



# GenieCanHelp

**Mobile App**

**Functional Requirements Document**

Version	Description of Change	Author	Date
1.0	Specifiction Document for iPhone App Release	Saher Junaid	6.12.2017

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# **1. INTRODUCTION**

GenieCanHelp is an interactive and easy-to-use smartphone app to support patients along their cancer journey. An app that reduces unnecessary stress during stressful times and helps manage their routine. The aim is to provide an app that's different to those that are currently available in the market.

## ***Purpose***

GenieCanHelp app is already built for android phones and is slowly gaining popularity among its users. But iPhone users are currently deprived of experiencing its benefits. This app will be able to help manage personal information, appointments, contacts, notes, medicines, mood and lists.

## ***Scope***

The iPhone app will be available for iOS 9 or higher and will implement Google Analytics capability in it to develop future reporting revolving around different aspects of the app. E.g. Usage, user dynamics, popular sections etc

# **2. METHODOLOGY**

Agile/Scrum Methodology was used to gather requirements.

# **3. FUNCTIONAL REQUIREMENTS**

## ***3.1 Data Flow Diagrams/ ER Diagram***

As per the attached Database Design document

## ***3.2 Logical Data Model/Data Dictionary***

As per the attached Database Design document

### 3.3 Functional Requirements

Requirement ID	Requirement Definition
<b>FS 1.0</b>	<b>The user should be able to keep his/her profile.</b>
FS 1.0.1	The user should be able to edit, delete and save profile.
<b>FS 1.1</b>	<b>The user should be able to keep important contacts.</b>
FS 1.1.1	The user should be able to add, edit, save and delete contacts.
FS 1.1.2	The user should be able to call on a phone number in contact with 1 or 2 clicks.
FS 1.1.3	The user should be able to send email to a contact.
<b>FS 1.2</b>	<b>The user should be able to keep Medicines details.</b>
FS 1.2.1	The user should be able to add, edit, delete, save, export and mail medicines detail.
FS 1.2.2	The user should be able to set repeated reminders for the medicine.
FS 1.2.3	The user should be able to select days to take medicine.
FS 1.2.4	The user should be able to set number of times in a day and exact time medicine needs to be taken.
<b>FS 1.3</b>	<b>The user should be able to keep appointments.</b>
FS 1.3.1	The user should be able to edit, add, delete and save appointment details.
FS 1.3.2	The user should be able to set reminder a day before the appointment
<b>FS 1.4</b>	<b>The user should be able to keep notes and important information.</b>
FS 1.4.1	The user should be able to add, save, delete and edit notes.

Requirement ID	Requirement Definition
<b>FS 1.5</b>	<b>The user should be able to keep track of mood and anxiety levels.</b>
FS 1.5.1	The user should be able to add, save, delete and edit moods.
<b>FS 1.6</b>	<b>The user should be able to find useful links (family friendly recipes, puzzles and crosswords etc).</b>
<b>FS 1.7</b>	<b>The user should be able to make lists (what to eat after chemo? What to take to specialist appointment? What to ask the doctor?).</b>
FS 1.7.1	The user should be able to create new list.
FS 1.7.2	The user should be able to add, save, edit and delete items in the list.
FS 1.7.3	The user should be able to delete, save and edit list.
<b>FS 1.8</b>	<b>The user should be able to rate the app.</b>
<b>FS 1.9</b>	<b>The user should be able to send feedback.</b>
<b>FS 1.10</b>	<b>The user should be able to report a bug.</b>
<b>FS1.11</b>	<b>The user should be able to share the app.</b>
<b>FS1.12</b>	<b>The user should be able to keep record of the body temperature.</b>
FS1.12.1	The user should be able to add, save, delete and edit Temperature records.
<b>FS1.13</b>	<b>The user should be able to keep record of the fluid intake.</b>
FS1.13.1	The user should be able to add, save, delete and edit Fluid intake records.
FS1.13.2	The user should be able to instantly add 250ml, 500ml and 750ml.
<b>FS1.14</b>	<b>The user should be able to keep record of the oxygen level.</b>

Requirement ID	Requirement Definition
FS1.14.1	The user should be able to add, save, delete and edit Oxygen Level records.
<b>FS1.15</b>	<b>User should be able to add or remove items displayed in the main menu.</b>
<b>FS1.16</b>	<b>Google Analytics capability will be implemented to track activities of the user.</b>

## 4. OTHER REQUIREMENTS

### 4.1 Interface Requirements

#### 4.1.1 Slide Menu

Slide menu have following items

**Terms and Conditions:** Takes to a simple text screen with terms and conditions text. Refer to Appendix Section 2. “End User Terms and Conditions for use” for text.

**About:** Takes to a text screen with information regarding the app and the CyberGenie Solutions. Refer to Appendix Section 3. “About Page – Text” for text.

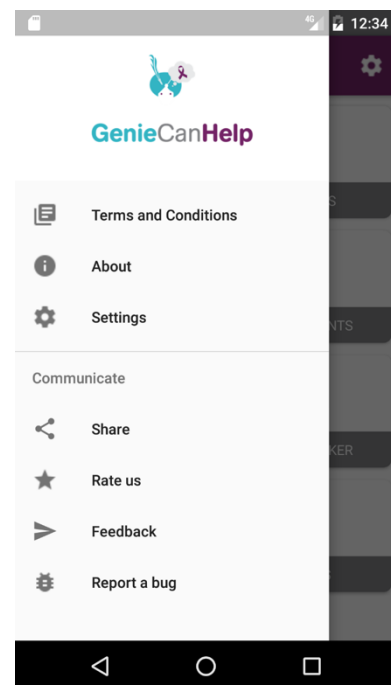
**Settings:** Takes user to settings screen.

**Share:** Asks user that through which channel (Facebook, Whatsapp, Viber, sms etc.) he/she wants to share this app? Setting a text to share, which contains information regarding GenieCanHelp app and website URL <http://geniecanhelpapp.com/> . Refer to Appendix Section 4. “Share – Text” for text.

