iJRASET
International Journal For Research in Applied Science and Engineering Technology

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 10 **Issue:** XI **Month of publication:** November 2022

DOI: https://doi.org/10.22214/ijraset.2022.47625

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 10 Issue XI Nov 2022- Available at www.ijraset.com

DOCtalk: A Web Application for Health Care Solutions

Prof. Suhas Chavan[1], Umar Ansari[2], Vedant Nagose[3], Akshay Mugale[4], Akshay Pawar[5]
[1]*Professor,* [2, 3, 4,] *Students, Department of Computer Engineering, SKN Sinhgad Institute of Technology and Science, Kusgaon(BK), Pune*

Abstract: ***In this paper we will discuss about how using web technologies, we can design a service or a software which can be used for booking an appointment with a doctor. Many a times, almost every time, we come across a tedious way of traditional way of booking appointments with a doctor, i.e. we have to go to the hospital to book the appointment and wait for the scheduled appointment to come.***
At some unusual times, the appointment even cancels and the patient is not updated about it. This application will provide everything from knowing about a particular doctor to booking an appointment with him/her. The appointments are made based on time slots interval available in a day.
Keywords: Doctor Appointment, Hospital search, Editing, Appointment, Web Technologies.

I. INTRODUCTION

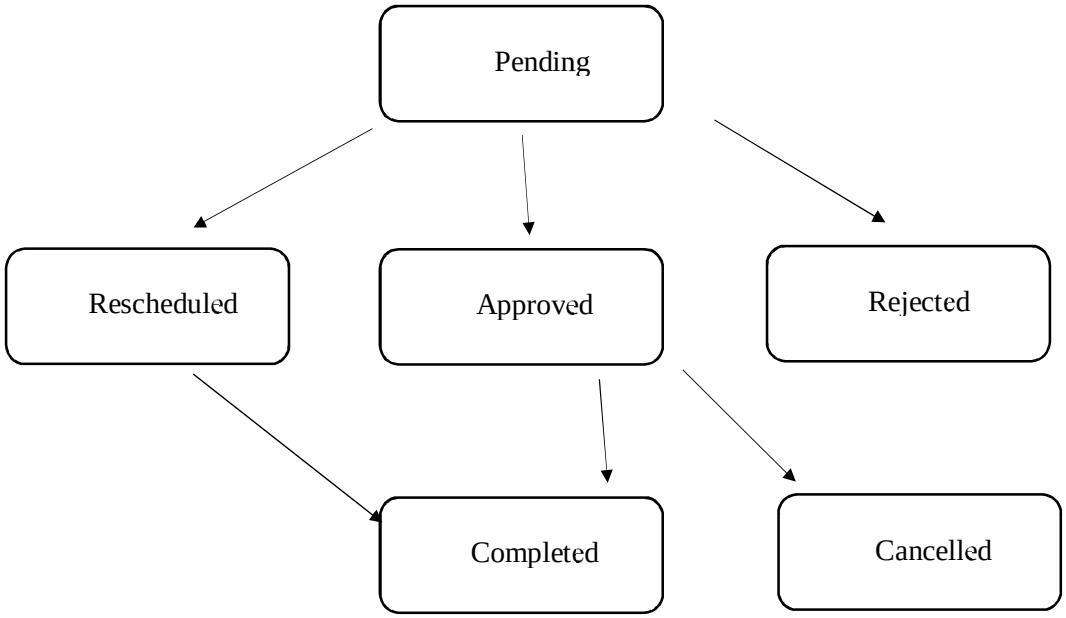
Nowadays, mobile phone is considered as the most widely used electronic device. People use it daily to complete their chores and to make their tasks easy. Automated system-based applications receive huge acceptance and popularity because of their easy-to-use nature. Almost every industry has been revolutionized because of the advancements and implementations of computing technologies.
Health care is one of them . Health issues, small or big, is crucial in these times and people need to have check-ups on regular basis. Most of the check-ups require a prior appointment with doctor where a patient has to physically visit the hospital and book the appointment or in some minor cases a patient has to call the hospital for confirming an appointment.
Usually, an appointment is booked through a practitioner staff. And if for some reason the doctors cancel the appointment the patient is not notified until he/ she visits the hospital. Most of the time the number and address of a doctor is unknown making the appointment booking difficult.
To solve these problems, this application is designed. It will use various Web technologies to achieve its aim. Users will first create their profile and after logging in, user gets permission to access to different doctors' profiles. Also, doctors need to register and provide some relevant information. After that, a user can see a doctor's profile and book an appointment if he/she fits relevant to the patient. Users can select a specialization category in their profile which will show them the relevant doctors on their homepage.

