

**INTERACTIVE TECHNOLOGY  
PROJECT INFO3008**



AN INTERACTIVE PLATFORM FOR  
BREADTH CHOOSING

# Brea(d)th Out

GROUP 7

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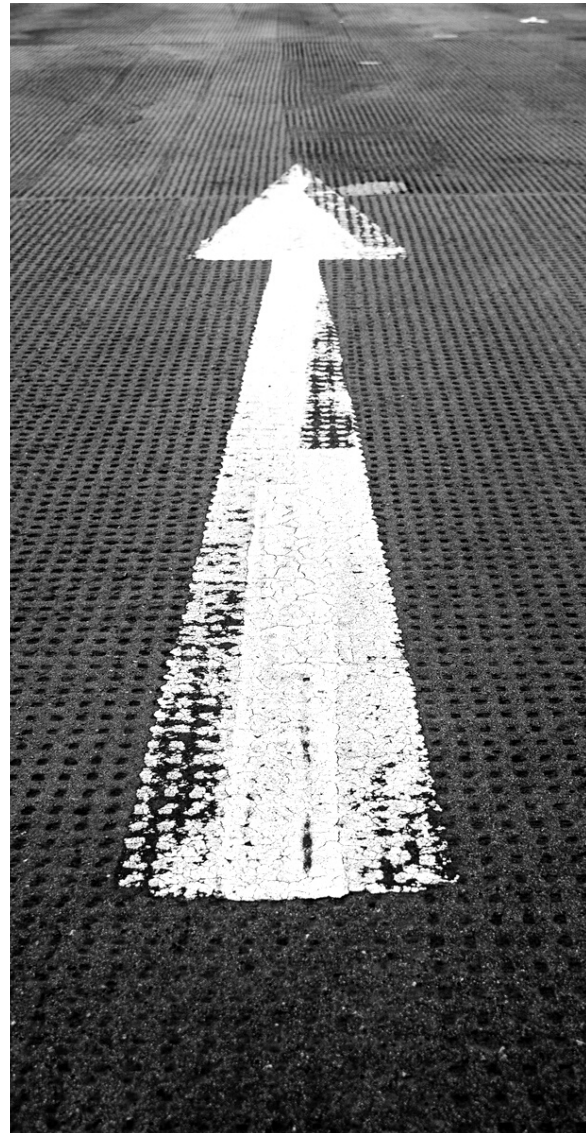


**BREA(D)TH OUT**

# Executive Summery

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Our proposal Brea(d)th Out is developed based on the paradox between the direct user and affected stakeholder, that there is a gap between the breadths provided by the university and the actual amount of breadths that students get to know. Besides, students are always keen to gain more information about the subjects they are going to study, while the official university handbook cannot provide a comprehensive introduction regarding subjects. We aim to provide students with a personalized recommendation experience. This was confirmed by our preliminary user interviews. After gaining inspiration from relevant existing designs, we first developed an initial version of the prototype that performs the basic functions of breadth researching. We first conducted expert reviews with a series of personas and scenarios to examine the usability of our prototype.



Then, several user-based evaluations were conducted with the current student stakeholder group, which includes scenario tasks and reflective questions, we further developed our prototype based on the feedback provided. There is a high variety of user needs. As a result, we provided three different recommendation systems to tackle these differences. Additional adjustments were also made including adding key functions to the homepage for flexibility. We also discovered some future reflections: we should first discover and understand users' fundamental needs and then develop our design based on them, rather than changing our design after receiving every feedback.

# Ideation Process



## 01

### **PREVIOUS IDEAS**

At the start of the project, based on our own experiences, we found a paradox that it is hard for a student to learn about a university or a subject before they actually start learning. Moreover, they tend to waste a lot of resources and time because they don't know how to make the best choices in their study. Thus, we have developed an idea to help students know more about their studies before they make decisions.

In the preliminary design cycle, each of our group members developed their own design idea in a total of five. The first one is "Person-to-Person Communication", which is to build a forum for schoolmates to communicate and give suggestions to each other. The second is "Information integration", to integrate information that students may concern about from the official website and student feedback into a concise form so that students can learn about a subject quickly. The third one is "Subject Relations", recommending subjects according to their internal relationships to help students develop a deep and comprehensive understanding of a certain area of study. The fourth idea is "Melbourne Transition", an information app to help international and regional students set down to the life of Melbourne. Last but not least is "Connection with Employable Skills", where students can communicate with employers and be exposed to skills that are needed in the industries.

## 02 FINAL IDEAS

With further evaluations of these ideas, we found that they are all too broad and general. The user group is huge and there are already existing solutions that can solve these needs in the market. To avoid making a generic app that loses its focus, we decided to narrow down the stakeholders and design concepts to clarify the value proposition of our app. With this understanding, we developed two possible ideas:

1. Helping Australian high school students find a suitable course at the University of Melbourne
2. Helping university students explore suitable breadth subjects

The purposes and target users of these two ideas are much more clear than the previous one, thus making the process of designing solutions smoother. Upon further discussion, we found that there might not be enough users for the first idea, because it is much more often for high school students to consider which major to choose first, and then decide which university to go to. A career consulting teacher would also normally assist them throughout their senior year. So there is no point in designing an app that only provides information about majors in one university. The second idea is much more realistic and relatable, it came from our personal experience in our freshman year. After some interviews from the preliminary cycle, we confirmed that there is an urgent need for students to understand what they can do with breadth, instead of wasting their precious chances to learn. Eventually, it became our final design direction.

## 03 RELATION BETWEEN PRELIMINARY AND FINAL IDEAS

The final idea is a narrowing-down version of our previous idea with a slightly shifted focus. The stakeholder groups are narrowed from the university, information provider, and employers to just current students studying at the university. The previous one is about helping students choose any subjects from their course, but the current one pays full attention to breadth selection. Still, we found a way to incorporate our previous efforts into the new idea, most of the old design ideas are integrated into the final design concept as functions, including the forum, subject detail page, information banner, study plan, etc. The app still remains relatively concise with these functions, and it allows students to gain all kinds of information they might need about breadth in one place, providing convenience and efficiency in their process of study.



# Main Design Concept

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Our main design concept is to help students to make sense of the breadth system in Unimelb while assisting them in exploring the full possibilities of breadth and generating new ideas about the breadth they might take.

Online learning platforms and online forums gave us initial inspiration for our main design concept. The former allows users with clear goals to get professional development through a range of well-structured courses, it also helps users to explore possibilities in other areas of development. The latter provides users with a space to share and connect with like-minded people. Users can support each other conveniently without the boundaries of location.

In our previous stages, we discovered many stakeholders like information providers and employers, but here we decided to narrow down to university and current students to focus on a specific user concern which is breadth selection.

The primary users are current students from the university. From our preliminary user interviews, a commonly mentioned topic is confusion in breadth selection. They share an urgent need of choosing the most suitable breadth from the range of subjects provided by the university. One participant stated that they “wish to know the most about how Bachelor of Arts works and how the breadth works right now.” Other Interviewees also expressed their feeling about breadth selection and mentioned how they wish they could make better decisions. Specifically, good planning and understanding beforehand are valued. They wish they “did not waste breadth spots.” and that “there should be a very easy way to see what breath I can take.”

The main paradox happened between the university, which is our affected stakeholder and the students, which are our direct users. The university wants to introduce the breadth system and encourage students to develop comprehensive skills.

## BREA(D)TH OUT

The university wants to introduce the breadth system and encourage students to develop comprehensive skills. But due to the Information gap, students often can't fully utilize this system. Meanwhile, students couldn't see the full possibility of breadth due to the large number of subjects available. They also tend to be unfamiliar with subjects outside of their course, causing them to be hesitant about breadth selection.

To tackle these concerns and paradoxes, we designed Brea(d)th Out. Our app is applicable to a range of different users. Two examples are given to further explain the function of Brea(d)th Out.

Firstly, students who don't have an idea about which breadth to take could use the "browse all" function to find out which area of study they are interested in. The recommendation page, recommending breadths based on interest, career and popularity, could also provide breadths to students without searching keywords or exact areas of study.

Secondly, for students who have clear a clear target regarding breadths, the "browse all" function allows them to search keywords and gain further information on specific subjects. There will be school-based information and student-based feedback provided, and the user could develop a comprehensive understanding of the subject while deciding which side to trust more by themselves.

Besides, students could also use forum to post questions regarding subjects and make network with peers. For those who want to make plans for their undergraduate study, the "study plan" function provides them with multiple plans that they could add and edit subjects into.

The existing design that is most similar to our app would be the university handbook. However, the handbook is aimed at providing students with official information about all courses and subjects. Our app is targeted specifically at breadth choice, and in addition to official information, it can provide other content like numeric student feedback, personalized recommendation, etc., everything that could be needed by students to choose breadth.

**BREA(D)TH OUT**



# Review of Relevant Technologies

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**XENIA - GOOGLE MAP**

**YUEQI - POSTER**

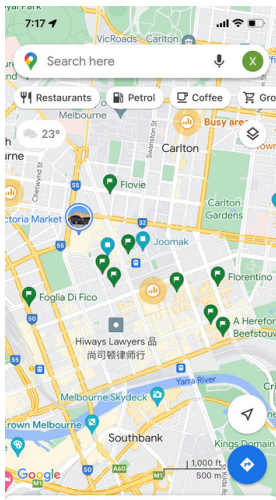
**WENDY - SLOT MACHINE**

**MINGZHE - STOP 1 POKER**

**JEREMY - HANDBOOK**

## BREA(D)TH OUT

## XENIA - GOOGLE MAP



Google map is a well-known map app that can help people with almost everything with travelling. Among its comprehensive functions, there are a few aspects we found that can inspire our design.

