**Assignment 2: Final Design of a Flatting App**

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# Abstract

FlatMate Ltd. accepted the primary design of the flatting app. CEO asked for a final design to develop it into a real app. This report contains the final design of the Flatting app. The introduction provides background knowledge, target users and aims of the app. Drawing sheets are provided for the graphic design of the app and a brief description of each UI is provided. After that, the report discusses the details of user task and extensive use of figures and accompanying text description to clarify precisely how the user interacts with the app. At the end of this report contains a summary that talks about the main idea of this report and prospection to the future of this app.

# Introduction

FlatMate Ltd. accepted the primary Flatting app design from the team. The final interface design of the flatting app was developed according to the request from FlatMate's CEO. A detailed description shows how the user will interact with the app, including what states can be reached and how they are reached in the final design of the flatting app.

Flatting with others who you do not know can bring up problems due to their different lifestyle and culture. This is the backbone of the app, to create a friendly, usable environment for all flatmates to use.

## Target Users

Students are one of the important groups that we are focusing on and because of that, may not necessarily be home all the time to attend to house chores and house activities. Due to clashing lifestyles, some may need to be reminded when to do those activities. Some students might even hold parties in their flat, which can disturb other's studying and put a strain on the flat. With more communication and a fixed roster to remind everyone, our app can be a staple in student life to help form healthy flatting habits.

Office workers would be another group of the user base. They often need to travel to different places for business. When they flat with others, they are not familiar with the rules of the flat. They may forget to do their chores for the flat and may have a different schedule to flatmates. It will be difficult to have a harmonious environment. The flatting app provides utilities to coordinate different people's schedule so that they can communicate about whether everyone agrees with an event or not. And a reminder, of course.

Students and workers are two groups of people that potentially need to live somewhere away from their family. Moreover, they may want to lead a peaceful and harmonious flatting life. They will become our user base. The Flatting app will help them ease running the flat. It provides a powerful tool to manage and coordinate flat activities.

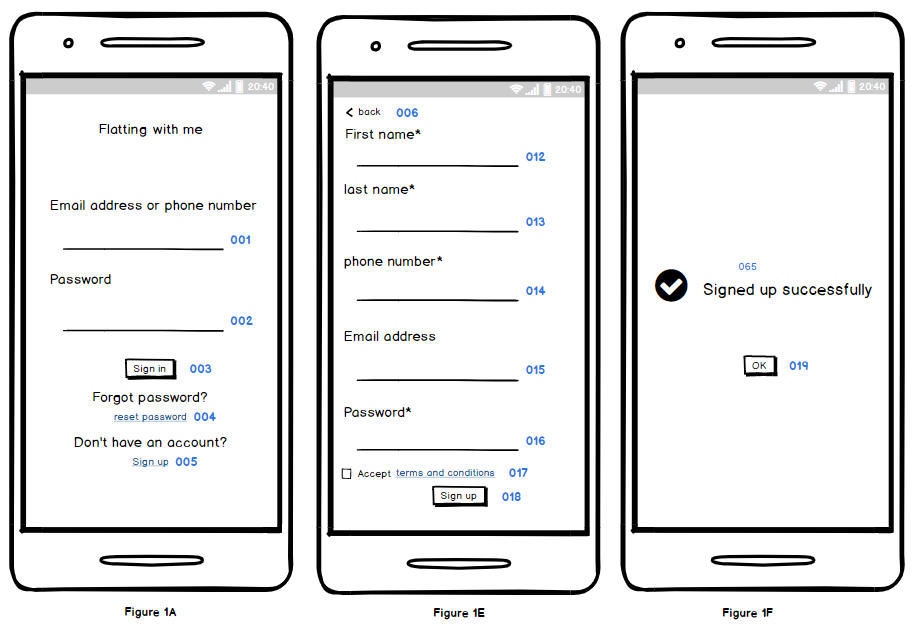
## Aims

This report is aiming to clarify how exactly the user will interact with all parts of the UI. **Drawing sheets** contains all parts of the final design for the flatting app. **Description of the drawings** contains explanations for all sets of figures for flatting app. **Description of user tasks and details of interfaces** explains user tasks and the expectation of its use frequency and importance for the user from our team. Also, the details of all individual parts in each figure and how the user interacts with it. The **Conclusion** which contains thesummary of this report and prospection to the future of this app.

# Drawing sheets

The final design will be separated into multiple sets according to different purposes. The whole final design user interfaces in graphs are listed down below.

## Sign in page



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## Home page

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## Events and Chores

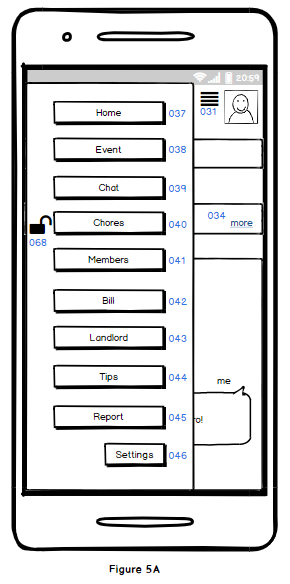
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# 

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## Chat

## Chores assignment



# 

# 

## Members

## Bill

# 

## Landlord

## tipsTips

## Report

## Settings

# Description of the Drawings

All of the final design interfaces are divided into different sets of figures in order to easily illustrate how the user interact with interfaces. This part explains the purpose of each set of figures in general.

FIG.1A to 1K illustrates an example interface of the sign-in page of the app. which consists of 3 different parts: user sign-up procedure and interface. Password reset procedure and interface, as well as a flatting group join interface and methods.

FIG.2A to 2F-2 illustrates an example interface of the home page of the app. This part demonstrates the interface of the home page sector: The home page which comes with chat functionality. The user profile interface which binds with the user profile editing interface. The side menu bar, which is the main menu of the app. Flat admin voting system and its interface.

FIG.3A to 3F-2 illustrates an example of the event center interface. It shows the interface of any coming up event and chores for any individual member. The interface consists of the following. The voting system and the event interface, the interface for creating a customized event, as well as the functionality and interface for event editing/removing and chores swapping.

FIG.4A to 4C illustrates an example of chat interface of the app. It shows the chat interface and how each aspect of chat function works, which includes an ignore feature, private message feature and anonymous mode feature.

FIG.5A to 5E illustrates an example of chores interface which is only accessible by the flat admin. This has tools which allow the flat admin to assign chores to any member of the flat, as well as adding or modifying chores catalogue.

FIG.6A illustrates an example of flatmates interface of the app. It shows a list of all members of the flat and allows the viewer to redirect to the profile page of the selected user.

FIG.7A to 7B illustrates an example of the billing interface of the app. The billing interface works as bill estimator. It allows a user to factor in his/her current rental/electricity/gas fee and returns with his/her total weekly costs and saves it to the account.

FIG.8A-1 to 8A-2 illustrates an example of the landlord interface of the app. The landlord page shows the information of the landlord with an update function.

FIG.9A to 9B illustrates an example of the tips section of the app. It allows a member of the flat to add or modify any tips associated with solving any flat related issues.

FIG.10A illustrates an example of the report interface of the app. It allows the user to address any app-related issues to the customer service such as bugs, crashes.

FIG.11A to 11B illustrates an example of the settings interface of the app. The settings interface gives the user the ability to toggle a few features in the app. It includes toggle notifications. Offline mode; synchronization data with all other flat members; shares flat QR code; leaves the flat group also log out of the app.

# Description of User Tasks and Details of interfaces

This part will discuss all user tasks with scenarios as well as expectations regarding the frequency and importance of the tasks supported.

## Sidebar on home page

The sidebar on the home page is for the user to easily navigate from one interface to another without pressing multiple backward buttons. This design may improve the user experience and fluency of using the app.