II. METHODOLOGY

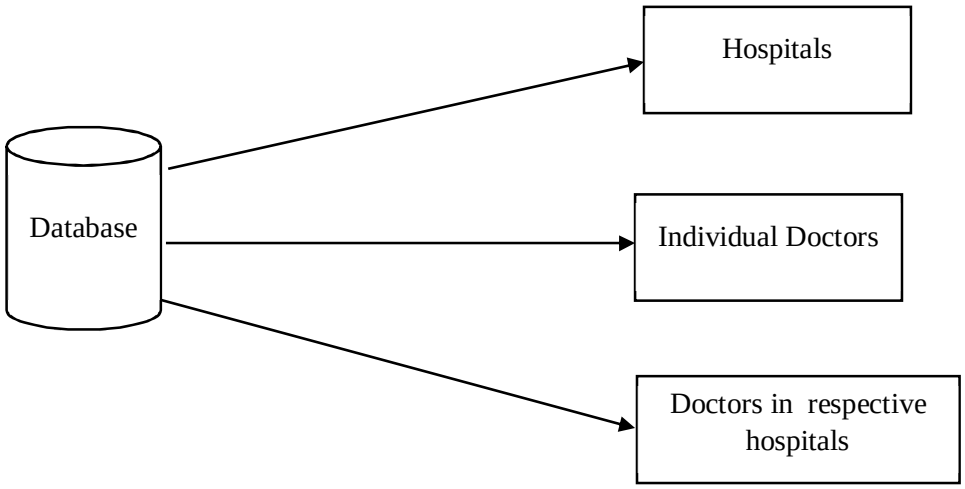
DOCtalk uses Internet or the network of the cellular network operator. It requires a registration with the user number and email address which is later used for feedback and rating information of that particular doctor. The user than can search for a particular doctor and see the relevant lists of doctors.
If the user selects a particular doctor then all information about the doctor is displayed. If the user seems correct, then he may apply for appointment with him. If the user is then satisfied with the appointment, then he can rate the doctor on his profile which can be helpful for others.

1) *Appointment allocation and flow:* The appointment booked for a doctor by a particular patient can be in one of the following three states: rescheduled, approved, rejected. If the doctor is unavailable at a particular booked appointment, it is rescheduled then. If the appointment is in approved state, it means either the appointment is complete or it has been cancelled by the patient. Finally, if the appointment is in rejected state, it means the appointment has been rejected by the doctor or a hospital authority.

