

SAROHA: APPLICATION BASED ON PEOPLE'S SAFETY

Abhijit Kar¹, Hardik Bardia², Sandeep Yadav³, Rohan Dhekne⁴

¹Dept. of Computer Science and Engineering, Jain University, Kanakapura, Karnataka, India

²Dept. of Computer Science and Engineering, Jain University, Kanakapura, Karnataka, India ³Dept. of Computer Science and Engineering, Jain University, Kanakapura, Karnataka, India ⁴Dept. of Computer Science and Engineering, Jain University, Kanakapura, Karnataka, India

Abstract - In today's world, health care is one of the foremost important in one's life. More importantly the supplies of data regarding the available hospitals, doctors aren't easily accessible. Although there are existing systems that give this information, these systems require you to pay upfront or don't provide adequate information consistent with one's preference. The goal of this project is to develop an application that gives end- users quick access to information regarding health care with none additional costs. Users can look for hospitals that supported their preferred location, timings, and payment options. Moreover, users also can book appointments directly on the app and provides ratings supported their experience.

Key Words: Android application, online appointment, doctor-patient interaction, medical software, SDLC approach.

1. INTRODUCTION

Health care has become one of the most important and necessary component in our daily life. Mobile devices became commonplace in health care setting, resulting in rapid climb within the development of medical software applications (apps) for these platforms. Numerous apps are now available to assist with respect to information related to hospitals, availability of the doctors etc. But the problem with the existing apps is they need users to pay upfront for the service or do not provide adequate information. This project titled "Walk-in-Clinic" provides an all in one platform that allows users to browse available hospitals based on their preferences, book appointments on desired date and time, view their upcoming bookings, and provide ratings.

This application differs from the existing systems as this app doesn't require users to initially pay for the product and provides all the required information to book an appointment.

2. OVERVIEW

The intent of this project is to make a doctor-patient handling management system that will help patients to book doctor appointments. The system allows doctors to make a profile within the application. Various parameters are taken into consideration during the method of profile creation. At the bare minimum, these parameters will assist patients to look for a required hospital/clinic to the simplest of the system's ability. Patients are allowed to book empty slots online. The system manages the appointment data for multiple doctors of varying dates and times. The system also calculates the typical wait time when booking a meeting. This will provide a patient a good little bit of idea when to check-in.

3. OBJECTIVES

To provide a simple to use the platform to browse nearby hospitals supported given preferences. To supply a free platform to access the specified information. Allow users to schedule appointments, provide feedback, and provides ratings.

4. LITERATURE SURVEY

- [1] The objective of the project is to build a system that will ease the process of booking appointments for the doctor. The patient will book the appointment through his/her mobile phone.

Title-International Journal of Innovative Research in Computer and Communication Engineering

Authors - Prof. S. B. Choudhari, Chaitanya Kusurkar, Rucha Sonje, et.al

- [2] The objective of the [2] project is to develop a system's client, which operates on a mobile device (Android based) and acquires data from the eHR connecting to a centralized Database offered by the Hospital or Clinic.

Title-PCI '10: Proceedings of the 2010 14th Panhellenic Conference on Informatics

Authors - Dimitrys Tyachalas, Athanasios Kakarountas.

[3] The objective of the[3] project is to build a system that will ease the process of booking appointments for the doctor. The patient will book the appointment through his/her mobile phone

Title – Imperial journal of interdisciplinary Research (IJIR)

Authors - Asst. Prof. N. V. Chaudhari, Akshay Phadnis, Prajakta Dhomane.et.al.com

5. RELATED WORKS

Some of the related works we acknowledged during our literature survey were:

- [1] There have been few applications that had implemented an Electronic Health Record system that permits patients to look at their medical records.
- [2] There have been few mobile applications that provided the appointment booking service but so as to use this application, users had to pay upfront and had to pay some amount so as to book a meeting.
- [3] Few web app-based solutions were also available but they lacked the relevant information required, a number of them were paid and didn't include tons of features.

6. EXISTING SYSTEM

The existing system consists of booking a doctor's appointment through the website. The website is called practo.com. The main drawback of this system is that it is a website and one requires a very good internet connection as loading of web pages may take a long time. Although, there is another android app available on play store but it is a paid app, hence everyone cannot afford to use it. Another platform called justdial.com is a website that allows you to view and book appointments, but in order to enquire for a particular hospital you need to enter your name and mobile number

6.1 LIMITATIONS OF EXISTING SYSTEM

While conducting our literature survey, we found a number of the drawbacks of the prevailing systems. Those were as follows:

- [1] Most of the mobile applications available are paid. Initially, these applications provide their service free of charge (for a couple of days). But if a private wants to schedule an appointment or access to other information, they need to buy it. This made the prevailing system unaffordable especially for those that are financially challenged.

