the system. At the same time a doctor may view patient's previews medical history while the patient visits. The main objective of this paper is to develop a web based application for the general public usage of people. The public usage includes reducing the side effects for peoples in which many patients are taking medicines without doctor's knowledge which causes side effects such as stroke, jaundice etc. In order to avoid that this system is introduced where patients consult the doctor after consulting prescription will be generated in the e-prescription based which can be passed to both patient and to the pharmacy and they can store their own medical data and access it anytime from anywhere in the application and also can do appointment. Doctor Appointment Fixing system is the application of mobile phones, internet which aims to provide services electronically to improve patient's medical needs. In our system, users can register as patients to consult doctor and store their medical data in the database. The system also consists of registered doctors under the enlisted hospitals, who can give medical appointments, after consulting to the doctor e-prescription will be generated and it will be passed to both patient and for pharmacy where patients can buy medicines based on the prescription in the pharmacy.

II. EXISTING SYSTEM

Many health organizations already use digital hospital management system. For example, hospitals like Apollo and United hospitals have their own customized software to carry out the daily activities of the hospital such as patient registration, scheduling appointments or diagnostic tests, medicine department and many others. But these operations are only handled by the hospital employees and are specific to their own hospitals. There are no scopes for the patients to use it personally and cannot access it from anywhere else.

This is just a hospital management software designed for a specific hospital. This application is a doctor-patient interaction system based on Android. Its excellent performance on mobile terminals makes it possible that patients are able to access the hospital server to obtain the necessary suggestion about the symptoms and interact with the doctors on their own mobile terminals, while doctors can track patients whenever and wherever possible on mobile terminals. Paper describes the needful things that the Doctor has to do every day. This paper, solve this problem by proposing a new system based on android technology, through that the doctor can manage their appointments from anywhere. In addition to this, the patient who is unable to go to the clinic and take the appointment can also book their appointment from a mobile phone in a short time. Solution is to build a system that will help the needful people or every person who wants to save their precious time. Any needed information can be supplied at the time of installation. This removes the need for a technician to install software and enormously quickens the implementation of a patient monitoring system.

III. PROPOSED MODEL

The proposed system consists of two panels: Doctor and Patient. The users will first have to download the application from Google Play store and install it on their android mobile devices. Once installed, this application will remain into the device permanently until the user deletes it or uninstalls it. For the first time, the patient will have to register into the application to get the username and password and some other important personal details which are required for hospital. The patient can use this username and password for logging into the app each time he uses it. After logging in the Doctor's Specialization list will appear. The patient has to select the doctor according to their requirement and then the doctor list will appear after that select any particular doctor and view their profile. Also, the patient can view the doctor's schedule and look for an appointment according to their convenience. Then the patient will send a request for an appointment. The doctor can either accept the appointment or reject it. The database will get updated accordingly and the patient will get a notification on his mobile phone. Before the actual appointment is booked, a patient will get notified either it is approved or cancelled. The proposed project is a smart doctor appointment fixing system that provides patients or any user an easy way of booking a doctor's appointment online and to provide e-prescription. This e-prescription is generated after consulting to the doctor, they will pass the prescription information to both the patient and to the pharmacy which are using this application. This application's main objective is to reduce the number of patients who are getting medicines from pharmacy without doctors knowledge. This is a web based application that overcomes the issue of managing time and getting the prescriptive medicines with the due date.

IV. OBJECTIVE

This application is mainly built for reducing the waiting time for patients by doing online appointments and patients has to consult doctor before they take medicines. Because most of the patient's are taking medicines for temporary cure of their pain. For that they buy medicines from pharmacy without knowing about the problem that what they have. A medicine can bind to more than one receptor site. Thus the medicine may be toxic for some receptor site. Further, in most cases medicines causes harmful effects when taking in higher does than recommended. In which most of the peoples are doing that only. As a result, medicines may be poisonous in such cases. Hence, medicines should not be taken without consulting doctor.