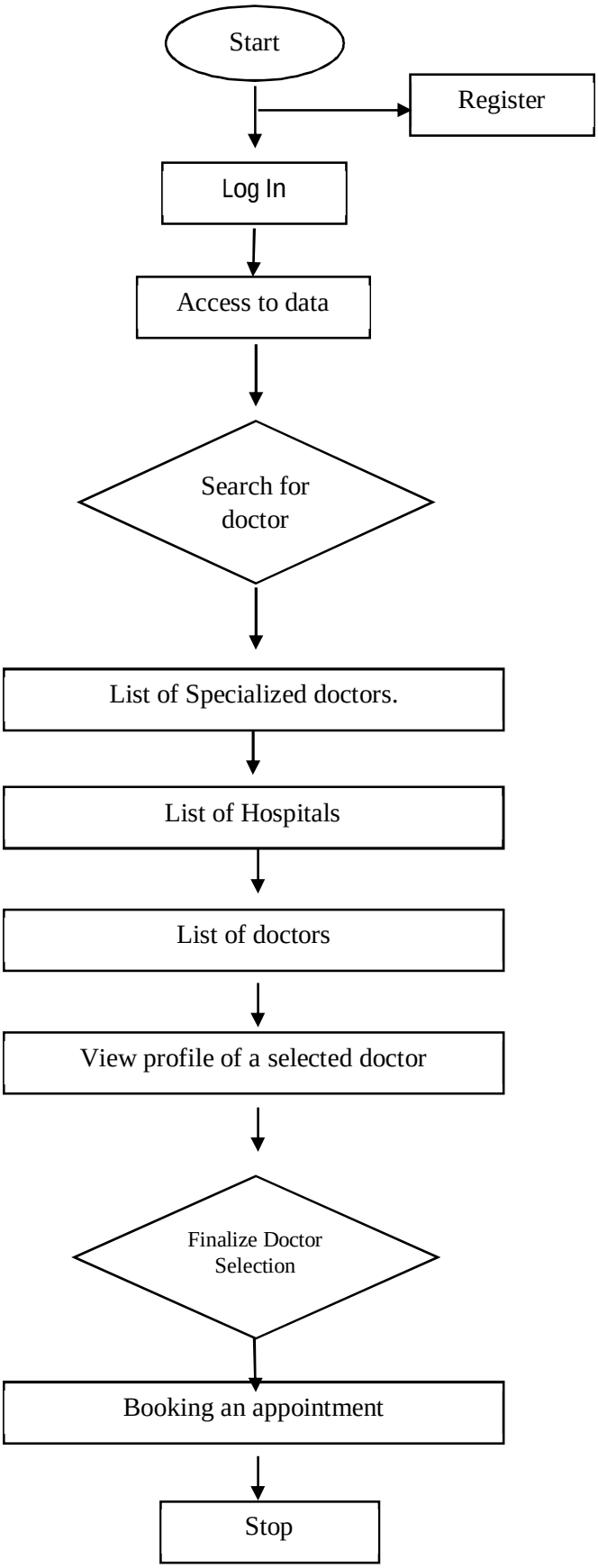
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 10 Issue XI Nov 2022- Available at www.ijraset.com



2) *Collection of information of various doctors:* The main work of this application involves the collection of data and information about doctors. Of course, this has to be done with the consent of the doctors. This involves visiting various hospitals and doctors and telling them about this work and asking them if they want to contribute to this project.



3) *Process Flow:* The process is where the algorithms work and the user gets it relevant results. This is where a user enters his/her search about a particular doctor. The search is then made to go in the search engine and the search engine uses the central database. Then from the central database relevant doctors are selected and are displayed in a form of a list of results. The user can book an appointment with any doctor he/she may please.


Start
Register
Log In
Access to data
Search for doctor
List of Specialized doctors.
List of Hospitals
List of doctors
View profile of a selected doctor
Finalize Doctor Selection
Booking an appointment
Stop

III. PROPOSAL SYSTEM

Web Application for this system has following functions:

1) Registration of a new user
2) Login
3) Search for a doctor:
a) By search
b) By Hospital or clinic name
4) Booking appointment
5) Editing Appointment
6) Other options: rating, feedback …

A. Central Database

MySQL is used to design and implement the database with which our main web application with interact. It will be linked to Databases used in hospitals and clinics, to user web application. It will store all types of information such as names of hospitals, name of doctors, individual doctors, respective doctors.