Fig 2A

Button 031 will call out the sidebar from the left-hand side of the screen. It will remain on the top right-hand side of the sidebar. Press 031 again or press any position that is not on the sidebar will force the sidebar goes back to the left side of the screen.

The button on the sidebar will be explained inside Task explanation.

## Task 1 Sign in and password reset

The user may expect to have a view of the whole app without login, but this will lead to the security problem (i.e. some person may sneak into private group steal information with, and no one may know who is it), so the user has to login first to use the app.

The flatting app provides a simple way to log into the user account, which will be very similar to any other apps, as shown in Fig 1A. The user will expect to log in their account from this UI. Users have the option of resetting their password if they forget.

This task will not be used very frequently since it is unnecessary to log in each time when opening the app. However it is very critical as the user must log in to their account in order to use the app.

Task 1 assume the user has already had an account and belong to a flat group, so whenever they log in to their account, the app will switch to the user home page (Fig 2A).

**Details**

**Fig 1A is the login interface.**

Fig 1A

Text input 001 is where the user expects to enter their email address or phone number for login.

Text input 002 is where the user expects to enter their password.

Button 003 is where user need to press after they enter their information in 001 and 002 in order to switch to their home page (Fig 2A).

Link 004 will redirect the user to the password reset page (Fig 1G).

**Fig 1G-1K illustrate the procedure of how the user reset their password.**

Fig 1G

Button 020 will bring the user back to the login page.

Text input 021 is for the user to enter the account that they want to reset the password.

Button 022 will switch to the next page (Fig 1H) of the password reset. However, it will not work if 021 is blank.

Fig 1H

After entering a valid account name and press button 022, Fig 1H will ask the user to choose in which way to receive verification code.

Option 023 send verification code to the phone number provided when signing up.

Option 024 send verification code to the email address provided when signing up.

Button 025 let server send verification code to the phone or email and switch to next interface (Fig 1I).

Fig 1I

Text input 026, where the user needs to enter the verification code.

Button 027 is for the case that user could not receive their verification code, press to resend, but it will not work if next press is not over 1 minute.

Press button 028 to submit the verification code and switch to the next interface (Fig 1J) if the code is correct corresponding to account name entered.

Fig 1J

Text input 029 and 030 is for the user to enter the new password twice.

Press button 028 to submit and will show the next interface (Fig 1K) if two passwords are the same.

Fig 1K

Notification 066 will tell the user that their password has updated.

'OK' button 031 will bring the user back to login interface.

## Task 2 Sign up

The user may expect to start using the app, and if they do not have an account, then they need to sign up for an account.

This task will not be used very frequently but is still a critical part of the app, as this is exactly how the user starts using the app.

The user will need to enter their personal information in sigh up page (Fig 1F), after this app switches to group joining interface (Fig 1B), which will be discussed in task 3.

**Details**

**Fig 1E and 1F illustrate the procedure of signing up**

Fig 1E

Text input 012,013,014,015,016 is for the user to enter their personal information, including first name, last name, phone number, email address, password. The 015 is optional for the user if they do not have an email address, but if they enter their email address, they can log in to their account using email address.

Checkbox 017 is the term that the user must agree with to sign up for an account. Press the box to tick the agreement.

Button 018 cannot be pressed if the user does not agree with the term. If everything is valid from the user, then press 018 will switch to the next interface (Fig 1F).

Fig 1F

Notification 065 tells the user that they have signed up successfully.

'OK' button 019 will switch to group joining interface (Fig 1B).

## Task 3 Join/create the flatting group

The user may expect to join a flatting group that is created by another flatmate in new flat. Or they may want to create a group by themselves if nobody has created the group yet and share the group to other flatmates.

How often the user will touch this task depends on whether the user moves to different flat frequently. If so the user may need to change the group often. So this feature is reasonably important to this type of person mentioned above.

**Details**

**Fig 1B-1D illustrate the procedure of joining a group and create a group**

Fig 1B

By clicking sign up 005 in Fig 1A, Fig 1B will show up.

Code input 007 is where the user enters a group code that is copied from other flatmates.

Button 008-1, if the user has input the group code, then press 008-1 will switch to the home page (Fig 2A) that is the group's home page. If not, then this button will do nothing.

Button 008-2 will switch the interface to Fig 1D no matter the user has input the code or not.

Link 'create your own flatting group' 009 will switch interface to Fig 1C.

Fig 1C

By pressing 009 in Fig 1B, Fig 1C shows the group code and QR code that belong to the user's group.

Link 'share code' 010 will activate the user's phone sharing functionality, and then the user can let others join the group via other platforms.

'OK' button 011 will switch interface to the home page (Fig 2A)

Fig 1D

By pressing button 008-2 in Fig 1B, Fig 1D shows a QR scanner which will recognize QR code from others. Once it recognizes a QR code, the user's account will join the group represented by QR code. Then switch to the home page (Fig 2A).

## Task 4 Vote for a group leader

Users may want to vote for a group leader to manage their chores on the app. A group leader can assign members to particular chore activities. As this app is aiming to ease flatting life, a group leader can potentially reduce conflicts between members as it’s a lot easier to do chores when being told and reminded to.

This task will only be used once before the flatting group dismissed. However, this is a critical task that users must do because only the group leader can use the functionality of assigning member chores to do (Fig 2B lock 067 shows that if the member is not a leader, then they do not have access to this feature).

**Details**

**Fig 2E-(2F-2) shows the home page of the app and how to choose a leader**

Fig 2E

Button 032 will appear if the group has no leader yet. Press this button to switch to the voting interface (Fig 2F-1).

Fig 2F-1

Column 064 is the name of all members, including user himself.

Button 054 is how users vote for their leader. One member can only vote once, and they can vote themselves. Once voted, Fig 2F-1 will become Fig 2F-2.

Fig 2F-2

Column 057 shows how many votes a member got.

Icon 058 shows that which member does the user vote.

Cross 033 provides the user to escape from this interface and switch to the home page (Fig 2E).

This procedure, only member get over half of the votes will become the leader. If two members get the same votes, then the button on home page (Fig 2E) will not disappear, and the votes will be reset, the user can vote for a new leader again.

## Task 5 View/edit the user's own profile

The user may want to view and edit their profile in order to complete the information of themselves.

This task may not happen very often. Flat mates would only edit their profile if it is necessary. It is unimportant to the flat mate to update their profile as this isn’t a social app. The profile is reasonably necessary for some situation as people may need to know each other's phone number. Group number is also in the profile, this the code that new member enters to Fig 1B to join the group.

**Details**

**Fig 2c to Fig 2D-2 illustrate how the user changes and view their profile.**

Fig 2c

Icon 062, which is also the avatar of the user. Press this avatar to switch to the user's profile page (Fig 2D-1).

Fig 2D-1

All the information of the user will show on this page, including name, gender, birthday, email address, phone number and group NO.

Press button 047 will switch to the profile editing interface (Fig 2D-2).

Fig 2D-2

From row 050 to row 055 is the text input area for the user to change their information.

Cross 063 on the right of the row can delete the whole row by pressing it.

Button 048 will update the user's information by pressing it.

Photo 049 can be changed by pressing it and upload a new photo from the user's phone.

## Task 6 List and update the user's events

The flatting app provides the user the ability to post their event, which may be relative to others, such as party, upcoming visiting from friends. These events can disturb other flatmates or may clash with other events. If two flatmates all have 3 or 4 guests coming in the same afternoon, that would be very annoying for all of the members. So the user may want to post an event and see if everybody agree with it.

The user will perform this task in the highest frequency because this is the main feature that flatting app provides to the user to coordinate with flatmates and ease running the flat. This task is the most import one in the app.

**Details**

**Fig 3A-(3D-2) illustrate how the user list and update their events and how the user determine whether an event can be held or not**

Fig 3A

From Fig 2B press button 038 to switch to Fig 3A.