- [3] We also found a number of the online application-based solutions, but since these were web apps, accessing them won't be an efficient process.
- [4] Other web apps provided only limited information and didn't include the specified features

7. PROPOSED SYSTEM

In this project, we are proposing an android application that permits doctors/hospitals to make a profile within the clinic. Patients have the power to look for a specific hospital supported various filters provided within the application. Patients can schedule a meeting with the doctor, rate a hospital, and supply feedback. Patients also can view the typical wait time of a clinic. This will play an important role within the decision-making process of a patient opting for a selected hospital.

The main intent behind building this application is to make a free and secure platform for both doctors and patients. One portal for both doctor and patient thus eliminating the tedious procedure in searching and booking the proper hospital.

8. METHODOLOGY

Every software developed is different and requires an appropriate SDLC approach to be followed by supported internal and external factors. Some situations where the use of the agile model is most appropriate are:

- [1] Working software is delivered frequently
- [2] Incessant attention to technical excellence and good design.
- [3] Regular adaptation to changing circumstances.
- [4] Even late changes in requirements are welcomed.
- [5] People and interactions are emphasized rather than processes and tools.
- [6] Proper interaction with the customer, tester, and developers.

9. RESULT

The used case for the deliverable is shown below:

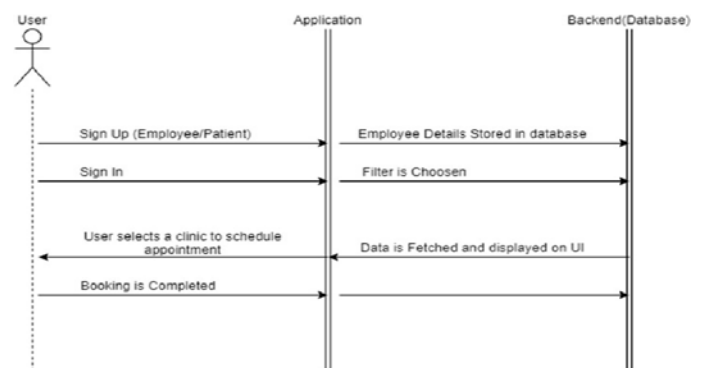


Fig -1: Used case Diagram

Patients can search for walk-in clinics using different filter types (address, city, working hours and types of services provided). Patients can also view average wait times for each clinic and book/check-in to the clinic of their choice. This feature also includes the ability to check-out (or cancel) once the visit is complete. Finally, a patient can rate a clinic and leave a comment as well as view average ratings for each clinic.

10. CONCLUSION AND FUTURE SCOPE

To conclude, our implementation of Android Application for online doctor appointment booking is often used as another service to other software systems. The appliance is extremely accurate to calculate the wait-time for a specific hospital. The info the appliance uses is securely stored onto a cloud-based database.

As this is often a versatile project, it is often expanded to be integrated with Google Maps API which can be helpful in accurately knowing the hospital's location. Another feature that will be added is that the upload feature. This feature can enable a doctor to upload a prescription in PDF format or the other appropriate format.

IRC chat between doctor and patient also can be integrated into the appliance

As mentioned earlier, this project is extremely flexible and scalable; this project fact outdoes all other previously created similar systems for the factors mentioned within a previous couple of paragraphs like adding IRC chat, Google Maps API, etc.

REFERENCES

- [1] Prof. S. B. Choudhari, Chaitanya Kusurkar, Rucha Sonje, et.al "Android Application for Doctor's Appointment , International Journal of Innovative Research in Computer and Communication Engineering.
- [2] Planning and Development of an Electronic Health Record Client Based on the Android Platform.
- [3] Android Application for Healthcare Appointment Booking System "Cervical Cancer Cells by a Two- Level Cascade Classification System" Analytical Cellular Pathology Volume 2016, Article ID 9535027
- [4] Mark L.Murphy, "The Busy Coder's Guide to Android Development," United States of America, Commons Ware, LLC, 2008.
- [5] CHENG Chun-Iei, PAN Ze-qiang, "Research of Chinese traditional medicine embedded information system based on android platform," Manufacturing Automation, pp 136-138, January 2011.

BIOGRAPHIES



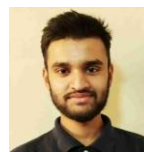
Abhijit Kar currently pursuing B.Tech in Computer Science and Engineering with Specialization in Mobile Application and Cloud Technology in Jain (Deemed-to-be University).



Hardik Bardia currently pursuing B.Tech in Computer Science and Engineering with Specialization in Mobile Application and Cloud Technology in Jain (Deemed-to-be University).



Sandeep Yadav currently pursuing B.Tech in Computer Science and Engineering with Specialization in Mobile Application and Cloud Technology in Jain (Deemed-to-be University).



Rohan Dhekne currently pursuing B.Tech in Computer Science and Engineering with Specialization in Mobile Application and Cloud Technology in Jain (Deemed-to-be University).