IV. CONCLUSION

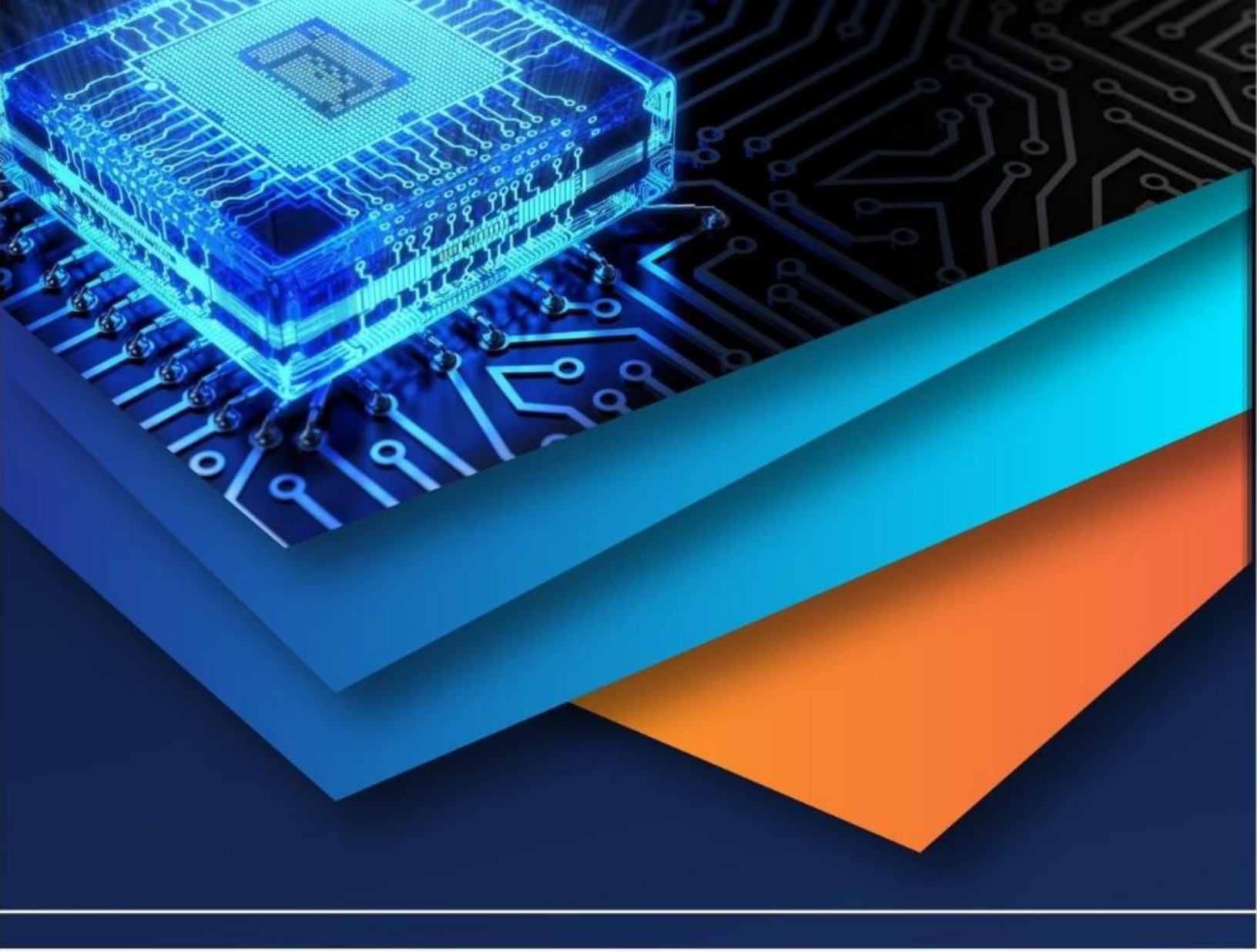
A highly integrated solution of health care has been developed using various web technologies. This includes online doctors' appointment and the getting information about a doctor. This application will keep a record of users' appointment and can send them notifications if the doctor is unavailable on the appointed time and date. Users can see available doctors at a particular instant, see the information about a doctor such as his available timings and his appointment fees. A user can search which hospitals are present around him. A user can see if a new type doctor relevant to his new disease which he is trying to find is available in a particular hospital or not.

V. ACKNOWLEDGMENT

We would like to thank Prof. Suhas Chavan for invaluable help and insights. We would like to thank Prof. S. M. Patil for his help and guidance towards our application. The authors would like to acknowledge the support and guidance provided by management and guides of SKN Sinhgad Institute of Technology and Science, Lonavala for providing the necessary support and guidance in carrying out this work.

REFERENCES

[1] R. Khan, Mashuk, Durdana , M. Alam, R. Roy, M. Razzak" 'Doctor who' – A customizable android application for Integrated Health Care ", July 2019.
[2] Yong-Feng Huang I, Peng Liu I, Qiao Pan I, Jing-Sheng Lin 2, A doctor recommendation algorithm based on doctor performances and patient preferences, 2012.
[3] Qiuju Yin, Yijie Wang, Guofeng Zhan, Lun Li, Effect of Doctor's Reputation on Patient Appointment in Online Health Communities, 2019.
[4] Cristian Cola , Honoriu Valean, E-Health Appointment Solution, A Web based approach, 2015.
[5] Ayman Odeh, Raghad Abdelhadi, Hussien Odeh, Medical patient appointments management using smart software system in UAE, 2020.



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY