

Medicine Alert and Reminder System (MARS)



Team Number: 16

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Introduction

Medicine Alert and Reminder System is the system which provides the complete system for medicine management. It helps users to add their medicines with the recommended time and the app will remind to take medicines on specific time. If a medicine must have a minimum gap of hours, then app will remind of the next dosage of medicine after recommended gap between two dosages.

For more detailed information go through the Increment-I Documentation:

https://github.com/pareshkasare/ASE_Project/blob/master/Documentation/Increment-1%20Report.pdf

Increment Objectives

OBJECTIVES:

The main aim of this phase is to provide an overview of the project and the tasks that are completed till third increment.

Features of Third Increment

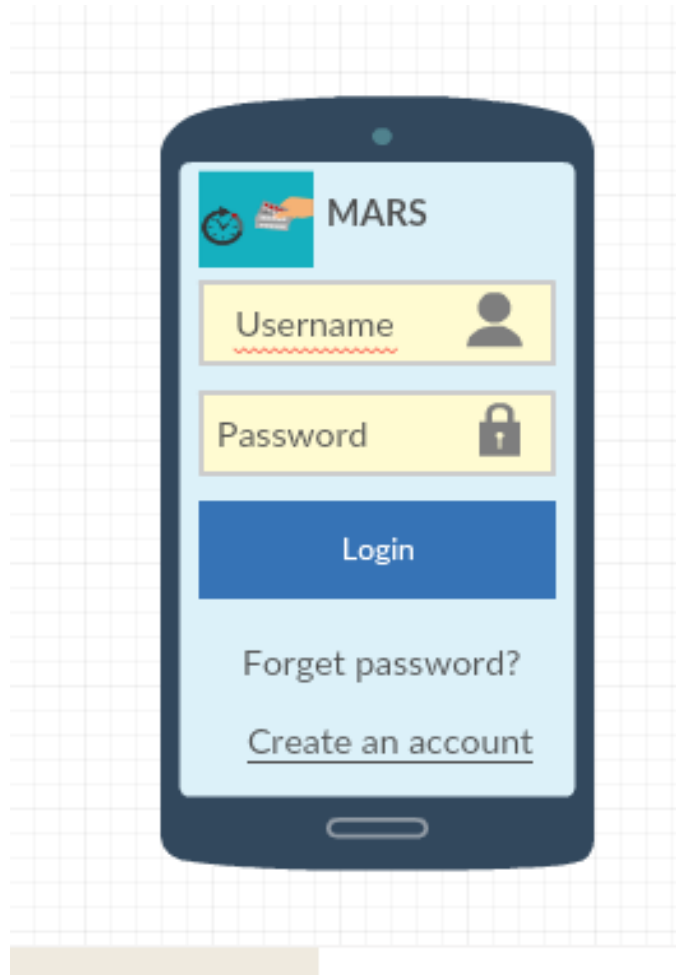
Features we are deploying are:

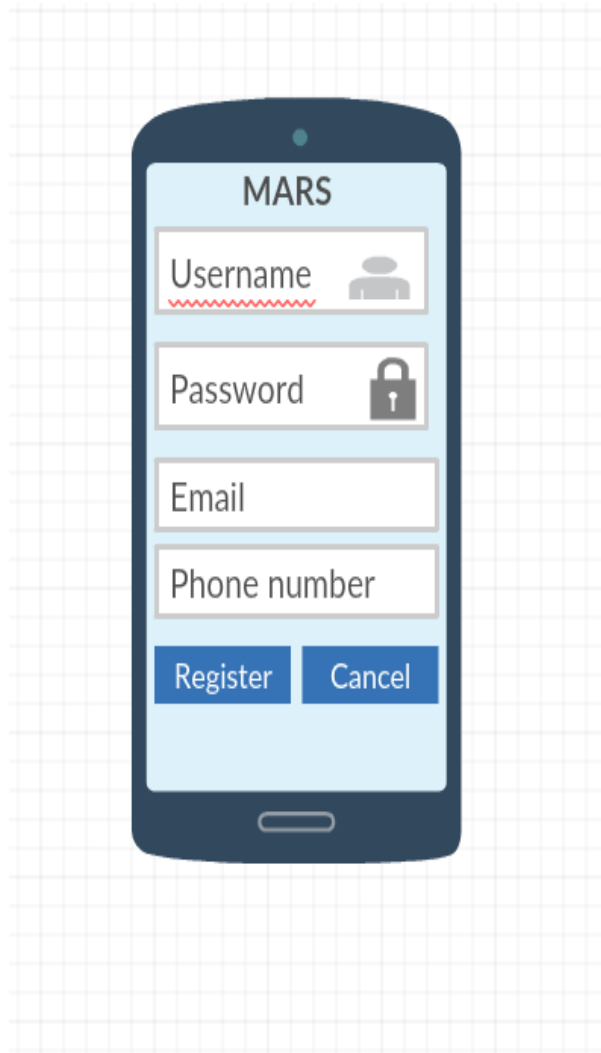
- Add notifications per day
- Display medicines
- Delete alarm manager in update activity
- Delete medicine
- Change medicine schedule
- Increase/Decrease medicine quantity

Detailed Design Features (Wireframes & UML)

First Increment:

Login Wireframe:



Register Wireframe:

Second Increment:

MainActivity Wireframe:



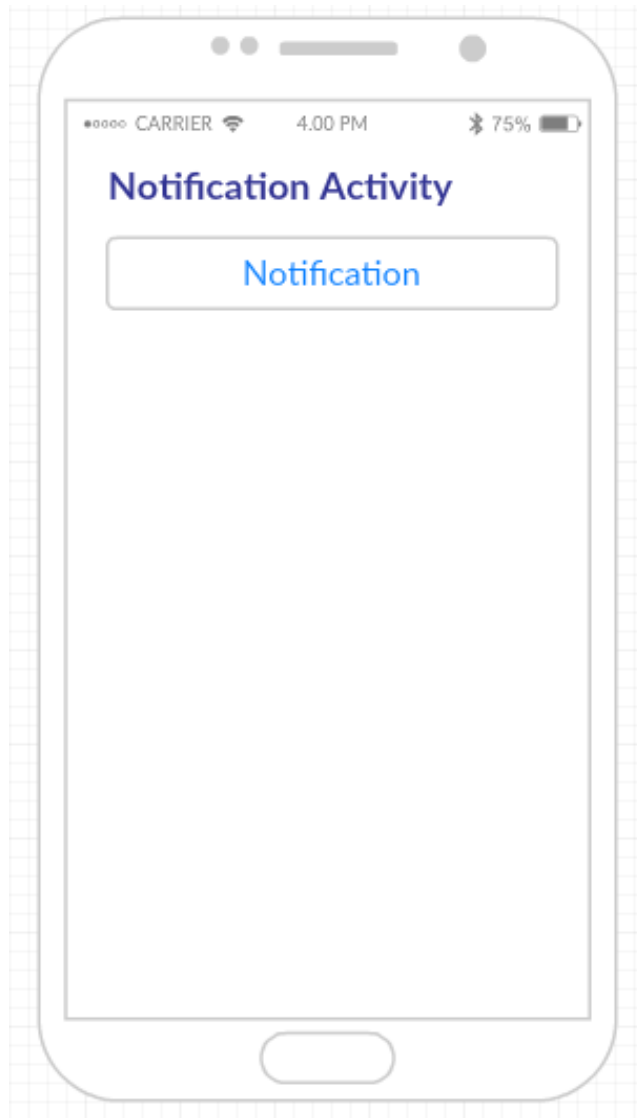
AddActivity Wireframe:

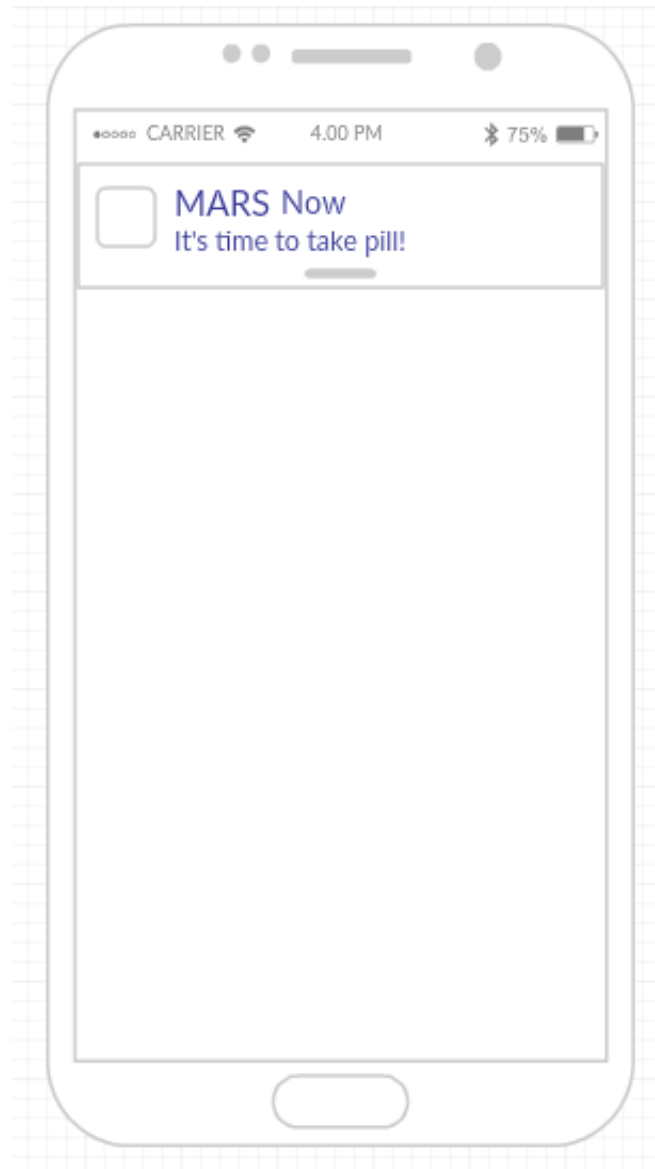
The wireframe illustrates a mobile application interface for adding a new activity. The screen is titled "Add Activity" and features a status bar at the top with indicators for signal strength, carrier, time (4:00 PM), and battery level (75%). The form includes the following elements:

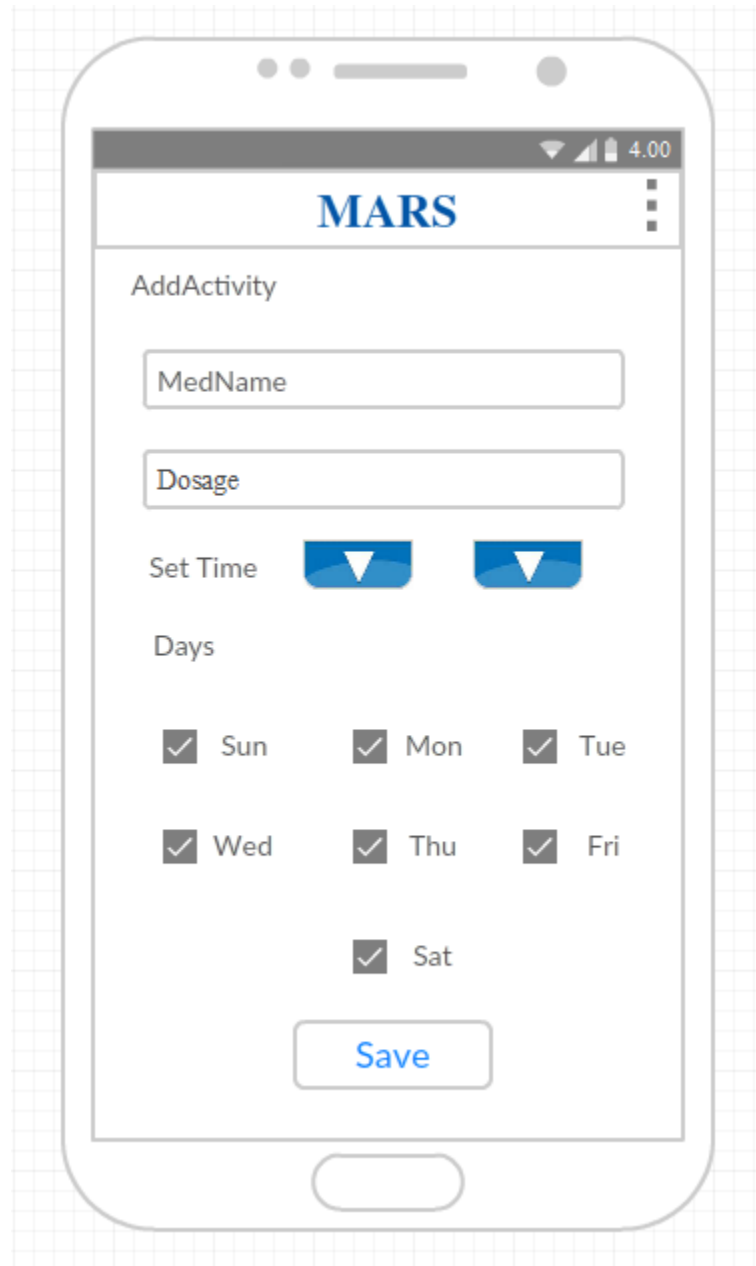
- Medicine Name:** A text input field.
- Dosage:** A text input field.
- From Date:** A date picker with three dropdown menus.
- To Date:** A date picker with three dropdown menus.
- Set Time:** A time picker with three dropdown menus.
- Day:** A list of days of the week, each with an unchecked checkbox:
 - ☐ Sunday
 - ☐ Monday
 - ☐ Tuesday
 - ☐ Wednesday
 - ☐ Thursday
 - ☐ Friday
 - ☐ Saturday
- Save:** A button to submit the form.

UpdateActivity Wireframe:

The wireframe illustrates the 'Update Activity' screen within a mobile application. The screen is set against a light gray grid background. At the top, a status bar shows 'CARRIER', signal strength, time '4:00 PM', and battery level '75%'. Below the status bar, the title 'Update Activity' is displayed in a bold, dark blue font, accompanied by an 'Edit' button in a light blue box. The form contains several input fields: 'Medicine Name', 'Dosage', and 'Medicine Type', each with a corresponding text input box. Below these are three date and time selection fields: 'From Date', 'To Date', and 'Set Time', each represented by a 3x3 grid of buttons with downward arrows. A 'Day' section follows, featuring a list of days from Sunday to Saturday, each preceded by an unchecked checkbox. At the bottom of the form, there are two buttons: 'Update' and 'Delete', both in light blue boxes. The entire form is enclosed in a rounded rectangle with a thin gray border.

