

HealthMate

Keyul Patel¹, Prof. Ajaykumar T. Shah ²

Department of Computer Engineering

¹ Alpha College Of Engineering And Technology

²HOD, Alpha College Of Engineering And Technology

Abstract- Nowadays, people book doctor appointments through phone calls or directly visit the clinic/hospital. Hence, they have to wait in a long queue in the critical situations. This project is intended to patient book doctor appointment using application as well as website. Using this system patient can check doctor has arrived at clinic or not. Furthermore, they can also see how many patients are waiting in the queue. In addition, they will get estimated time through SMS and email notification. This SMS and email notification automatically sent by the system. Therefore, patient does not need to wait for doctor meeting in the critical situation and receptionist workload will decrease.

Keywords- Appointment Management, Book appointment, Doctor Appointment, Health, Patient

I. INTRODUCTION

Human diseases are increased; therefore, hospitals and clinics are full of patients. In many hospitals and clinics, people book doctor's appointment through calls. Moreover, people call to the receptionist for asking the estimated time to consult with the doctor. However, in some hospitals and clinics there is no facility to book an appointment. They use first come first serve rule. Hence, the patient needs to wait for doctor's appointment and consultancy in the critical situations.

Now, the patient does not need to wait in long queue for appointment and consultancy. A patient can book their appointment using this system. Furthermore, they also can see how many patients are before them. It means they can live monitor waiting patients. This also reduces the burden of the receptionist.

Moreover, this system also sends SMS and email notification of their estimated time for a consultant with the doctor. In addition, the user can submit their feedback, review, and rating as per their experience.

Furthermore, User can pay fees or bill payments through this system. Doctor and Receptionist can track payments and analyze monthly or weekly reports easily.

II. LITERATURE REVIEW

There are many problems and weakness in the current system. In many locations, the current system for a doctor

appointment is manual and partially computer rise. They book an appointment using phone calls or going by physically and receptionist writes appointment in the book. There are very few website and application to book doctor appointment online. Nevertheless, some these websites can give only specific doctors' appointments. There are many hospitals and clinics, which uses manual appointment booking. This is very time consuming and patient needs to wait in very long queue. In addition, receptionist workload is very high. People are asking to the receptionist, "How much more time take to consult with the doctor?" This is a very annoying process for the receptionist and patient has to wait in a long queue.

A website named Ask Apollo has been established a few years ago and it provides a user's to book doctor appointment online. However, there are very few features. The user did not get any estimated time over SMS and email. Furthermore, there is no feature to pay doctor fees through this system. The user cannot see how many patients before them. Again, this is the same problem of manual booking. Moreover, the user only book doctor appointment of Apollo Hospitals.

The idea of developing this project is to book doctor appointment easily. People can take online appointment through handy devices such as android phone or tablet. They also can book an appointment through the website. A user can update appointment details and they can live monitor of waiting patients in a queue. The user will get estimated time for their appointment through SMS and email notification. The user can check the rating & review of the clinic and hospital, which will be helpful to other patients. Moreover, User can pay through this system.

III. METHODOLOGY

This project HealthMate is a web application and Android application that allows users to book doctor appointment as per their convenience. For, the doctor and receptionist use the web application to manage appointments. The web application is desktop and mobile version. Hence, it can work on all devices. The android application will work on all Android devices. My main motto behind this project is to provide convenience to the patient. In addition, Doctor and Receptionist workload reduce.

This project will work on the following way:

- User will login in the application or website. If the user is never signed up in the HealthMate then the user has to create a new account.

- After successful login user can book any doctor appointment.

- For booking appointment, the user has to select doctor by name or they can search using hospital or clinic name. Then, the user will be prompted with the date picker. After that user has to select a time from available slots according to doctor appointments. Then, the user has to submit that form and "success" screen appeared on a user device. Furthermore, they will get successful email and SMS notification.

- If user want to change appointment time or he/she want to cancel an appointment; so, they can go to the appointment section. There they can update or delete booked appointments.

- On the scheduled booking appointment, the system automatically provide an estimated time through SMS and email before the appointment time.

- Moreover, the user can give feedback of hospital or clinics. In addition, they can update their profile and they can pay doctor fee through this system.

