" Med-Dose "

A Medicine Reminder App

SUBMITTED BY

Name: Bhadane Mahesh Shantaram

Roll No: N20111056

M.Sc.(Computer Science) – SEM IV

Department of Computer Science,

Savitribai Phule Pune University,

Pune-411007



INTRODUCTION:

Good health has been a major concern since the inception of mankind whilst for some people attaining good health requires taking prescribed medicines or pills routinely. However, many patients find it very difficult to keep track of taking their medication in the right time and proportion. This happens especially if it involves taking pills or medication on daily basis due to several reasons such as heavy workload, forgetfulness, old age and alterations in day-today behavior can also have a significant result on whether patients recall to take their prescribed medications which can be termed as medicine adherence, which is a very serious problem because it may affect the total well-being of the patient, delaying the curing time, raising the total medical cost of the patient and can be a matter of life and death.

Med-Dose is an Android application which helps to remind users of their daily (weekly, monthly) intake of medicines. This application is mostly targeted at an elderly audience with a focus on accessibility and usability. The user will be able to enter their medical information and prescriptions and the application will send a push notification when it is time for the user to take their inputted medication. I have kept in mind the common isolation of senior citizens while creating Remedaily.

PROBLEM STATEMENT:

Health is one of the most important thing for most individuals simply because without good health nothing seems to go well. In recent times new diseases have emerged which needs to be taken care off by taking medicine or pills routinely. In addition, the working conditions of some individuals is bad and hectic and as such had resulted them in forgetting to take their administered medicine in the appropriate timing or proportion and for some people its old age, most elderly people suffer from Blood pressure, Sugar etc.

As such the design and development of an Med-Dose a medicine reminder could help in solving the problems by reminding patients to take their medicines as prescribed by the doctor within the stipulated timing and dosage.

PROJECT AIM:

This aim of the application is to serve as a medicine administration reminder. The primary audience is people aged 55+ and the secondary audience is anyone who wants to keep track of medicines.

To design and develop an automated application for medicine or pill reminder as prescribed by a doctor to patients using the Java programming language and the Android Studio integrated development environment.

OBJECTIVES:

The Objectives of the project are:

- To remind patients about taking their prescribed medicines or pills within the stipulated time as prescribed by a doctor.
- To support the physician monitor his patient in taking their prescribed from his own end.
- To use a notification system in making the remembrance in order to make patients stay healthy and fit.
- Reminding the patient's medication to one of his/her friends or nurses.
- Availability of history of user, where Doctor can track the records of patient's.
- Naming and description factor which helps users to know which medicine he/she has to take and how.
- The application help patients staying fit by remembering them to take their medicine in an appropriate time and proper proportion

USE CASES & OUTCOMES:

Use Case: Splash Screen

Expected Outcome: The splash screen should open immediately after the

application starts.

Actual Outcome: The splash screen opens immediately after the

application starts.

Use Case: Add user activity

Expected Outcome: The details entered should be validated and no

invalid entries should be accepted from the users.

Actual Outcome: The users receive and prompt error displaying the

invalid detail entered by them and are asked to re-enter the value before

saving the details.

Use Case: Edit User Activity

Expected Outcome: The activity should display the current details of the

user and re-validate them once the user requests to edit them.

Actual Outcome: The activity displays the current details of the user and

re-validates them once user requests to edit them.

Use Case: Add Medicine Activity - Medicine Details

Expected Outcome: The users can enter the medicine details and dosage

along with the image for the medicines.

Actual Outcome: The users can easily enter the medicine details and

dosage along with the image for the medicines.

Use Case: Add Medicine Activity - Calendar Details

Expected Outcome: The users can enter the start and end date for the respective medicines and the end date should not be less than the start date.

Actual Outcome: The users can enter the start and end date for the respective medicines and will be prompted to re-enter the dates if the end date is less than the start date.

Use Case: Add Medicine Activity - Time Duration

Expected Outcome: The time duration should be of two types-daily and weekly. Weekly time duration should display the week details so that user can select a particular day and Daily should display the time which is to be reminded daily.

Actual Outcome: The time duration displays the two types-daily and weekly. "Weekly" time duration displays the week details so that user can select a particular day and "Daily" displays the time which is to be reminded daily.

