Android Application of Hospital for Karjat Taluka

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Abstract: **In today's world if any Patient has to search or schedule a Doctor's Appointment then they need to call in clinic or personally go and schedule the appointment, which consumes precious time of the patient. This emerges the need to develop a system which is beneficial to patient and doctor. So we are proposing to develop an all new android application as Patients Appointment System. This system will provide the patient to schedule an appointment with the doctor. It also provides the patient a medium to interact and communicate with doctors without making any physical appointments with them. Additionally using this app, the patient can make an appointment to meet the doctor in clinic/hospital. The patient will be able to schedule his/her appointment. As our system is based on the android platform, it will only allow the android users to use the application, i.e. this application will be operated on android operating system only. This app enables the doctor to schedule the time of patient appointment and also it gives a record of vested patients. In addition this app helps the doctor to know the number of patients he has to attend in a day. The system will also save patients as well as doctors time and it will also reduce paper work.**

Keywords: **Health care, Appointment, Android, Patient, Doctor, Schedule.**

I. INTRODUCTION

A mobile app is a computer program designed to run on a mobile device such as a tablet. An Android app is a software application running on the Android platform. Because the Android platform is built for mobile devices, a typical Android app is designed for a smart phone or a tablet PC running on the Android OS .Smart Doctors Appointment and Prescription System is an application that provides services to the Doctors and Patients. The Doctor's Appointment and Prescription system connects Doctor and Patients using web and android apps and patients are able to search a Doctor and ask for his/her appointment as well as for prescription using their Smartphone. This application shows the Doctors the previous history of a particular patient and can prescribe on basis of the history of patient. The main objective of this research is connecting doctor and patient very quickly and easily from any location without any involvement of any third party. Any doctor and patient can easily use this application by registering themselves, and doctor can prescribe the patient based on disease using listed medicine and number of days etc. This system also notifies the Doctor and patient through android application about the request of doctor appointment and prescription within shortage possible time.

The objective of this project is to build a system that will ease the process of booking appointment of the doctor. The patient will book the appointment through his/her mobile phone. The doctor will come to know the number of patients he has to attend in a day. The system will save patient's as well as doctor's time. It will save the paper work of both doctor and patient

II. Literature Review

Obulor R., Eke B. O. (2016): "Outpatient Queuing Model Development For Hospital Appointment System", International Journal of Scientific Engineering and AppliedScience, Volume2, Issue 4, ISSN 2395-3470[1]. This research presents an efficient queuing model for proper appointment system to give the solution to the long waiting times in the hospitals. This system provides better utilization of resources and reduces patients waiting times in the general OPD before consultation with the Doctor.

IrinSherly. S, Mahalakshmi. A, Menaka. D, Sujatha. R (2016): "Online Appointment Reservation and Scheduling for Healthcare- A Detailed Study", International Journal of Innovative Research in Computer and Communication Engineering, Volume 4, Issue 2, ISSN 2320-9798[2]. This research represent online Appointment reservation and scheduling systems in healthcare are used to maintain and manage the access to the hospital.
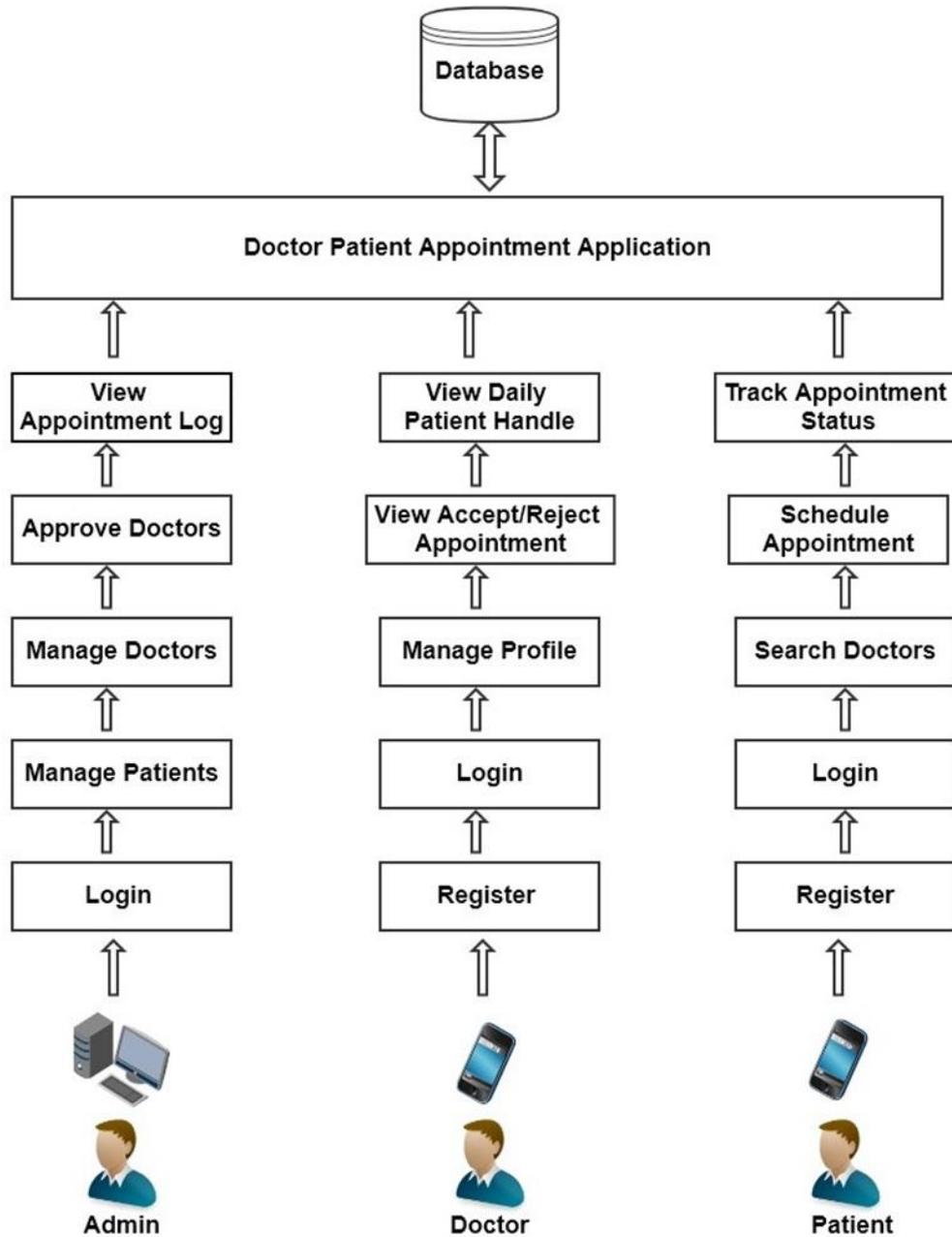
Godphrey G. Kyambille, KhamisiKalegele(2015):"Enhancing Patien Appointments Scheduling that Uses Mobile Technology", International Journal of Computer Science and Information Security, volume 13, No.11, ISSN: 1947-5500[3]. In this paper researcher present a mobile based application scheduling system for managing patient appointments.

