



# IFN591

## Assignment 3 Portfolio Virtual Psychologist

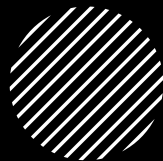
### Team 1

Doris Che (Xinyang)	n10892915
Ho Sze Wong (Angel)	n10864989
Yena Park	n10837353



**Doris Che**

Doris is a Master of Information Technology student majoring in Data Science at QUT. Living in Brisbane for 10 years now. She graduated in Bachelor of Civil Engineering at UQ in 2017. As she has work experience with clients for two years, now she wants to explore more in the UX & UI fields to gain more knowledge and apply to the real world project. Doris has good communication skills and strong empathy with clients, which helps to understand the needs and determine the goals of the project. Doris has contributed to this project by providing good hand sketch and design techniques, and communicate with clients to understand the scope and needs of this project.



Angel is a Master of Information Technology student majoring in Software Development at QUT. She has a background in studying Hotel and Tourism management for 3 years and has work experience in service industry for more than 5 years. From her working and study background, she is good at understanding the customer behaviour and analysing their user experience. Angel has contributed to this project by providing insight on how to improve customer experience. She has good interview techniques and constantly participated to the project.



**Angel Wong**

# UX Team





# UX Team



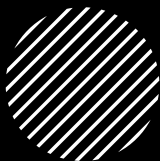
Yena Park

Yena is a Master of Information Technology student majoring in Computer Science at QUT. Having grown up in Korea, and currently lived in Australia. She studied a Bachelor of Economics at Ewha, and now she is excited to start her career in ICT. Yena is good at presenting data visualisations in an effective way. She has a strong skill to precisely analyse and address the ideas that she wants to deliver, which has contributed to the project in a deep understanding of problem stages as well as in the design ideas of the prototype and the portfolio.



*"Our team scheduled regular team meetings every week during the project. All members have involved in all the phases of the design and provided creative ideas from multiple aspects to the project. Three of us have the same goal and high standards to achieve the better outcome.*

*We have encouraged each other and enjoyed working together as a team."*





# Design Brief

Refined Problem



# Problems

Research from the previous UX study has elaborated that the current booking bot system of Virtual Psychologist has only accomplished **simplicity** and **efficiency**.

After the discussion about findings of each team member, we concluded the main problems:

- ◆ **Lack of instruction**

- ◆ **Simple and unprofessional user interface design**



# Objectives

**Two facets** of Peter Morville's honeycomb which need **to be improved** based on combining the comprehensive insights from all participants:

## ◆ Usability

to make the whole booking process **user friendly** not causing any uncertainty but feeling satisfied and inclined to book again.

## ◆ Credibility

for users to **ensure** against being misled by providing professional interface and preventing them from feeling insecure.



**Maintain simplicity** while **improving usability**  
and **credibility**

## Objectives

- ◆ **Modify UI design and structure consistently**
- ◆ **Additional information and guidance**



## Target Audience

**Employee of the Australian organisation** who have participate in the **corporate solutions**

The scope of the project focus on the **Corporate solutions** within Australia

Although it is for global clients, this project restricts to **English speakers** living in Australia as the given system is **Australian version**

## Scope





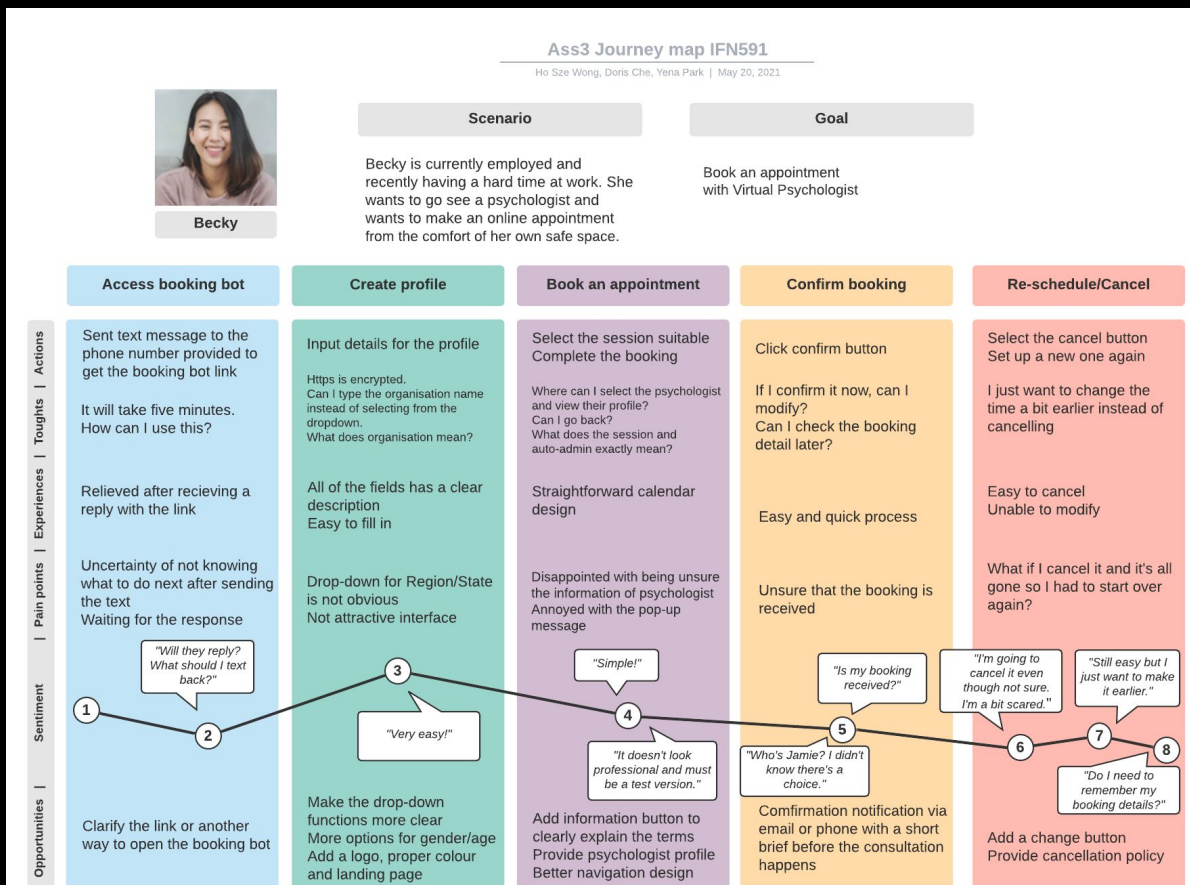
# Design Process

From design specifications through  
to design iterations

# Design Process 1: New Journey Map

This journey map displays the **combined findings** of our past UX study as a **single journey** based on six participants.

This shows **the experience flow** of a target persona **would take** when they book an appointment using the booking bot.





# Design Process 2: Problems Findings

## UI Design Problems

- ◆ Increase the **font size**
- ◆ Refine the **drop down button**, make it **obvious and clear**
- ◆ Re-design the way to show **the booking confirmation** instead of the pop-up message
- ◆ Add **Logo** to reinforce the reputation
- ◆ Modify the **colour of the button** by using green colour for the button that the user expects to go to the next stage such as **'booking'** instead of **'view profile'**



## Functional Problems

- ◆ Add information button to provide **description of 'Organisation' & 'Sessions'**
- ◆ Add **Q&A or 'Support'** sections to allow clients to have any chance to get help in case they feel confused
- ◆ Add **more option for user to select** in the drop down list of 'Gender' and 'Age', such as **'Prefer not to say'**
- ◆ Provide **more information of psychologists**, such as photo, age category, gender, major and study background
- ◆ Add a **progress bar** for the booking part, such as 'Step 1 Select Service Type > Step 2 Select Psychologist & Date > Step 3 Confirmation'
- ◆ Create the **'Reschedule appointment' button** instead of cancelling and booking again
- ◆ Add the **cancellation policy** to clarify cancellation terms before user click the cancel button



# Design Process 3: Hand Sketch & Prototype 1



During the early stage of research study, we have **combined the feedbacks from six participants** and summarised in Problem Findings (slice 12-13). We have **refined the design objectives** based on Honeycomb framework.

The design of **hand sketch** and **prototype 1** indicated **the improvement on finability, usability and credibility**. The following slides shows the key changes in Prototype 1. The full hand sketch design and prototype 1 can be found in Appendix A and B.





# Hand Sketch & Prototype 1.0

Hand-drawn sketch of a 'Create Profile' form. At the top, there is a placeholder for a 'logo' and a 'Banner Image' indicated by blue diagonal lines. The form is titled 'Create Profile :'. It contains several input fields: 'Organisations' with a red circle containing an 'i' (information button) and a green arrow pointing to it with the text 'add information button'; 'Age Category' with a red square containing a 'v' (dropdown button); a field with the text '+ Option ! Refer Not to Say!' with a green arrow pointing to it; 'Gender' with a red arrow pointing to it; and 'State/Region'. Below these fields is a large box for 'Confirmation & Reminder Message'. At the bottom are two buttons: 'Back' and 'Confirm'.

Digitized prototype of the 'Create profile' page. It features a header with a 'logo' placeholder and a title 'Create profile'. The form includes input fields for 'First Name', 'Last Name', 'Organisation' (with a dropdown arrow and a red circle containing an 'i'), 'Country' (with a dropdown arrow), 'Region/State' (with a dropdown arrow), 'Gender' (with a dropdown arrow), 'Age Categor' (with a dropdown arrow), and 'Post Code' (with a dropdown arrow). A disclaimer text states: '\*Once you submit the profile, you cant manually change the content in this website due to Government policy'. At the bottom are two buttons: '< Back' and a green 'Confirm' button. The footer contains the text 'Copyright © 2021 Powered by Virtual Psychologist'.

Create user profile page of prototype 1.0 now with:

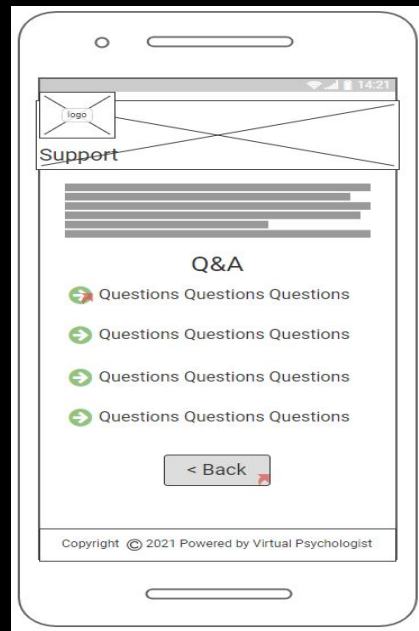
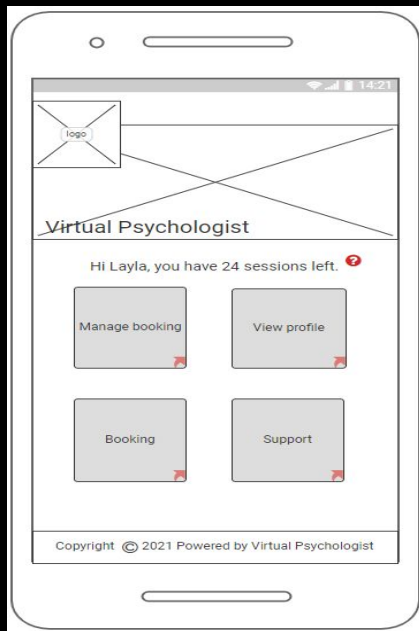
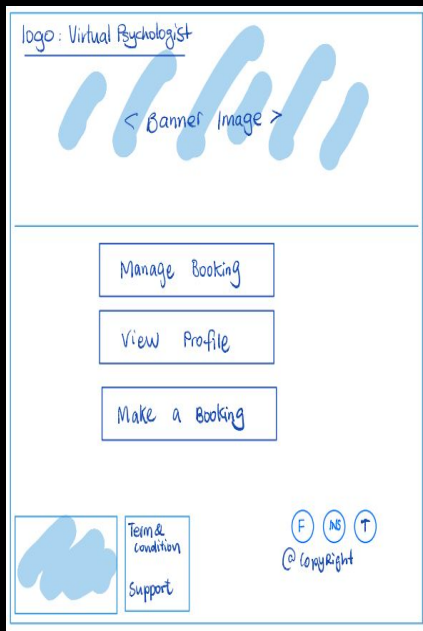
- **Information button** was added next to 'Organization'
- Make the **drop-down button clear and obvious**
- Modify the **'Confirm' button to green**



# Hand Sketch & Prototype 1.0

The home page after logging in now in prototype 1.0 with:

- **Information button** added besides '**24 sessions left**' to provide the description
- Increase **the button size**, which is easier for user to click on mobile app
- Add '**Support**' option to give more instruction

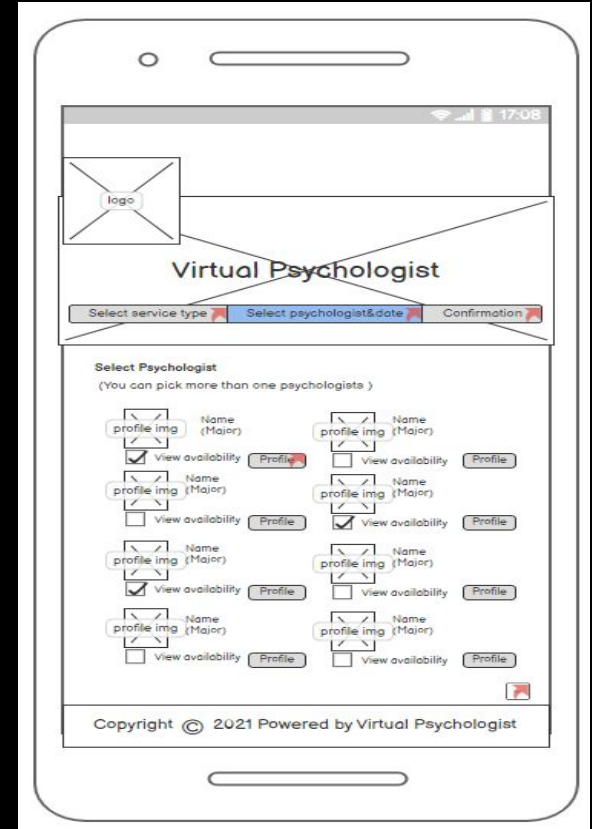
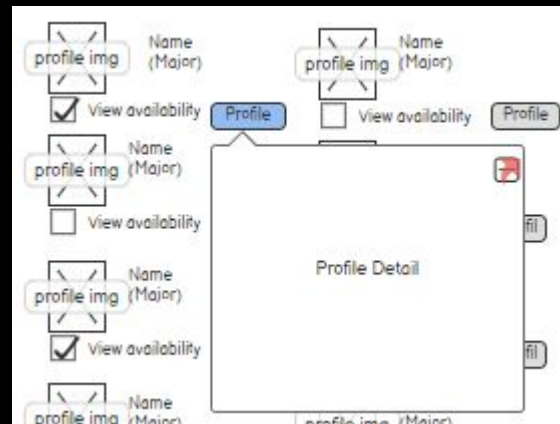
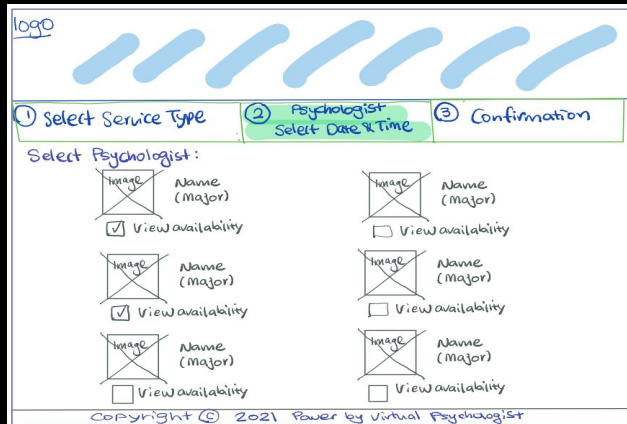




# Hand Sketch & Prototype 1.0

The booking process and psychologist profile have new changes now in prototype 1.0 with:

- Add a **progress bar** to indicate the current status to the user
- Allow the user to view the **detail psychologist profile**
- Contain **more information of psychologists**
- Able to select **multiple psychologists** to view the **availability**







# Hand Sketch & Prototype 1.0

## New confirmation page of prototype 1.0:

- Add a **new page for 'Booking confirmation'** to show the detail information of the appointment
- Allow the user to **async the booking to calendar**
- Modify the **'Confirm' button to green**

logo

1 Select Service Type 2 Psychologist Select Date & Time 3 Confirmation

You selected:

Date:  
Time:  
Psychologist Name:  
Service Type:

Back Confirm

Support

Virtual Psychologist

Select service type Select psychologist&date Confirmation

You selected

Date: Fri 21 May  
Time: 9.5uAM  
Psychologist: Dervla Loughnane  
Service Type: Consultation

Back Confirm

Support

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Virtual Psychologist

Booking Confirmed

Booking Details

Consultation x1 is booked for Layla

You will receive a message confirming this appointment.  
Please contact us if you do not receive your confirmation message.

Date: Fri 21 May  
Time: 9.5uAM  
Psychologist: Dervla Loughnane  
Service Type: Consultation

ADD TO YOUR CALENDAR


HOME Support

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# Prototype 2.0

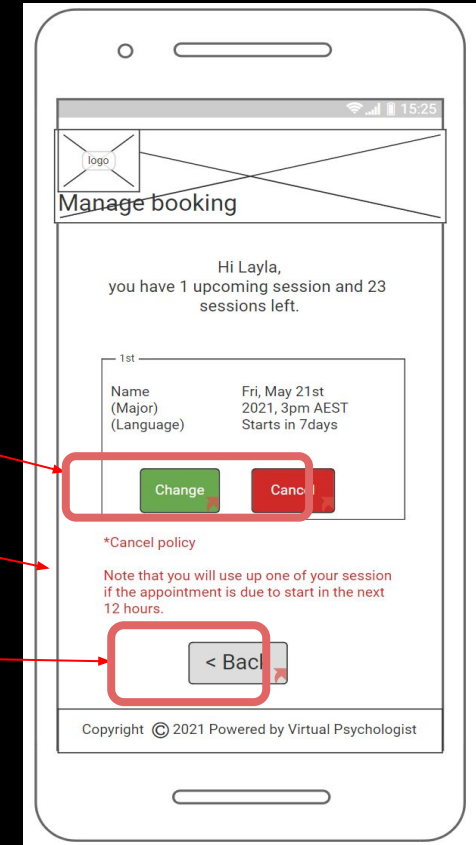
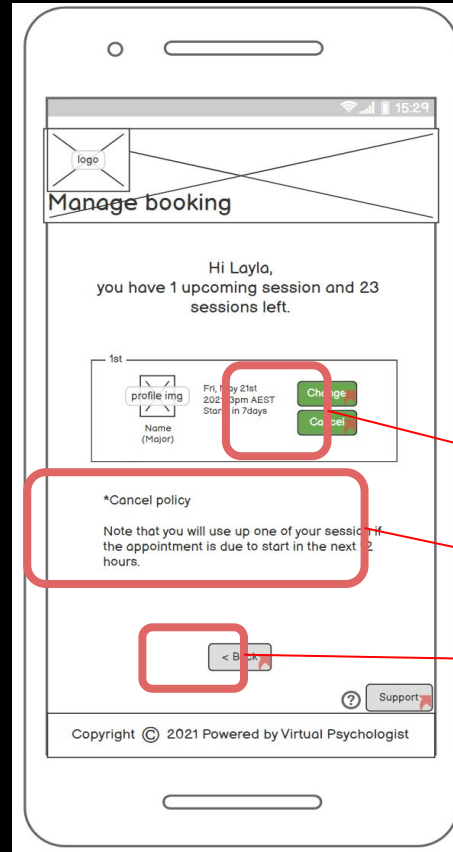
After presenting our first prototype to  
the real world partner,  
we implemented our prototype 2.0  
based on the feedback.



# Feedback 1

◆ **Bigger button size**  
especially considering  
mobile environment

◆ **Change the colour** for  
the **cancel policy** in case  
the user missed it

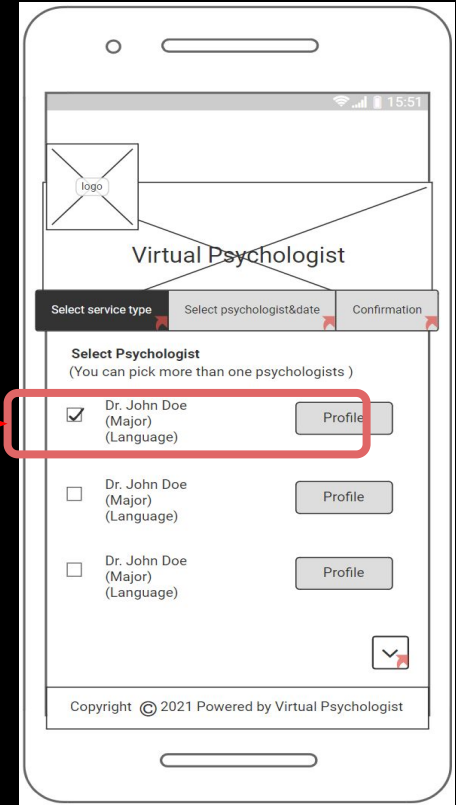
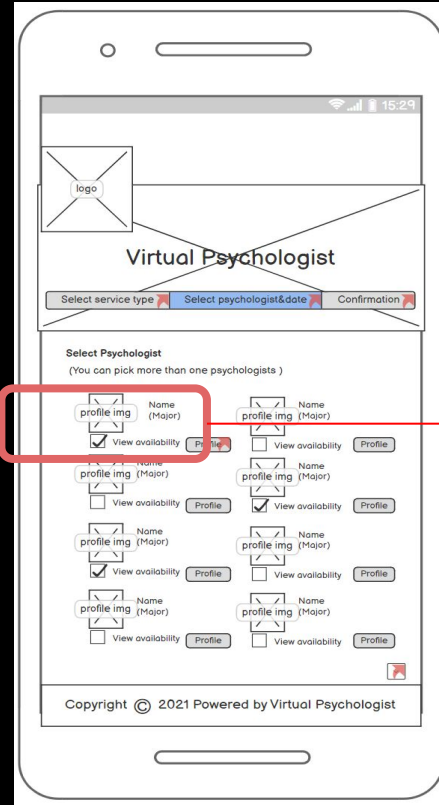



## Feedback 2:

◆ **Reduce the information** in the select psychologist page as it is **overwhelming on the mobile application**

## Feedback 3:

◆ **Remove the image of the psychologist** as it might create bias from a privacy perspective, there has been occasions where **removing photos has helped counsellors to be booked**





# Evaluation Method



# Evaluation Method

Based on the feedback from the previous UX study, we have **combined the feedbacks from six participants** and summarised in Problem Findings (slice 12-13). We have **refined the design objectives** based on Honeycomb framework.

The design of **hand sketch** and **prototype 1.0** indicated **the improvement on finability, usability and credibility**. The following slides shows the key changes in Prototype 1. The full hand sketch design and prototype 1 can be found in Appendix A and B.

The aim of this study is to **evaluate the prototype** that has been **developed based on** the findings of **participants' exploration** and **real world partner feedback**. Two same participants with the previous study were invited to three methods. Both participants were provided with consent form to complete before the interview.



# Evaluation Method

## ◆ Participant Overview

### Participant 1

Participant 1 is a 23-year-old female who is currently working in hospitality service. She is a Hong Kong citizen who moved to Australia 4 years ago. She can speak fluent Chinese and English. The booking systems she has used before include a travelling booking system and a vet booking system. She expects the booking process to be easy to use and able to complete in 10 minutes. Most of the time she likes to use her laptop to make a booking. She is comfortable with using technologies such as smartphones and laptops.

### Participant 2

Participant 2 is a 24-year-old female who is working and living in Hong Kong. She is currently working for a Bank as a money laundering officer. She can speak fluent Chinese, English and a bit of French. Most of her experience with a booking system is using a tourism booking system, such as Airbnb, booking.com etc. She expects a booking process to be able to complete in 5 minutes. She is comfortable with technology such as smartphone and laptop, as she uses them in daily life.



# Evaluation Method

## ◆ Usability Test : Do

The purpose of the usability test is to allow the interviewer to **observe the participants interaction with the booking system**. Participants were asked to perform predefined set of tasks with a scenario. The tasks were performed on the refined Virtual Psychologist booking bot prototype.

The usability test was conducted **face-to-face**, participants needed to open the corresponding website using the link provided. The tasks include **reviewing the create profile page, making a booking, changing the booking** and **canceling the booking**.

During the usability test, participants were expected to perform the tasks **without researcher intervention** unless needed. As a researcher, we provided an explanation on the tasks without interrupting the original performance of the user.





# Evaluation Method

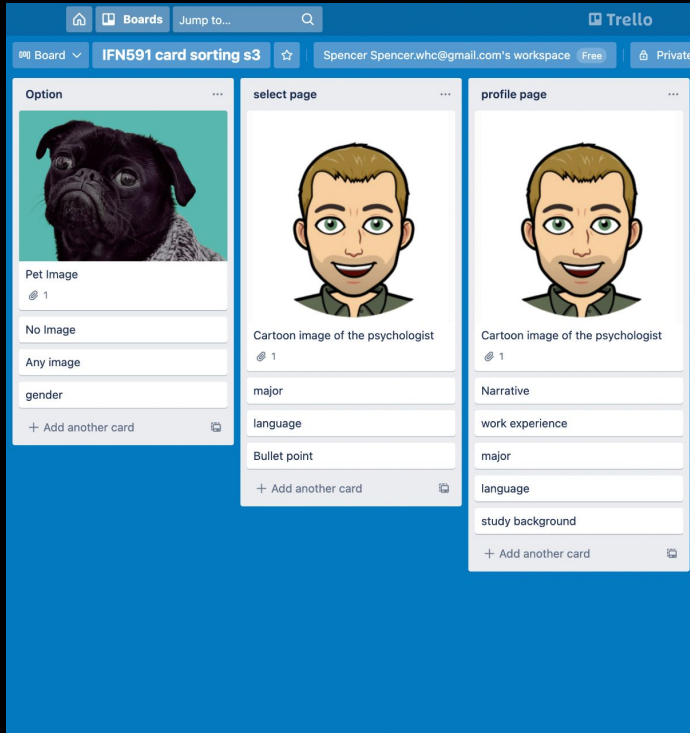
## ◆ Interview: Say

A **semi-structured interview** was conducted **after the usability test**. The interview questions were designed **based on the Peter Morville's honeycomb model** and usability test content. In the interview, the participant was asked to share their user experience based on the prototype usefulness, usability, findability and credibility. The interview also collected the participants opinions on **what need to be improved** if there is any.

All the questions were **open-ended questions**. When the participant provided a brief answer such as “Yes” or “No” more follow up questions were asked. The Interview method was used because it allows the interviewer to gain a detailed and comprehensive response from the participant regarding to their user experience. As experience and feelings are very subjective, a semi-structured interview question can guide participants to express their thoughts easier.

# Evaluation Method

## ◆ Card Sorting: Make



Card sorting method was used to help participants **visualise their suggestion**. The aim was to study what is **the key information** that affects the user's decision on **choosing the psychologist** when there's no real person image provided. As based on the real world partner feedback, the real person image might trigger unnecessary bias towards the psychologist and affecting user choice. Therefore, it is important to not include any real image in the psychologist profile page.

In order to improve the prototype for the select psychologist page and detailed psychologist profile page, participants were given **a set of attribute related to the profile**, and they needed to sort the cards they think as important for decision making. The tasks was conducted on Trello. They can break up the attribute or create a new attribute if they want to. After participants finish the card sorting, the interviewer asked them why they chose some cards.



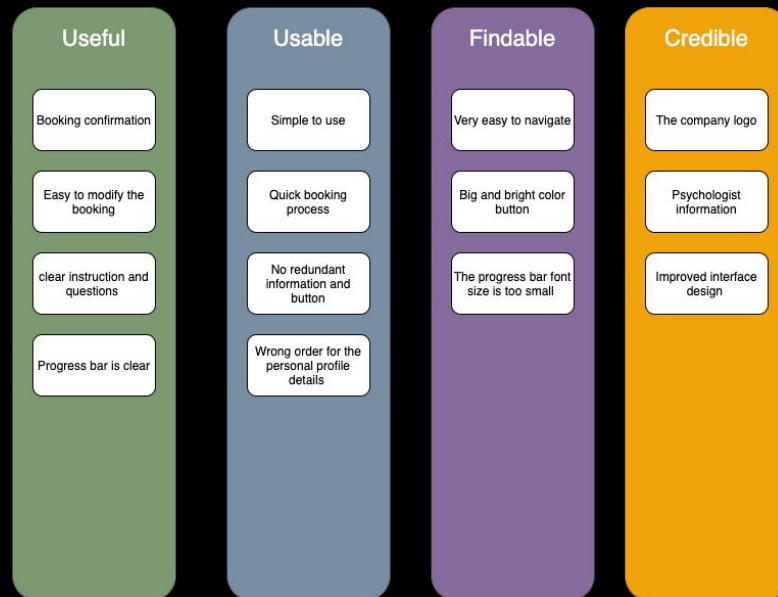
# Evaluation Method

## ◆ Analysis process

As the data collected was **qualitative**, we had use **thematic analysis** for the analysis process.

First of all, after the interview, all the **recordings was transcribed** using Otter.ai. Based on the transcript and field notes taken, an **affinity diagram** have been developed and presented.


Peter Morville's honeycomb model was used as the theme to assign the coded found from the data.





# Findings

New design improves usability, findability, accessibility, and credibility.



Overall, it is easy and efficient to make a booking with proper instruction.





# User's Experience

## Useful

Booking confirmation

Easy to modify the  
booking

clear instruction and  
questions

Progress bar is clear

The following quote is related to **usefulness** of the prototype 2.0.

*"I like the booking reconfirmation, it make me feel secure that I actually did booking something." -P1*

*"Now I can easily change my booking without cancelling it, which is so much better then before where I can only cancel the booking." -P2*

*"All the detail and questions is what you will usually see on the booking website."-P2*

*"I really like the progress bar, it gives me a clear idea of how many step it's in the booking process and which step i'm in right now."-P1*





# User's Experience

## Usable

Simple to use

Quick booking  
process

No redundant  
information and  
button

Wrong order for the  
personal profile  
details

The following quote is related to **usability** of the prototype 2.

*"This user interface is too easy to understand, everything is just there for you."-P2*

*"I like the booking process is simple and feels like the progress bar can indicate me where I am upto so far, which is nice."-P2*

*"Questions is on point and easy to understand."-P1*





# User's Experience

## Findable

Very easy to navigate

Big and bright color  
button

The progress bar font  
size is too small

The following quote is related to **findability** of the prototype 2.

*"The button size is big and clear to see, so good!" -P1*

*"I like how I can navigate back and forth through the progress bar."*  
-P1

*"But the size of the font in the progress bar is a bit hard to see." -P2*





# User's Experience

## Credible

The company logo

Psychologist  
information

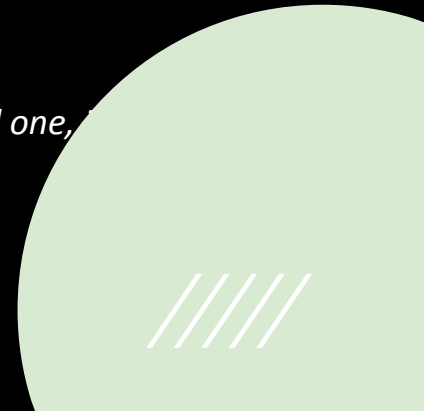
Improved interface  
design

The following quote is related to **credibility** of the prototype 2.

*"I remember before when I first use this website, I really doubt if this the real website as there's no logo or company name whatsoever, so it is great to able to see something real now." -P1*

*"I think the psychologist information is really important for me to make booking, as I need the information to see if I can trust that person." -P2*

*"The user interface design improved a lot from the original one, it looks more professional now." -P2*







# Re-design suggestion

Based on the **data collected from two participants**, their user experience can be discussed using the Peter Morville's honeycomb model. The findings will include **re-design suggestions** from the participants.

- ◆ **Re-order the attribute in the profile page**
- ◆ **Add a new button to display all the psychologist profile**
- ◆ **Provide cartoon image to identify psychologist**
- ◆ **Change the progress bar design**

## ◆ Re-order the attribute in the profile page

*"I usually gave my personal information like gender and age first and then, filled up the address."*

... by participant 1

0:47

logo

### Create profile

First Name

Last Name

Organisation ?

Country

Region/State

Gender

Age Categor

Post Code

\*Once you submit the profile, you can't manually change the content in this website due to Government policy

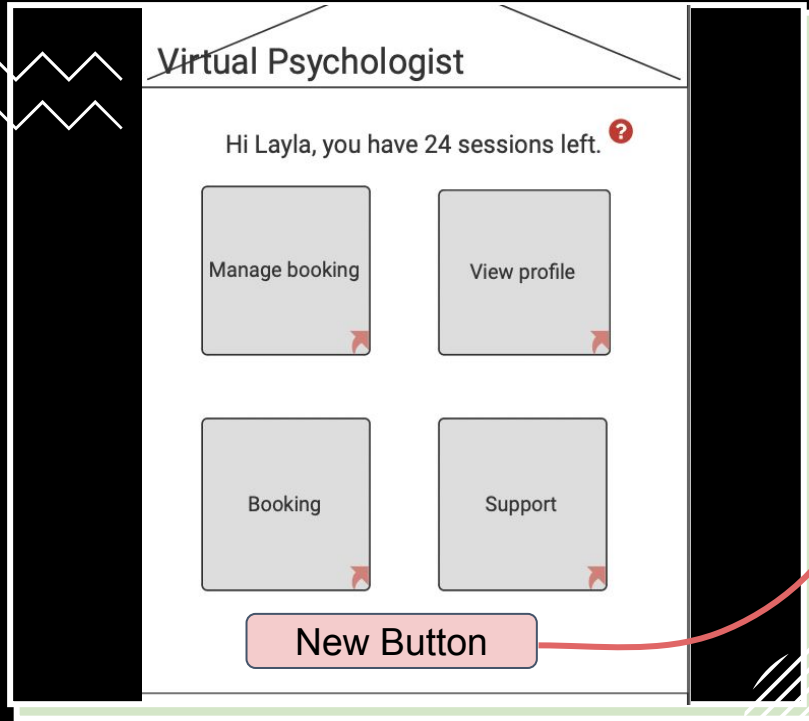
< Back Confirm

Prototype 2: Create profile page

◆ **Add a new button to display all the psychologist profile in the home page**

*"I think it will be better to be able to see all the psychologists' profile before the booking process."*

... by participant 2



Prototype 2: Home Page

## ◆ Provide cartoon image to identify psychologist

*“I’m not good with names, a photo can help me better understand who that is.”*

... by participant 2

15:02

logo

### Virtual Psychologist

Select service type   Select psychologist&date   Confirmation

#### Select Psychologist

(You can pick more than one psychologists )

☒ Dr. John Doe  
(Major)  
(Language)   Profile

☐ Dr. John Doe  
(Major)  
(Language)   Profile

☐ Dr. John Doe  
(Major)  
(Language)   Profile

✓

Prototype 2: Select psychologist page

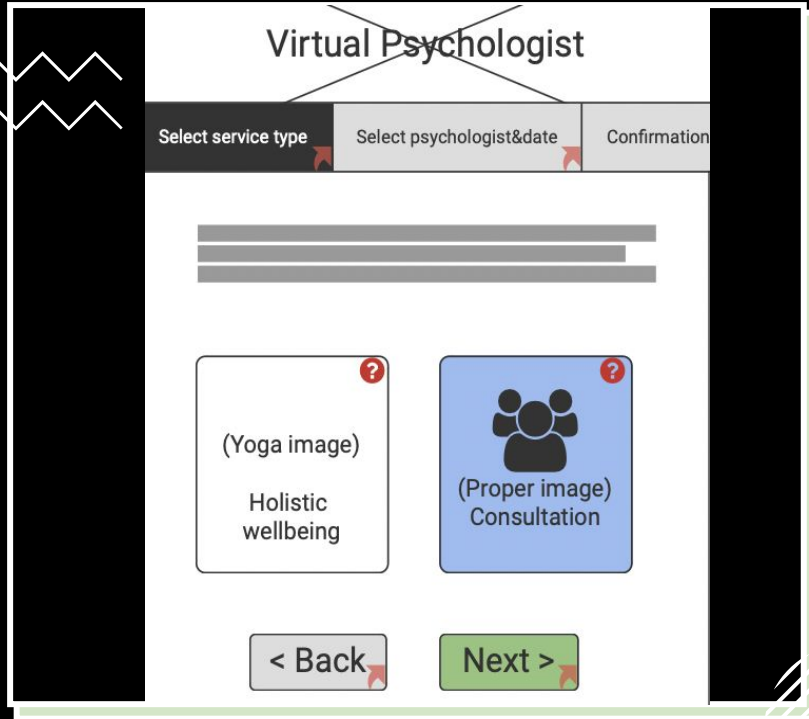
## ◆ Change the progress bar design

*"The font size is too small."*

... by participant 2

*"It is confusing that I feel like I can straightly go to confirmation page even though I haven't selected what service I want yet."*

... by participant 1




Prototype 2: Booking page



# Final Prototype

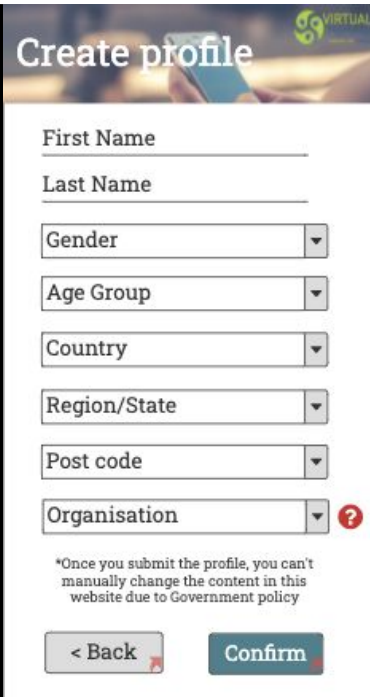
Prototype 3.0 combined all the good  
element from the prototype 2 and  
re-design suggestion from the participant



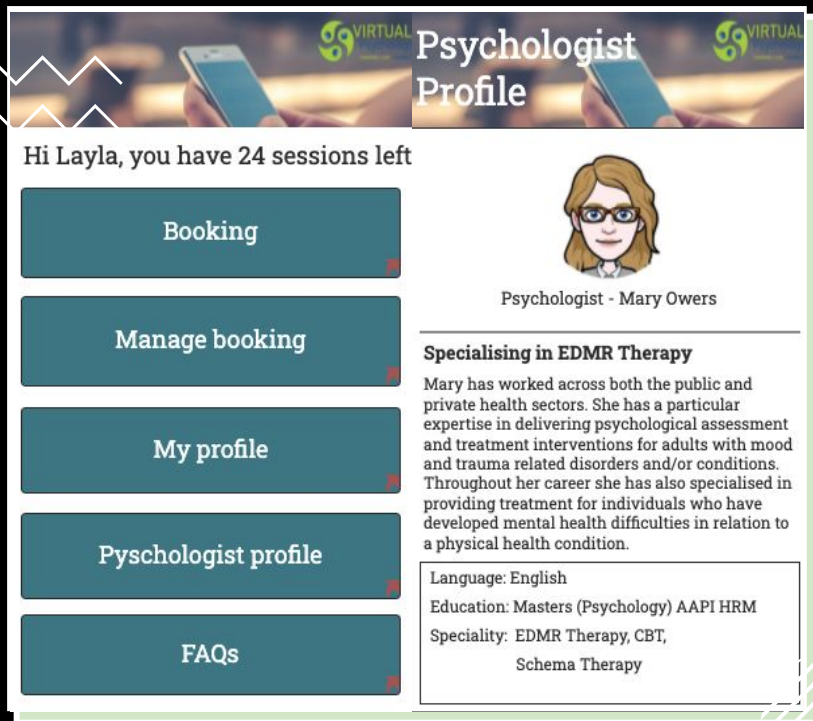
## ◆ Re-order the attribute in the profile page

Participant 1 pointed out that the order of the attributes in the profile page doesn't make sense, we realised that the previous order was not allocated well. (slide 33)

We **organised them in the order** that is **familiar and easy** to follow for users.



The screenshot shows a 'Create profile' form with the following fields: First Name, Last Name, Gender (dropdown), Age Group (dropdown), Country (dropdown), Region/State (dropdown), Post code (dropdown), and Organisation (dropdown with a red question mark icon). Below the fields is a disclaimer: '\*Once you submit the profile, you can't manually change the content in this website due to Government policy'. At the bottom are two buttons: '< Back' and 'Confirm'.



## ◆ Add a new button to display all the psychologist profile in the home page

According to the participant 2, it is likely to spend unnecessarily long time if the user can only view the psychologist profile when they selected them in the booking process. (slide 34)

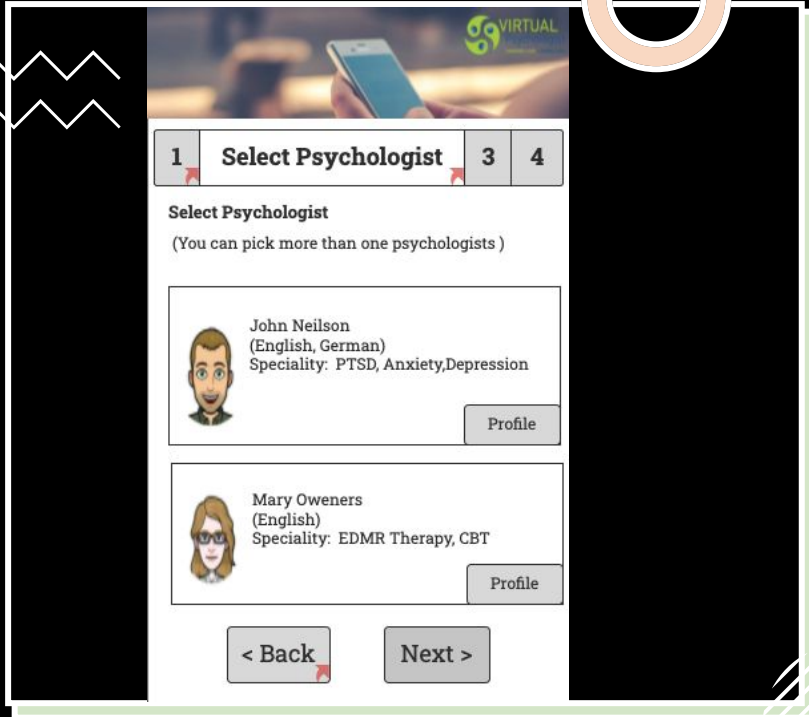
We added a button to **access to all the psychologist profile** in the home page as well as in the booking process.



## ◆ Provide cartoon image to identify psychologist

After collecting the opinion on what is the key information the user would like to see in psychologist selection page, we found that **their image is a very important factor for decision making**. (slide 35)

We added **a cartoon image** not only satisfying users' needs but also avoiding any bias from the real photo.



## ◆ Change the progress bar design

The progress bar in the prototype originally included every title of each page and it is hard to see and touch in mobile. (slide 36)

We displayed **only one title of the current page** and replaced the other titles with numbers to indicate the progress. We also allowed user to **click the progress bar** as a navigation bar **only if they are ready to move to another page**.

**Select Service Type** 2 3 4

**Holistic Wellbeing**

**Consultation**

< Back Next >

**Select Date** 1 2 3 4

**Select Date and Time**  
(Show selected psychologist)

Today 22nd April	Fri 23rd Apr	Sat 24rd Apr	Sun 25rd Apr
3:00pm John	7:00am John	7:00am John	6:00am John
	9:00am John	9:00am Mary	1:00pm Mary
	11:00am John	3:00pm Mary	3:00pm Mary

< Back Next >

## **Demo Video for prototype 3.0 (final prototype)**

Link:

<https://youtu.be/o8glw1gxybg>

**User test in balsamiq  
(recommended to do in a web instead of mobile, you  
will need to login/register to your own balsamiq  
account in order to test it)**

Link:

<https://balsamiq.cloud/sm79n5h/pngcf0s/r6C80?f=N4lgUiBcAMA0IDkpxAYWfAMhkAhHAsjgFo4DSUA2gLoC%2BQA%3D>



# Conclusions



# Conclusion

Our final prototype has achieved the design brief, which **maintains the simplicity and efficiency of the current booking bot system** and especially focus on **improving the usability and credibility**. In the final design, we also provided **more instructions** to the user by implementing the **support service** to answer some general questions, displaying the **psychologist profile** and adding **information button** to explain the meaning of 'Organisation' & 'Sessions'.

In addition, **clickable progress bar** has been additionally provided for the whole booking process, which can help not only clearly **indicating the status** to the user but also **navigating the next page** by allowing the user to move forth and back. It contributes to the **improvement on usability**.

The overall **UI design** has been improved in multiple aspects to **reinforce the company reputation and credibility**. For example, a **logo** has been added to every page, a **colour of buttons** has been modified in the way that users are familiar with and easy to understand, and the **font size** has increased.



# Limitation

## ◆ Research size

Findings only based on 2 participants due to the time restraint, therefore the design can be limited by the participants' subjective view. In the future study, we can invite more participants with different backgrounds or age group.

