



Online Doctor's Appointment System

Swapnil Nyayade¹, Kartik Pawar², Nayan Sonawane³, Aniket Patil⁴

U.G Student, Department of Computer Engineering, Shrama Sadhana Bombay Trust's, College of Engineering and Technology, Jalgaon, India¹

U.G Student, Department of Computer Engineering, Shrama Sadhana Bombay Trust's, College of Engineering and Technology, Jalgaon, India²

U.G Student, Department of Computer Engineering, Shrama Sadhana Bombay Trust's, College of Engineering and Technology, Jalgaon, India³

U.G Student, Department of Computer Engineering, Shrama Sadhana Bombay Trust's, College of Engineering and Technology, Jalgaon, India⁴

Abstract: The main theme of this proposal was to develop a smart appointment booking system, that provides patients or any user an easy way of booking a doctor's appointment online in health care. The purpose of doctor's appointment system is to automate the existing manual system by the help of computerized equipment, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. The required software and hardware are easily available and easy to work with. This system overcomes problem of searching doctors by helping users to get doctor according to their need, and other related health care details at a single place. Also solves issue of managing and booking appointments according to user's choice or demands. This system provides the power of direct interaction between doctors of customer choice when required for your small problems. This application is basically organized in a bipartite in terms of functions: doctor can get the patients data to understand the history and users(patients) can get registered in few seconds at comfort of home. Online doctor's appointment application was devised to offer huge variety in health care to users, case of registering and get verified doctor, view medical progress and all the data get stored in database.

Keywords: Online appointment system, Waterfall development methodology, Unified Modelling Language.

I. INTRODUCTION

Online Appointment System is familiar to the developed countries throughout the world. It is system in health care that allows the user to book appointment of the doctor through the internet by utilizing a web browser. Online doctor's appointment is becoming increasingly popular because of speed and ease of use for customers. Life is becoming too busy to get medical appointments in person and to maintain a proper health care. For this purpose people needed much time to visit a hospital and book appointment physically. The main idea of this work is to provide ease and comfort to patients while taking appointment from doctors and it also resolves the problems that the patients has to face while making an appointment. In online appointment the user goes to the website, selects a time and date, book a meeting with particular doctor and all data is maintained by database. The proposed project is a smart appointment booking system. Aim of this project is to create doctor patient handling management system that will help doctors in their work and will also help patient to book doctor appointment and view medical progress. The system allows doctors to manage their booking slots online. Patients are allowed to book empty slots online and those slots are reserved in their name. The system manages the appointment data for multiple doctors of various date and times. Each time a user visits a doctor his/her medical entry is stored in the database by doctor. Next time a user logs in he may view his/her entire medical history as and when needed. At the same time a doctor may view patient's previews medical history while the patients visits him. This system also allows users to cancel their booking anytime.

Paper is organized as follows. Section II describes how our portal works, which facilities are available in our portal and all related working is described. The diagram represents the step of data flow. After working of our portal of healthcare, project methodology and technique that is given in Section III. Section IV presents experimental results showing results of working portal with data. Finally, Section V presents conclusion

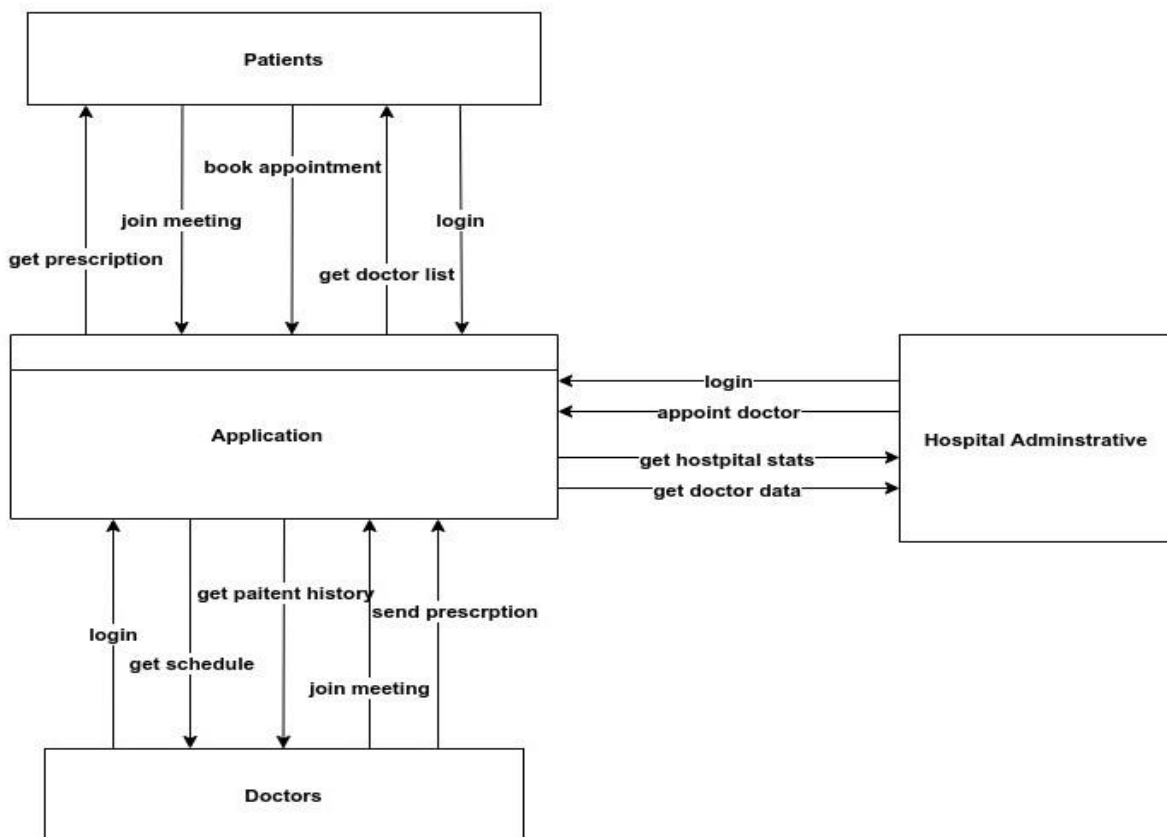


II. RELATED WORK

The online doctor consultation allows the dissemination of specialized knowledge among the medical community through advanced networks, reviews, emergency medical consultations during an epidemic or crisis among others. This are known for specialties such as Gynecology and Dermatology, while other specialties like mental health, pediatrics, ENT, ophthalmology, and gastroenterology are all well-known departments. The main idea of this work is to provide ease and comfort to patients while taking appointment from doctors and it also resolves the problems that the patients has to face while making appointment. In online appointment the user goes to the website, selects a time and date, book a meeting with particular doctor and all data is maintained by database. The proposed project is a smart appointment booking system. This project is to create doctor patient handling management system that will help doctors in their work and will also help patient to book doctor appointment and view medical progress. The system allows doctors to manage their booking slots online. Patients are allowed to book empty slots online and those slots are reserved in their name. The system manages the appointment data for multiple doctors of various date and times. Each time a user visits a doctor his/her medical entry is stored in the database by doctor. Next time a user logs in he may view his/her entire medical history as and when needed. At the same time a doctor may view patient’s previews medical history. This system also allows users to cancel their booking anytime.