Press button 069 to switch to event listing interface (Fig 3B).

Press event 071 to switch to event update interface (Fig 3C). The box on the right of 071 shows how many votes the user's event gets. The box will become a smiling face when votes over half have been achieved. The box will become the crying face if votes less or equal to the number of other flatmates. This rule also applies to **'other’s events'**.

Other's event 072 shows Josh's event is still in voting status and press it will switch to Fig 3D-1.

Other's event 073 shows flatmates reject the party and press it will switch to Fig 3D-2.

Other's event 074 shows visitation is agreed by most of the flatmates. As it has already been voted, it will switch to Fig 3D-2 like above.

Fig 3B

Press switch 076 will make the event change between the all-day or not.

Press 077 and 078 will let the user set the start and end time of the event.

Press 079 to select whether the event will be automatically listed again next week, month or year.

Text area 080, the user can input some detail for other member to read.

Press button 081 will list the event and wait for other's vote.

Fig 3C

User can make any change to their event and press button 082 to update, or button 083 to delete the particular event.

Fig 3D-1

The user can view the detail information about the event belong to others.

Text area 084 provides user functionality to comment on other flatmates events. The comment will appear via phone notification.

Button 085 will add one vote to the event.

Button 086 will not vote for the event.

Once the user votes the event 084 085 086 will disappear like Fig 3D-2

Fig 3D-2

The interface that event has already been voted.

## Task 7 View the user's chores and other's chores

Doing chores in turns is critical to a happy life for everyone. The flat is everyone’s home. Each individual has to take responsibility for it. The user may want to view when their next duty day is and what they should do. Also, they may want to swap to other flatmates if any inconvenient time appears in the user's schedule.

The user will often do this task, or passively be notified by the app via phone. This task is crucial for the user because if they forget to do it, others may be upset.

**Details**

**Fig 3F-1 to 3G illustrate how the user views their chores as well as others**

Fig 3F-1

Press chore 070 on Fig 3A, will switch to the interface of detail of 'my chores'

The user can see all the detail of their chore.

087 shows all other chores.

Press swap button 088 will send a request to target member and ask for swap chore.

Fig 3F-2

If target member accepted the request, notification 089 would appear on the screen. At the meantime, the chore will be swapped with the target's chore.

Fig 3G

If press other's chores 075 on Fig 3A, Fig 3G will appear to show details of the selected flatmate's chore.

Fig 2A

The home interface shows upcoming events and chores.

061 is an event which could come from anyone, including yourself.

034 is the upcoming chore for the user, not including other flatmate’s chores. The **‘more’** button in 034 will switch to interface to Fig 3A the same function to button 038 on Fig 2B.

## Task 8 Message other flatmates

Communication is another critical way to ease running flat. Most of the time, misunderstanding and confliction will happen to flatmates who lack communication with each other. The user may expect to use a utility supporting them to communicate with each other easily and maybe more functionality due to different situation of communication.

Private chat could be helpful for a personal conversation. The anonymous message could be helpful to solve some problem that is not good to let people know the suggestion is from whom. E.g. one of the flatmates is very noisy during the night, but they do not know each other very well, the anonymous message could help to stop noise without harming the relationship between flatmates.

This task will be used very frequently. Post the event in the app sometimes may not as detail as needed. Message others and confirm with them about events will make flat management easier. This task is important for the flatting life.

**Details**

**Fig 2A illustrates how the user chats with each other in the public channel.**

Chat Bubble 060, is how it looks like when flatmates chat with each other.

Unlock icon 059 shows that Jose is the group leader.

Text input 035 is where the user input what they want to say to others.

Icon 036 will call the keyboard if the user presses it.

**Fig 4A to 4C illustrate sending a personal message and anonymous message and how to mute a member.**

Press button 039 on Fig 2B will switch to interface Fig 4A.

Fig 4A

Column 090 is the name of all members.

Icon 091 provides the user with a way to mute other members. The user will not be able to see any messages from the member being muted.

Icon 092, provides the user with a way to private chat with a member. Press it will switch to Fig 4B.

Icon 093, provides the user with a way to anonymous message a flatmate. Press it then a pop-up window will appear as shown in Fig 4c 094, the user can input what they want to say in the window and press send to send message to target member.

## Task 9 Assign chores to flatmates

This task can only be done by the group leader. Assign chores by the group leader avoid people argue with each other about what kind of chores they like and what they do not like. The group leader may want to assign chores to a particular person and add/modify the necessary chore category.

This task would not be touched by the group leader very often. As long as the group leader set the chore repeatedly, the app will assign the chore to all people periodically. This task is critical in this app because this is about how flatmates manage their chores.

**Details**

**Fig 2B and 5B-5D illustrate the procedure of how the user assigns the chore to a member and how to add/update chore category.**

Fig 2B

Unlock icon 068 shows that the user is the group leader.

Button 040, will direct to interface Fig 5B.

Fig 5B

Column 095 shows all members name.

Press one of the members' name from 095, will switch to interface Fig 5E.

Press button 096, will switch to interface Fig 5C.

Fig 5E

Dropdown menu 103, the group leader can select a chore for the selected member.

Date 104 is for setting the date of chores.

Repeat 105 is for whether chores are a one-time assignment or will automatically be assigned to the member each week, month, and year. This option is determined when creating this chore.

Column 107 shows that what chores the member has.

Button 108 will assign the chore to the selected member.

Fig 5C

Column 097 shows the chores categories added before.

Button 098 will switch to interface Fig 5D for adding new chores.

Fig 5D

Text input 099 is for inputting the name of chore.

Repeat 100 if for setting whether the new chore needs to be assigned to the member periodically.

Description 101 is the detail of this new chore that can be added by the group leader.

Button 102 will add the new chore to chores category.

## Task 10 View profile of other flatmates

The user may want to view other profiles in order to get familiar with them. It could be a way to improve the relationship between flatmates. For some situation that the user needs to contact with particular group member via phone, this feature could be handy and helpful for solving the problem.

This task would not frequently be used, as members know each other in real life, not from this simple profile. This task is not essential as this is not a social app like Facebook.

**Details**

**Fig 2B 6A and 2D-3 illustrate how the user views others' profile.**

Fig 2B

Press button 041 will switch to the interface Fig 6A to view the list of member.

Fig 6A

Column 109 shows the name of the members. Press any of the members' name will switch to interface Fig 2D-3.

Fig 2D-3

Fig 2D-3 shows all information about selected flatmate.

## Task 11 View bill and estimate bill

The user may want to estimate and record the bill of the flat so that the user does not need to keep it in mind all the time. Bill can be quickly checked via Flatting app. This task may happen once a week or a month, as this the time that the user needs to pay rental fee. This task may not be important as most of the time, the bill each week would not change.

**Details**

**Fig 2B, 7A and 7B illustrate how to check their bill and update estimation of the bill.**

Fig2B

Button 024 will switch to interface Fig 7A.

Fig 7A

Dollar 110 shows how much rent per week.

Dollar 111 shows how much rent per week in person.

Dollar 112 shows how much for electricity per week.

Dollar 113 shows how much for a person to pay for the flat.

Button 114 will switch to interface Fig 7B.

Fig 7B

Text input 115 is for input the total rental fee.

Dropdown menu 116 will adjust how often would the user pay the rental fee.

Switch 117 determines whether the rental fee will be shared if shared 113 and 111 in Fig 7A will be displayed after money sharing.

Text input 118 is for electricity fee.

Dropdown menu 119 and 120 is the same to 116 and 117.

Press button 121 will update the estimation for the rental fee and electricity fee.

## Task 12 View/update landlord detail

Detail of the landlord is stored in the user's phone locally. Flatmates may want to upload different information for the landlord i.e. a different email address or different contact number. This task would not be often touched by the user, as they need to check the payment method only once a week. And not important because most of the e-bank apps provide a record of payment.