**Rate Us:** Takes user to ‘App Store’ at GenieCanHelp page to rate the app.

**Feedback:** Takes user to ‘Survey Monkey’ survey, where user can give feedback. Link to the survey is <https://www.surveymonkey.com/r/3YN6KWC>

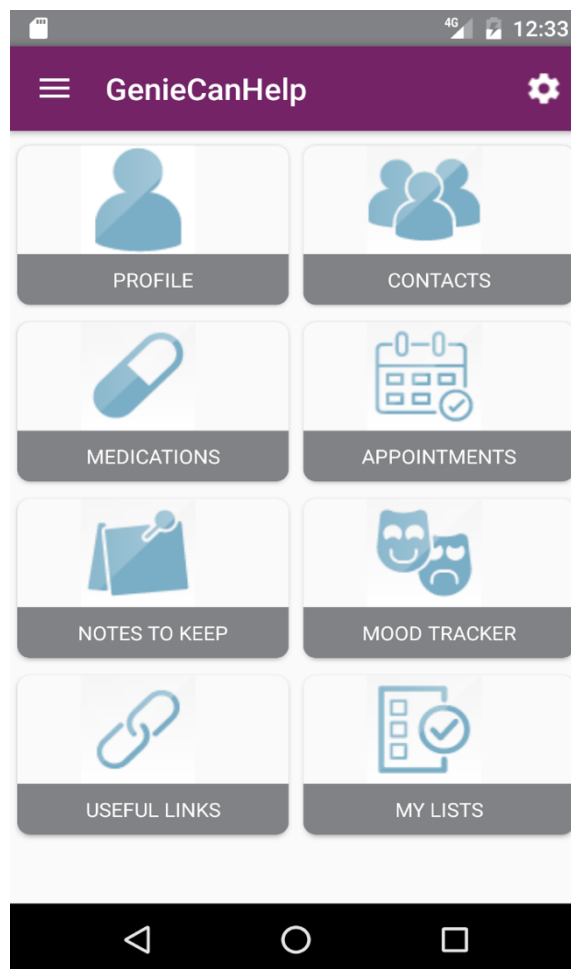
**Report a bug:** Takes user to email app with email address [support@cybergeniesolutions.com](mailto:support@cybergeniesolutions.com) to report a bug.





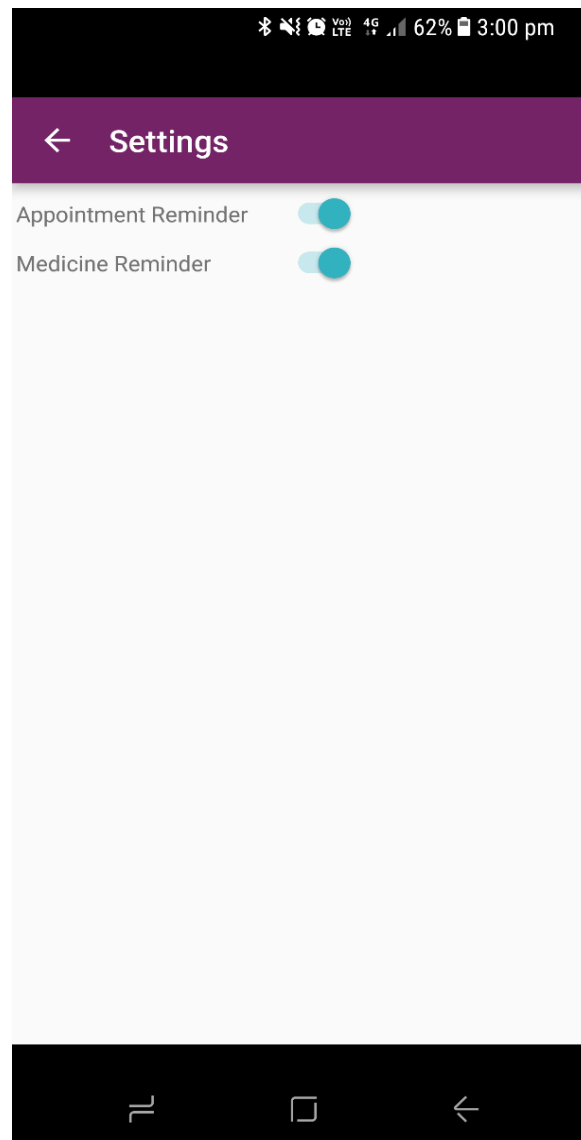
### 4.1.2 Main Menu

- This screen shows the main menu of the app.
- User can select the feature he/she wants to use.
- Top right button takes to Settings screen.
- Customize button in the settings menu lets the user choose which options appear in the main menu and a floating customize button on the main screen gives a check box list dialog box to the user to select which options will appear.
- Options given to the user are Profile, Contacts, Medications, Appointments, Notes to Keep, Mood Tracker, Useful Links, My Lists, Oxygen Level, Temperature and Fluid intake.



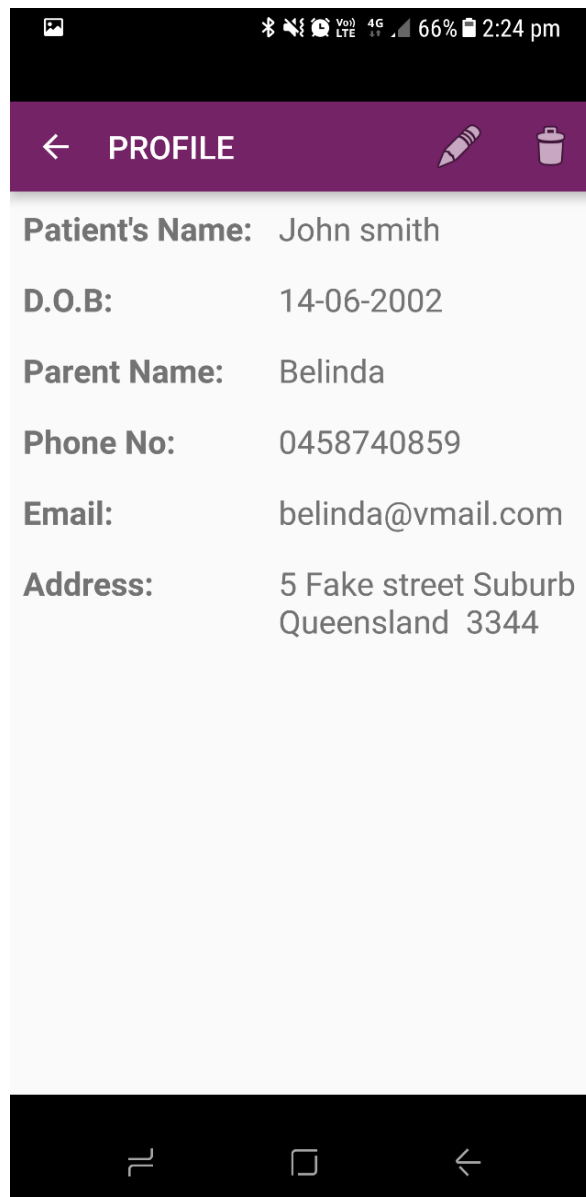
### 4.1.3 Settings

- This screen gives user an option to turn appointment and medication reminders on or off. By default, it should be set on.
- There should be an option to customize main menu dashboard. Which should take to a dialog box with check boxes to select main menu items user wants to add or remove from dashboard.



#### 4.1.4 Profile

- User can see its profile.
- User can delete profile entries by clicking delete button on top right.
- User can go to profile edit screen by clicking edit button on top right.
- Profile should contain Patient's name, date of birth, height, weight, surface area, BMI, parent name, phone number, email, postal address.



#### 4.1.5 Profile Edit

- User can edit and save profile.
- If profile exists in database screen is filled with that data otherwise empty profile edit screen is displayed.
- Profile can't be saved if Patient's name is not given.
- Phone number and Post Code edit boxes only let digits to be input.
- Email edit box must contain email address format.
- Height, weight, surface area and BMI options should also be there.

PROFILE

Patient's Name:  
John smith

D.O.B:  
14-06-2002

Parent Name:  
Belinda

Phone No:

Email:

Street:

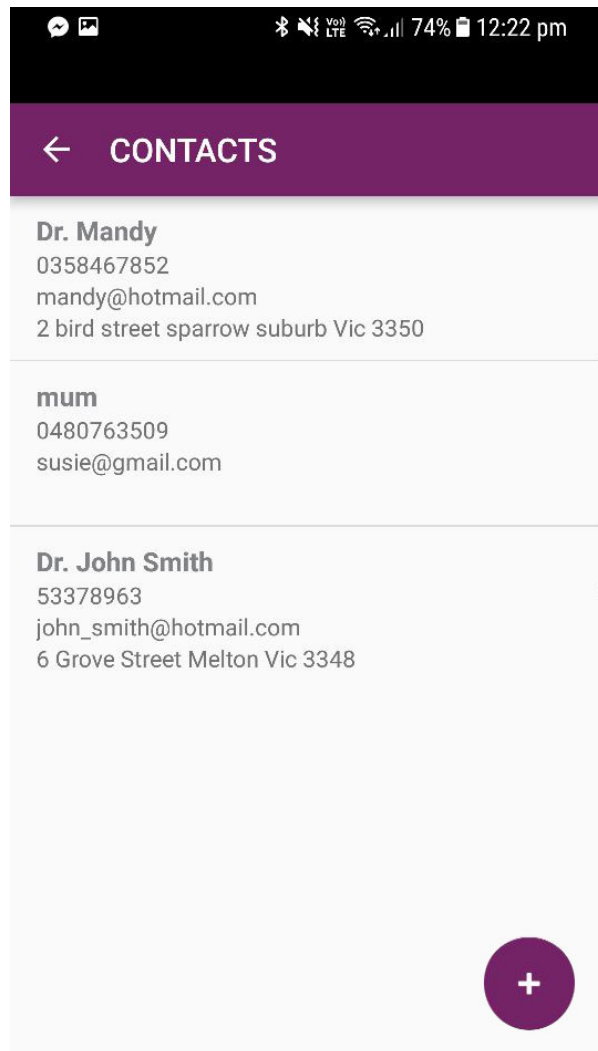
Suburb:

State:

Post Code:

#### 4.1.6 Contacts

- Gives the list of all the stored contacts.
- Clicking on a contact gives a context menu containing options edit, delete, call and email.
- Using delete user can delete the selected contact.
- Edit takes user to Contact Edit screen.
- Call can dial in the selected contact's phone number.
- Email takes to email app with selected contact's email address as recipient.
- Floating add button takes user to contact edit empty page to add new contact.



#### 4.1.7 Contacts Edit

- If new contact is being added empty contact edit screen is displayed otherwise fields are filled with data from the selected, contact.
- User can edit or save a contact on this screen.
- Record will be saved using floating save button on the page. Contact can't be saved if name is not provided. Display a message "Please provide name of the contact".
- Phone number and Post Code edit boxes only let digits to be input.
- Email edit box must contain email address format.

CONTACTS

Name  
mum

Phone  
0431899972

Email  
mum@hhh.com

Street

Suburb

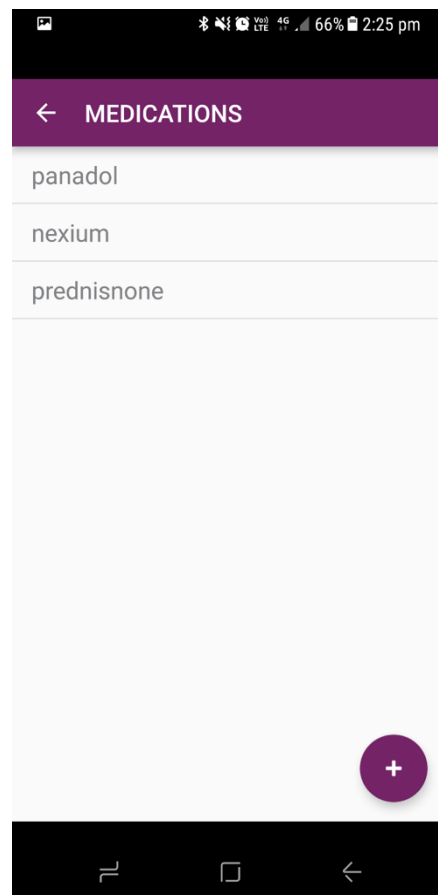
State

Post Code

Save

#### 4.1.8 Medication

- Gives the list of all the stored medications.
- Clicking on a medication gives a context menu containing options edit and delete.
- Using delete user can delete the selected medication.
- Edit takes user to Medication Edit screen.
- Floating add button takes user to medication edit empty page.



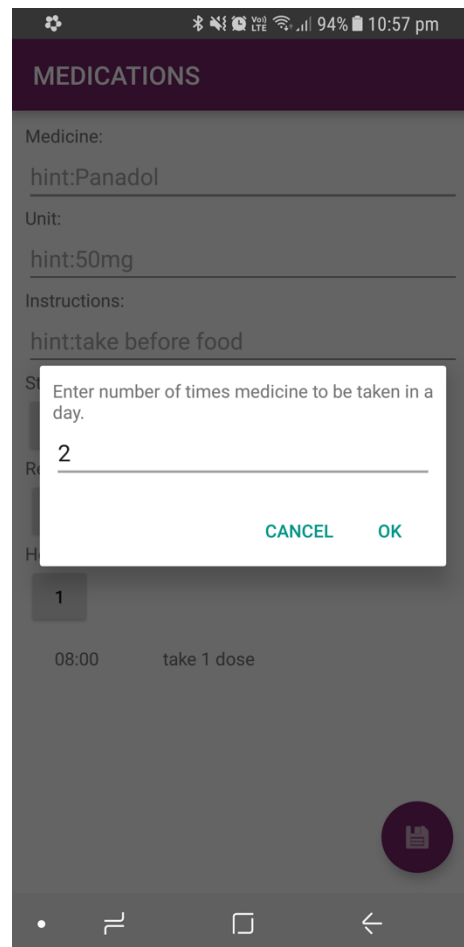
#### 4.1.9 Medication Edit

- If new medication is being added empty medication edit screen is displayed otherwise fields are filled with data from the selected, medication.
- User can edit or add medication name, unit, instructions, start date and days of the week medication needs to be taken.
- User can also add that how many times a day medication needs to be taken at what times and how many doses? Click
- User can edit or save a medication on this screen.
- Record is saved using floating save button. Medication can't be saved if name of the medicine is not provided. Message should be displayed that "Please provide name of the medicine".
- "How many times a day?" Use case sequence
  - I. On this page by default medicine is added as to be taken once a day at 8am.

Medications Edit screen showing fields for Medicine, Unit, Instructions, Start Date, Repeat (days of the week), How many times a day, and a time/dose section. A floating save button is present at the bottom right.



- II. If user wants to change number of times a day, he/she will press a button under a sentence "How many times a day?" with caption "1". A dialog box will appear. User will add how many times medicine needs to be taken.



- III. This will update button's caption to number of times input by the user in a dialog box and same number of rows with 1 dose and 8am time are added.

**MEDICATIONS**

Medicine:  
hint:Panadol

Unit:  
hint:50mg

Instructions:  
hint:take before food

Start Date:  
19-12-2017

Repeat: sun,mon,tue,wed,thu,fri,sat

S M T W T F S

How many times a day?  
2

08:00 take 1 dose

08:00 take 1 dose

• ≡ □ ←

- IV. User can select any row to change number of doses or time. Clicking on any row will take user to another dialog box. User Will add number of doses needs to be taken and time. Selected row will be updated.

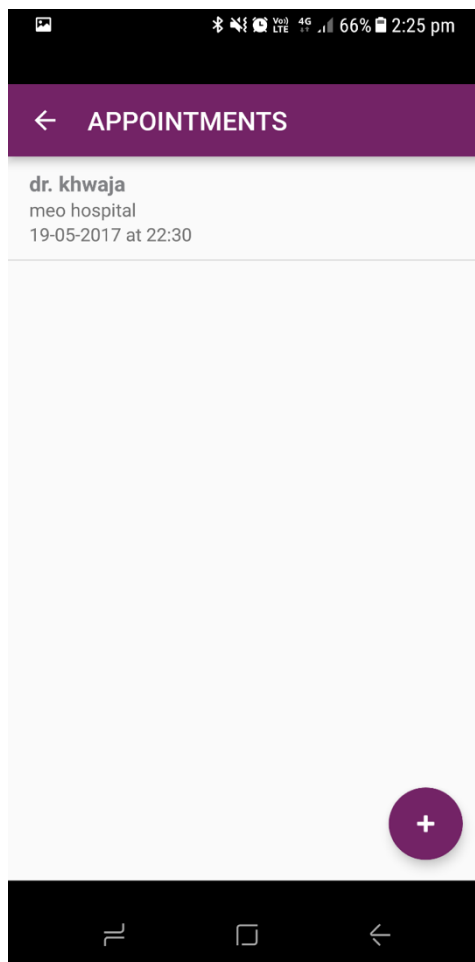
The left screenshot shows a dialog box titled "Please enter number of doses to be taken:" with a text input field containing the number "2". Below this, it says "Please set time to take dose:" followed by a time picker showing "12 : 00". The time picker has a vertical scroll bar on the right with values 11, 12, and 13. The hour field has values 59 and 00. The minute field has values 00 and 01. At the bottom of the dialog are "CANCEL" and "OK" buttons.

The right screenshot shows the "MEDICATIONS" form. It has fields for "Medicine:" (hint: Panadol), "Unit:" (hint: 50mg), "Instructions:" (hint: take before food), "Start Date:" (19-12-2017), "Repeat:" (sun, mon, tue, wed, thu, fri, sat), and "How many times a day?" (2). Below these are two rows of medication reminders: "08:00 take 1 dose" and "12:00 take 2 doses". At the bottom right is a circular button with a document icon.

- On save if medication reminders are set to on, repeated reminder notifications are set depending on the days, no. of times and timings of the medication.

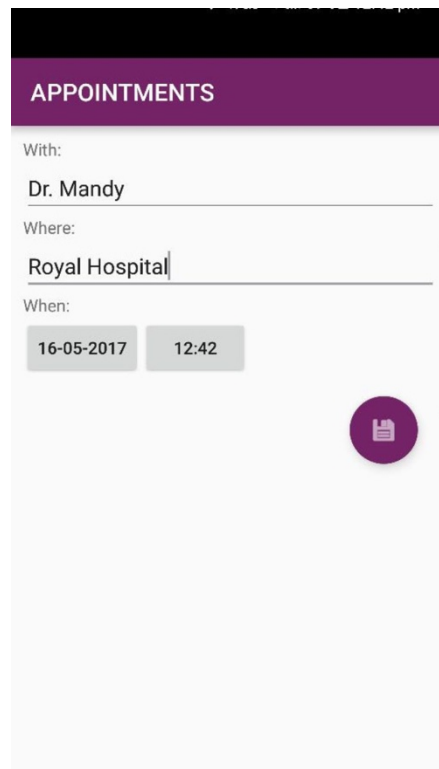
#### 4.1.10 Appointments

- Gives the list of all the stored Appointments.
- Clicking on an appointment gives a context menu containing options edit and delete.
- Using delete user can delete the selected appointment.
- Edit takes user to appointment Edit screen.
- Floating add button takes user to appointment edit empty page.



#### 4.1.11 Appointments Edit

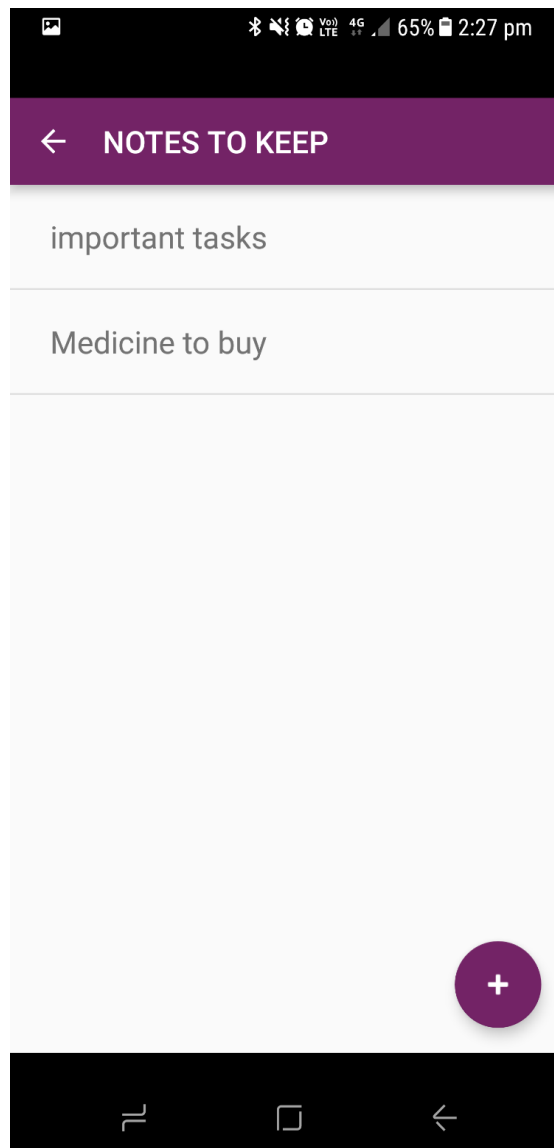
- If new appointment is being added empty appointment edit screen is displayed with current date and time, otherwise fields are filled with data from the selected, appointment.
- User can edit or add appointment with, where and when (date and time) fields. Clicking on date button will take user to a dialog box with a date spinner and update button title with the date selected by the user. Clicking on time button will take user to time spinner dialog box to select time and update the time button title accordingly.
- User can edit or save an appointment on this screen.
- Record will be saved using a floating save button. Record cannot be saved if “with” is not provided and gives a message that “Please enter “with” information for data to be saved”
- On save if appointment reminders are set to on, reminder notification is set for a day before the timing of the appointment.



The screenshot shows a mobile application interface for editing an appointment. At the top, there is a purple header bar with the word "APPOINTMENTS" in white capital letters. Below the header, the form is divided into three sections: "With:", "Where:", and "When:". The "With:" section has a text input field containing "Dr. Mandy". The "Where:" section has a text input field containing "Royal Hospital". The "When:" section has two buttons: one for the date "16-05-2017" and one for the time "12:42". At the bottom right of the form, there is a circular purple button with a white document icon, representing the save function.

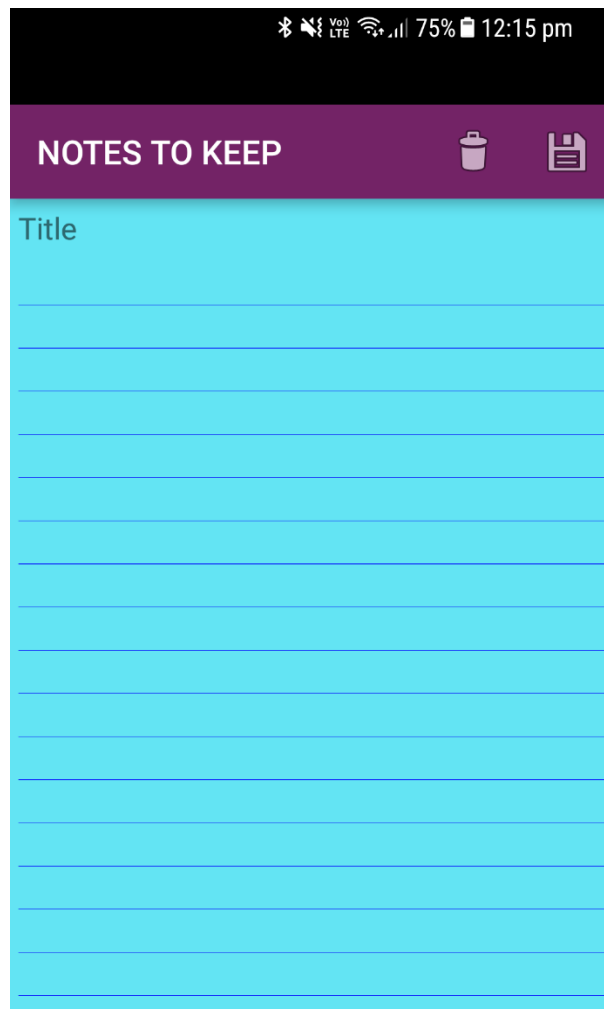
#### 4.1.12 Notes to Keep

- Gives the list of all the stored notes.
- Clicking on a note gives a context menu containing options edit and delete.
- Using delete user can delete the selected note.
- Edit takes user to note Edit screen.
- Floating Add button on the page takes user to appointment edit empty page.



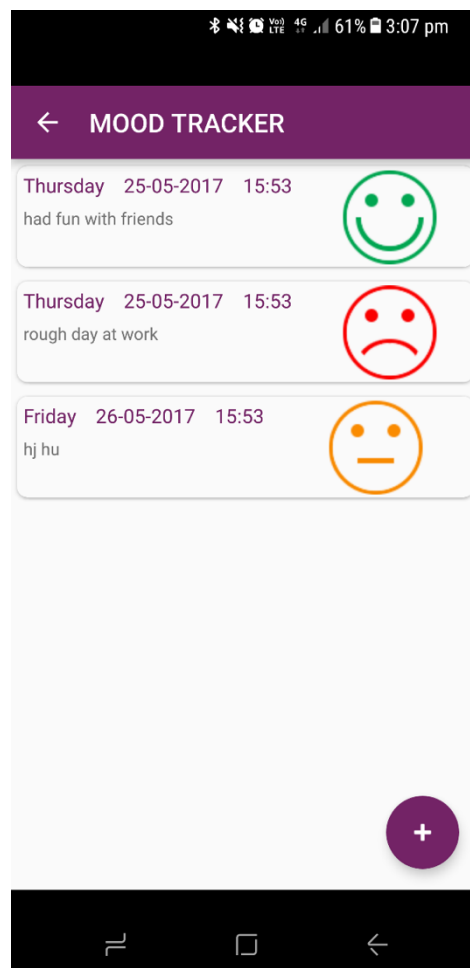
#### 4.1.13 Notes Edit

- If new note is being added empty note edit screen is displayed otherwise fields are filled with data from the selected, note.
- User can edit or add notes title and other text.
- This is like a mini notepad.
- User can delete, edit or save a note on this screen.
- Notes can't be saved if Title and content both are not provided.
- If title is not provided, first word of content is taken as a title.



#### 4.1.14 Mood Tracker

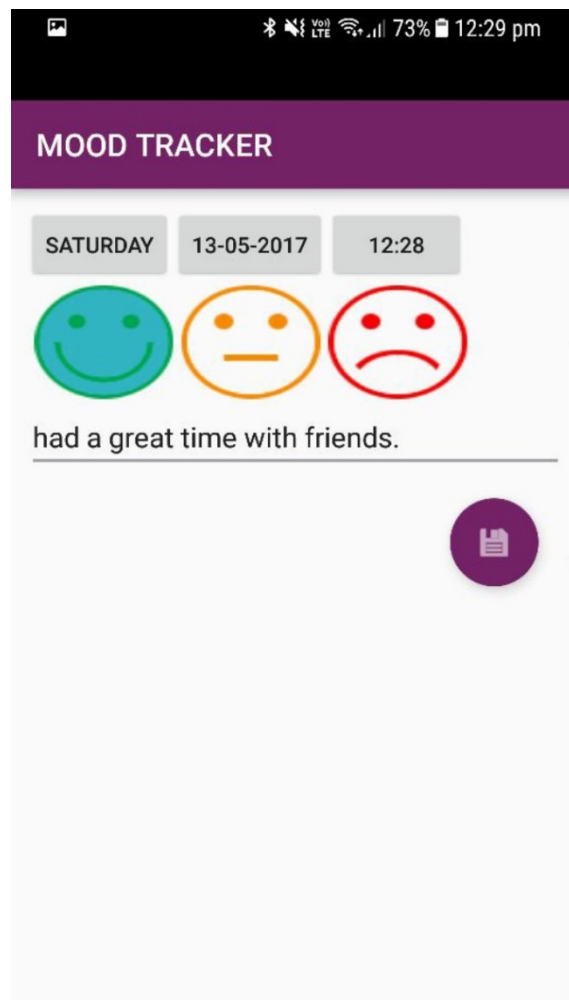
- Gives the list of all the stored Moods.
- Clicking on a mood gives a context menu containing options edit and delete.
- Using delete user can delete the selected mood entry.
- Edit takes user to Mood Edit screen.
- Add button takes user to Mood edit empty page.





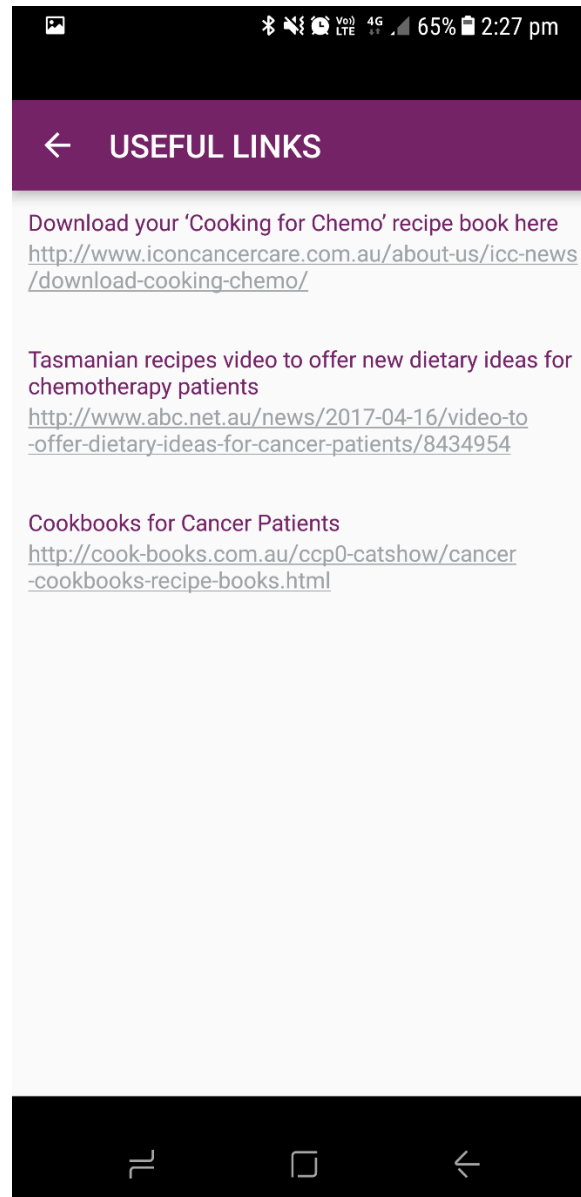
#### 4.1.15 Moods Tracker Edit

- If new mood is being added empty mood edit screen is displayed with current date and time, otherwise fields are filled with data from the selected, mood.
- User can edit or add mood date, time, notes and mood.
- Clicking on date button will take user to a dialog box with a date spinner. Once user has selected a date, update button title with the date and day selected by the user. Clicking on time button will take user to time spinner dialog box to select time and update the time button title accordingly.
- User can select one of the three moods using a slider instead of buttons.
- User can edit or save a mood on this screen. Record will be saved using a floating save button. Record cannot be saved if mood is not selected and gives a message that “Please select mood for data to be saved”



#### 4.1.16 Useful Links

- Contains some useful links for the user.
- Default links should be present in the list as per Appendix Section 1. Default Links



#### 4.1.17 My Lists

- Gives the list of all the stored Lists.
- By default, there will be three lists in this option

##### *I. List1*

**List Title:** "What to take to specialist appointment?"

**List Items:** "Reports", "Test Results", "Medicine list"

##### *II. List2*

**List Title:** "What to take to chemo?"

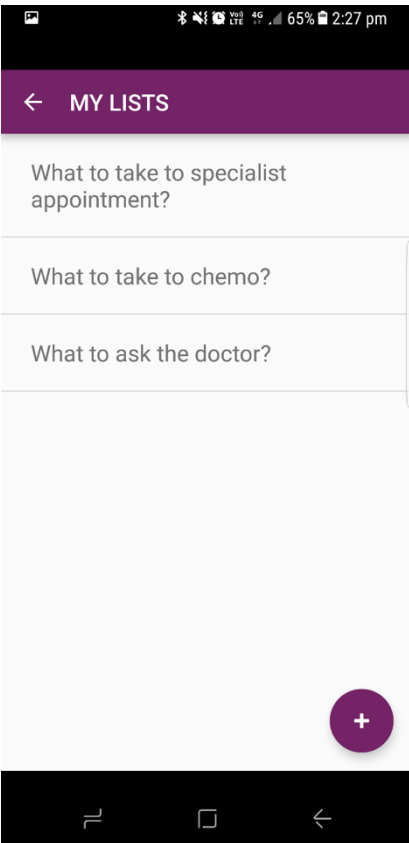
**List Items:** "Books or magazines", "Movies", "laptop or tablet", "Games, puzzles, crosswords", "Comfy cloths", "Friend"

##### *III. List3*

**List Title:** "What to ask the doctor"

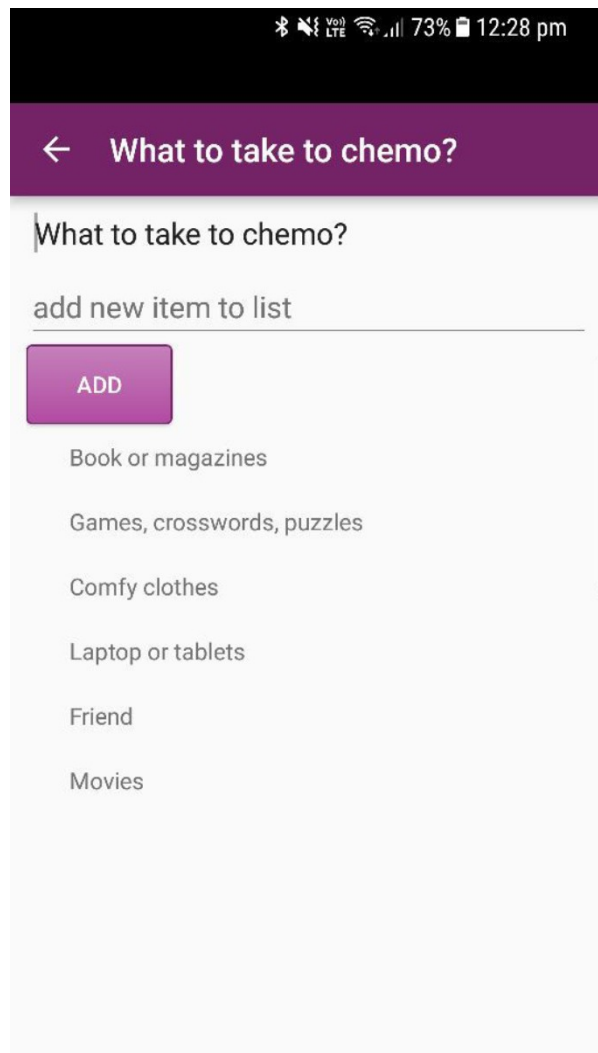
**List Items:** no list items

- Clicking on a list gives a context menu containing options edit and delete.
- Using delete user can delete the selected list.
- Edit takes user to list Edit screen.
- Floating add button takes user to popup dialog box in which user can add title of the new list.