NotificationActivity Wireframe:

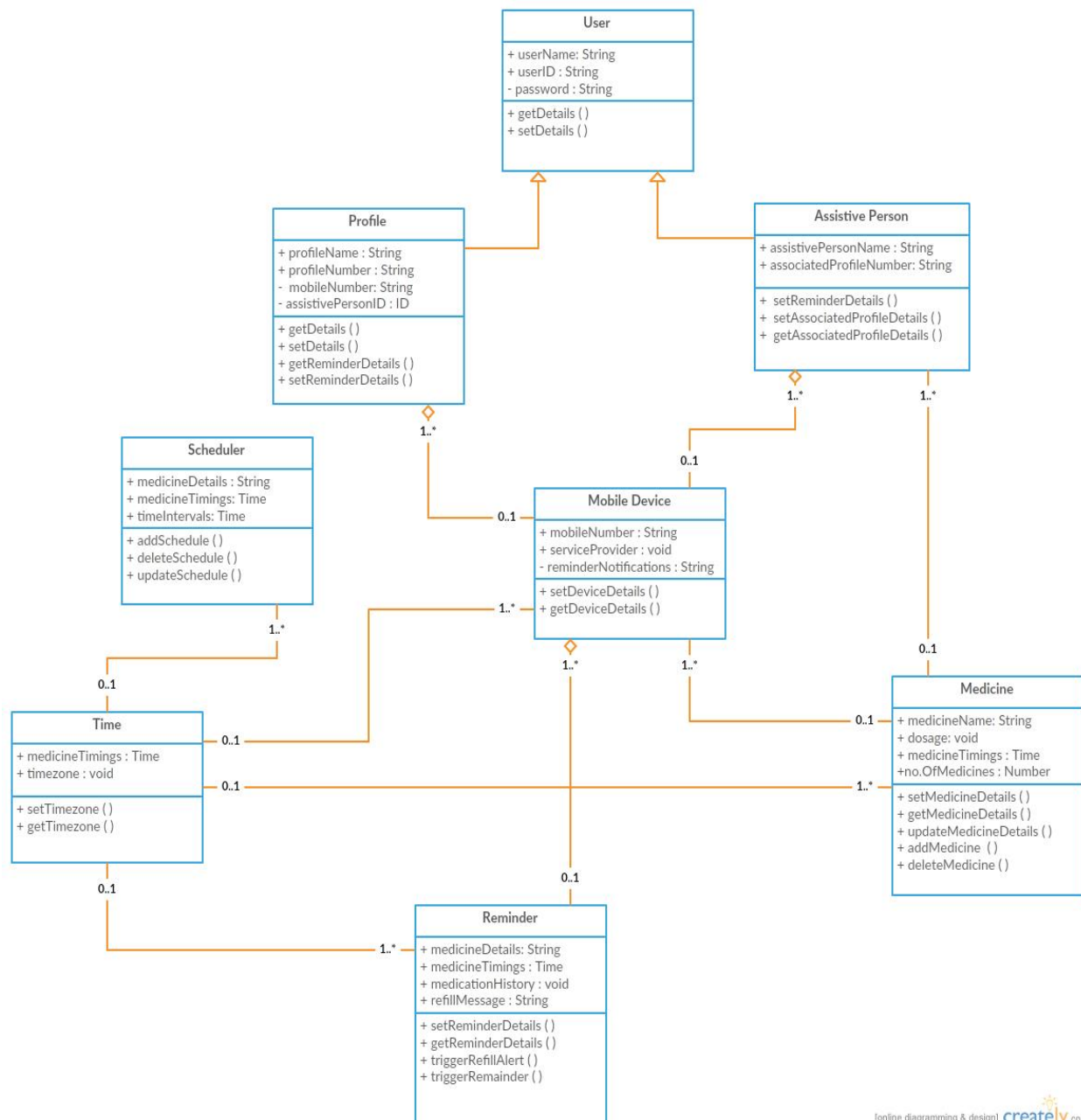


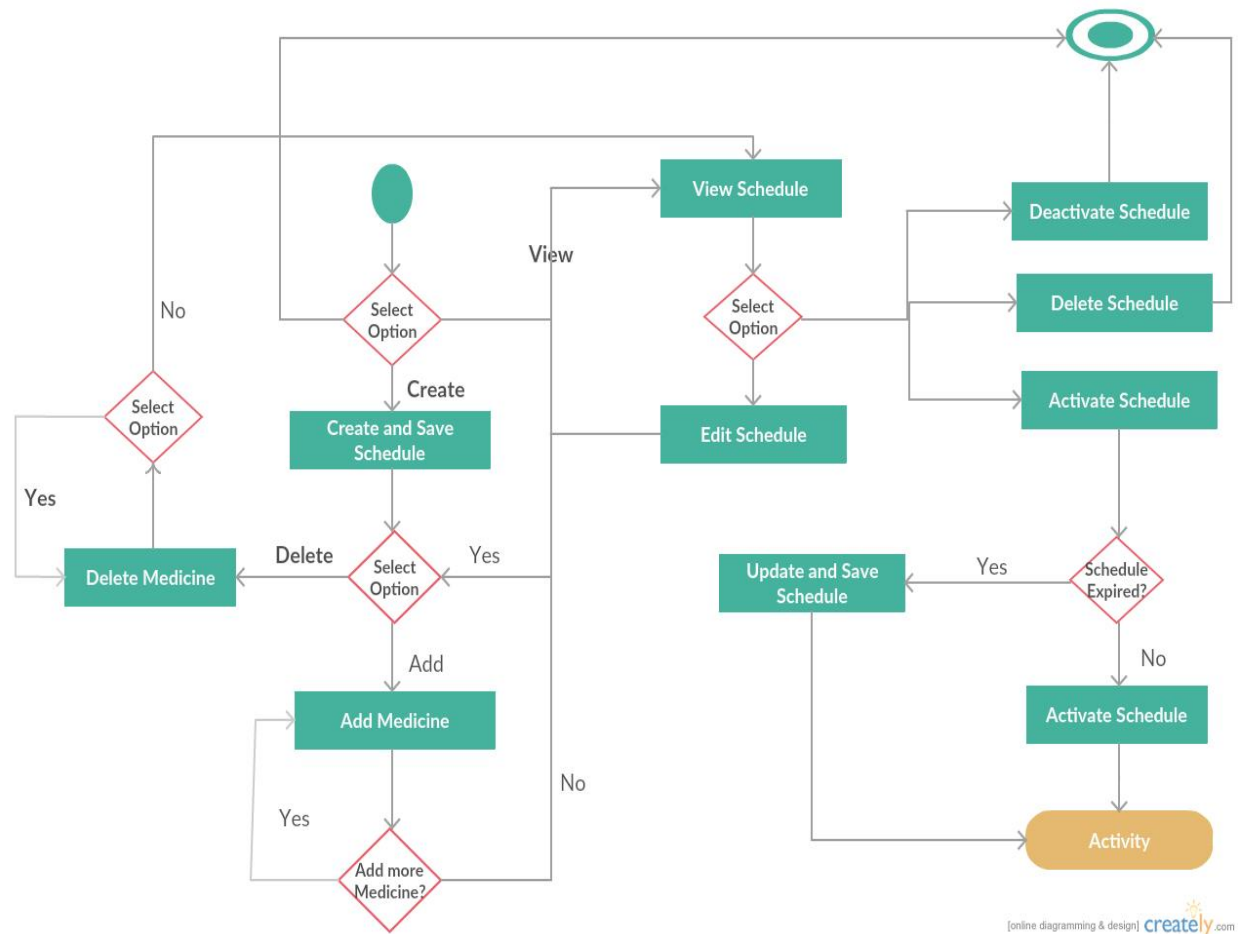
Third Increment:**Updated the AddActivity and UpdateActivity Wireframes:**

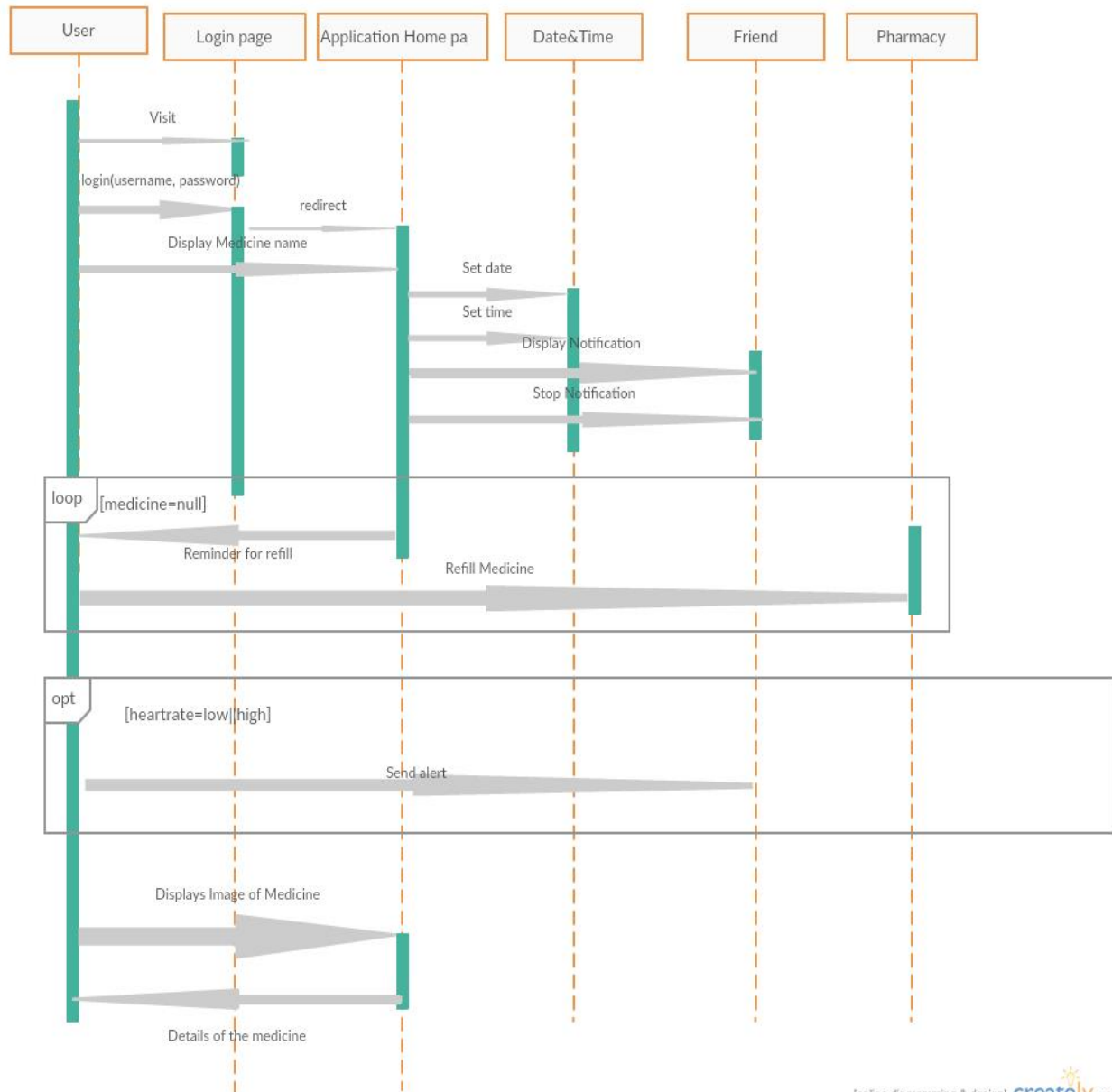
The image shows a mobile application interface for 'MARS'. The app is running on a device with a status bar at the top showing signal strength, battery level, and the time 4:00. The app's title 'MARS' is displayed in a blue serif font at the top of the screen, next to a three-dot menu icon. Below the title, the section is labeled 'UpdateActivity'. It contains two text input fields: 'MedName' and 'Dosage'. Below these fields is a 'Set Time' label followed by two blue dropdown menu icons. Underneath is a 'Days' label, followed by seven checkboxes, each with a day of the week: Sun, Mon, Tue, Wed, Thu, Fri, and Sat. All checkboxes are currently checked. At the bottom of the form are two buttons: 'Update' and 'Delete', both with blue text. The entire interface is set against a light gray grid background.

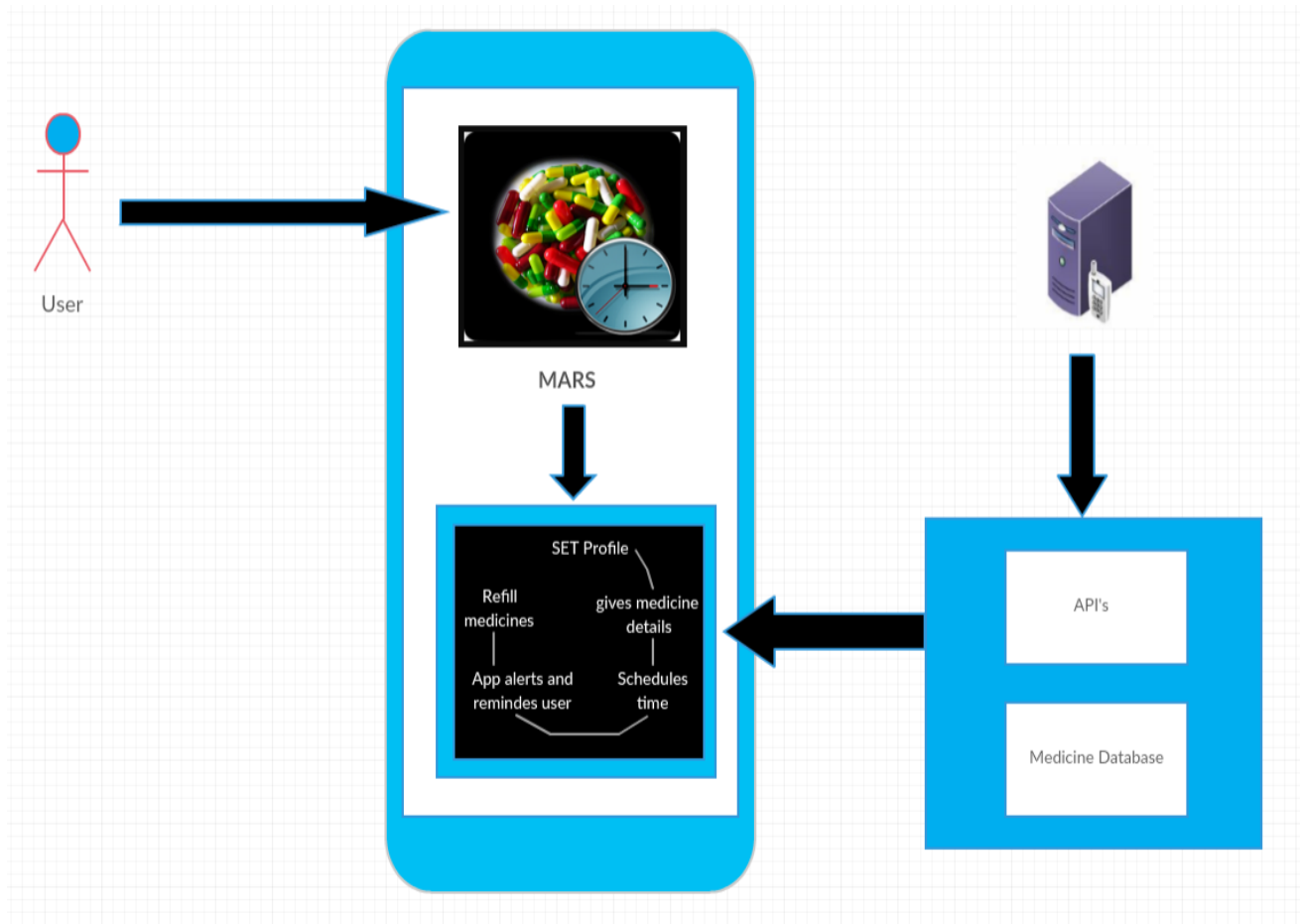
First Increment(UML):