## ◆ Scope of the study

Even though we understand the virtual psychology scope is internationalise, however, due to the nature of this assignment, we only focus on the Australian booking bot .

## ◆ Prototype method

Balsamiq tool has been used in this project, due to the limitation of the Balsamiq, some of the design can not be implement properly in this project, such as, we would like to add the 'Prefer not to say' in the drop-down list, page scrolling for viewing psychologist profile, limited font styles and device choices (Android).

## ◆ Prototype design

Design is mobile application only, not available for the web user.



## The next steps . . .

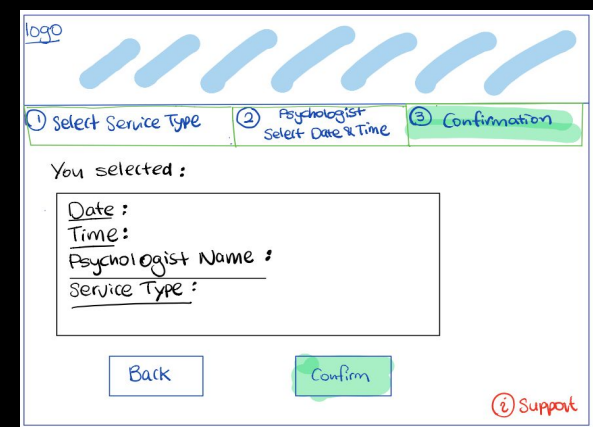
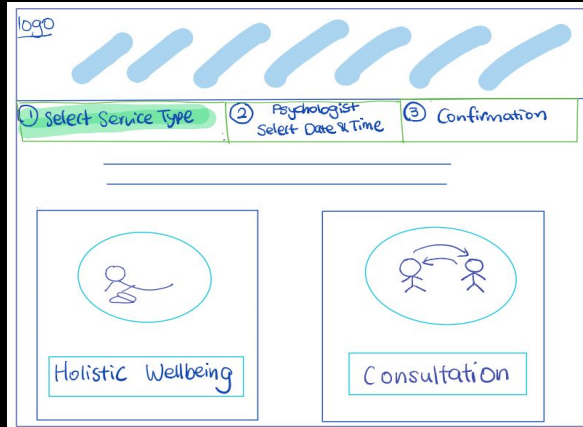
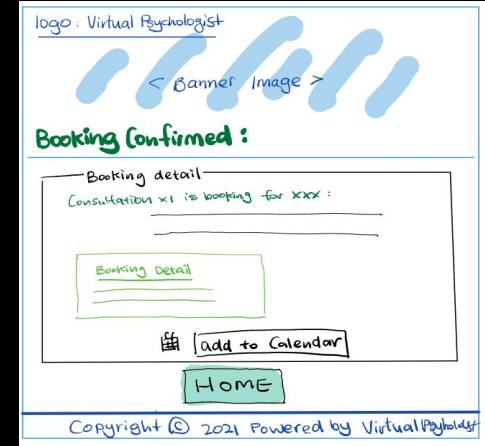
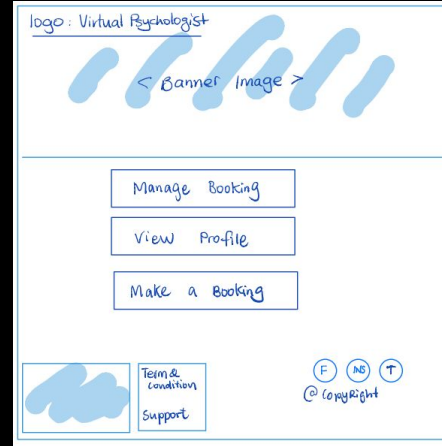
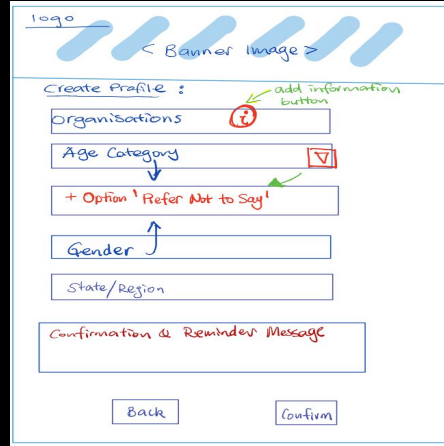
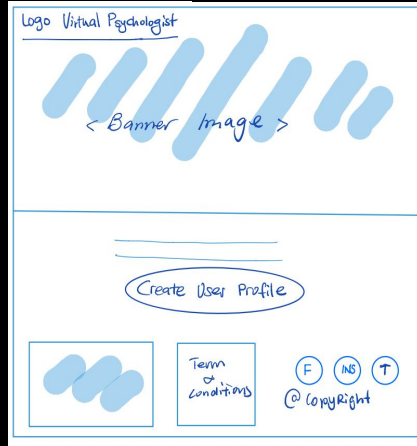
- ◆ Invite more diverse group of participants such as older generation, different gender, culture and ethic group. Also, we should increase our participant size for user test for up to 10 peoples.
- ◆ Include more functionality, such as scroll, drop down and history of the consultation, allow user to rebook the same consultant.
- ◆ The prototype can extend to different devices such as laptop or tablet version.



# Appendix



# Appendix A: Hand Sketches Design





# Appendix B : First Interactive Design



Home page(new user) ▼



Create profile



Home Page(current user)



View Profile



Manage booking - empty



Support



Support-answer



Mange booking - 1 booking



Cancel Booking



booking - step1



booking - step1 copy



booking - choose psychologist



booking - view profile



booking-choose date



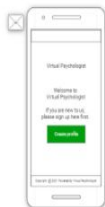
booking-confirm



booking-booking confirmed



# Appendix C : Second Interactive Design



Home page(new user) ✓



Create profile



Home Page(current user)



View Profile



Manage booking - empty



Support



Support -answer



Manage booking - 1 booking



Cancel Booking



booking - step1



booking - step1 copy



booking - choose psychologist



booking-choose date

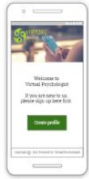


booking-confirm



booking-booking confirmed

# Appendix C: Final Interactive Design



Home page(new user)



Create profile



Home Page(current user)



View Profile



Psychologist profile



Psychologist profile 2



Manage booking - empty



Support



support: how does it work



Support: How long is 1 session



Support: Contry support



Support: proactive wellbeing



Support:Prevention



Support: reactive wellbeing



Support: reactive wellbeing 2



Mange booking - 1 booking



Cancel Booking



booking - step1 copy



booking - step1 selected ser...



booking - choose psychologist



booking - choose Mary



booking - choose John



booking - choose John + Mary



booking-choose date



booking-choose date Mary



booking-choose date John



booking-confirm



booking-booking confirmed