**Details**

**Fig 2B, 8A and 8A-2 illustrate how the user views their landlord's information.**

Fig 2B

Press button 043 will switch to interface Fig 8A.

Fig 8A

Column 128 shows all the information that the user uploads.

Press button 122 will switch to interface 8A-2.

Fig 8A-2

Text input 123, 124, 125, 126 can be change by type the input area and change the information.

Press button 127 will update the information changed by the user.

## Task13 View/add tips for flatting life

Tips can be a handy utility for users because it provides knowledge about how to complete tasks better or have friendly reminders from other flatmates. This can be very useful for people not sure about how to do some chores. Stress from flatting can come from being not familiar with chores. Tips would help the user to improve their skill of taking care of the flat. The user may want to have a look of tips during their chores or to add new tips for other flatmates.

The user could be doing this task very often. Moreover, this is reasonably important for ease running the app.

**Details**

**Fig 2B, 9A and 9B illustrate how the user view tips and add tips.**

Fig 2B

Press tips button 045 will switch to interface Fig 9A.

Fig 9A

Dropdown menu 129, the user can tape each of the titles to view tips appear below the title.

Press button 130 will switch to interface Fig 9B.

Fig 9B

The user can input the title of the tip in text input 142.

The user can input the details of the tips in the text area 141.

Press button 131 to submit tips.

## Task 14 Report bug

The user may want to report a bug of the app in order to get a better experience. This task would also help us to improve the app.

The user may seldom touch this task because most of the time, the user would ignore the bug. This task is important for our developer but not for the user.

**Details**

**Fig 2B and Fig 10A illustrates how the user report a bug of the app**

Fig 2B

Press report button 045 will switch to interface Fig 10A

Fig 10A

Text area 132 is for the user to input a description of how bug happens.

Press button 133 will submit the bug description to us.

## Task 15 Adjust app via settings

Like other mobile apps, Flatting app also provides several options for adjustment in settings. The user may want to adjust some to the settings in a particular situation such as closing notification, offline mode, and sync with others.

The user would not do this task very frequently but may do it the first time they login to the app. Settings are important for the app. It shows that the app can be adjusted to fit the user’s preference.

**Details**

**Fig 2B, 11A and 11B illustrate how the user can adjust app in settings**

Fig 2B

Press button 046 to switch to interface Fig 11A.

Fig 11A

Switch 134 is controlling if the user can receive notification from the app.

Switch 135 is for whenever data is not available, or the app will keep trying use up data.

Switch 136 is for synchronize with the server after recovering from offline mode.

Press button 137 will switch to interface Fig 11B, to show the QR code for a new flatmate to scan and join the group.

Fig 11B

A QR code.

## Task 16 Leave group and logout

The user may want to logout the app and log in to a new account or leave the group for a new group if they move out.

This task would not happen so often, as most the people would not usually move from one place to another. Moreover, people often have one account. The importance of this task is in the middle. The user should not be stuck in the app by one account, and the group should be able to change.

**Details**

**Fig 11A shows how the user leaves flat and logout.**

Fig 11A

Press button 138 will leave the current group, and switch to interface Fig 1B in order to join a new group or create a new group.

Press button 140 will logout the current account, then switch to interface 1A in order to log in again.

# Conclusion

This app is aiming to provide people who flat together a set of utilities to enhance their flatting life and increase flat relations. With the help of this app, people can potentially ease running the flat with less confliction and problems. These powerful tools help people to manage all events and duties for themselves quickly.

The design of flatting app has already been developed multiple times. It is reliable and stable for solving the user's problems from flatting with each other. We believe this final design of the flatting app will become popular and widely used by people who are flatting after developed into a real app by FlatMate Ltd.

**Contribution**

Enyang Zhang: report writing, final design refinement

Hui Zhuo: report writing, final design refinement

Bryan Lim: report writing, final design refinement.