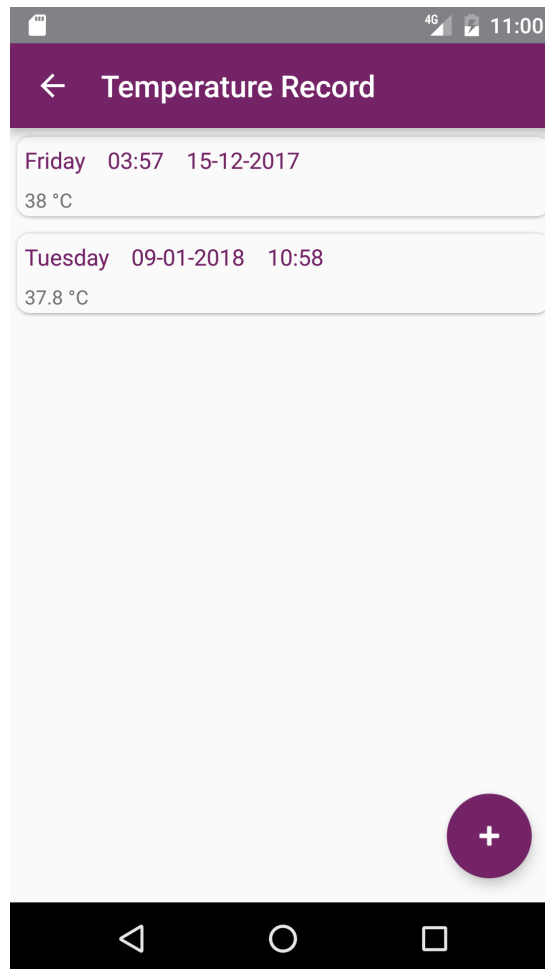
#### 4.1.18 My Lists Edit

- All items of the lists are displayed.
- User can add new item in the list by writing in an edit box and clicking 'add' button.
- User can click on lists title to edit it.
- Clicking on a list item gives a context menu containing options edit and delete.
- Using delete user can delete the selected list item.
- Edit takes user to popup dialog box to edit the list item.



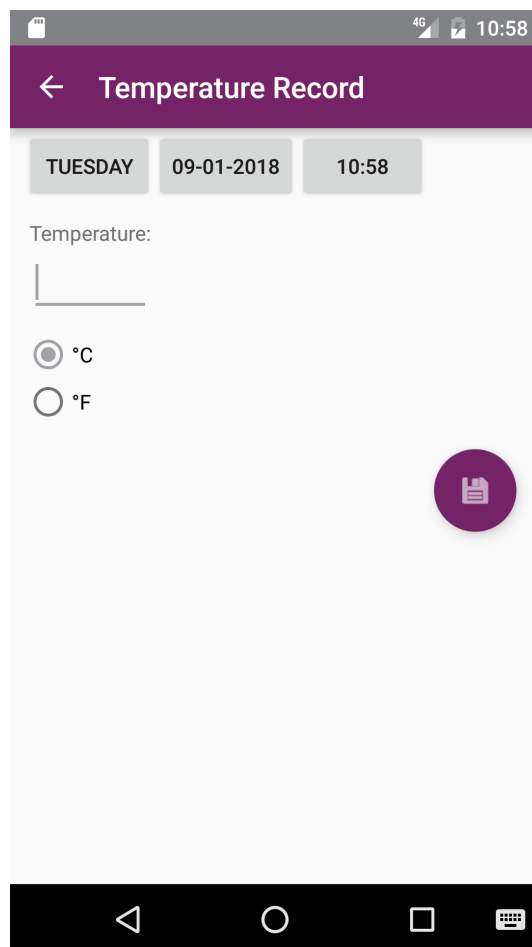
#### 4.1.19 Temperature Tracker

- Gives the list of all the stored temperatures.
- Clicking on a temperature list item gives a context menu containing options edit and delete Options of deleting a temperature entry
- Edit takes user to Edit Temperature screen.
- Delete option deletes that record.
- Floating Add button on the screen takes user to Temperature edit empty page.



#### 4.1.20 Temperature Tracker Edit

- If new temperature reading is being added empty temperature tracker edit screen is displayed with current date and time, otherwise fields are filled with data from the selected temperature reading.
- User can edit or add temp date, time.
- Clicking on date button will take user to a dialog box with a date spinner. User will select date and button's title with the date and day will be updated according to selected date. Clicking on time button will take user to time spinner dialog box to select time and time button's title will be updated accordingly.
- Temperature measurement scale can be selected here via a radio button i.e. Celsius or Fahrenheit
- Record will be saved using a floating save button. Record cannot be saved if temperature is not provided and gives a message that "Please enter temperature for data to be saved".



#### **4.1.21 Fluid Intake Tracker**

- Gives the list of all the fluid intake readings.
- Clicking on a fluid intake list item gives a context menu containing options edit and delete
- Delete option deletes a fluid intake entry.
- Edit takes user to Edit fluid screen.
- Floating Add button on the page takes user to fluid retention edit empty page

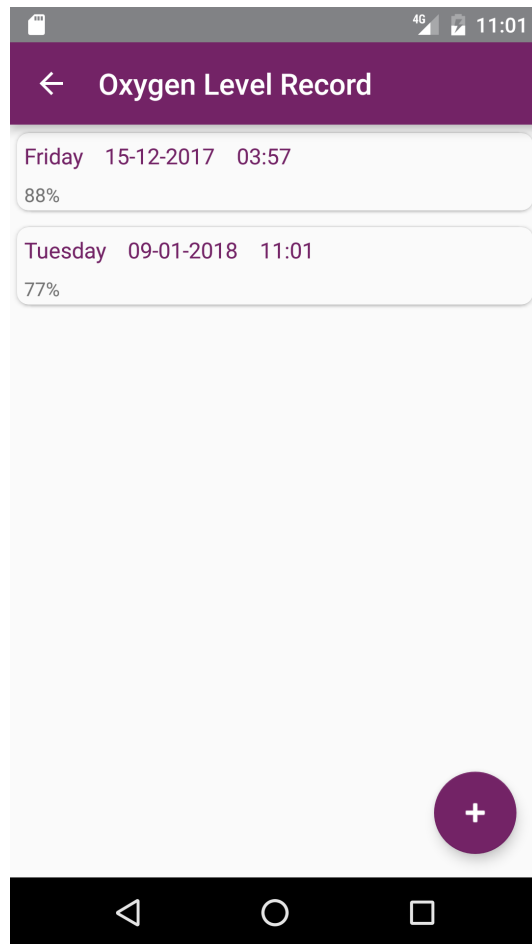
#### **4.1.22 Fluid Intake Tracker Edit**