Class Diagram:



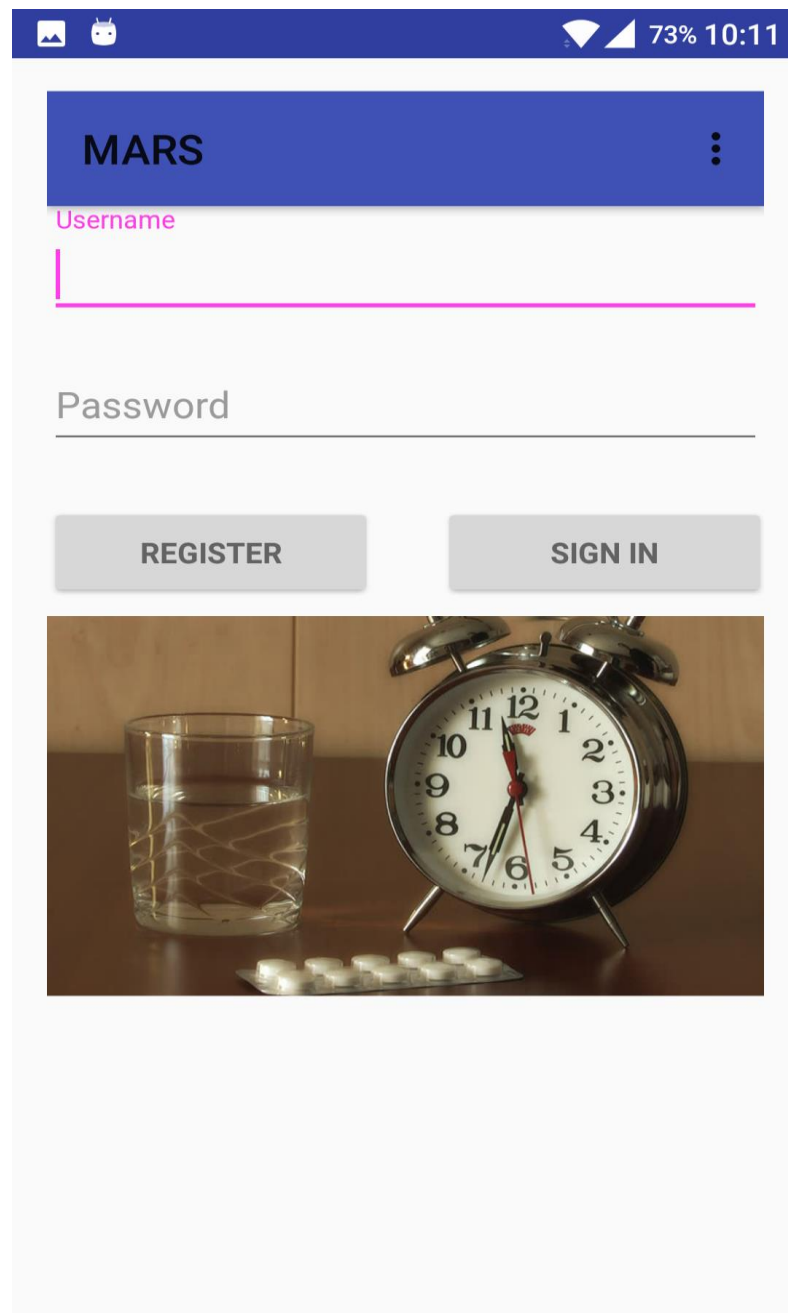
Activity Diagram:

Sequence Diagram:

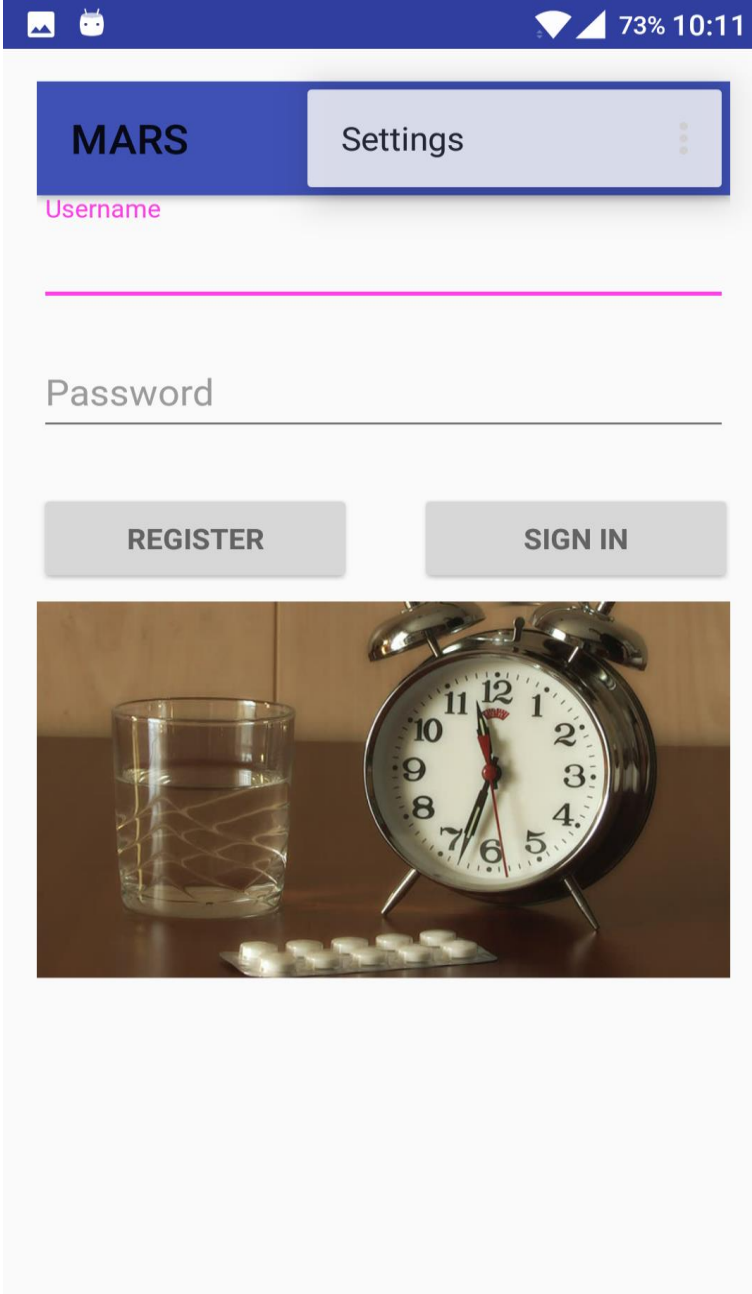
Architecture Diagram:

Previous Implementations

Login Screen in Android:



Login Screen with Settings:

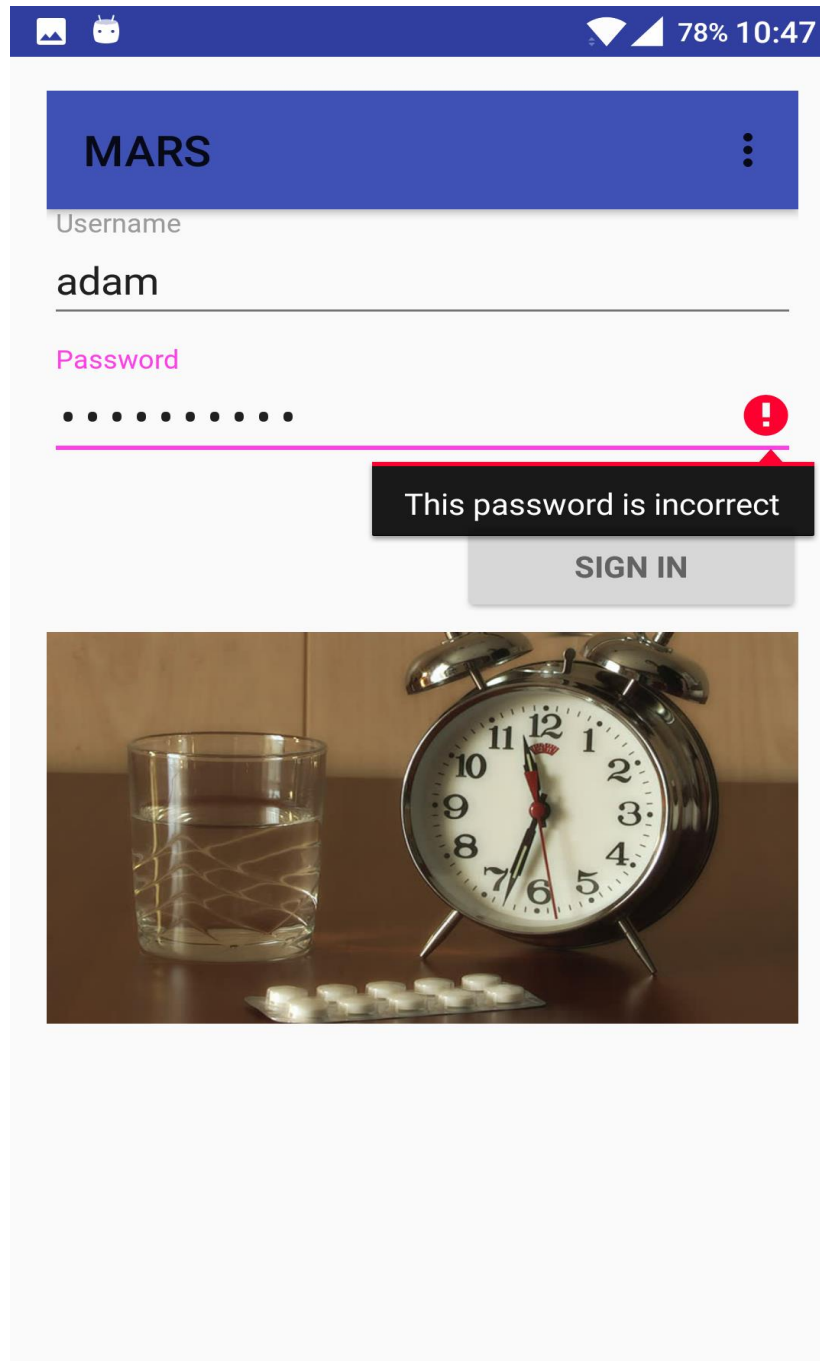


The image shows a mobile application interface for a login screen. At the top, there is a dark blue header bar with a status bar on top showing icons for a picture, a robot, Wi-Fi, and 73% battery at 10:11. Below the header, there is a blue bar with the text "MARS" in white. To the right of "MARS" is a light blue button labeled "Settings" with three dots to its right. Below the blue bar, there is a pink label "Username" followed by a pink horizontal line. Below this is a grey label "Password" followed by a grey horizontal line. Below the password field, there are two grey buttons: "REGISTER" and "SIGN IN". Below the buttons, there is a photograph of a glass of water, a silver alarm clock, and a blister pack of white pills on a wooden surface.

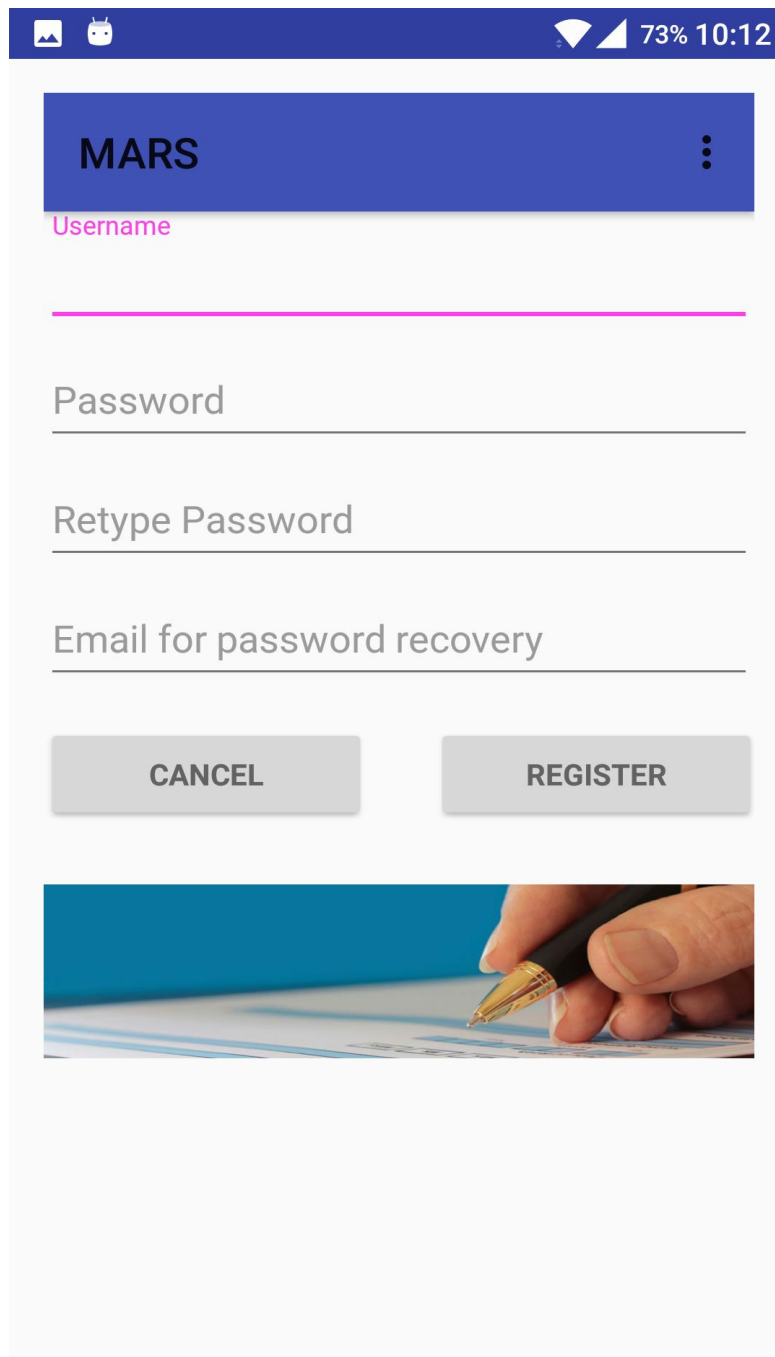
Login Screen when NO username is entered:

The screenshot displays a mobile application interface for a login screen. At the top, a dark blue header bar contains the word "MARS" in white, followed by a vertical ellipsis menu icon. Below the header, there are two input fields. The first field is labeled "Username" in pink text and is currently empty. A red exclamation mark icon is positioned to the right of this field. The second field is labeled "Password" in gray text and contains five dots. A black tooltip with the text "This field is required" is displayed over the password field. Below the input fields is a gray button labeled "SIGN IN". At the bottom of the screen, there is a photograph showing a glass of water, a silver alarm clock, and a blister pack of white pills.

