

THE POCKET DOCTOR

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ABSTRACT

In this paper we are proposing a health application that provides an efficient way to keep a track on health. In the age of Smart phones and technology where one can have applications on every aspect of our lives, having an application that addresses health issues is a must and 'The Pocket Doctor', an android application provides an efficient and time saving method for the users to track and manage the most important aspect of their lives. The application will help the users to keep a track of their health. Patients who use our app can store the prescription details of themselves. So our aim is to develop an application that addresses the health issues and provides optimal solutions to the users.

Keywords: Smart Phones, BMI (Body Mass Index), Prescription, Android

I. INTRODUCTION

In recent times health care concepts of people have undergone a tremendous change which has led to higher expectations and an increased demand for high quality medical care and facilities. The Pocket Doctor app provides an efficient and time saving method for the users to track and manage their health. The application also addresses the weight related issues. The users can check whether they are overweight or underweight or normal using Body Mass Index (BMI) calculator, a feature that is incorporated in our application.

The users can post their health queries on this application and they will be provided with immediate solutions for their queries. Patients who use this app can also store the prescription details of the themselves. It helps the patient to view their medication anytime, anywhere through their phone. A substantial number of patients, particularly the handicapped and the elderly do not follow instructions in taking medication. This can result in patient failing to take medication, taking the wrong medication, taking an incorrect amount of medication, or taking the medication at a wrong time, leading to either a drug overdose or an ineffective application of medication to the patient. The elderly are especially prone to problems since they often take several medications and have failing memories. The app will also display all the hospitals and clinics that are in the user's locality with their contact numbers. The application provides the facility to the users to book an appointment to visit the hospitals that are near user's location.

II. CURRENTLY USED SOFTWARE SYSTEM

We studied the previously developed applications thoroughly. The user interface created is hectic to use and one has to proactively use the application to get the gist of using it. Also the feature of storing and viewing prescriptions is not incorporated in the previously created applications. There is no more than one or two features in those applications. Users have to download separate application for having some First Aid

information, and a separate application for BMI calculation. There are more or less no applications that have all the features incorporated into one single application.

The problems faced in this applications are:

- The GUI is not user friendly.
- Absence of multi purpose features.
- No dynamic changes in the databases.
- No storing and viewing of prescriptions.

III. AIM & OBJECTIVES

Keeping a regular check on one's health is one of the most tedious task for humans. There are still serious problems while managing our health. Some may not have the time for visiting doctors and in some rural areas there isn't ample Healthcare facility. Some patients may not know the hospitals or clinics operating in their own locality. Therefore there is a great requirement for an application that provides all the first aid health related information. There is a requirement for an application that shows all the nearby hospitals and clinics which can benefit a lot if users come across some health issues during the nights. Our aim here is to develop a simple, easily understandable, and portable application, which could prove useful in managing health issues and provides some first aid solutions. This project aims for effective and easier way to view a prescription by the patient with very less user involvement.

IV. METHODOLOGY

The different modules in the system include:

4.1 Login Module

Only the authorized users can login into the site. Admin, Doctors and Receptionist can login using their username and password. If invalid username or password is given, then access will be denied.

4.2 Administrator Module

The administrator can add new doctors as well as change the password of the receptionist.

4.3 Registration

The patient details are entered by the receptionist and it is stored in the database.

4.4 Provide Prescription

The doctor provides the prescription and it is stored in the database.

4.5 Send Prescription

The prescription details are sent to the Prescription Viewer App installed in the patient's phone using Google cloud messaging. (GCM).

V. WORKING OF THE SYSTEM

1) The user has to register on the application. The user will be provided with the login access.



Fig 1: User Login

2) For calculating the body mass index (BMI), User has to provide his/her height and weight as inputs so that the application can provide the user with his/her BMI.

3) The user can use the feature of prescription storing and viewing, which will help the user to keep a track on medication. Doctors will send the prescription from their respective logins to the patients on their phones.



Fig 2: Sending Prescription to the patient.

4) User can fix appointments with the hospitals, clinics, physicians registered on the application.

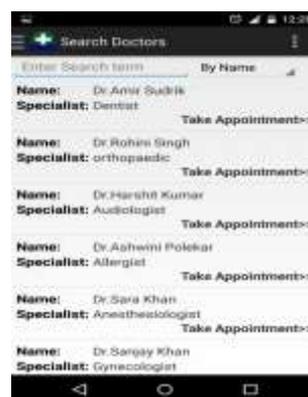


Fig 3: Scheduling Appointments

5) User can post their health queries on the application. The queries will be addressed with immediate effect.

6) Users will be provided with all the hospitals that are located in their area of interest with their contact numbers.



Fig 4: Hospital Search Functionality

VI. SCOPE

An increasing number of patients are using mobile health applications on their smart phones to manage their health. Moreover, The app can fix an appointment whenever required with the doctors registered on the application. As a trusted source of information, health care providers can take advantage of this opportunity to connect with patients. Apps that help patients manage chronic diseases, update their health records, institute behavioral change, find health information and connect to remote monitoring devices have the potential to improve health outcomes, reduce costs and help differentiate providers from the competition. Providers should aim to develop easy-to-use apps that can be extended across a variety of devices and platforms and offer functionality that patients can use on a regular basis. In many cases, mobile health apps can become an extension of the web presence already established by providers.

VII. CONCLUSION

Our Android application will help everyone using Android devices with features such as BMI calculator, Prescription viewing, Search functionalities for doctors and hospitals, Scheduling appointments. One would be able to schedule appointments with doctors registered on the app. Prescription viewing makes it easier to view your prescription anytime and anywhere. Hospitals with their exact location using google maps are provided to the user too.

REFERENCES

- [1] Mobile Devices and Apps for Health Care Professionals: Uses and Benefits, C.Lee Ventola, Pharmacy and therapeutics, May 2014.
- [2] Colin Konschack : Mobile applications in healthcare. 2014
- [3] Chi Zhang : Healthcare mobile app development, 2013
- [4] Darren Dancey : Smartphone Medical Applications for Women's Health: What Is the Evidence-Base and Feedback?, 2013
- [5] Modern healthcare magazine : mHealth, 2013
- [6] WHO : MHealth, New horizons for health through mobiles, 2012
- [7] Jose Marquez, "Will mHealth Revolutionize Healthcare?", Huffington Post, 2012