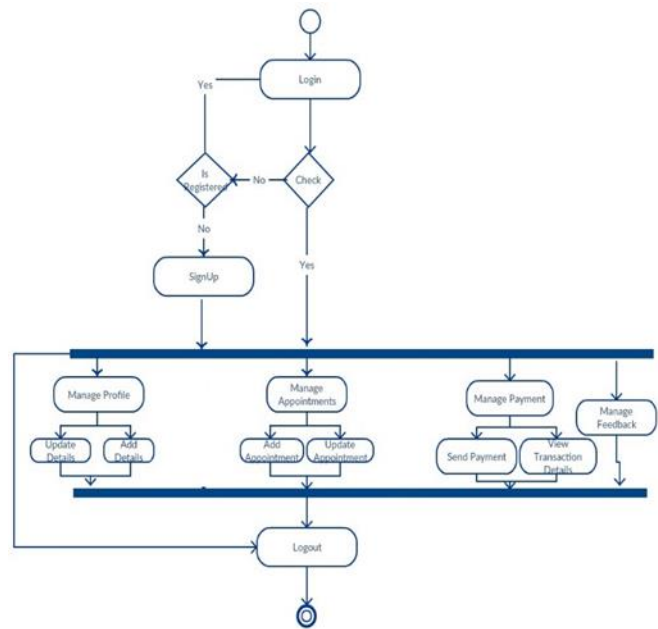
- For the doctor, they can sign up with a hospital or clinic details and submit it. If the doctor was already registered in HealthMate, then can log in with their details.

- After successful login, they can see today's booked appointment. Moreover, they can update a booked appointment.

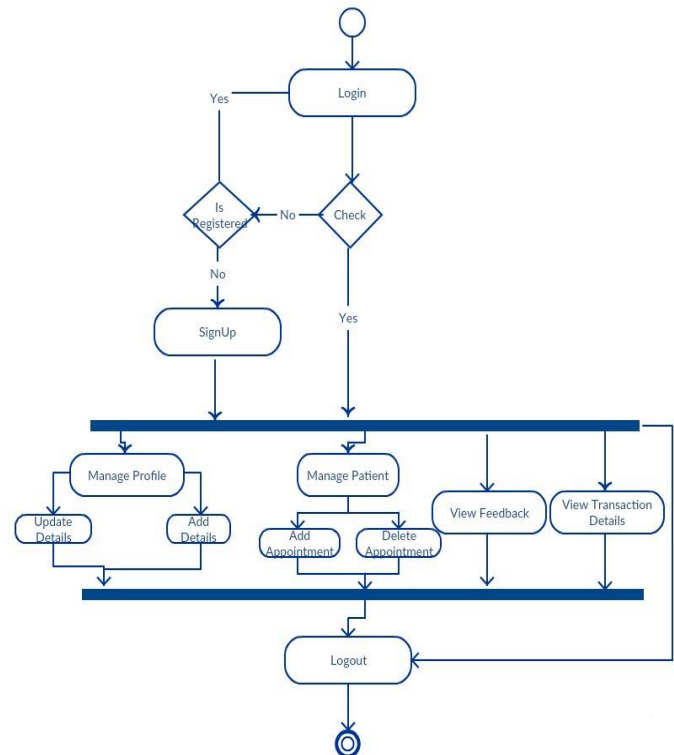
- Furthermore, the doctor can update hospital or clinic details, they can analyze monthly or weekly reports.

- The admin has the right to approve and disapprove user and doctor profiles.

The flowchart for the user is as follows:



The flowchart for the doctor is as follows:



IV. SPECIAL FEATURE

There are very few applications for book doctor appointment online. In these applications, the user can only book appointment of specific hospital doctors. I instead made a website and application with some new features and all other website and applications features.

Some of the special features include:

□ In HealthMate, any doctor can register his/her hospital or clinic. It is open for all and admin will approve or disapprove doctor profile.

□ A patient can check doctor availability online through this system. Furthermore, People can take online appointment through handy devices such as android phone or tablet as per their convenience.

□ Moreover, they can check how many patients are waiting before them. In addition to that, they will get estimated consultant time through SMS and email notification.

□ A patient can pay doctor fees through HealthMate. In addition, the user can check doctor rating and review of the clinic and hospital.

□ The patient can give review and rating to the hospital and clinics as per their experiences. This review and rating will be very helpful to other patients.

□ Doctor and Receptionist easily analyze monthly or weekly reports.

V. CONCLUSION

My main motto behind this project is to provide convenience to the patient. In addition, Doctor and Receptionist workload reduce. Using this system one can book an appointment with ease and monitor waiting queue. Therefore, receptionist workload will reduce and patient does not need to wait in a critical situation. Moreover, they can check doctor availability. Furthermore, the user can pay doctor fees through this system. Doctor, receptionist analyze weekly and monthly reports. Hence, HealthMate will be very helpful for patient, doctor, and receptionist.

REFERENCES

- [1] Software Engineering by Roger S. Pressmen
- [2] Java - The Complete Reference 9th Edition
- [3] www.w3schools.com
- [4] <https://creatly.com/app/>
- [5] <https://www.askapollo.com/physical-appointment/patientconsultationregistration.aspx>
- [6] <https://play.google.com/store/apps/details?id=com.apollo.android&hl=en>
- [7] <https://www.tutorialspoint.com>