Login Screen when password entered is incorrect:



Registration Screen in Android:



The image shows a registration screen for an Android application named "MARS". The screen has a blue header bar with the app name "MARS" and a menu icon (three vertical dots) on the right. Below the header, there are four text input fields: "Username" (with a pink underline), "Password", "Retype Password", and "Email for password recovery". At the bottom, there are two buttons: "CANCEL" and "REGISTER". Below the buttons, there is a small image of a hand holding a pen, writing on a document.

MARS ⋮


Username

Password

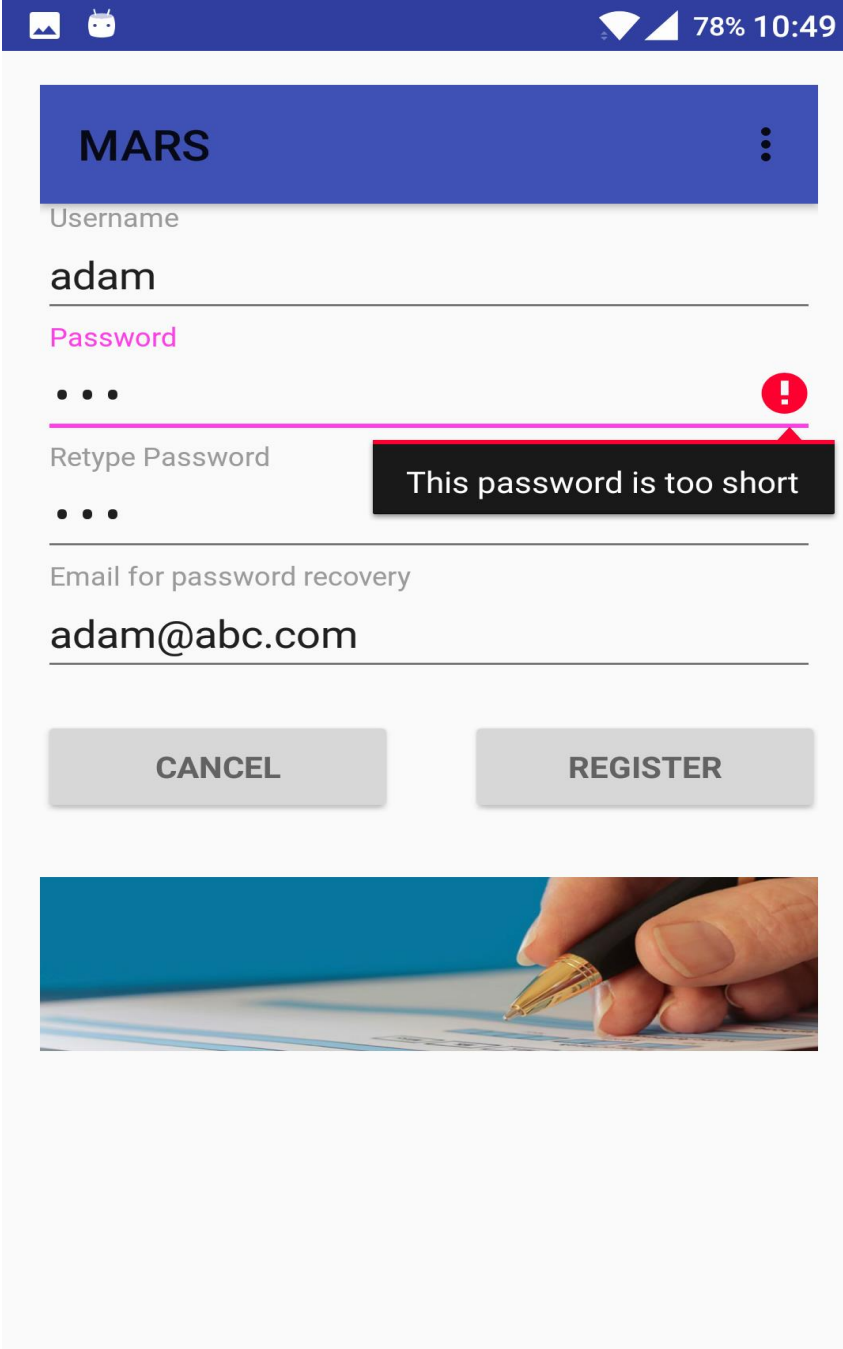
Retype Password

Email for password recovery

CANCEL REGISTER



Registration Screen when password is short:



The image shows a mobile application registration screen for an app named "MARS". The screen has a blue header with the app name and a menu icon. Below the header, there are four input fields: "Username" (containing "adam"), "Password" (containing three dots), "Retype Password" (containing three dots), and "Email for password recovery" (containing "adam@abc.com"). A red error message "This password is too short" is displayed in a black box over the password field. A red exclamation mark icon is also present next to the password field. At the bottom, there are two buttons: "CANCEL" and "REGISTER". Below the buttons, there is a banner image showing a hand holding a pen writing on a document.

MARS

Username
adam

Password
...

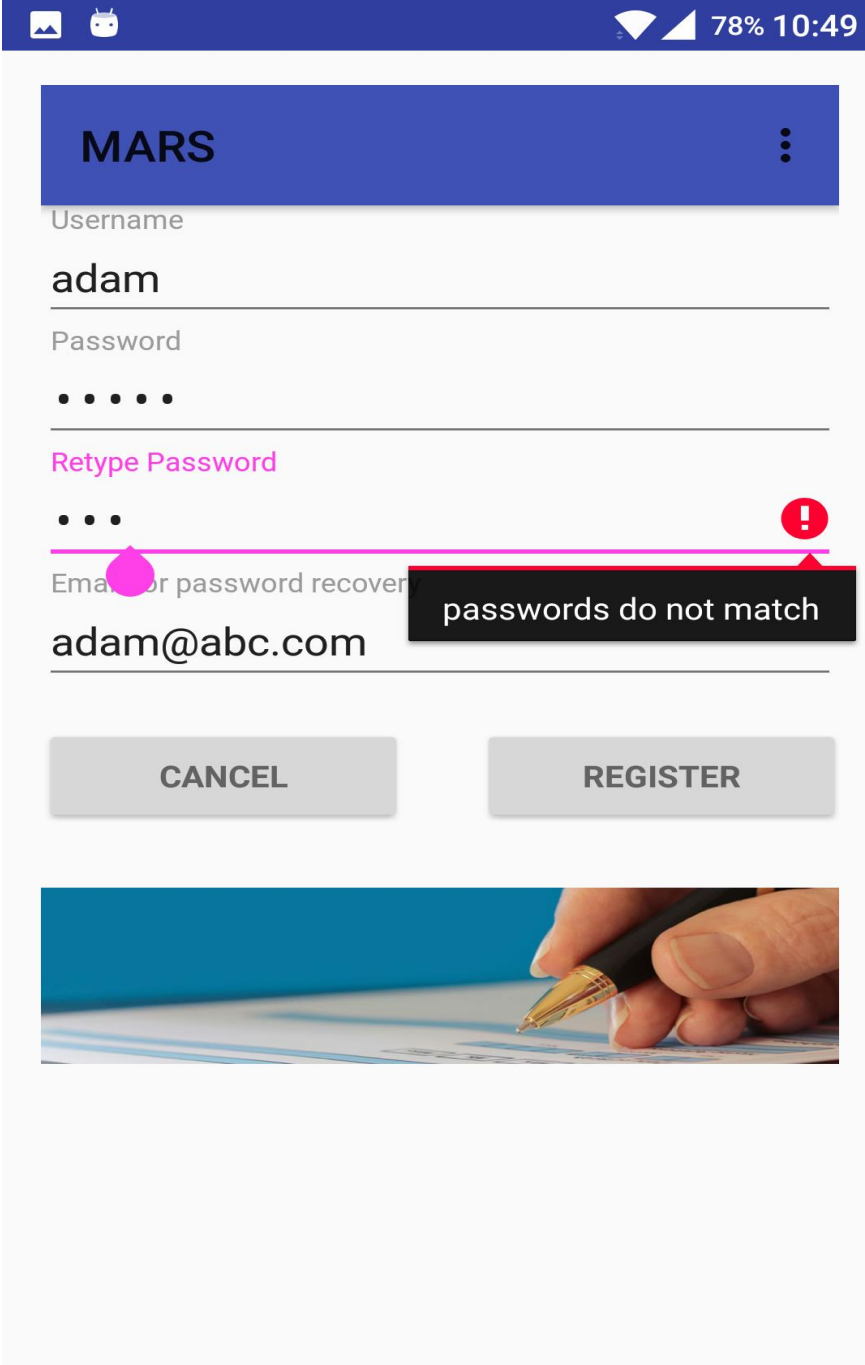
Retype Password
...

Email for password recovery
adam@abc.com

CANCEL **REGISTER**

This password is too short

Registration Screen when passwords don't match:



The image shows a mobile application registration screen for an app named 'MARS'. The screen has a blue header with the app name and a menu icon. Below the header, there are four input fields: 'Username' (containing 'adam'), 'Password' (containing five dots), 'Retype Password' (containing three dots), and 'Email for password recovery' (containing 'adam@abc.com'). A red exclamation mark icon is positioned above the 'Retype Password' field. A black error message box with white text 'passwords do not match' is overlaid on the right side of the screen, pointing to the password fields. At the bottom, there are two buttons: 'CANCEL' and 'REGISTER'. Below the buttons is a banner image showing a hand holding a pen over a document.

MARS

Username
adam

Password
.....

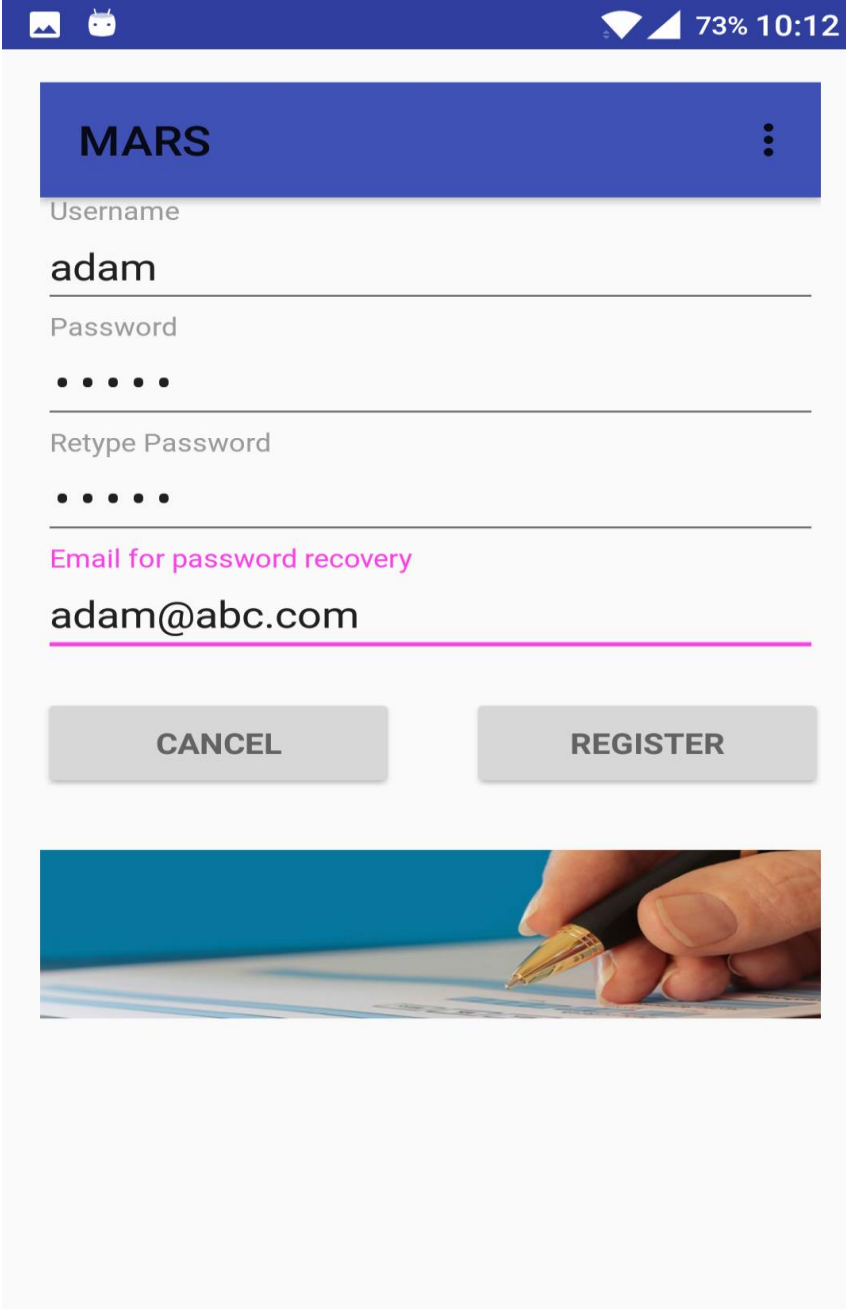
Retype Password
...