Use Case: Home Page Activity

Expected Outcome: The Home page should display the schedule of the next medicines to be reminded and the missed medicines which the users did not take in the past. Also, the application should have an add medicine details button which will call the "Add Medicine Activity"

Actual Outcome: The Home page displays the schedule of the next medicines to be reminded and the missed medicines which the users did not take in the past. Also, the application has an add medicine details button which calls the "Add Medicine Activity" Use Case: Calendar Activity

Expected Outcome: This activity should display all the details of the

medicines categorized on the basis of day.

Actual Outcome: This activity displays all the details of the medicines

categorized on the basis of day.

Use Case: Settings Activity - Delete User Profile

Expected Outcome: This activity should help the user to delete the user

profile.

Actual Outcome: This activity helps the user to delete the user profile.

Use Case: Settings Activity - Change User Details

Expected Outcome: This activity should call the edit user details activity.

Actual Outcome: This activity calls the edit user details activity.

Use Case: Settings Activity - Delete Medicine

Expected Outcome: The user can easily delete all the details of a specific medicine.

Actual Outcome: The user can easily delete all the details of a specific medicine and the changes will be updated in the database.

Use Case: Database Creation on Dashboard- User

Expected Outcome: Complete Details of the user should be stored in the database. Also, the application should update and delete the stored details.

Actual Outcome: Complete Details of the user are saved in the database. Also, the application will update and delete the stored details.

Use Case: Database Creation on Dashboard- Medicines

Expected Outcome: The medicine table should store have all the details of the medicines along with the time and date. The users can easily modify and delete the details from the database table.

Actual Outcome: The medicine table stores all the details of the medicines along with the time and date. The users can easily modify and delete the details from the database table.

Use Case: Add User and Edit User Integration

Expected Outcome: The details stores in the add user activity should be displayed in the edit user activity and the add user activity should be disabled after the user has been added.

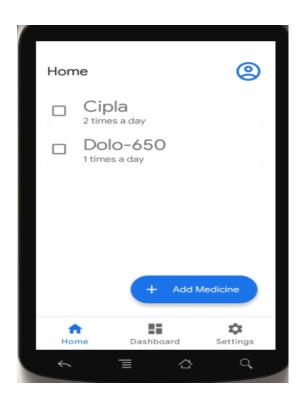
Actual Outcome: The details stores in the add user activity are displayed in the edit user activity and the add user activity is disabled after the user has been added.

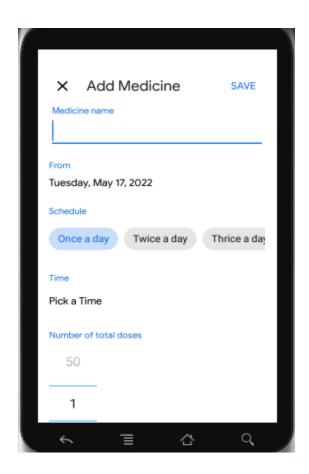
Use Case: Medicine Reminder

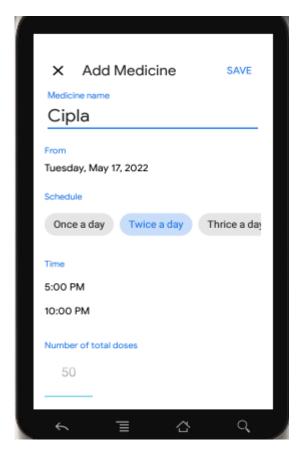
Expected Outcome: The application should provide the reminder notification for all the medicines at the specified time.

Actual Outcome: The application provides the reminder notification for all the medicines at the specified time.



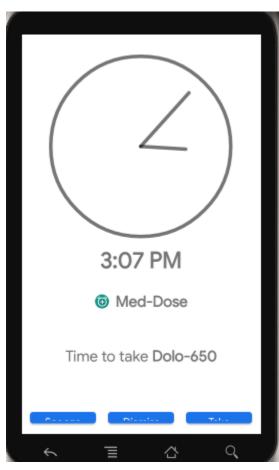














TECHNOLOGIES USED:

Android Studio. Android Studio is the official integrated development environment (IDE) for Google's Android operating system, built on JetBrains' IntelliJ IDEA software and designed specifically for Android development.

2 GB of available disk space minimum (500 MB for IDE + 1 GB for emulator system image)

Backend:

- Android Studio IDE
- Java

Frontend:

• XML

REFERENCE:

https://www.testingexcellence.com/best-software-testing-quotes/

http://softwaretestingfundamentals.com/wp-content/uploads/2010/12/system_testing.jpg

https://www.flaticon.com/free-icon/hands_838597#term=medical&page=1&position=46

https://developer.android.com/topic/libraries/architecture/room

THANK YOU