PillX

A visualization platform for patients

DECO3801/7381
Team Red Panda

General Description

The name of this application is PillX. This is a kind of app used to narrow down the gap between the patients and professional medical knowledge.

The aim of Pillx:

- Remind people take medicine on time.
- Help people to keep their healthy data records well.

What features PillX has:

- Clear interface.
- Strong function.
- Safe storage.
- Easy to learn.
- Friendly to old people.

Early research

We made some researches to check whether people experience forgetting taking medicines on time or having missed their healthy data records.

We divide people into different age groups.

- 30

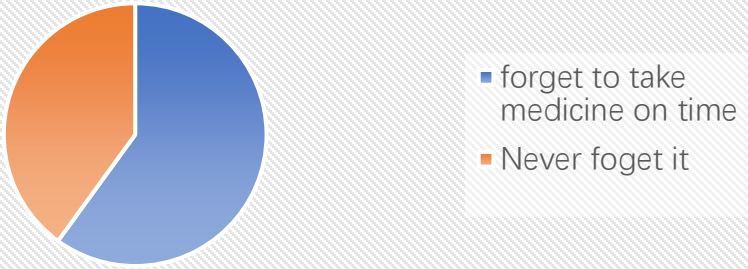
31 - 50

51 - 60

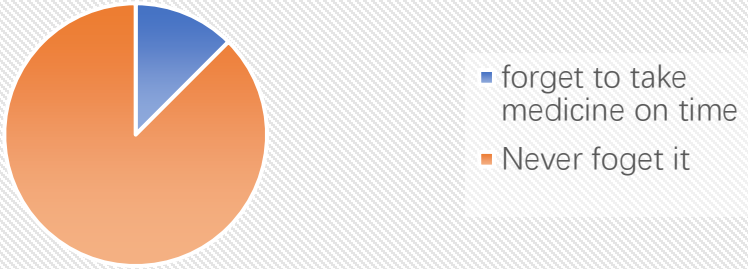
60 -

Here is some main results.

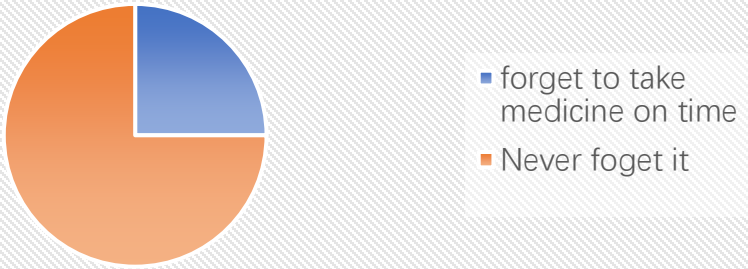
People over 60 that experienced forgetting take medicine on time



People form 31 to 50 that experienced forgetting take medicine on time



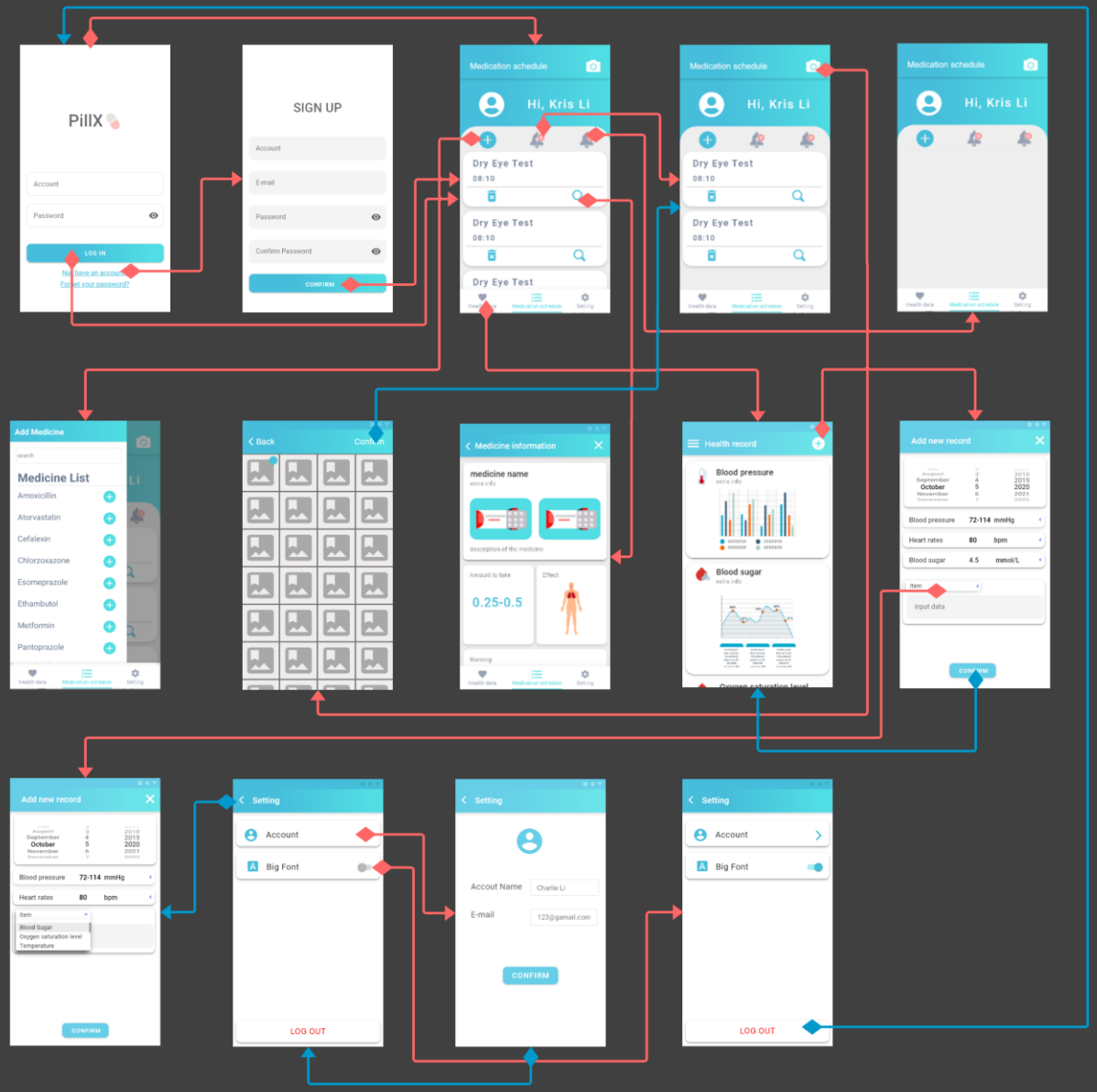
people under 30 that experienced forgetting take medicine on time



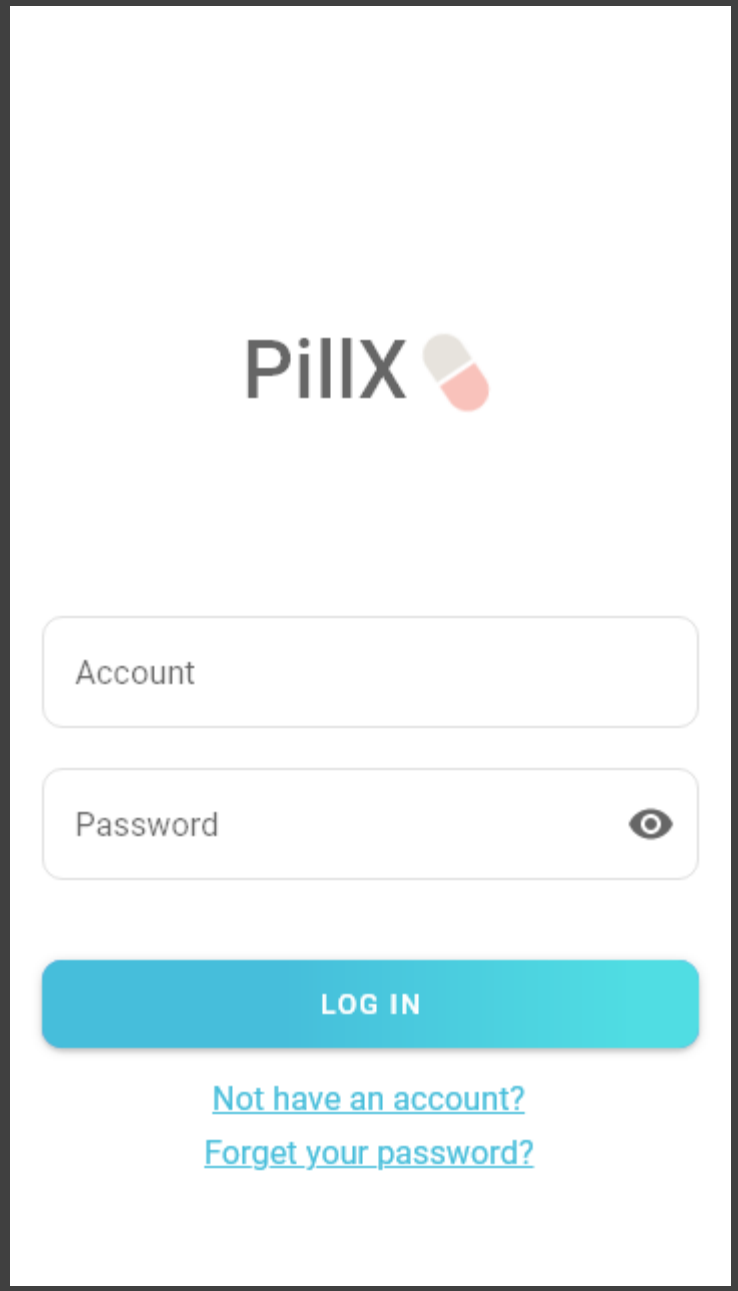
The percentage of families that keep members' healthy data well

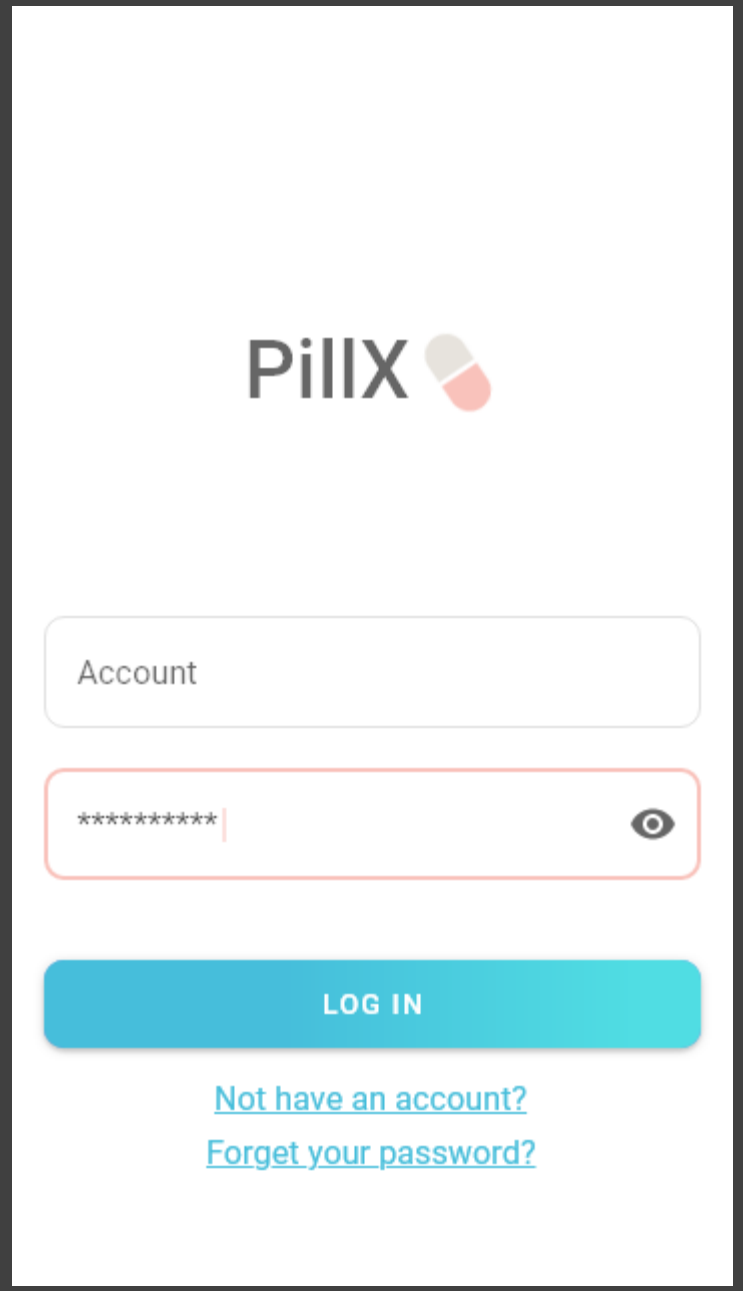
Interaction

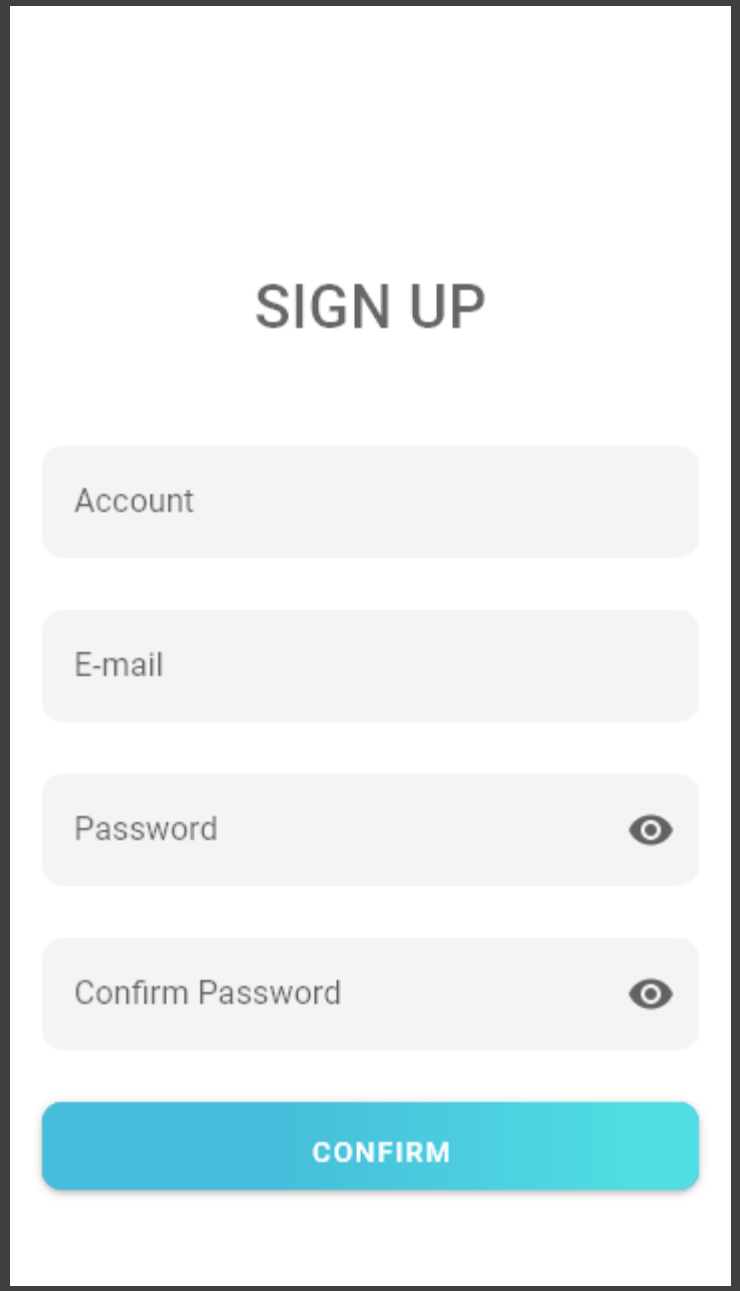
1 Interaction flow

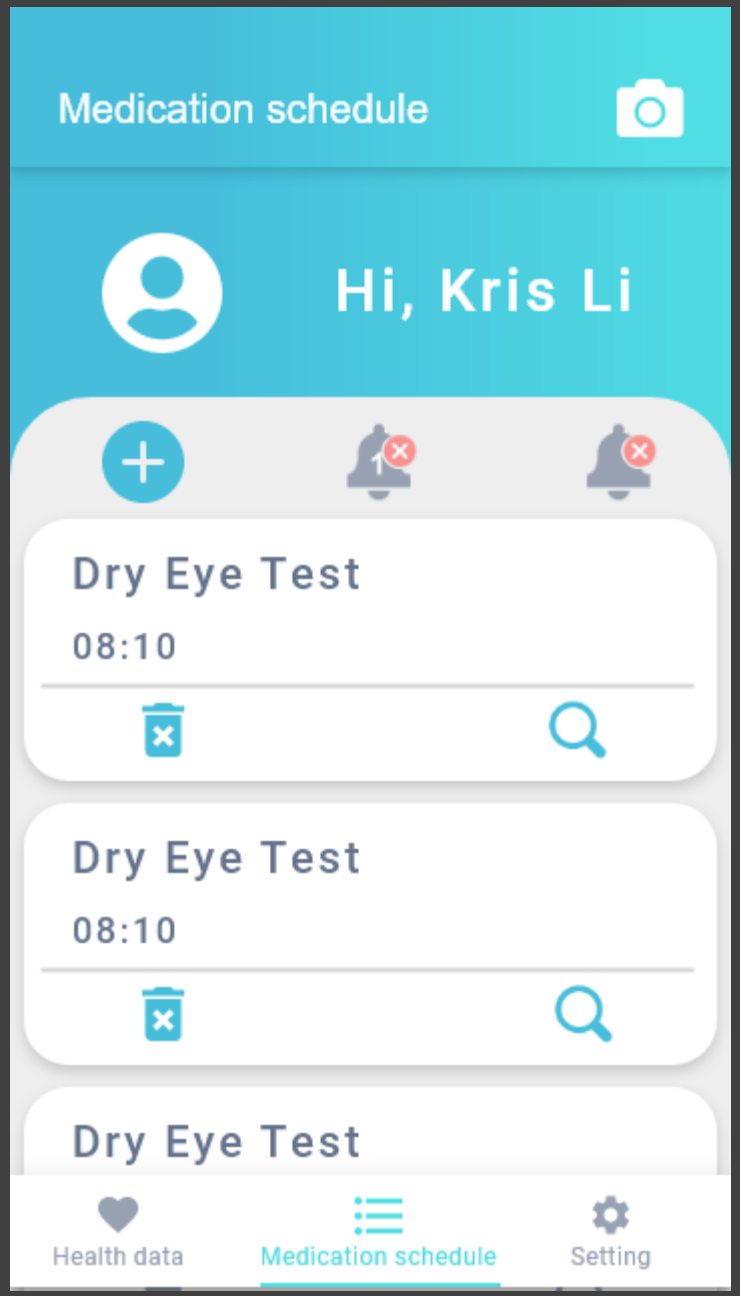


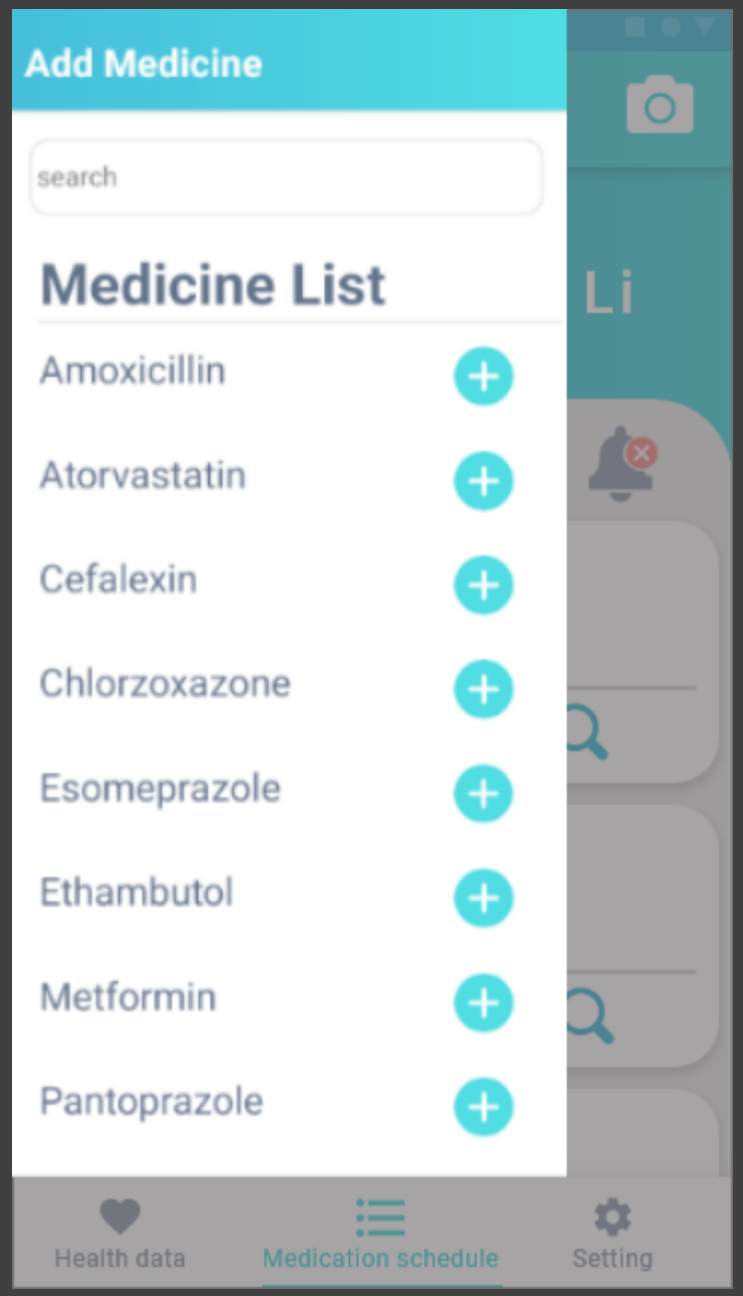
Functionality

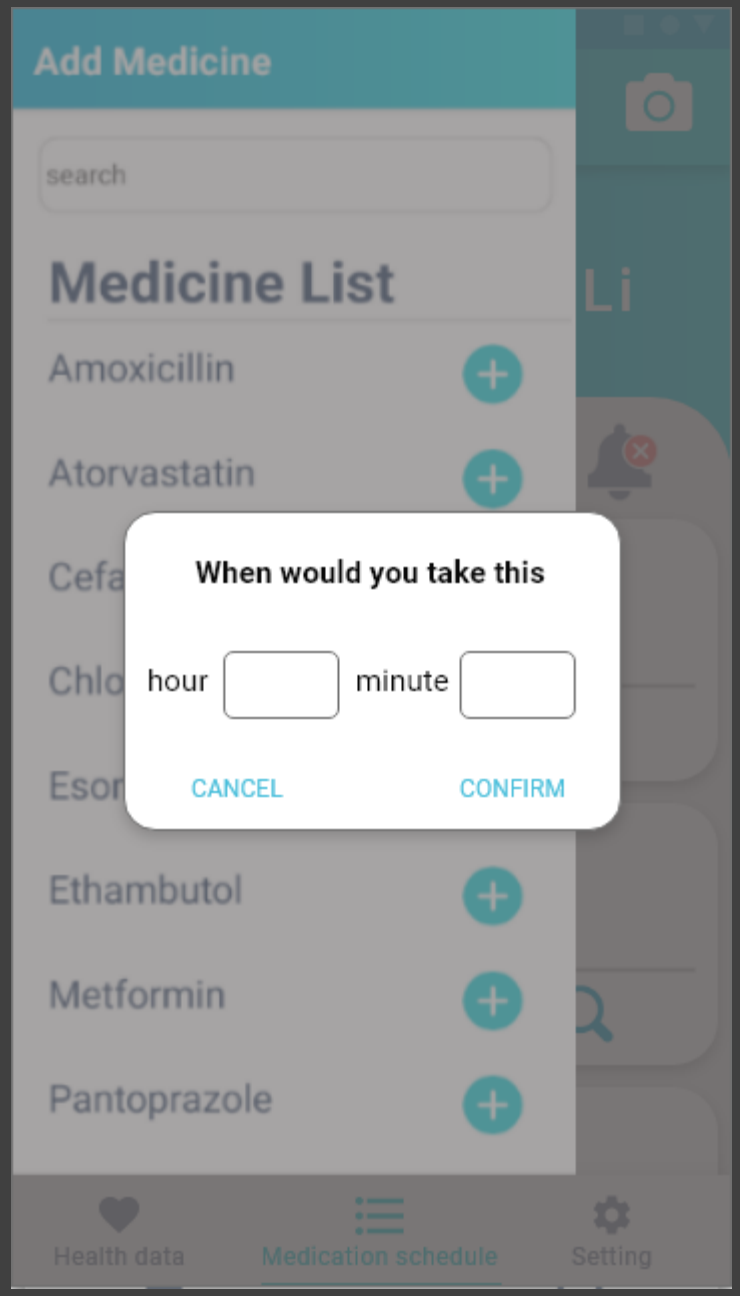

PillX
Account
Password
LOG IN
Not have an account?
Forget your password?


PillX
Account
****
LOG IN
Not have an account?
Forget your password?


SIGN UP
Account
E-mail
Password
Confirm Password
CONFIRM


Medication schedule
Hi, Kris Li
Dry Eye Test
08:10
Dry Eye Test
08:10
Dry Eye Test
Health data
Medication schedule
Setting


Add Medicine
search
Medicine List
Amoxicillin
Atorvastatin
Cefalexin
Chlorzoxazone
Esomeprazole
Ethambutol
Metformin
Pantoprazole
Health data
Medication schedule
Setting


Add Medicine
search
Medicine List
Amoxicillin
Atorvastatin
When would you take this
hour
minute
CANCEL
CONFIRM
Ethambutol
Metformin
Pantoprazole
Health data
Medication schedule
Setting

Medication schedule

Hi, Kris Li

Dry Eye Test

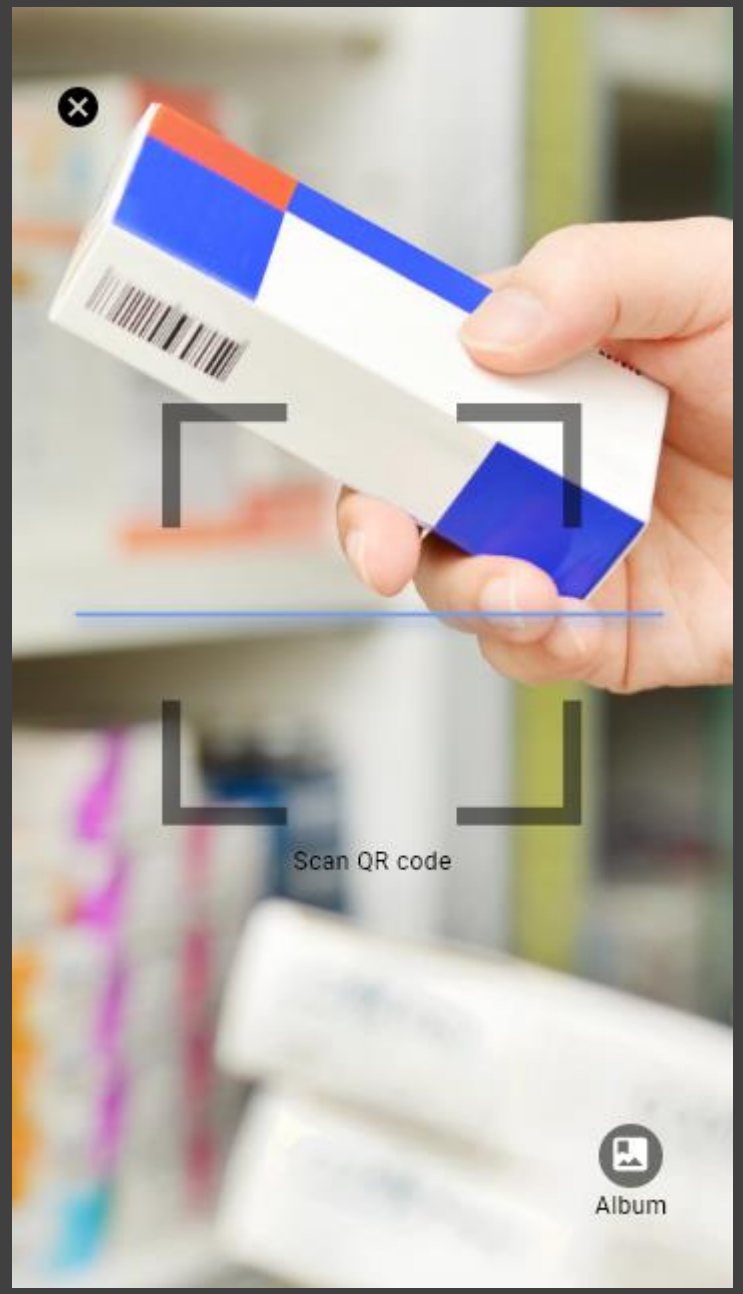
08:10

Dry Eye Test

08:10

Dry Eye Test

Health data | Medication schedule | Setting



Medicine information

medicine name

extra info

description of the medicine

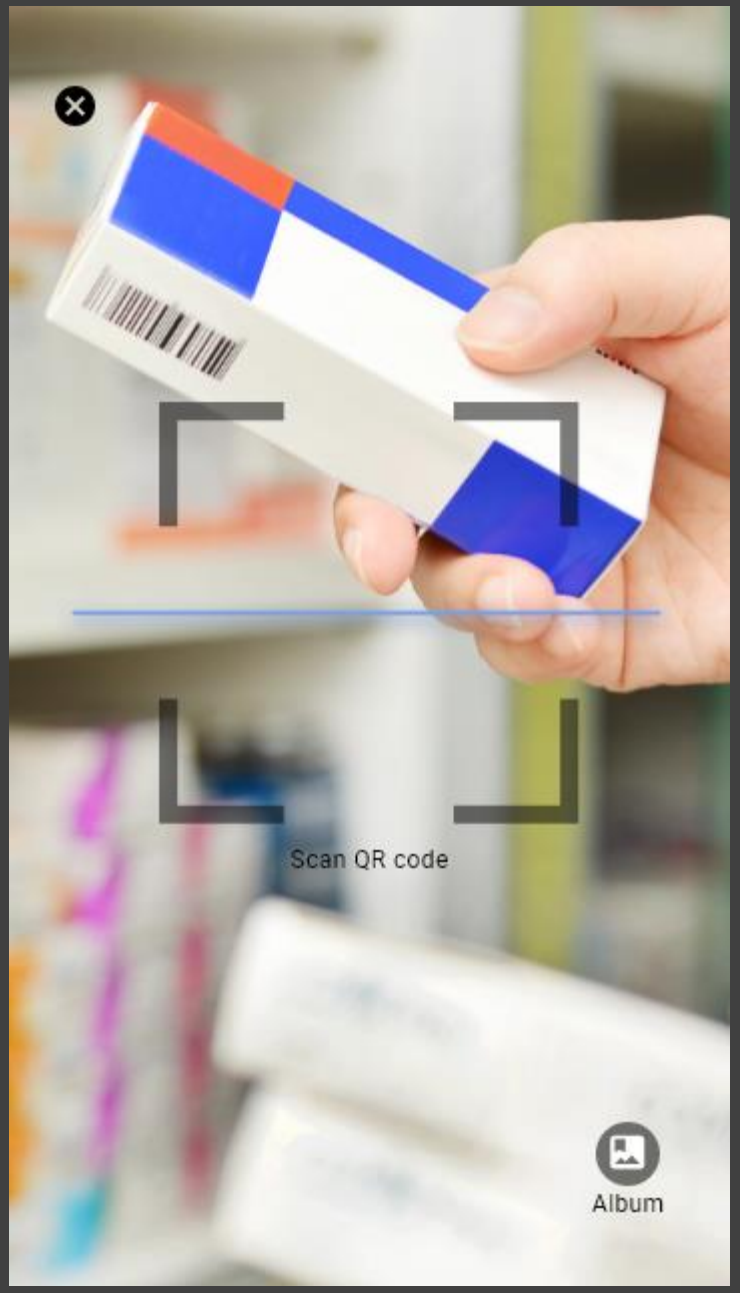
Amount to take

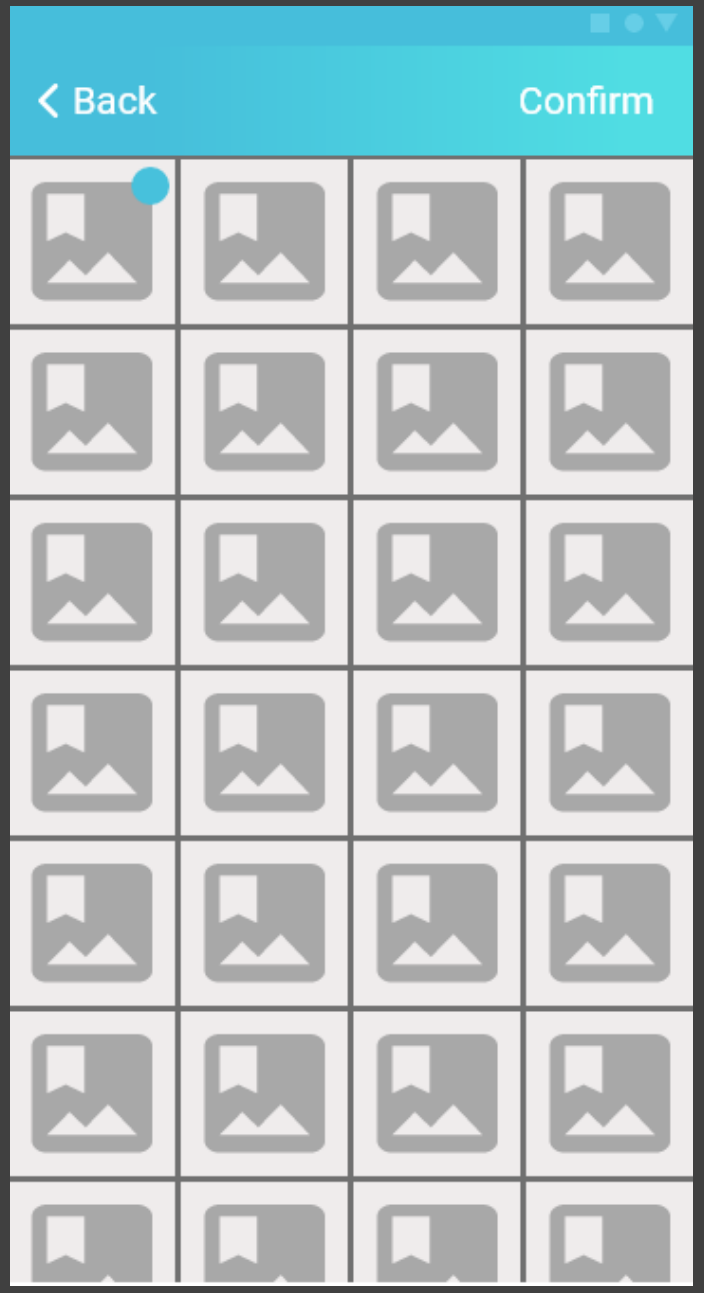
0.25-0.5

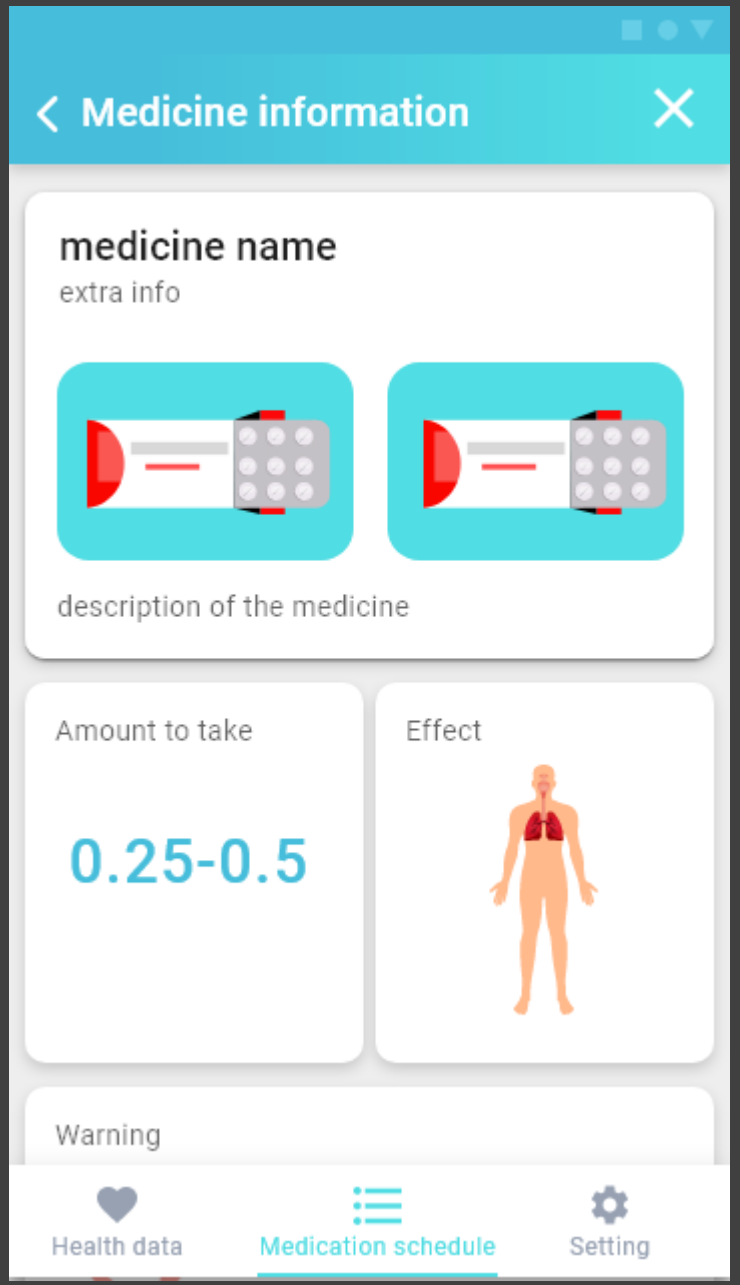
Effect

Warning

Health data | Medication schedule | Setting


Scan QR code
Album

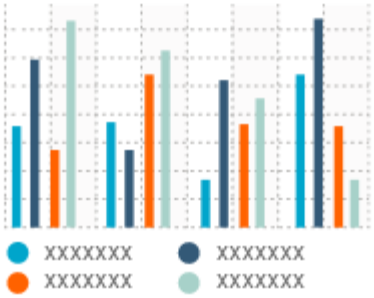

Back
Confirm


Medicine information
medicine name
extra info
description of the medicine
Amount to take
0.25-0.5
Effect
Warning
Health data
Medication schedule
Setting

Health record

Blood pressure

extra info



Blood sugar

extra info

Oxygen saturation level

Add new record

July	2	2017
August	3	2018
September	4	2019
October	5	2020
November	6	2021
December	7	2022

Blood pressure 72-114 mmHg

Heart rates 80 bpm

Item

input data

CONFIRM

Add new record

July	2	2017
August	3	2018
September	4	2019
October	5	2020
November	6	2021
December	7	2022

Blood pressure 72-114 mmHg

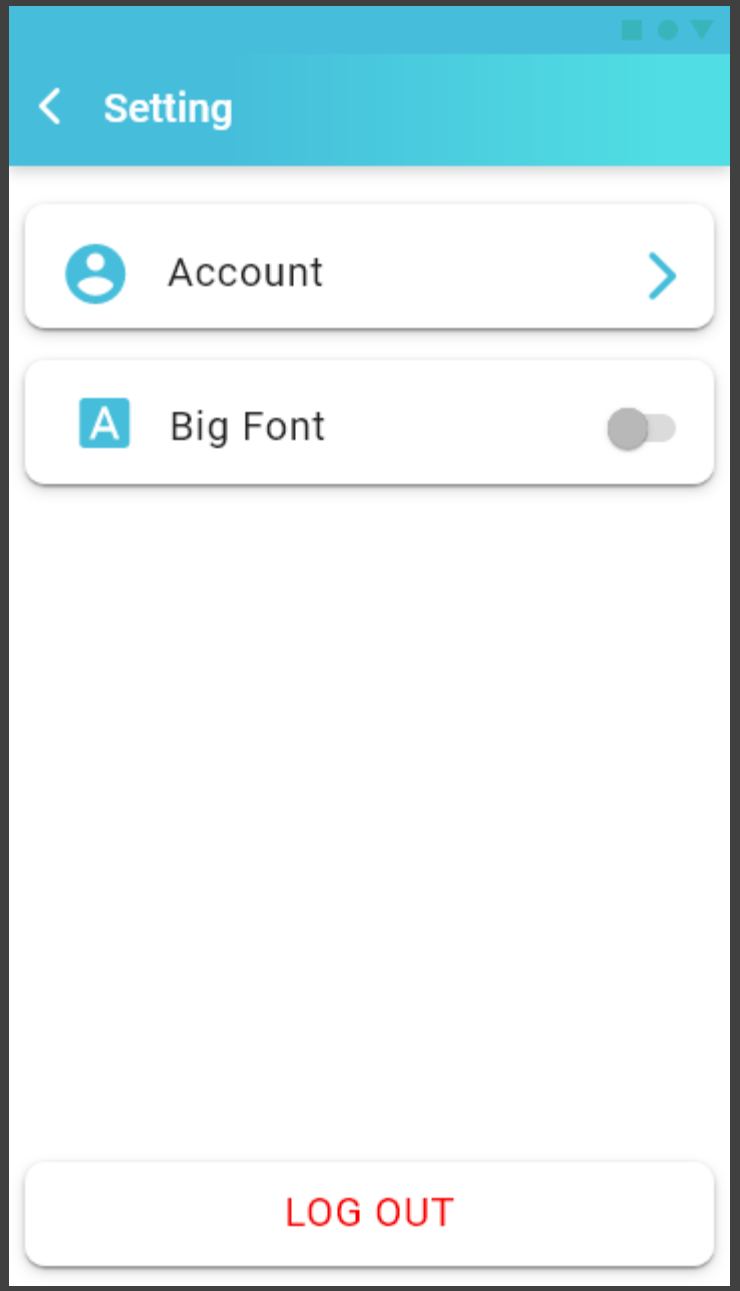
Heart rates 80 bpm

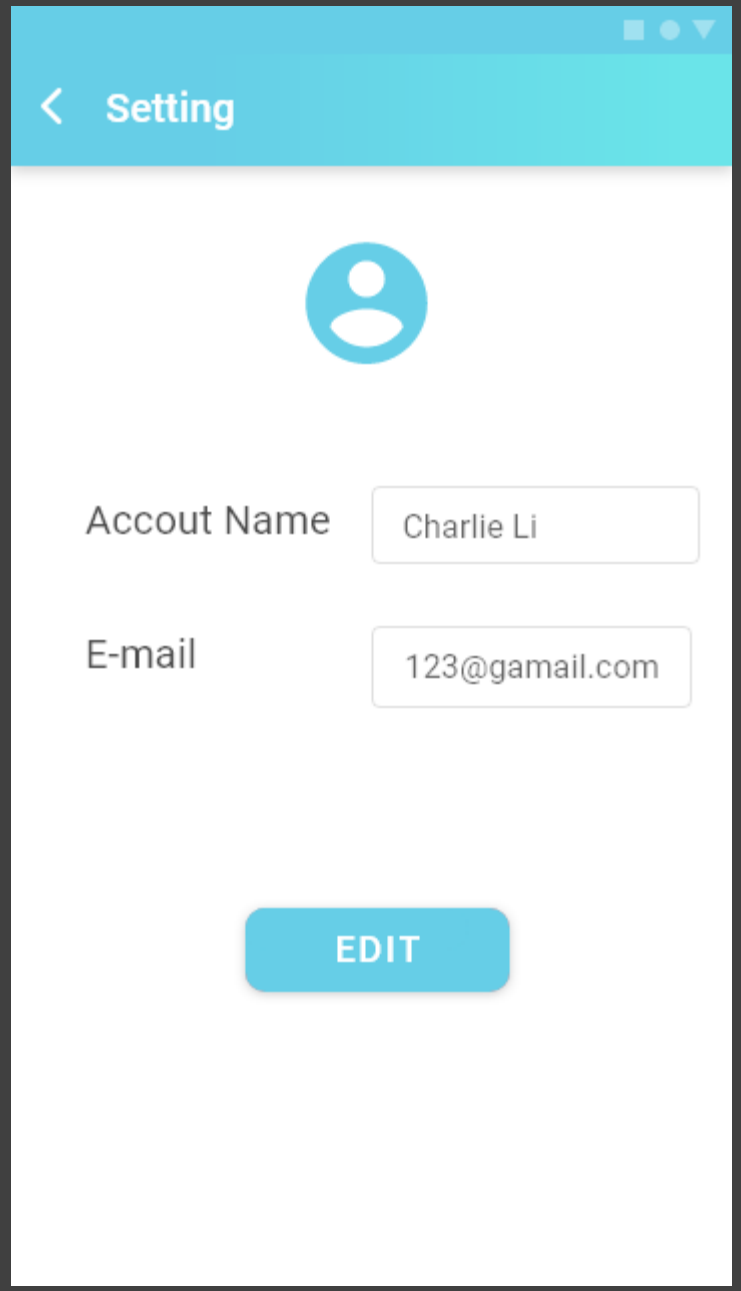
Blood sugar 4.5 mmol/L

Item

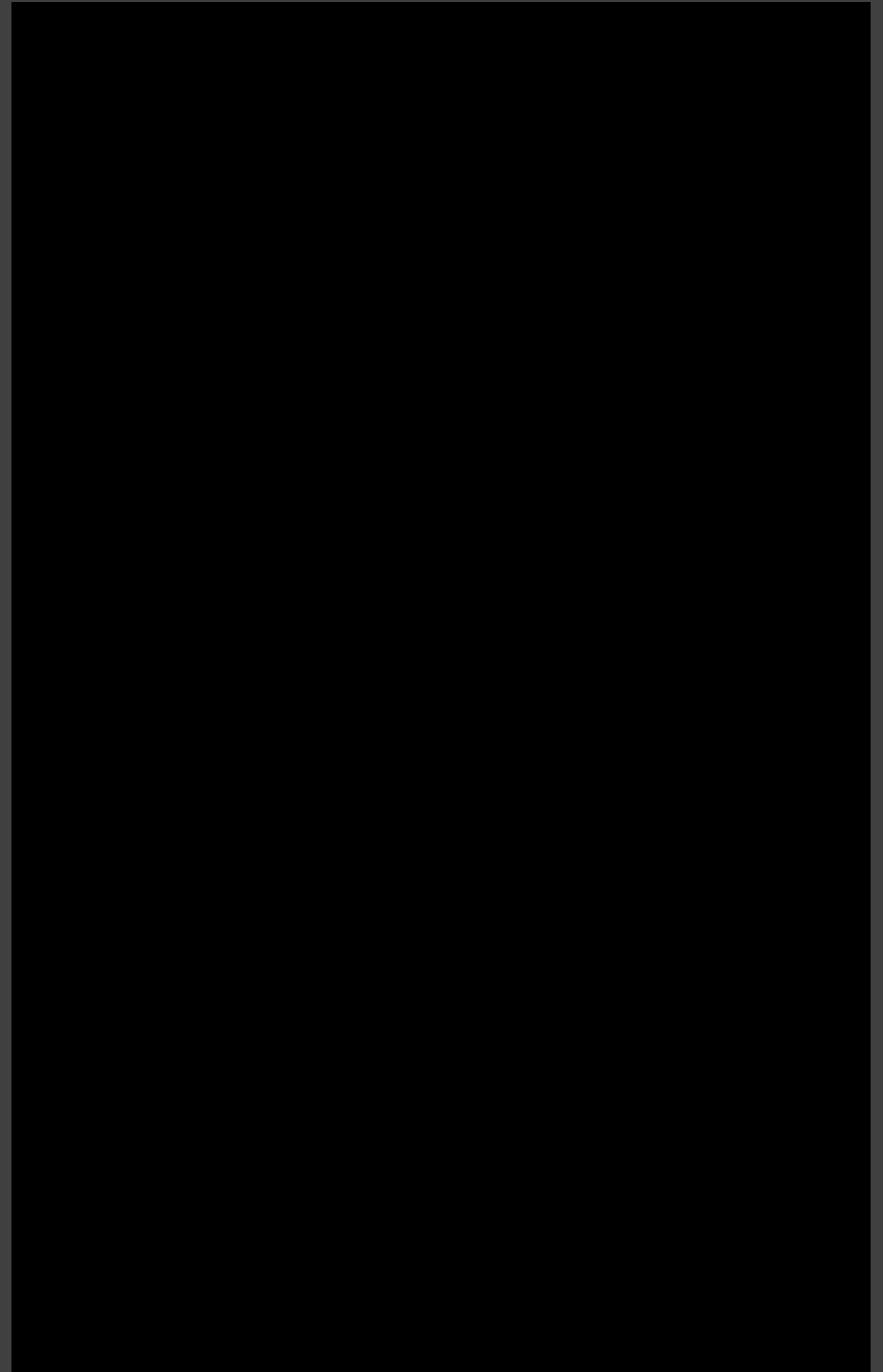
input data

CONFIRM


Setting
Account
Big Font
LOG OUT


Setting
Accout Name
Charlie Li
E-mail
123@gamail.com
EDIT

Video Demonstration



Competing with existing app

10:09 4G

iCare · 药品

+ 添加药品

10:09 4G

iCare · 今日提醒

+ 添加提醒

10:09
4G
添加提醒
完成
添加药品
药品库
吃药时间
简单
第一次
第二次
第三次
第四次
--:--
更多选项（可选）
重复
每天
从今天开始
剂量
未设置
我 你 这 在 不 一 是 好
q w e r t y u i o p
a s d f g h j k l
z x c v b n m
123
空格
完成

10:09
4G
iCare · More
设置
升级
iDaily
倒数日
23
2020
8.30
发工资还有
3
12点前睡觉
iOS14 超强 Widget
首屏推荐
iDaily Museum
每日环球展览
「苹果官方年度推荐」
iHour
时间投资计划
- 10000 小时成为大师 -
NEW
灵感笔记 · iNote
有史以来最美最好用的笔记 App。无限扩展，强大清单，图片导出，深色模式，加密备份
Free
倒数日 · Days Matter
帮助你记录生活中重要日子的小工具。通知挂件，历史上的今天，日期计算器。
Free
每日珠宝杂志 · iDaily Jewelry
不可错过的珠宝手册，每日呈现全球精美珠宝作品，宝石知识和珠宝历史专栏
Free

User Evaluation

1 Interview

To understand the preference of elderly users about APP, the team has interviewed five elderly people who have the experience of using APP and the requirement of having medicine.

- Common problems users have when taking medicine
- Users' opinions about mobile app for timing
- User needs for medication apps and web apps

Conclusion:

- The eyesight of the elderly has declined, and the size of pictures and words should be taken care of their experience as much as possible.
- The cognitive level of the elderly has declined, and the APP interface needs to be sufficiently guiding.
- They also have functional requirements based on ease of use, but these requirements are also based on reducing the cognitive burden of users.

2 Observation

We observed how a 68-year-old couple and a 72-year-old man use mobile phones. According to our observations, the interfaces of these three applications are not suitable for the elderly. They had to wear reading glasses and read hard.

- For the **social APP**, we found that they are very unfamiliar with the operation of finding notifications and editing personal information.
- When using the **reminder APP**, they could not find this feature at first. By our reminder, they found that this feature was activated by sliding down. This shows that the efficiency of searching by inputting text is quite low.
- When using the **Medication Reminder APP**, we found that the elderly is more capable of using the device than we thought. When they performed the operation of deleting the medication reminder, they could not click the icon because it is too small. Lastly, we found that they are using Android phones. So we decided to develop an app based on the Android platform.

3 Think Aloud

Task Objectives:

- **Will the existing interface increase the cognitive burden of users?**
- **Whether the operation process of Medicine schedule users is smooth; whether users have doubts about the interface.**
- **Whether the health data is sufficiently visualized and easy for users to understand.**
- **Whether the function of the setting page is lacking/redundant.**

Conclusions	Solutions
Heavy cognitive load in medicine schedule page	Simplify every notification chunk in the schedule interface
Cannot find add function	Put add function in top right corner
Confused time setting	Remove time setting in medicine information page
Lack of dosage	Set a prominent area for dosage

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Thanks for watching

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Rui Tian
Yan Sui
Yifan Wu
Zhuoran Li