V. APPOINTMENT FIXING

DOCTOR MODULE

The doctors of this application are managed by the admin of the hospital enlisted in the system. Doctors cannot use the application without the admin approval. Only the registered doctors who have been appointed details by a patient can view the patient's medical information on the specific date of the appointment. After that time, the appointment details option will be expired. And doctor can also check about cancellation and appointment details. The appointed patient can consult doctor in the due time and get the prescribed necessary medicines or suggest medications to their respective patients.

PATIENT MODULE

The users who want to update their details in the application. And the user who needs to receive the facility of this system first needs to register as patients in our web application. On the successful registration, a patient profile will be created. The patient needs to login to view their profile and to fix appointment. After login, their own medical data are updated in the database. And they can fix their appointment using GPS service for consulting the doctor. Before the actual appointment is booked, a patient will get notified either it is approved or cancelled. The proposed project is a smart doctor appointment fixing system that provides patients or any user an easy way of booking a doctor's appointment online and to provide e-prescription. This is a web based application that overcomes the issue of managing time and getting the prescriptive medicines with the due date.

VI. APPOINTMENT FIXING WORKFLOW

Appointment fixing involves, initially the patient/user has to login to the application. If they are new user means they have to sign up into the application where they have to update all their general details. And Patient Id will be generated automatically during the sign in time by the system. If they are an existing user means they can just login to their account and previously consulted every medical details will be stored in the database. That details includes their date and time when they consulted and the medicine validity period, billing details and pharmacy details etc... And the verification will be done for each appointment, where an one time password (OTP) will be generated after submitting to general details and that OTP will be verified to the patient account that they created. The appointment fixing is only done through online but the patient has to visit to the doctor to check about the problem. After visiting to hospital doctor will generate e-prescription. Where that prescription involves mainly two fields: i-Validity date, ii-Validity period. Based on those details, patients can buy medicines from pharmacy. If the validity period exceeds pharmacist will not provide the medicines, each patients have to consult doctor. This application is built mainly to reduce the side effects of the patients who are taking medicines without doctor's knowledge.

E-PRESCRIPTION

E-prescription will be generated after consulting to the doctor where the doctor will update the medical prescription for the patient in the form of e-prescription which will be stored completely in the system database. And that prescription will be sent to patient and pharmacy. Where each pharmacy will have their own id of using this application. So that the user can get medicines from pharmacy on where they want. Information about the pharmacies using this application will be also included in each user account, which are near to their location it will be tracked using Global Positioning System (GPS), from that they can choose their choice.

VALIDITY PERIOD

Validity period is the most important module in this application. If doctor specifies the validity period for some time say it as 3 times, only during that time only patient can buy medicines form the pharmacy. After that period they should consult doctor then only the can buy medicines. This is done in order to reduce the side effects of patients by taking medicines from the pharmacy without doctor's knowledge. Based on the validity period given by the doctor for a patient can buy medicines from the pharmacy.

VERIFICATION API

To verify the patient's appointment an Application Programming Interface(API) is used to integrate with the application system and to verify the appointment fixed by the patient from their general details which they have updated. This API will work in background where have are simple restful available for integration with the existing modules and work flows. An API is used is (To initiate verification request), for the first step to initiate background checks(s) for a patient. Where we can add number of checks by providing different check ID's, types etc.

VII. CONCLUSION

This application simplifies the task of both the patient and the doctor. It will be very beneficial to the patient because now they don't have to stand in a long queue to take their appointment and with the doctors knowledge only they can buy medicines from pharmacy. Also patient can book their appointment according to their choice in a more convenient way. Doctors will not worry about managing their appointment within their scheduled time. The patient can book their appointment from anywhere you want through our application and they have to go clinic physically to consult doctor. This helps to save the time of patient. Also, the patient can get the doctor of his choice through various filters used in the application. Also, the patient can choose among various doctors in specific specialization. The doctor is also able to view his day to day appointment list which makes it easier for him to plan his schedule according to the appointments booked. This application will help to optimize the work of patient and doctor. This application will be eco-friendly for both patient and doctor to minimize their time and mainly to reduce the patient's side effects of having medicines without doctor's knowledge.

VIII . REFERENCES

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