OployeeLabs, Developed an apps "Doctorola", October- 2015, Updated September, 2016 [4]. In this project they designed an android application which is developed to find a doctor or a dentist easily and take an appointment with the doctor instantly.

III. Proposed system

The proposed system consists of Three panels: Admin, 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. 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 his requirement and then the doctor

list will appear after that select any particular doctor and view his profile. Also, the patient can view the doctor's schedule and look for an appointment according to his convenience. The patient will then send a request for 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.

System Architecture

Admin Panel (Website)
Admin Login: - Admin login into web application using his/her login credentials.
Manage Doctors: - Admin can manage Doctors Registration request.
View Patients: - Admin can manage Patients Registration request.
Approve Doctors: - Admin verifies doctor's documents and allow access in application.

Doctor Panel (Android App)
Register: - Doctor register by filling personal information, Qualification along with Qualification certificates.
Login:- Doctor login using login credentials provided during registration phase.
Manage Profile:- Doctor can edit, update personal information in edit profile page.
View Appointment request:- Doctor can view list of appointment requests which are received from patients.
Approve Appointment Request:- Doctor will decide to approve or reject appointment.
View Daily patients Handle:- Doctor can view list and numbers of patients handles during a day.

Patient Panel (Android App)

Register:- Patient register by filling personal information along with username and password as a login credential.

Login:- Patient login into the android application using login credentials provided during registration phase

Search base on Disease, Problems and location base:- Patient search doctor in search panel as per the required specialisation and location.

Place Appointment:- patient place an appointment to the required doctor.

Track Appointment Status:- Patient can track the status of the appointment if doctor receive it or not.
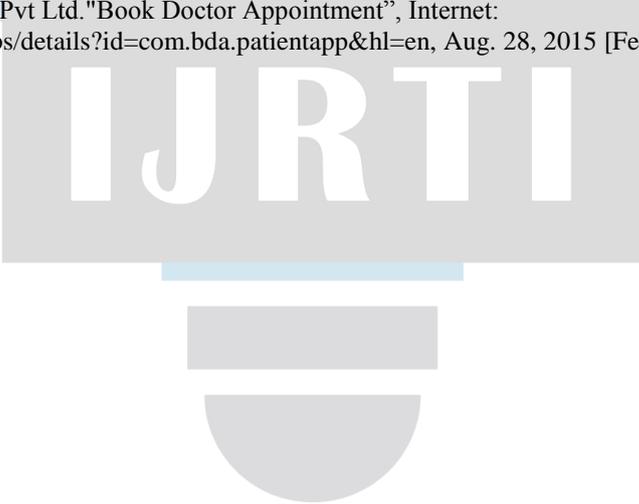
IV. Conclusion And Future scope:-

Convenience and simplicity are the two major highlights of this application. 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 can also book an appointment according to their choice in a more convenient way. Doctors will not worry about managing their appointment. The patient will not have to go clinic physically and can book an appointment from anywhere you want. This helps to save the time of patient. The patients 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 lists which make it easier for him to plan his daily schedule.

The proposed system is Doctor's Appointment Booking System for Karjat Taluka only. We can enhance this system by expanding the application and including more cities in the application.

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