

## REVIEW ON MOBILE APPLICATION FOR MEDICINE REMINDER

**Ms. S. A. Patil<sup>\*1</sup>, Ms. Monika Bhanuse<sup>\*2</sup>, Ms. Snehal Mali<sup>\*3</sup>, Ms. Vishaka Swami<sup>\*4</sup>**

<sup>\*1</sup>Assistance Professor, Department of Computer Engineering, Sharad Institute of Technology Polytechnic, Yadrav, Maharashtra, India.

<sup>\*2,3,4</sup>Diploma Student, Department of Computer Engineering, Sharad Institute of Technology Polytechnic, Yadrav, Maharashtra, India.

---

### ABSTRACT

Nowadays, mobiles have been reached everywhere and at every home. As a result, today people are using lot many mobile applications to make their day to day life easier. Our review paper main objective is to the development of a mobile application to provide an effective health care system. We are going to develop an android based mobile application in which we have implemented an automatic alarm ringing system. With the help of our application Patients need not to remember their medicine dosage timings as they can set an alarm to remind their medicines. This mobile application will be helping to those people who are busy in their day to day life or old age people who forget which medicine is to be taken and when. We are going to make a system which is free of cost, time-saving and supports medication adherence without any extra hardware devices.

**Keywords:** Android, Automatic alarm, Reminder system, Notification System, Medicine scheduler.

---

### I. INTRODUCTION

Health care is very essentials for human being. Nowadays, all people have a busy hectic schedule. Today's life is full of responsibilities, stress etc. So, people have different types diseases and it is our duty to make themselves fit and healthy. Even the old age people who generally stay home or with their servants find it difficult to remember which medicine is to be taken and when. In our everyday life, it is difficult for a person to remind their daily intake of medicines. Today every person has mobiles in hand. Our life is totally dependent on gadgets especially mobiles. With this, we get an opportunity to use technology in a better way so that we can help our society to keep them healthy. It plays an important part in our everyday life and helps us staying healthy. We are developing an Android application, whose objective is to remind the patients of their dosage timings through Alarm Ringing system so that they can stay healthy all the time. With the alarm ringing system, they may remember which medicine is to be taken. This mobile application main focus on the people who forget to take medicines on time. It allows users to set an alarm along with the date and time which will allow them to set alarm for multiple medicines at different time intervals.

### II. LITERATURE REVIEW

Today we know that the use and the demand of Mobile Application Development are increasing and it makes inspiration to create user friendly and effective variety of application. There are different types of concepts, ideas & platforms developed in medication systems. Now a days, uses of healthcare application is growing day by day, but there are many issues related to their application. We are going to develop a mobile application for medicine reminder. We are developing a Android- based application in which We have develop a user interface for medicine scheduler & notification system for reminding users about their medicine type & time as per the users medicine details & an automatic alarm ringing...as Medical Reminder Systems & also, we are developing a notification system ... in which a message will be sent to the users, users can go with Notification through notification Mode with email or message.

... On the cost effectiveness of pharmaceuticals: a review of the Health Economics. ”.

We have discussed with our group about Medicine reminder pro application. Which is a free application & allow users up to 15 reminders only We are developing mobile Application that tries to avoid major errors related to previous medicine reminder system

### III. METHODOLOGY

We are going to develop Android application for patients to remind medicines and health care. In this application there are two important modules. First is set alarm and second is get notification module.

In this application, first patient will get registration form. In that form patient need to enter name, Mobile number, email id, gender and password.

But, patient need to understand that correct mobile number, email id and alphanumeric password should enter. After filling this information patient need to click on register button. All the information will be saved in the database.

After registration patient will get login screen. Patient can login with email/mobile no. and password provided in registration form.

After registration patient will have to set alarm:-

#### Set Alarm module-

In this module, there is calendar to select date and also there is time to set time and then there is textbox to add medicines. Patient can select specific period in calendar and can set time, on that date and time patient can add medicine name and description. And then patient need to select mode (email/mobile notification). If patient select mobile notification then patient can select ringtone from patient's device. And if patient select email then patient can get notification by email.

After set alarm module patient will get notification by email/mobile notification.