Email for password recovery
adam@abc.com

passwords do not match

CANCEL REGISTER

Registration Screen with email for password recovery:



The image shows a mobile application registration screen for an app named "MARS". The screen has a blue header bar with the app name "MARS" and a menu icon. Below the header, there are four input fields: "Username" with the value "adam", "Password" with masked characters, "Retype Password" with masked characters, and "Email for password recovery" with the value "adam@abc.com". The email field is highlighted with a pink underline. At the bottom, there are two buttons: "CANCEL" and "REGISTER". Below the buttons is a banner image showing a hand holding a pen over a document.

MARS


Username
adam

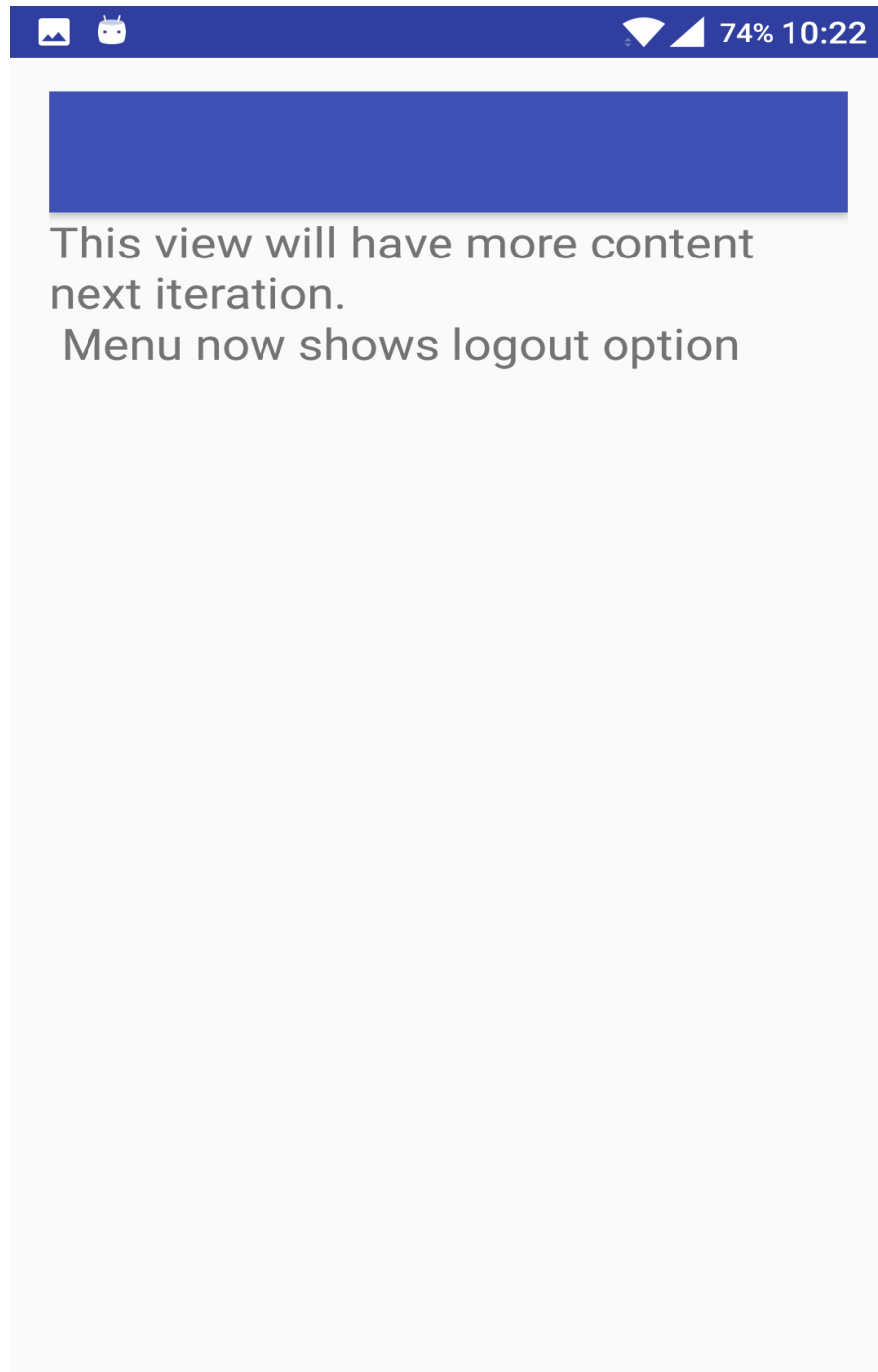
Password
• • • • •

Retype Password
• • • • •

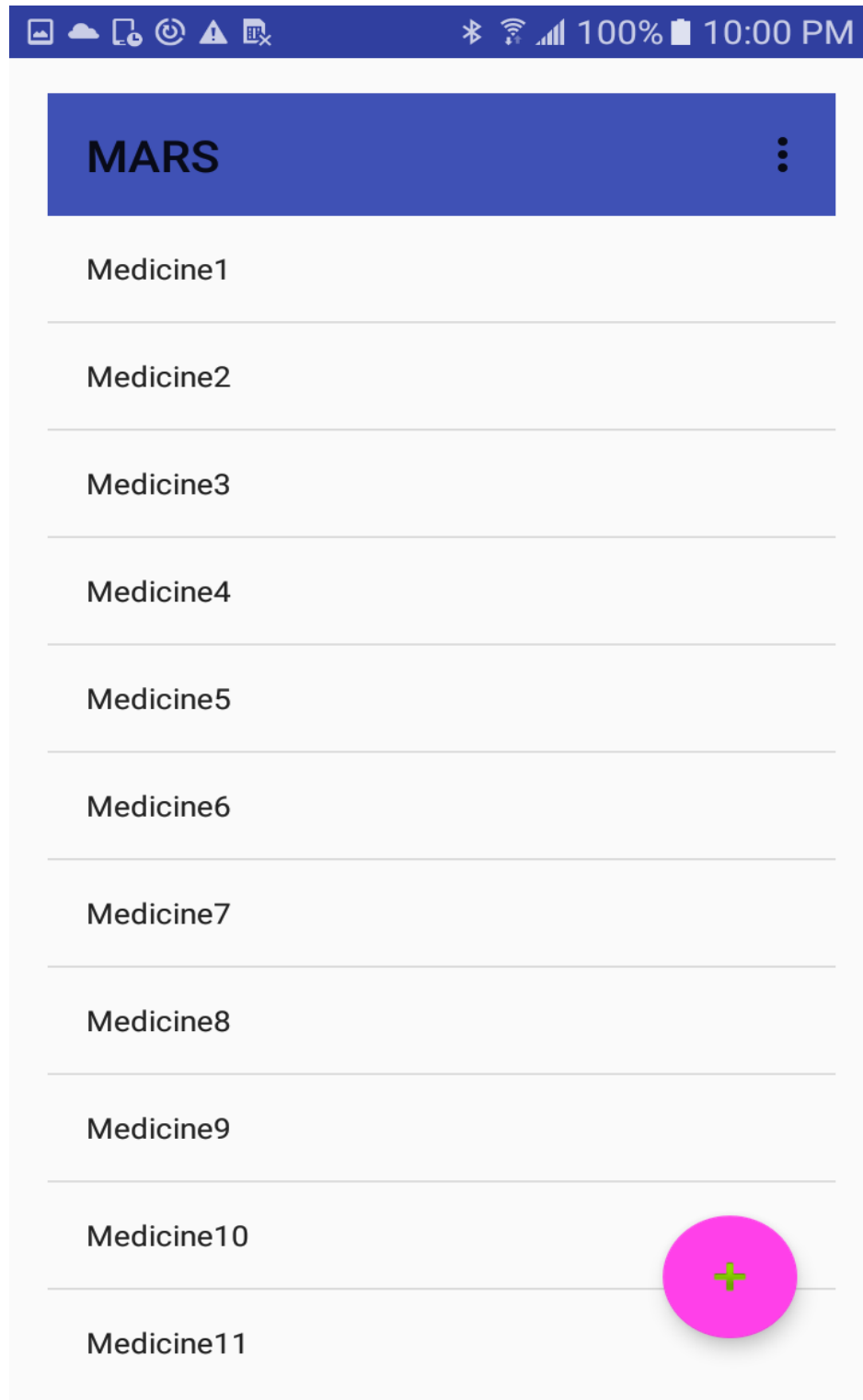
Email for password recovery
adam@abc.com

CANCEL **REGISTER**



MainActivity Screen in Android before Increment-2 implementation:

MainActivity Screen in Android:



AddActivity Screen in Android:

MARS ⋮

MedName

Dosage

From Date

To Date

Set Time

☐ Sunday

☐ Monday

☐ Tuesday

☐ Wednesday

☐ Thursday

☐ Friday

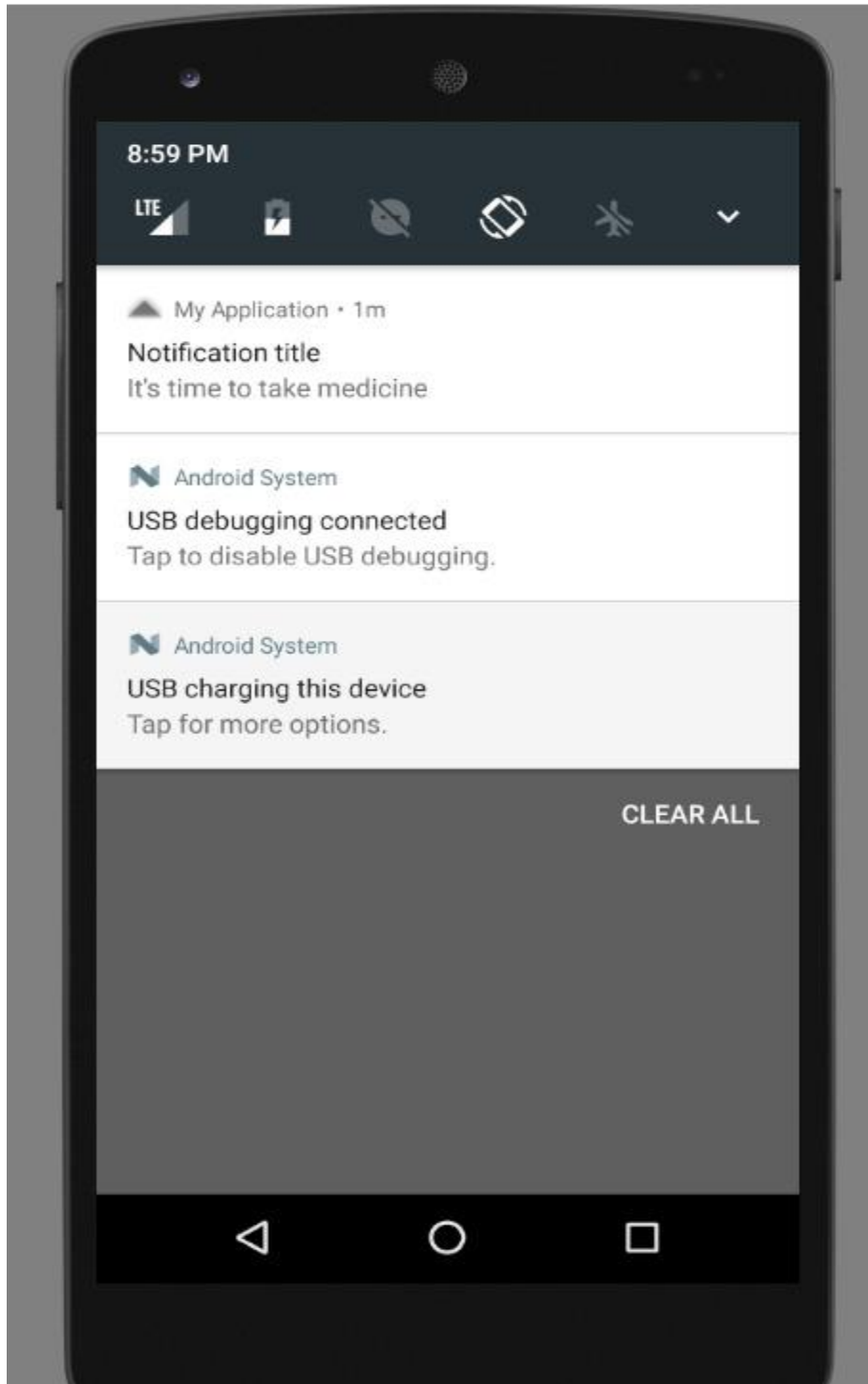
☐ Saturday

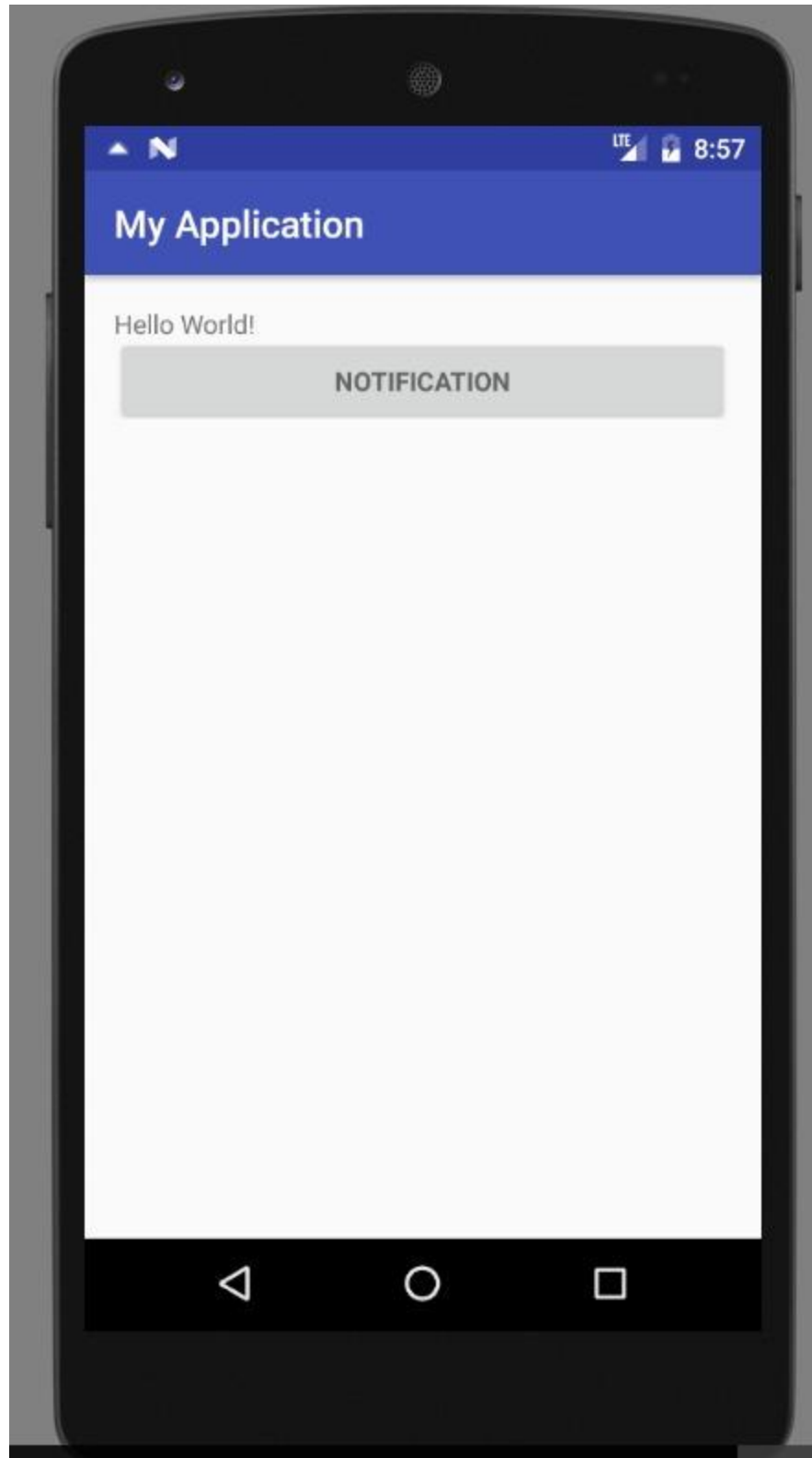
SAVE

UpdateActivity Screen in Android:

The screenshot displays the 'UpdateActivity' screen of an Android application. The interface features a blue header bar with the text 'MARS' and a vertical ellipsis menu icon. Below the header, there is a grey button labeled 'EDIT'. The main content area contains several input fields: 'Med Name' (with a pink underline), 'Dosage', and 'Medicine type'. Below these fields are three rows of date and time pickers, each consisting of a label and three dropdown buttons: 'From Date', 'To Date', and 'Set Time'. At the bottom of the screen, there are two large grey buttons: 'UPDATE' and 'DELETE'.

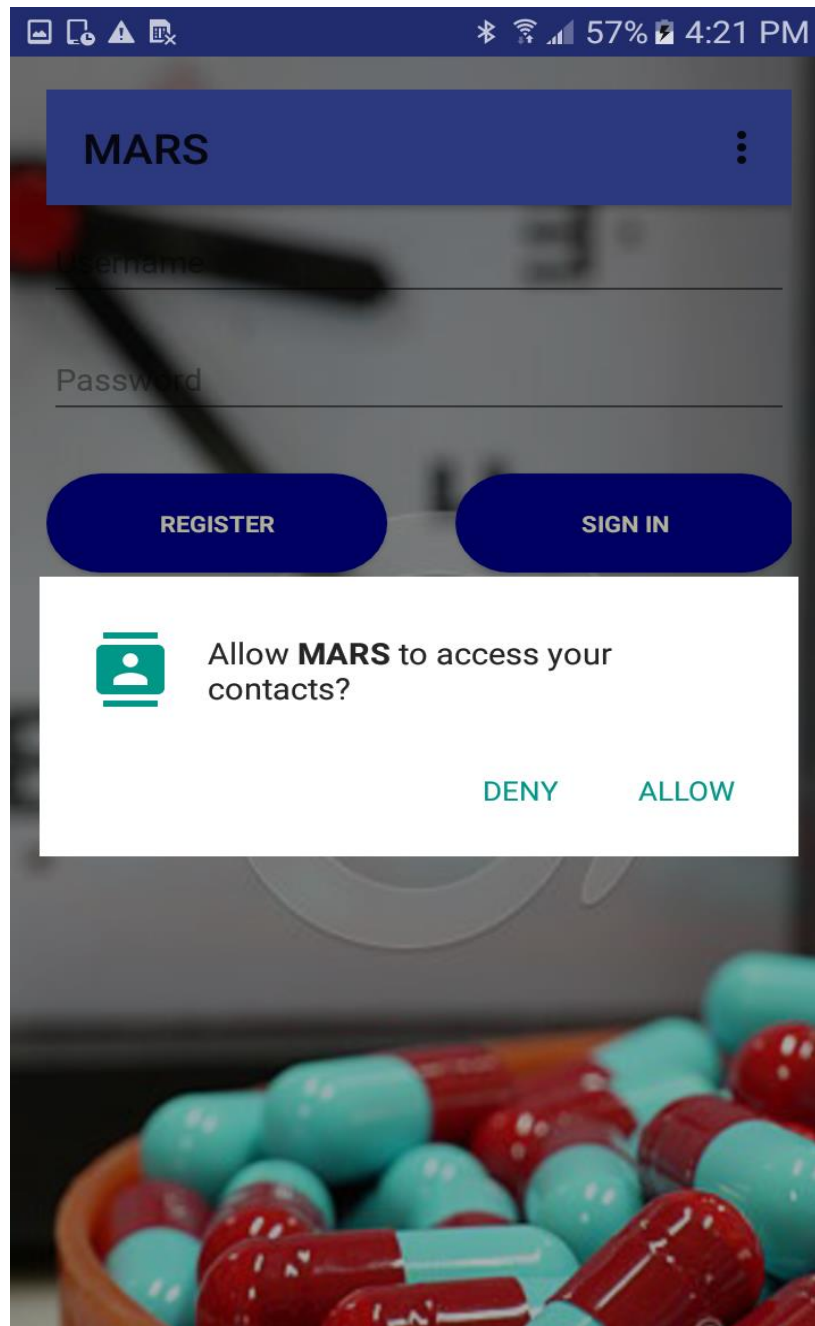
NotificationActivity Screen in Android:



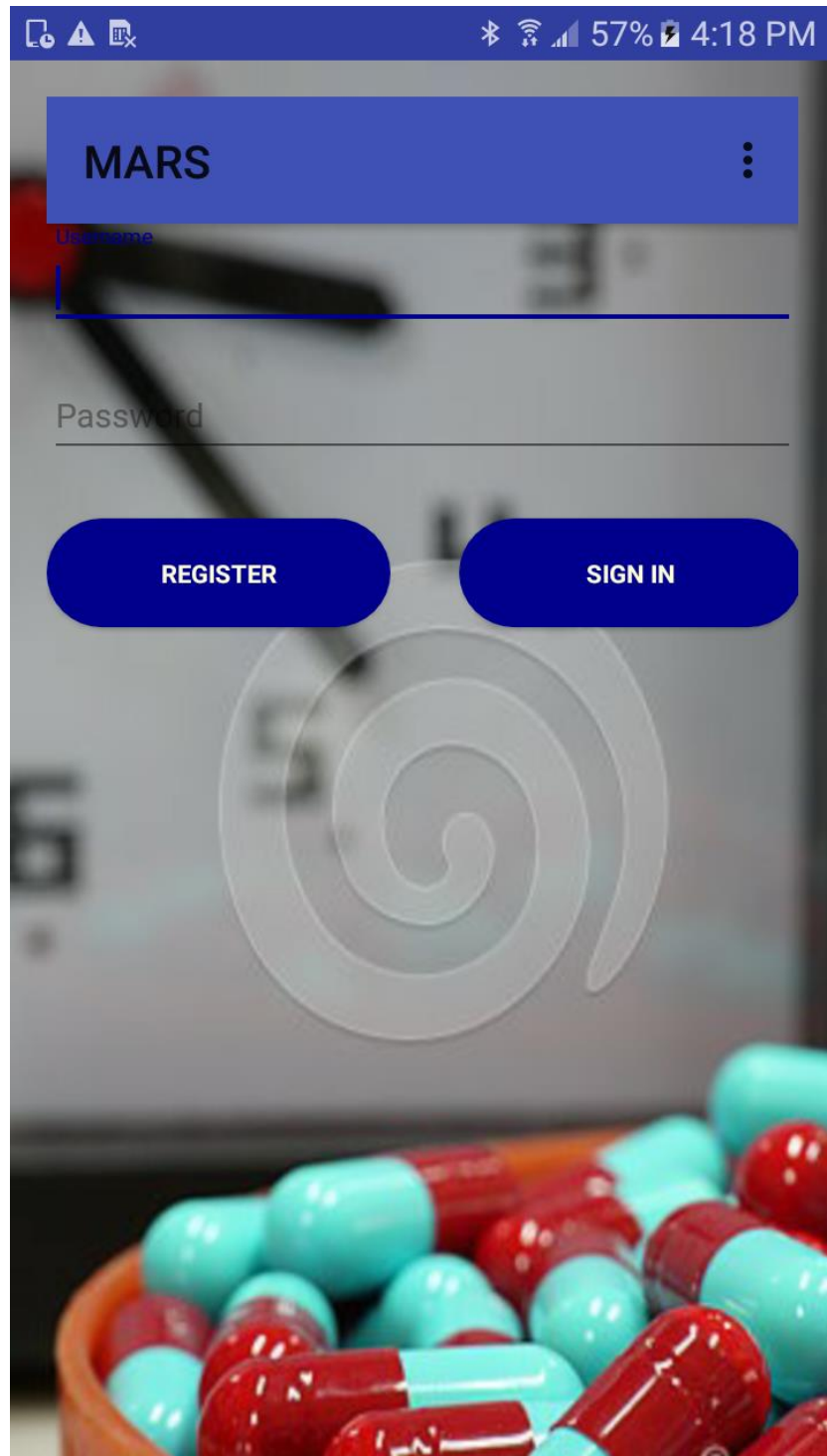


Third Increment Implementation

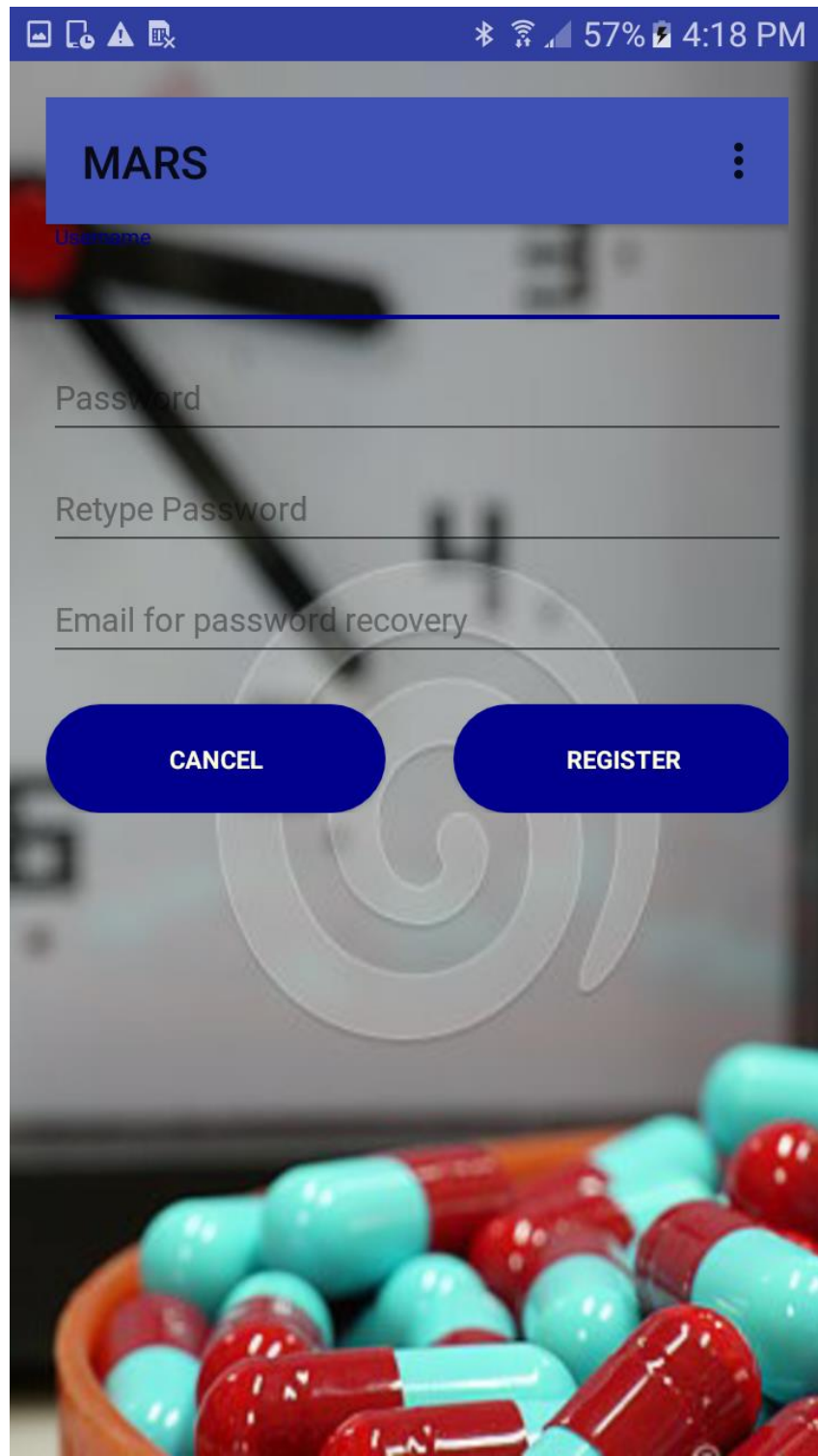
Contact Accessing Screen in Android:

