

MEDIDOCs-AN HEALTH CARE APPLICATION

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Abstract–This application is a combination of four features. Using four applications for four different Purposes consumes a lot of device memory and also it is very messy for the user. User does not need to install four applications for four different purposes. Instead we have made a single application integrating all the Functionalities. The software consists of an effective GUI. Users can easily navigate through different Options to find the required information. The application also consists of global positioning system (GPS) through which the users can track the nearby medicals and hospitals with respect to their location. It also provides the user complete information about different medicines. The information about the Medicine consists of its manufacturer, composition of the medicine, price per unit, symptoms under which it can be used. In addition to medicine and hospital information the application also consists of a reminder and one touch messaging facility.

It contains the details of medicine such as its composition, manufactured by, price per unit, symptoms under which it can be used. And also lets user know about the nearby medical stores using GPS. The User can compare medicines of similar composition on basis of price and manufacturers. In an emergency for e.g. accident, a person can use this facility to send messages to their relatives as well as ambulance centres by just pressing a single button. In the proposed and tested application the longitude, latitude information and the general idea of the place (BTS location area) of the current position of the mobile user is appended with the custom message that had been initially set in the application and is transmitted to the phone numbers registered. It's a function which remind user/ patients for its time to time medications, it's an important function since according to the researches patients have faced fatalities more due to medication timings problems It will give user

details about the medicals And also lets user know about the nearby medicals using GPS.

Keywords-Android, API, EI Plug in, Chopping, Android Tools, Android SDK, Android NDK, Eclipse, ADT plug in, El Google, engine.

1.INTRODUCTION

IN these modern world, medicines have almost been an vital part of every human being on this planet .but the problem with the medicines is that the knowledge about them is very limited to common man. Knowledge in terms of the details of medicine such as its composition, manufactured by, price per unit, symptoms under which it can be used. Many a times it is seen that user is allergic to some component of a medicine and doctor prescribes the same to him. so it may cause an immense effect on patients life, so it is necessary that patient should not be careless in terms of medicines the other major problem with the medication is taking it time to time According to a landmark study on medical errors conducted by the US Institute of Medicine in 1999 medication errors and adverse drug reactions are the most common cases among all medical errors. These adverse drug events (ADE) incurred significant tolls in terms of patient fatality, medical expenses ,productivity losses, and damages to morale and reputation of healthcare professionals. Out-patient medication administration has been identified as the most error prone procedure amidst the entire medication process. They accounted for 25%- 40% of all medication errors and were the main reason for admission of elderly into nursing homes Most out-patient medication errors were made when patients bought prescribed and over-the-counter (OTC) medicines from different drug stores and use them at home without little or no guidance.

In recent years, telemonitoring has been investigated as a cost-effective approach to impose quality control onto out-patient Medication administration. By using remote control devices to issue medicine in-take reminders, dispense proper medicines and record patient in-take schedules, Health Maintenance Organizations (HMO) hope to reduce cost of service while improving quality of care offered to elderly or chronically ill patients. Although the installation of these remote controlled devices represents a step in the right direction, the medicine dispensers are often bulky, expensive and prone to mechanical dispensing errors. An alternative solution is to install a medication scheduler, reminder and monitor on a mobile phone and using that mobile application along with a conventional pill box. This solution is cheaper and may result in deeper penetration into the consumer market.

So we are introducing an android based application which can make medical life of a patient easy.

2. EXISTING SYSTEM

In recent times there are various applications and websites which are providing help to patients for their medication. Applications and websites provide medicines constraints information like medicine name, their constituents and their type etc.

Disadvantages of existing system:

The application is a bit complicated for patients to use. Various services are provided through various applications. It's more hectic to maintain each application.

3. PROPOSED SYSTEM

The proposed system is based on the Android operating system which will remind the users to take medicines on time through notification and automatic alarm ringing system. It will also help the user to find nearby medicals and an emergency alert system. Users can also find the details of medicines they are consuming. Android is a Linux-based operating system designed primarily for touch screen mobile devices such as smart phones and tablet computers, developed by Google in conjunction with the Open Handset Alliance. Android was built from the ground-up to enable developers to create compelling mobile applications that take full advantage of all a handset has to offer. The system is specified on android

operating system only because the market share of Android is high. Android also comes with an application development framework (ADF), which provides an API for application development and includes services for building GUI applications, data access, and other component types. The framework is designed to simplify the reuse and integration of components. Android apps are built using a mandatory XML manifest file. The manifest file values are bound to the application at compile time.

Advantages of Proposed system

- Integration of different services into a single Android Application.
- Complete details of medicine such as its composition, manufactured price per unit, symptoms under which it can be used.
- Use of GPS for finding nearby medical stores.
- Emergency alert system in case of emergency.
- Medicine reminder for patients to take medicines on time.