III. METHODOLOGY

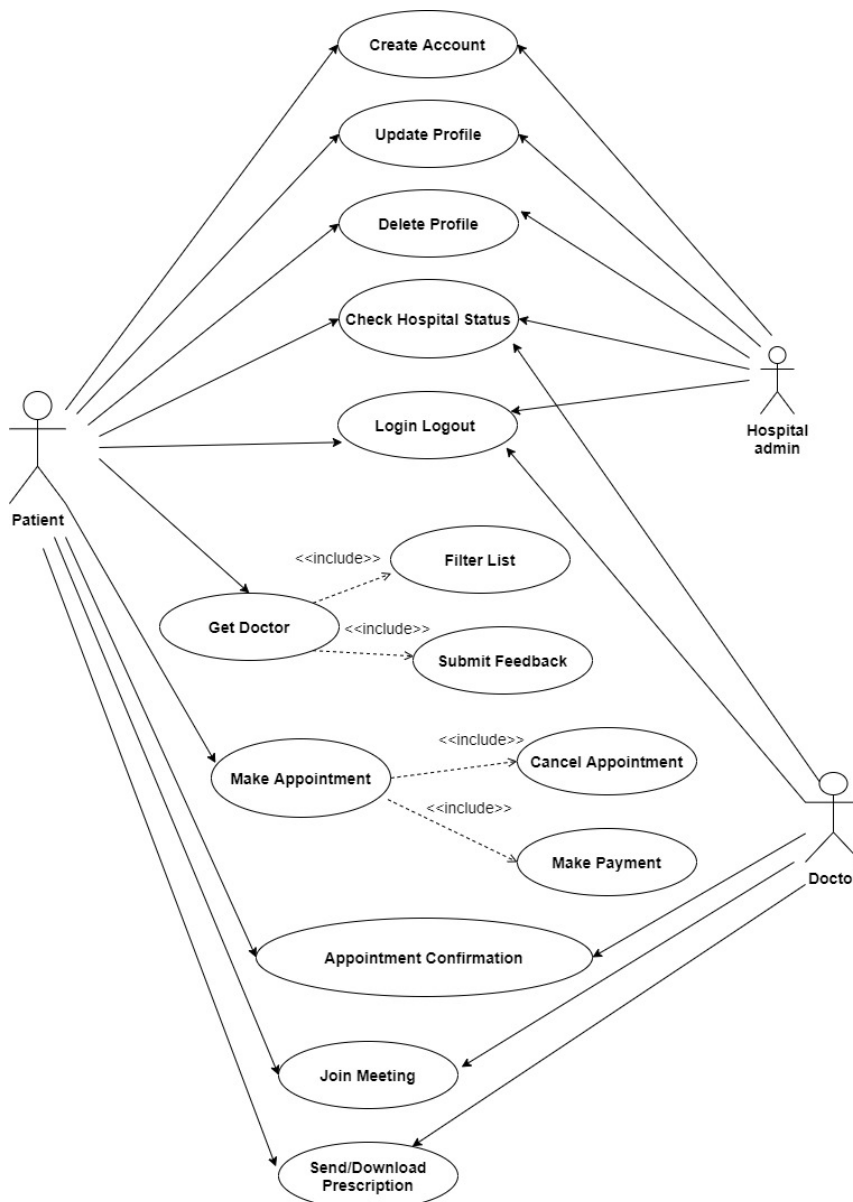
the application is developed using waterfall Development Methodology. the application have three tier architecture consist of presentation tier, application tier and data tier. The presentation tier is the user interface and communication layer of the application, where the end user interacts with the application. Its main purpose is to display information to user and collect information from the user. The application tier, also known as the logic tier or middle tier, is the heart of the application. In this tier, information collected in the presentation tier is processed sometimes against other information in the data tier using business logic. The application tier is responsible to add, delete or modify data in the data tier. The data tier, data access tier or database, is where the information processed by the application tier is stored and managed. Below figure shows the data flow diagram