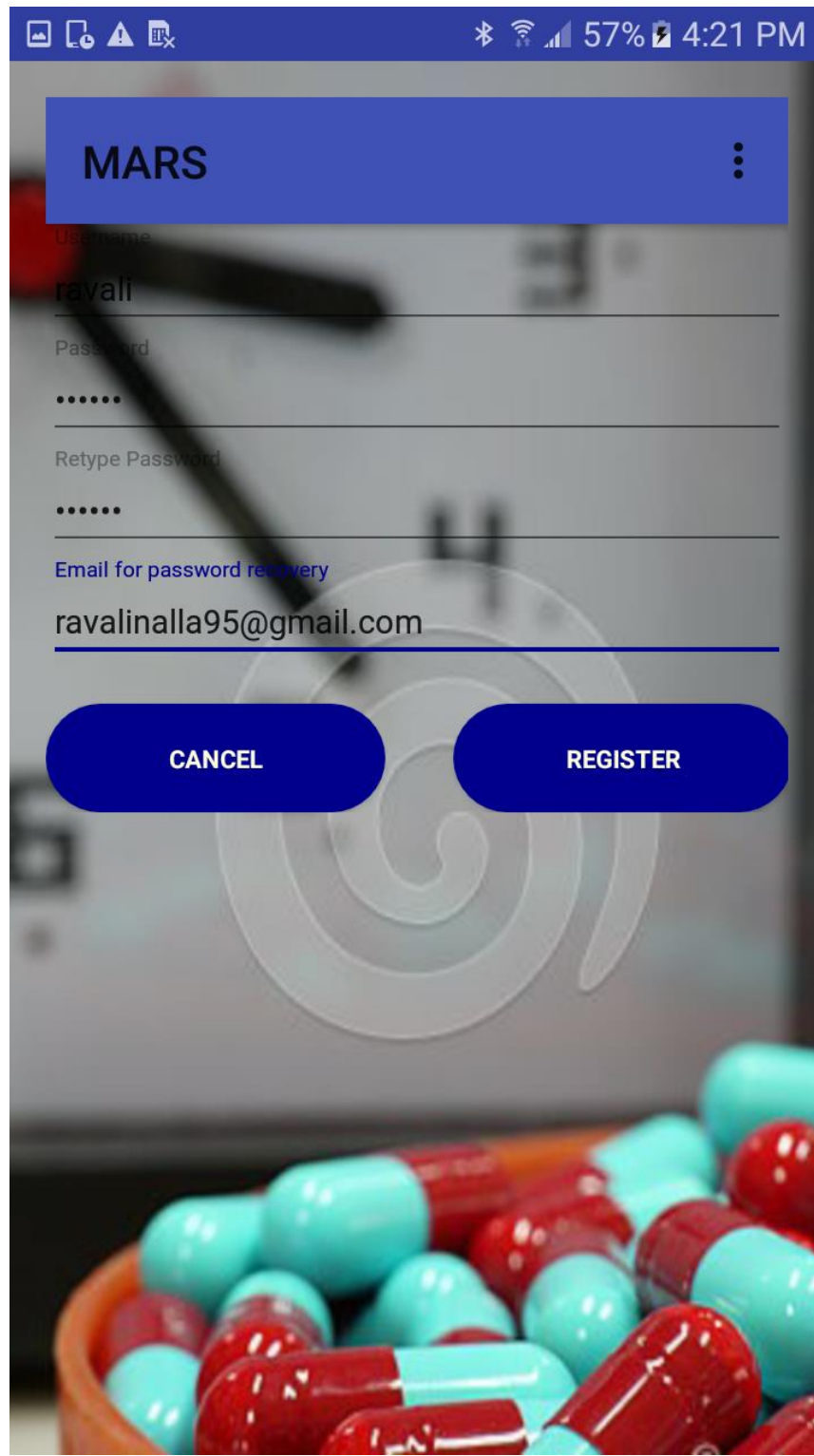


LoginActivity Screen in Android:



RegisterActivity Screen in Android:





The image shows a mobile application interface for registration. At the top, a blue header bar contains the text "MARS" and a three-dot menu icon. Below the header, the background is a blurred image of a clock and a bowl of red and blue capsules. The registration form consists of several input fields: a "Username" field with the text "ravali", a "Password" field with six dots, a "Retype Password" field with six dots, and an "Email for password recovery" field with the text "ravalinalla95@gmail.com". At the bottom of the form, there are two blue buttons: "CANCEL" and "REGISTER".

MARS

Username
ravali

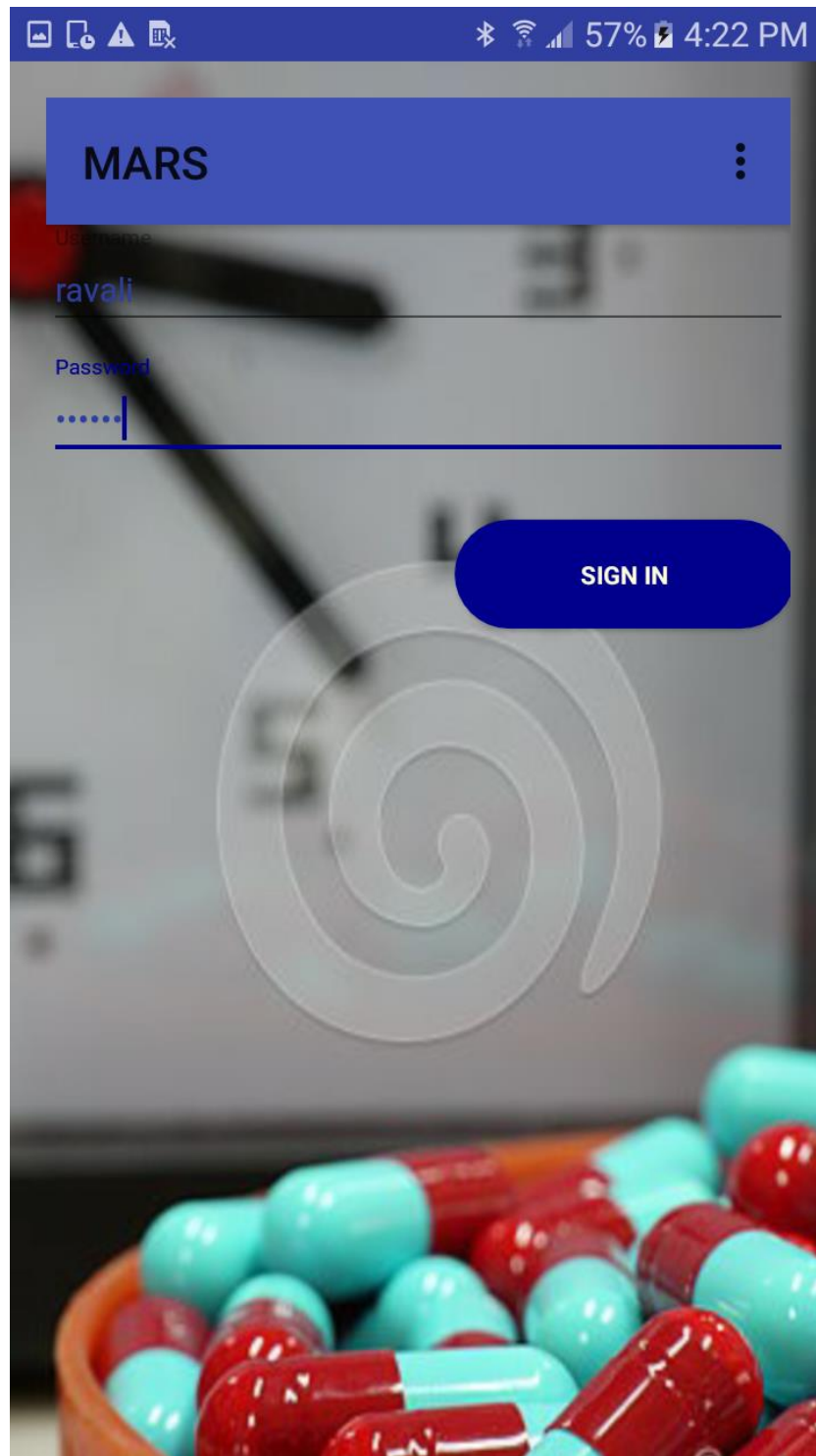
Password
.....

Retype Password
.....

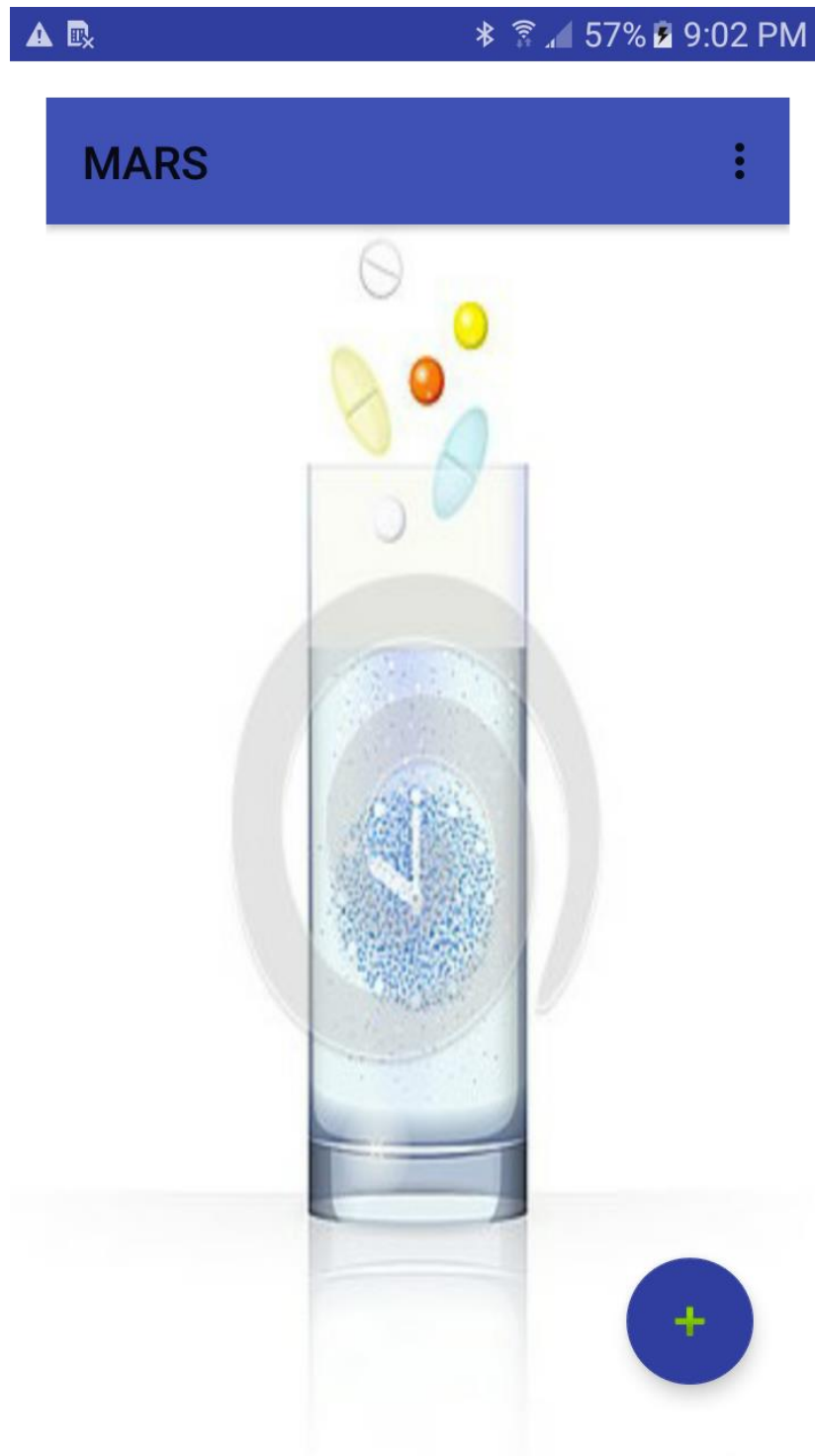
Email for password recovery
ravalinalla95@gmail.com

CANCEL **REGISTER**

LoginActivity Screen in Android:



MainActivity Screen in Android:



AddActivity Screen in Android:

MARS

MedName

Dosage

Set Time

01 00 am

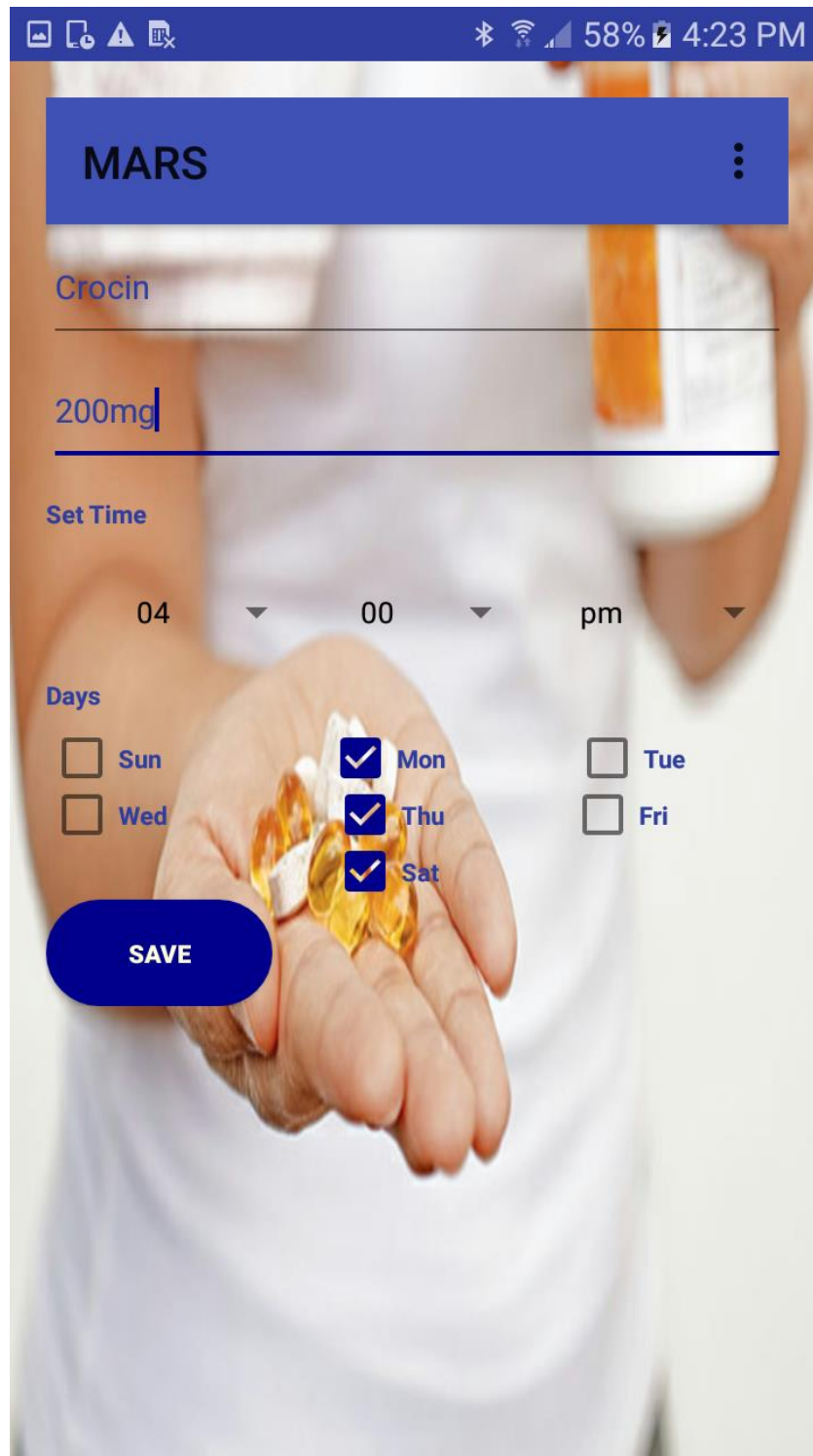
Days

☐ Sun ☐ Mon ☐ Tue

☐ Wed ☐ Thu ☐ Fri

☐ Sat

SAVE



The image shows a mobile application interface for managing medication. The background is a blurred photo of a person in a white lab coat holding a pill bottle and a handful of yellow capsules. The app has a blue header with the text "MARS" and a menu icon. Below the header, there is a text input field containing "Crocicn", followed by another text input field containing "200mg". Below these fields is a "Set Time" section with three dropdown menus showing "04", "00", and "pm". At the bottom, there is a "Days" section with checkboxes for each day of the week: Sun, Mon, Tue, Wed, Thu, Fri, and Sat. The checkboxes for Mon, Thu, and Sat are checked. A blue "SAVE" button is located at the bottom left of the form.