VARIOUS MODULES IN PROPOSED SYSTEM

- A. Medicine Information: - In this module the user is provided with the medicine information they search in the search box. Medicine information consists of Medicine name, Constituents, Type, Manufacturer, Price per unit, Symptom, Conflict, Warning, Side Effect.
- B. Medicals: It will give user details about the medicals for example user can search about facilities provided by Medicals. And also lets user know about the nearby medicals using GPS.
- C. One touch facility: In an emergency for e.g. accident, a person can use this facility to send messages to their relatives as well as ambulance centre by just pressing a single button. In the proposed and tested application the longitude, latitude information and the general idea of the place (BTS location area) of the current position of the mobile user is appended with the custom message that had been initially set in the application and is transmitted to the phone numbers registered.

D. Reminder function: A polio reminder or medicine reminder. The remarkable problem is that patients forget to take the proper medicines in proper proportion and in proper time. Medication adherence, which refers to the degree or extent to which a patient takes the right medication at the right time according to a doctor's prescription, has recently emerged as a serious issue because many studies have reported that non-adherence may critically affect the patient, thereby raising medical costs

Hardware and software requirements

Hardware Module:

- P IV processor and higher
- 512 MB and higher
- Fast Internet Connection
- Smart phone with Android OS
- Internet Connection for PC

Software Module:

- Windows Xp or higher
- Google map API.
- Android SDK tools.
- Android SDK platform tools.
- Android 3.2
- ADT-0.9.5