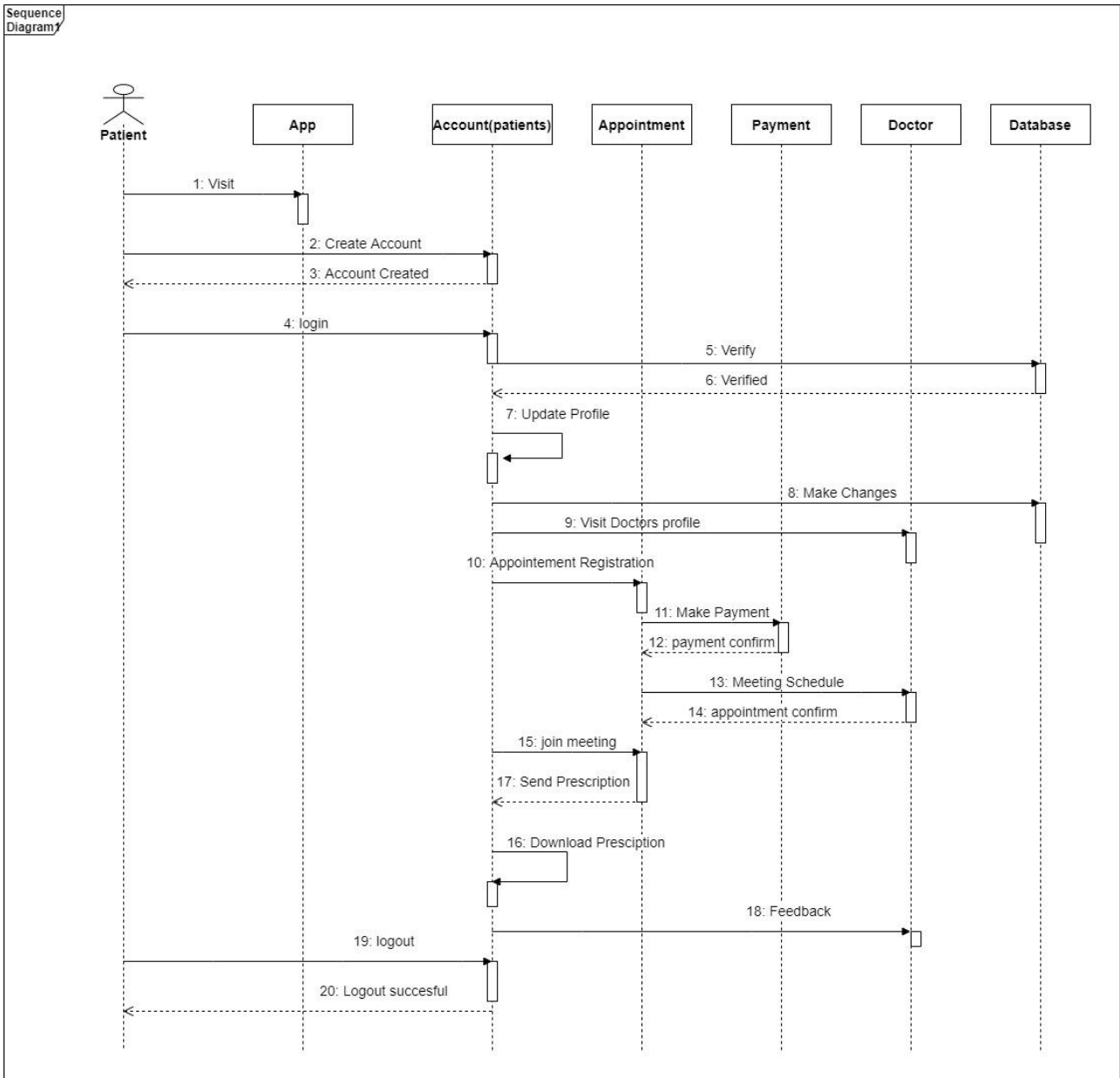


Steps:

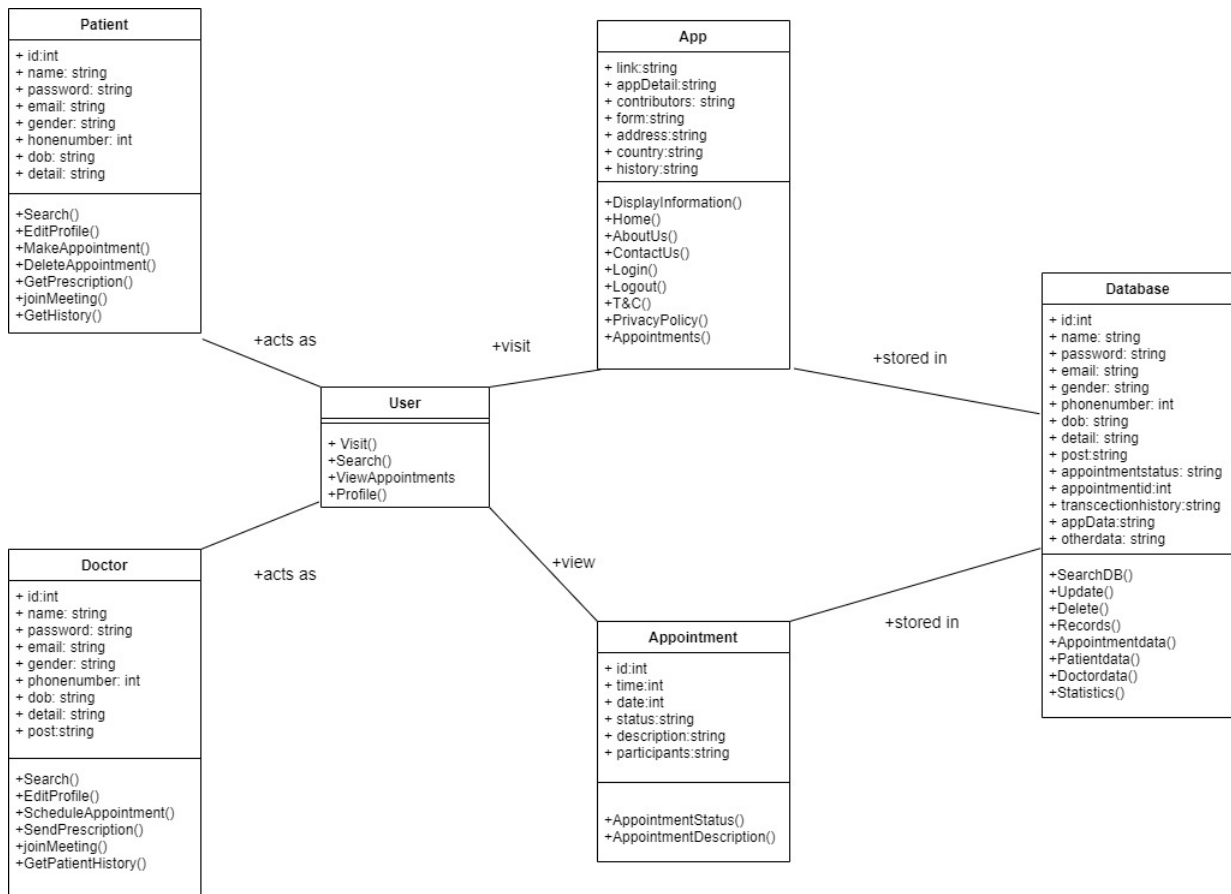
1. Start.
2. User(patient, doctor) create account by providing email id as user id, its own password and other details.
3. Login with credential and if right user gets the access to website.
4. After getting access patient can choose a doctor according to need and book appointment as per time.
5. Admin can create account, update account of doctors and check hospital status. Control activities of hospital.
6. After creating account doctor is able to confirm appointment , join at time and make communication with patient and send prescription.
7. After appointment confirmation doctor can check history of patient.
8. patient is also able cancel appointment and notifications are received if cancelled by doctor.
9. After all patient data is stored in database for further use.
10. User can logout.
11. stop.