MARS

Crocicn

200mg

Set Time

04 00 pm

Days

☐ Sun ☒ Mon ☐ Tue

☐ Wed ☒ Thu ☐ Fri

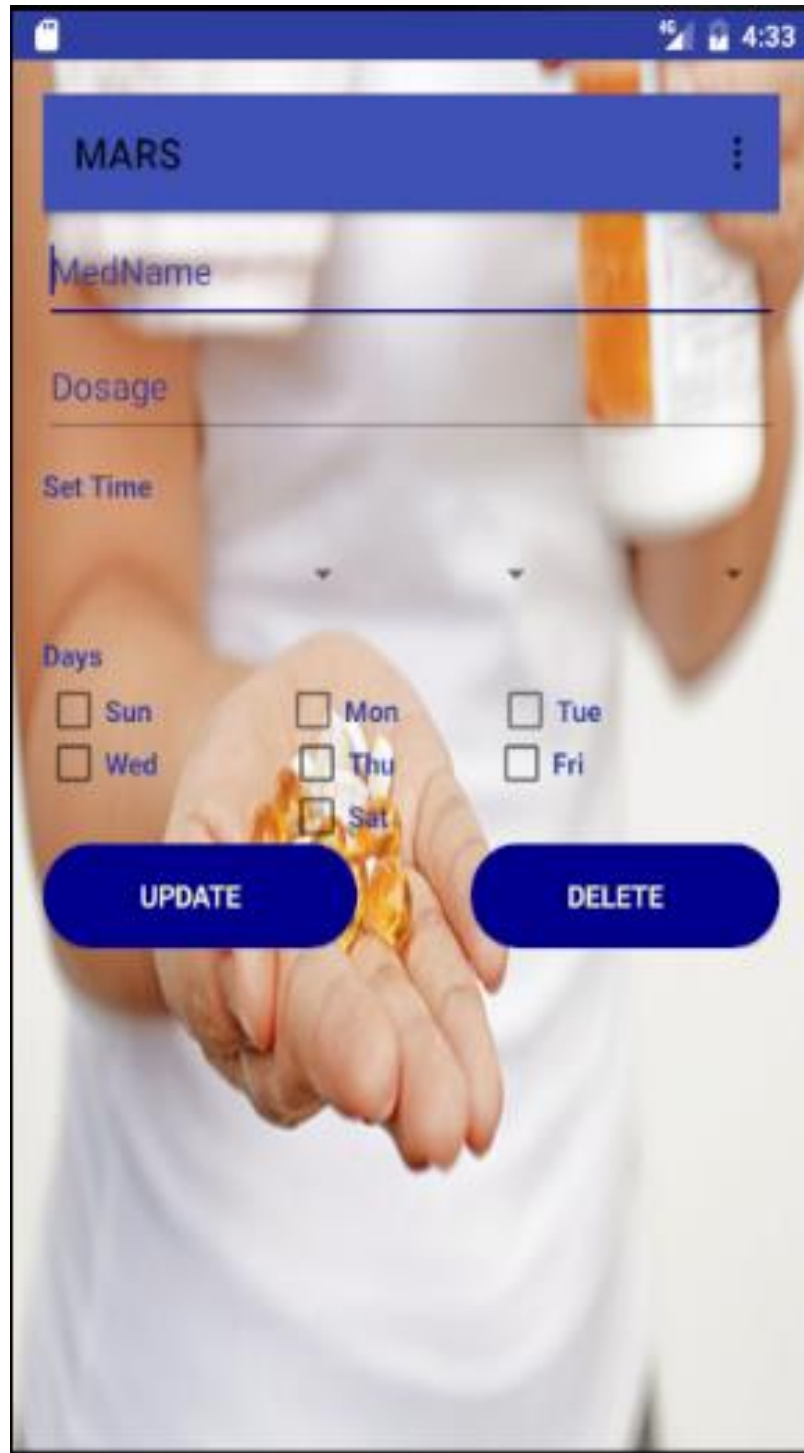
☒ Sat

SAVE

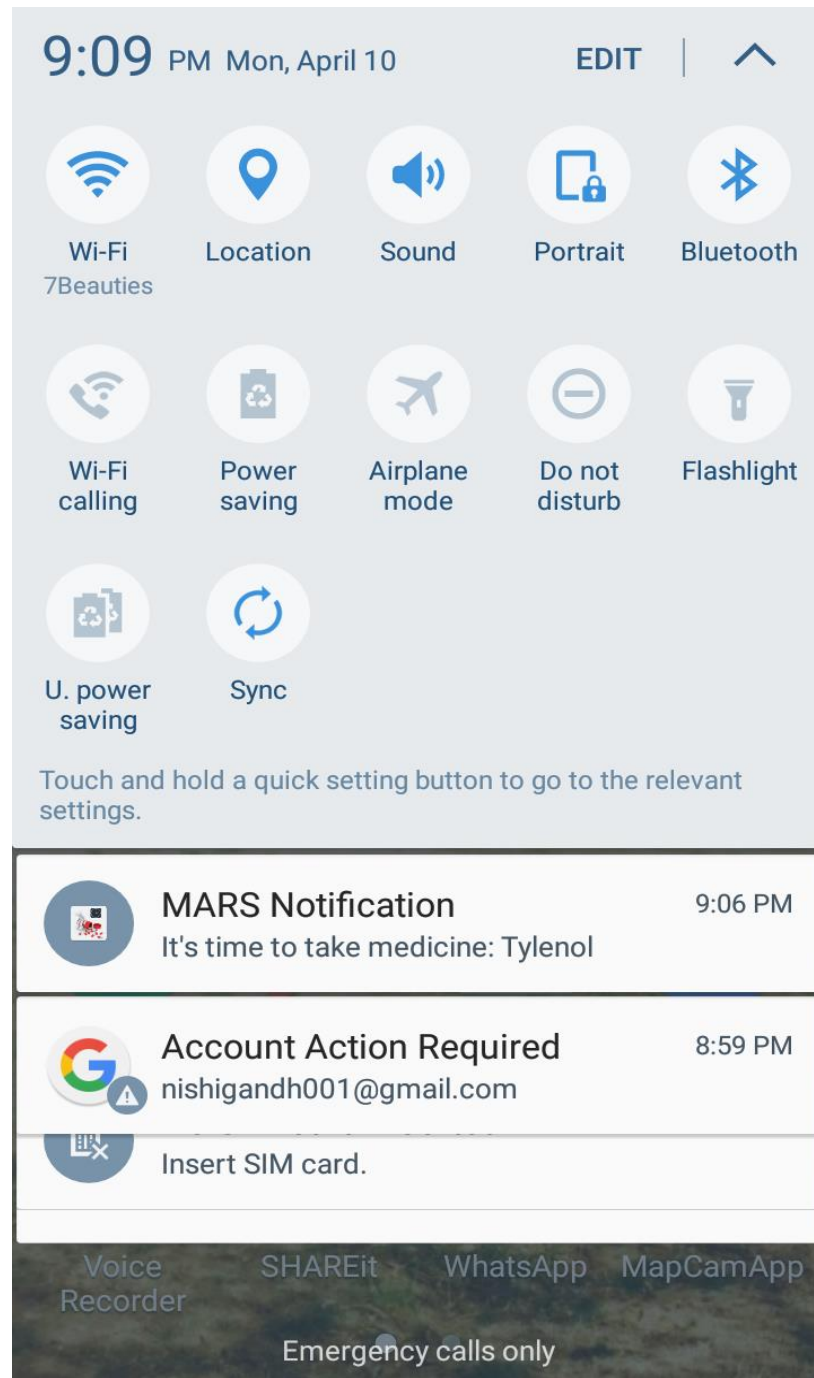
MainActivity Screen in Android:



UpdateActivity Screen in Android:



NotificationActivity Screen in Android:



Existing Services/API

MEDICINE REFILL:

MEDICINE INFORMATION RETRIEVAL

DailyMed API:

DailyMed provides high quality information about marketed drugs. This information includes FDA labels. This Web site provides health information providers and the public with a standard, comprehensive, up-to-date, look-up and download resource of medication content and labeling as found in medication package inserts. By using this API we can retrieve information related to a particular medicine.

URL: <https://www.healthdata.gov/dataset/dailymed>

Testing

Sr. No	Test Case	Description	Expected Output	Result
1.	Successful User Authentication	The user should login with username and password.	Successful Login	Pass
2.	Unsuccessful User Authentication	The user logs in with wrong username or password	Login unsuccessful with error-Invalid username or password	Pass
3.	Registration by new user	Admin accepts registration details from the user	Successful registration and transition to Login page	Pass
4.	Invalid Email ID	Invalid Email Id alert.	Error- Enter valid email address	Pass

Technologies Used

Implementation of Mobile Apps- Technology Used:

- XML
- CSS
- JavaScript
- Java

Tools Used:

- www.Creately.com
- Android SDK

Project Management

Issues:

pareshkasare / ASE_Project

Watch 0 Star 0 Fork 0

Code Issues 3 Pull requests 0 Boards Reports Projects 0 Wiki

Filters is:issue is:open Labels Milestones New issue

3 Open 9 Closed

Author	Labels	Projects	Milestones	Assignee	Sort
#12 opened 5 days ago by pareshkasare	enhancement	Iteration-3	In Progress		1
#11 opened 5 days ago by pareshkasare	enhancement	Iteration-3	In Progress		
#10 opened 5 days ago by pareshkasare	enhancement	Iteration-3	In Progress		

Closed Issues:

This repository Search Pull requests Issues Gist ToDo

pareshkasare / ASE_Project

Watch 0 Star 0 Fork 0

Code Issues 0 Pull requests 0 Boards Reports Projects 0 Wiki

Filters is:issue is:closed milestone:Iteration-3 Labels Milestones New issue

Clear current search query, filters, and sorts

0 Open 4 Closed

Author	Labels	Projects	Milestones	Assignee	Sort
#12 by pareshkasare was closed 2 minutes ago	enhancement	Iteration-3			1
#11 by pareshkasare was closed 2 minutes ago	enhancement	Iteration-3			
#10 by pareshkasare was closed 2 minutes ago	enhancement	Iteration-3			1
#9 by pareshkasare was closed 2 days ago	enhancement	Iteration-3			1

Burndown Chart:

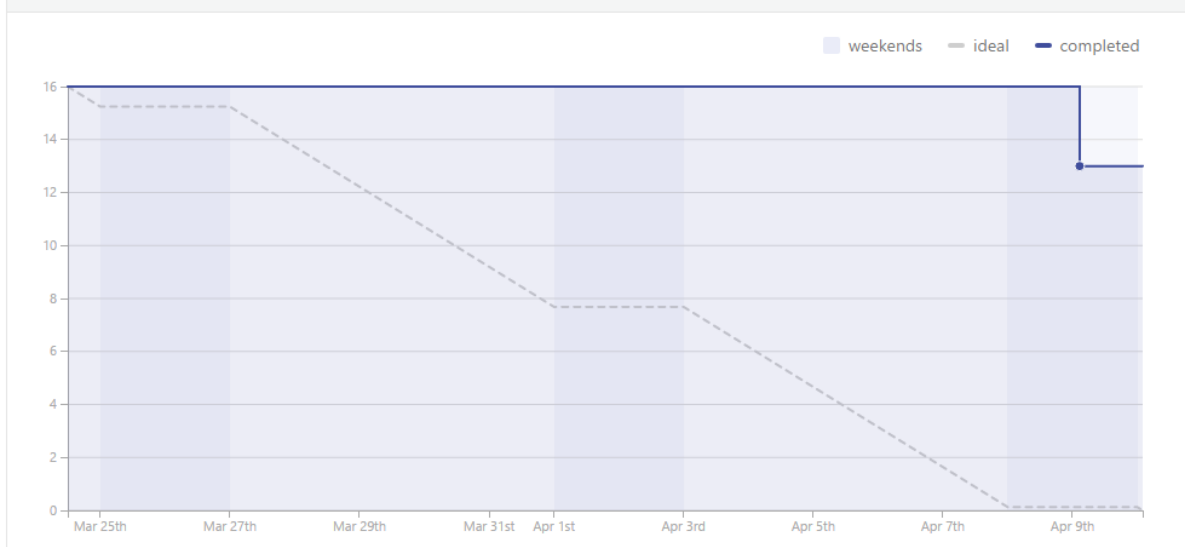
Iteration-3

[Edit Milestone](#)[Milestones](#)

API access for Image to text of medicine name API for medicine name search and autocomplete. Notification generation for selected days in a week. Update medicine information via update activity.

[Labels](#)[Hide Pull Requests](#)[Burn Pipelines](#)

Start: **Mar 24, 2017** [Edit](#) Due: **Apr 10th, 2017** [Edit](#)



Bibliography

<http://www.fda.gov/Drugs/ResourcesForYou/SpecialFeatures/ucm485545.htm>

<http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm164616.htm>

http://www.pfizer.com/health/senior_health/taking_medicines

<https://cloud.google.com/vision/>

<https://www.programmableweb.com/api/walgreens-pharmacy-prescription-refill>

<https://www.healthdata.gov/dataset/dailymed>