#### Get Notification module:

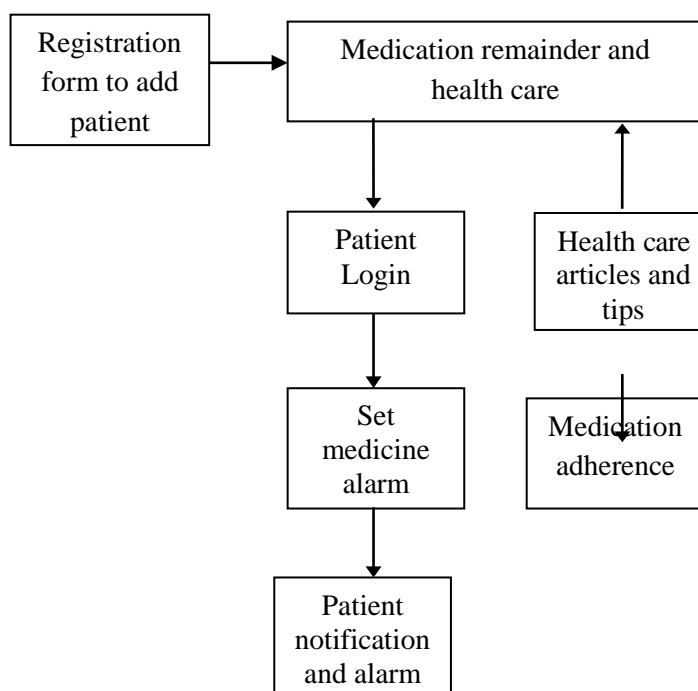
After set alarm then patient will get the notification. If patient selected mobile notification then system will send this notification into patient's device. Again if a user selected the notification in email form, patient will get Notification through Email Mode. And that notification contains medicine name and medicine details.

Using this application patient can read health care articles, posts and tips.

Many systems need special hardware devices to remind the patient's medicine in their timings. Buying new hardware devices cause costly and money consuming.

That's why, It is important to make android application. An attempt has been made to implement an application which is economical, easily accessible and improves medication adherence.

#### Block Diagram:



**Fig 1:** Block diagram of Medicine Remainder application.

#### IV. ADVANTAGES

1. It provides information regarding the medicine timings.
2. Patients can get a fair idea about Healthcare and can also get health tips from this application.
3. This system mainly focuses on improving rate of attendance on healthcare appointments.
4. The personal email notification and alarm notifications are strong aspects to get users attention.
5. It is an easy implementation as it is less expensive, reliable, scalable, accessible to anyone having android smartphone's, and does not require any addition hardware, packaging or separate device.

#### V. DISADVANTAGES

1. It doesn't encourage to cancellation or rescheduling in patient who cannot attend or who no longer wish to attend.
2. Generally, one-third of patients give incorrect contact details. This may put at a specific disadvantage to the patient registering.
3. Providing wrong phone number can result in the SMS reaching someone other than the patient.

#### VI. CONCLUSION

There are different types of Medication Reminder Systems have been developed on different concept & platforms. These all systems require special hardware devices to remind the patients about the medicine details & timings. Purchasing new hardware devices as medicine remainder devices are very costly and is very money consuming. So we have been developing a system which is economical, easily accessible and improves medication adherence. Medication non-adherence reduces the effectiveness of a treatment and imposes financial losses on health care systems. With the help of our application The patients will get the schedule of medicine details & in-take time with medicine description, our notification system sends notification through message or email, we have also provided a automatic alarm ringing system. This provides easy searching facility to the users and saves the time.

We have planned to focus on improving the overall performance of the system. Some more ways to achieve medication adherence will be focused.

#### VII. REFERENCES

- [1] Park, KeeHyun &Lim, SeungHyeon, (2012) "Construction of a Medication Reminder Synchronization System based on Data Synchronization", International Journal of Bio- Science and Bio-Technology, Vol.4, No. 4, ppl-10
- [2] "Smartphone medication adherence apps: Potential benefits to patients and providers", available at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3919626/>
- [3] "Thinking outside the Pillbox: A system wide Approach to Improving Patient Medication Adherence for Chronic Disease" (2009), A NEHI Research Brief July 2009, New England Healthcare Institute
- [4] Mahmood, R., Mirzaei, N., Malek, S., (2014), "EvoDroid: Segmented Evolutionary Testing of Android Applications" , FSE'14, November 16-21, 2014, Hong Kong, China
- [5] Healthful Reminders for Medications, "Beyond an Apple a Day" , available at: [http://www.nytimes.com/2010/09/30/technology/personaltech/30smart.html?\\_r=0](http://www.nytimes.com/2010/09/30/technology/personaltech/30smart.html?_r=0)