Use Case Diagram



Sequence Diagram

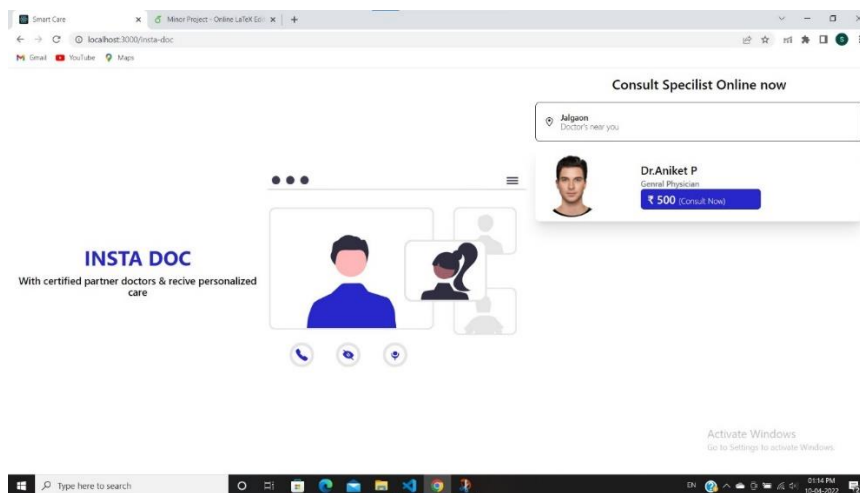


Class Diagram

Above are the UML diagram i.e. Use case, Sequence and Class diagrams respectively for our Project required in design phase.

IV. EXPERIMENTAL RESULTS

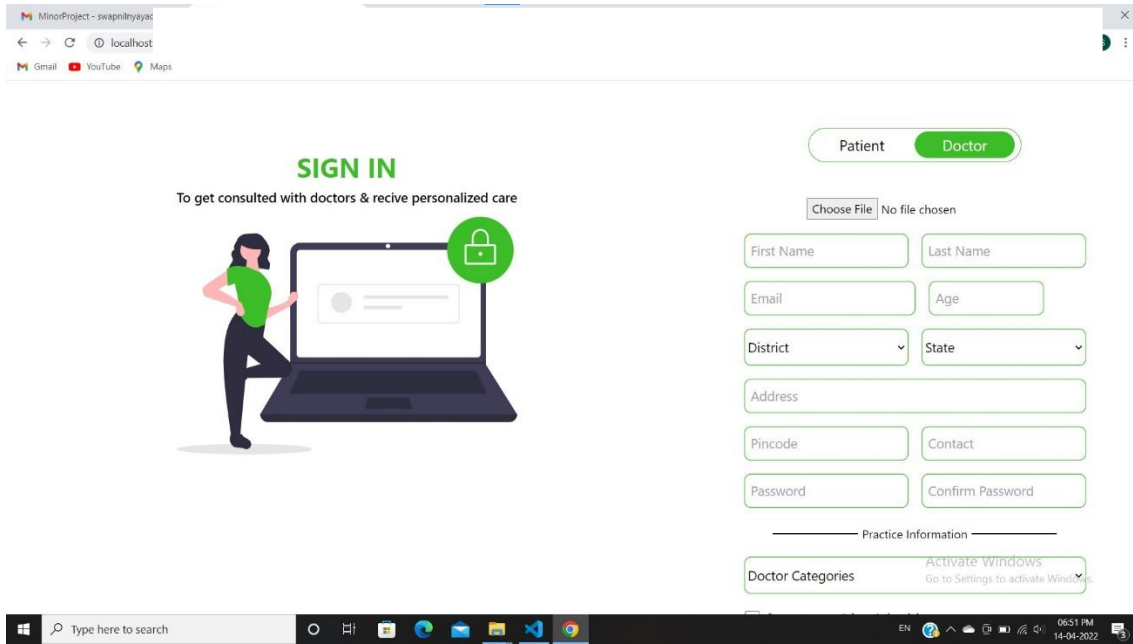
Figures shows the results of our online doctors appointment systems where . Fig. (a) shows the list of doctors according their speciality or professional field. Also user can search doctor for consultation and result get displayed.