- If new Fluid reading is being added empty Fluid tracker edit screen is displayed with current date, otherwise fields are filled with data from the selected fluid reading.
- Clicking on date button will take user to a dialog box with a date spinner and update button title with the date selected by the user.
- User can edit or add fluid intake.
- Fluid Tracking measurement scale can be set here using a radio button i.e. ml, oz and cup
- There should be an option to instant add fluid intake to already existing value. User should be able to add 1 glass (250ml), 1 bottle (500ml), 1 large bottle (750ml).
- Record will be saved using a floating save button. Record cannot be saved if fluid intake is not provided and gives a message that “Please enter fluid intake for data to be saved”



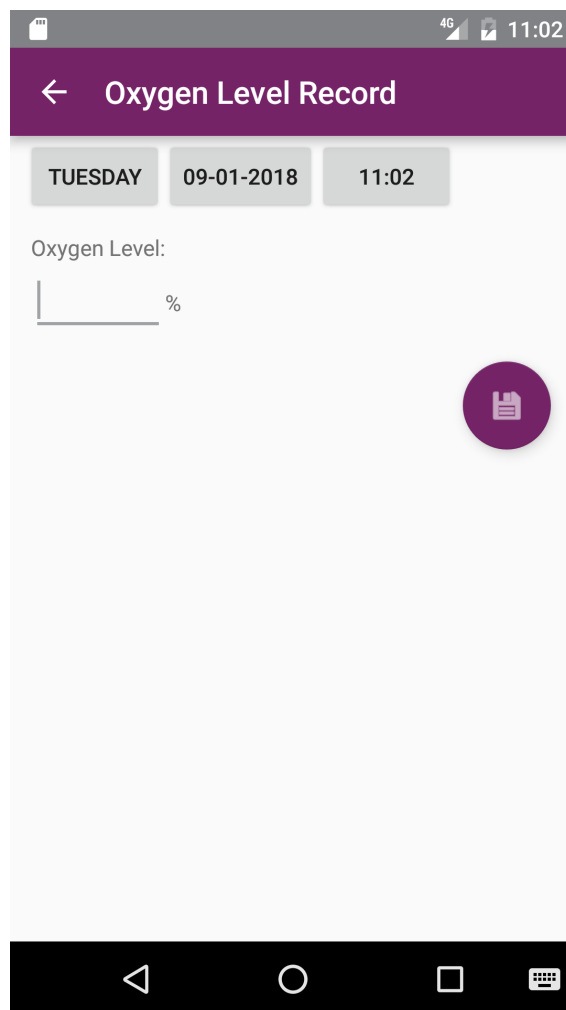
#### 4.1.23 Oxygen Tracker

- Gives the list of all the Oxygen readings.
- Clicking on a oxygen level list item gives a context menu containing options edit and delete.
- Delete option deletes an oxygen entry.
- Edit takes user to Edit oxygen level screen.
- Floating Add button on page takes user to Oxygen tracking edit empty page.



#### 4.1.24 Oxygen Tracker Edit

- If new Oxygen reading is being added empty oxygen tracker edit screen is displayed with current date and time, otherwise fields are filled with data from the selected oxygen reading.
- User can edit or add oxygen date, time.
- Clicking on date button will take user to a dialog box with a date spinner. User will select date and button's title with the date and day will be updated according to selected date. Clicking on time button will take user to time spinner dialog box to select time and time button's title will be updated accordingly.
- Record will be saved using a floating save button. Record cannot be saved if oxygen level is not provided and gives a message that "Please enter oxygen level for data to be saved".



The screenshot shows a mobile application interface for recording oxygen levels. At the top, there is a purple header bar with a back arrow and the title "Oxygen Level Record". Below the header, there are three buttons: "TUESDAY", "09-01-2018", and "11:02". Under these buttons, the text "Oxygen Level:" is followed by a text input field and a percentage sign (%). A floating action button (FAB) with a purple circular background and a white save icon is positioned on the right side of the screen. The bottom of the screen shows the standard Android navigation bar with back, home, and recent apps buttons.

#### **4.1.25 Google Analytics Functionality**

Google Analytics functionality must be implemented using Tracking id: UA-111256153-1

- for all screens (use screen title to identify the screen)
- Email sent event (use 'email sent' to identify event)
- PDF created event (use 'pdf created' to identify event)

#### **4.2 Hardware/Software Requirements**

- The iPhone APP has to be compatible with IOS9 or higher
- The backend database must build in Realm
- App colours and font should be restricted to the list below, matching the ones used in Logo
  - C 60 M 100 Y 29.02 K 14.12 - Hex Code (732366)
  - C 68.98 M 7.68 Y 22.71 K 0 - Hex Code (33b4c3)
  - C 0 M 0 Y 0 K 60 – Hex Code (818285)
  - Font: AG Book Rounded

## APPENDIX A - GLOSSARY

### *1. Default Links:*

`useful_link1_text` = "Download your 'Cooking for Chemo' recipe book here"

`useful_link1`= "<http://www.iconcancercare.com.au/about-us/icc-news/download-cooking-chemo/>")

`useful_link2_text` = "Tasmanian recipes video to offer new dietary ideas for chemotherapy patients"

`useful_link2` = "<http://www.abc.net.au/news/2017-04-16/video-to-offer-dietary-ideas-for-cancer-patients/8434954>"

`useful_link3_text` = "Cookbooks for Cancer Patients"

`useful_link3` = "<http://cook-books.com.au/ccp0-catshow/cancer-cookbooks-recipe-books.html>"

More links might be added.

### *2. End User Terms and Conditions of use:*

This App is developed and operated by CyberGenie Solutions. CyberGenie Solutions reserves the right to amend the Terms and Conditions at any time without notice.

#### **Parties**

This Agreement is between you and CyberGenie Solutions only, and not Apple. Notwithstanding the foregoing, you acknowledge that Apple and its subsidiaries are third party beneficiaries of this Agreement and Apple has the right to enforce this Agreement against you. CyberGenie Solutions, not Apple, is solely responsible for the GenieCanHelp App and its content.

#### **Privacy**

CyberGenie Solutions may collect and use information about your usage of the GenieCanHelp App, including certain types of information from and about your device. CyberGenie Solutions may use this information, as long as it is in a form that does not personally identify you, to measure the use and performance of the App.

### **Limited License**

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### ***3. About Page - Text:***

GenieCanHelp is developed by CyberGenie Solutions.

CyberGenie Solutions is an App development business. We have a mission to:

Develop most interesting and reliable software solutions, services and applications. Do research and product development in latest technologies.

For details visit: <http://cybergeniesolutions.com/>

### ***4. Share - Text:***

GenieCanHelp is a unique smartphone app designed to support and empower patients along their cancer journey. Visit [www.geniecanhelpapp.com](http://www.geniecanhelpapp.com) to download.