IV. SNAPSHOT

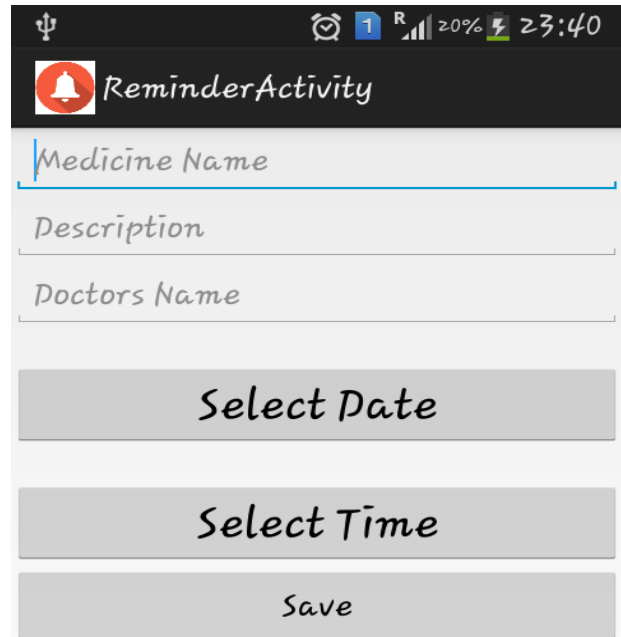


Fig 1: Medicine Reminder

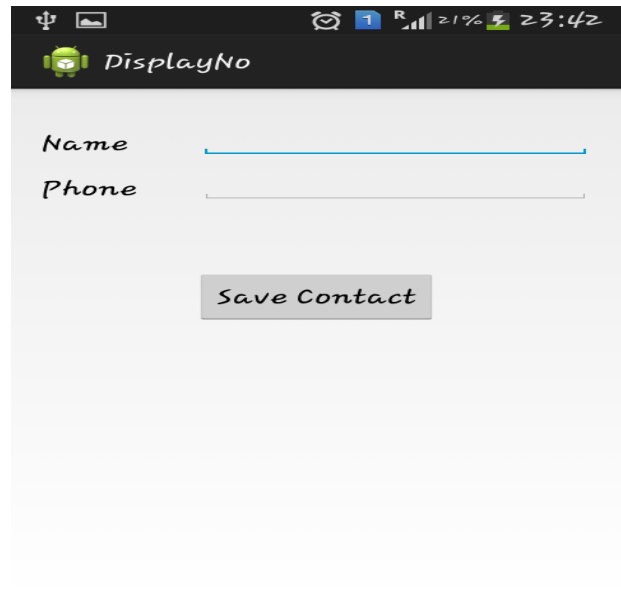


Fig 2: Register Contact

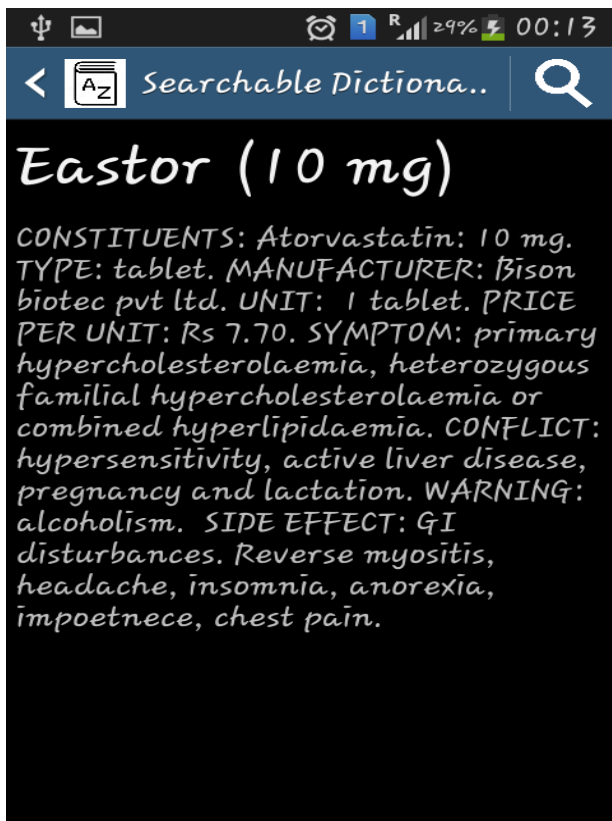


Fig 3: Medicine Detail Activity

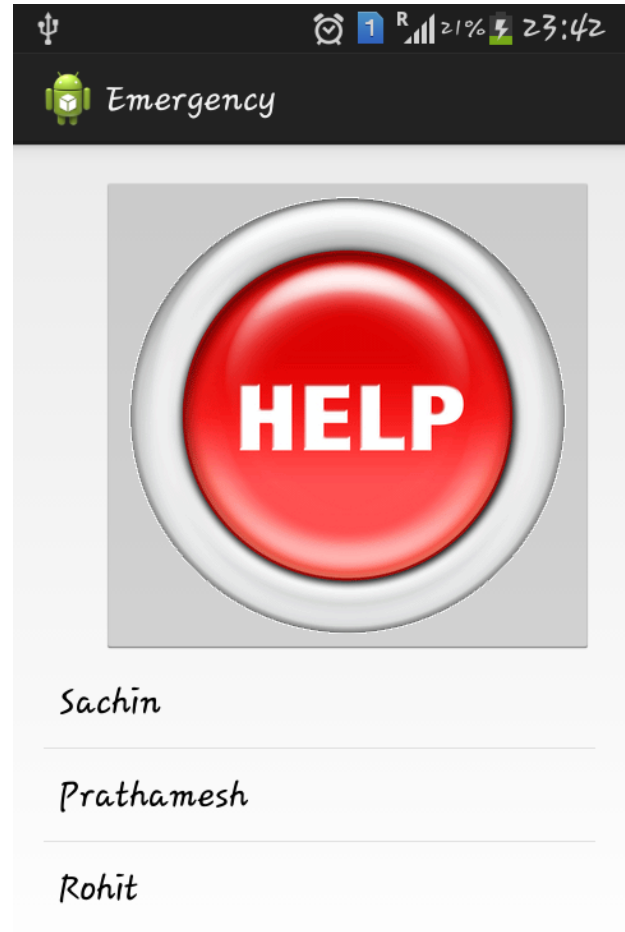


Fig 4: One Touch Emergency Service

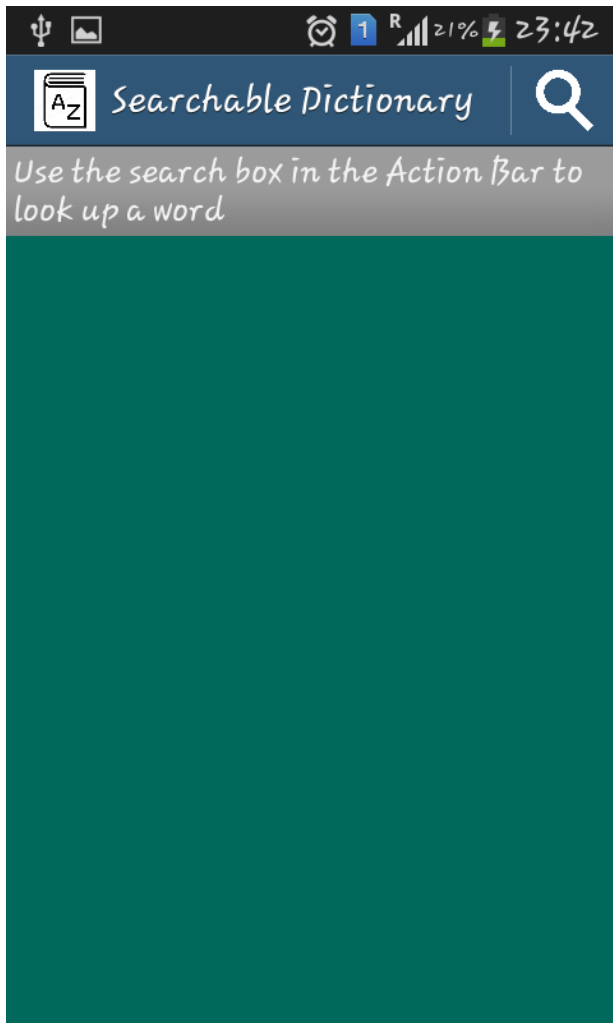


Fig 5: Medicine Dictionary

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VI. CONCLUSION

In Medidocs which is an complete health care android based application allows user to have almost complete knowledge about the medicine prescribed to the user and know its price, components, symptoms ,side effects which helps to avoid user from consuming medicines to which it is allergic. This application also solves the other major problem that is missing dosage by the patients this application has a scheduler which helps user to schedule its medication and patients is alarmed according to the schedule. It also decreases the overhead of finding nearby medical stores by using GPS. It also has a one touch triggering application that send message to the saved contact in case of any emergency such as accident