(a)

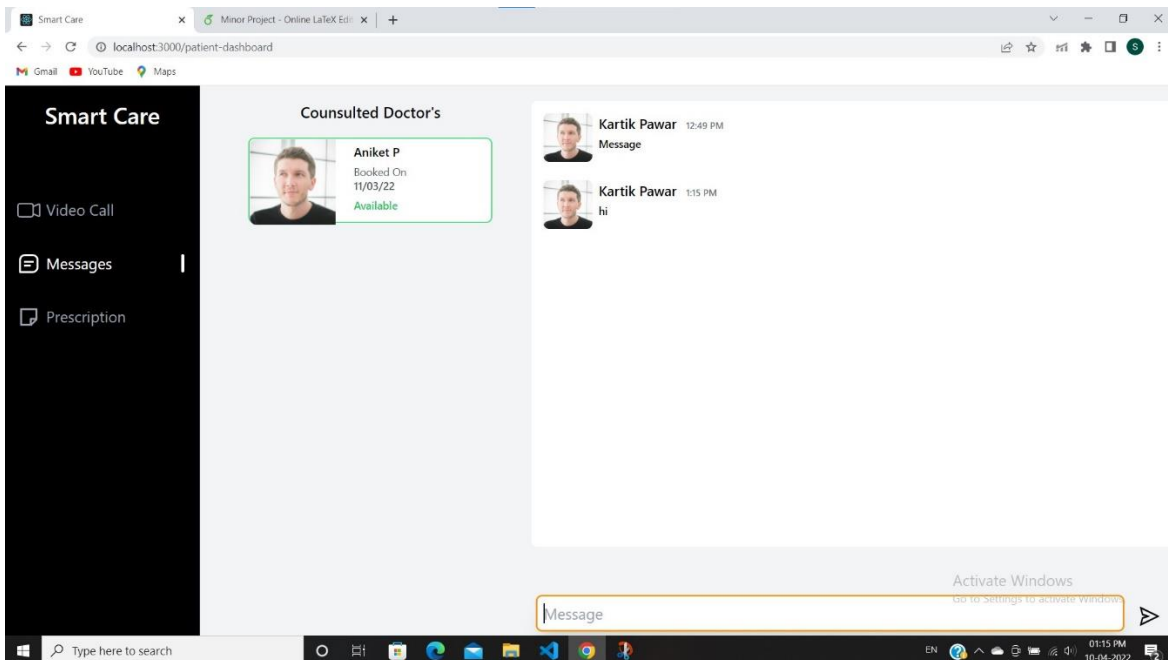


Fig. (b) shows the sign in option for doctor and patient. Also there is sign in form for doctor with fields like First Name, Last Name, Email, Address, Doctor Categories, etc After successful completion of form data get stored in database.



(b)

Fig. (c) shows dashboard where video call, messages and prescription options are available, patient can chat with respected doctor for consultation, also video call is possible if needed after all prescriptions can be downloaded by patient and all data get stored in database, no need of physically handling a files.



(c)



VI. CONCLUSION

We have implemented an online doctors appointment system so you do not need to visit the hospital physically just spend a couple of minutes to book appointment. As we know time is money and people are getting busy day by day and suffers from various health issues, our system make it possible to book doctors appointment very quickly and easily which is main advantage. Also now a days handling previous records files physically becomes so hard, so by doing all this thing online project ensures that no data will be lost. Online appointment system can be a very good technology to the consumers for checking and booking doctor as per requirement and also get prescription.

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