It's idea of visualising the environment corresponds to the idea of subject map in our preliminary design cycle. Looking at google map, users can form an picture about the surrounding environment in their mind, thus they can better understand and remember the environment. By forming a subject map according to their internal relationships, visualising the topics of subjects with colors and their internal location, it might also be able to help our students to understand the subject landscape better.

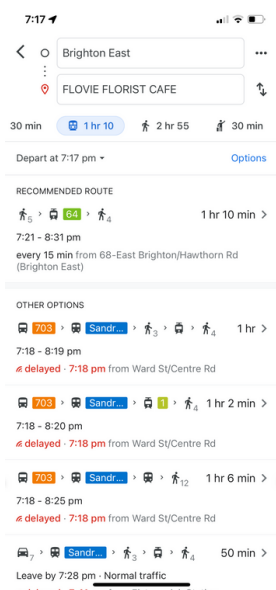
Google map also provides a function that allows users to make marks on the map, so users can see marks of places on the app, giving them an impression about where their collected places are and their relative location. In google map people can also see their collected places in the form of lists. We can also allow students to put subjects into collection and see their collected subjects both in map and in lists. In the map students can form an impression about the topic of the subjects they chosed by their locations and colors, and in lists students can see a bit more details and browse them more quickly.

Another important function for Google map is navigation. If a user wants to go to a certain place, Google map can generate a route the user can follow. This gives us an inspiration that, if a student want to achieve somewhere in their career, there can be a function that tells them what they should learn and what they should do, for example what subjects to take and what soft skills to practise. Another inspiration is at smaller scale. We found that the prerequisite scheme for some subjects can be very complicated, thus if a student saw an interesting Level 2 or Level 3 subject, the app can generate a suggestion about how to plan proper prerequisite.

On Google map's homepage, people can see recommendation about nearby locations with different topic, for example parks, restaurants, museums, etc. If we want students to learn about the subjects in the university, we can also recommend subjects that are suitable for them, considering letting them go through all subjects might not be very possible. We may recommend subjects under different area of study, according to their interest, or popularity, etc., which are common recommendation scheme in internet products. Students might get interested in a particular area of study and then go to check the detail about that faculty, or major, or subject.



### Landmarks on the map



### Navigation





above (Librairie Ed. Sagot Affiche Estampes - Chéret, Jules, 1891. 34.6" x 96.9" / 88 x 246 cm. Lithograph | Backed on Linen. ID# FRC14224. \$6,001 to \$10,000., no date)

My chosen relevant technology is the poster. It was one of the earliest forms of advertisement with a focus on visual communication and minimal texts that can be read from distance. In around the 1870s, the French painter Jules Chéret created the first ever lithographic poster with colours, which is an upgrade from the black and white lithography technique invented by the German actor Alois Senefelder. The coloured lithographic poster was created because of the cost and time of the black and white lithographic technique, that normally the median is wood or medal engraving, which are difficult to transport. Because of the attractive and economical combination of image and text, posters bloomed in the modern age of advertising. Chéret himself also created more than 1000 posters within 30 years. (A Brief History of the Poster | International Poster Gallery, no date)

In contemporary society, the poster has varied into numerous formats: billboards, banners or even graffiti. This way of combining visual components with concise texts for a promoting purpose has been widely used in many places, both digitally and analogously. Especially when everything is digitalized and stored in cloud space, analogue posters are still a popular solution for many topics. Instead of just marketing, posters have many genres: Political, social, educational and many more. It could work for an existing product or a conceptual idea. The general public is agreeing with the power of this medium because a poster is for everyone even though they have different intentions: some are really clear about what they want but others don't. The point of posters is to not only attracts existing customers with a known purpose but also invite other audiences with a vague or no idea about this topic to start paying attention. As a result, gaining interest towards the subject they are promoting. From my own experience, in the office of career counsellors from secondary schools, posters are one of the most seen materials that help senior students to explore their interests in tertiary studies since it is very common for them to not have a clear goal at that stage of life.

This corresponds with our main design concept which is to help university students understand the breadth and its purpose while assisting them to explore the full possibilities of breadth that they might not be aware of, resulting in generating new ideas. The paradox between our two main stakeholders from the preliminary stages: the university and the students could also be tackled here. The university needs to find a simpler way to promote the breadth system, including introducing different breadth options available for students in a direct and easily-digestible way. While the students are struggling to obtain sufficient information from official sources. The fact that the poster is a combination of imagery and texts, reinforces its nature of being an efficient collection and promotion of information. For this digital design solution that we are currently planning, I believe we should utilize the concept provided by posters and utilize its advantages to strengthen our usability and usefulness.

## BREA(D)TH OUT

## WENDY - SLOT MACHINE

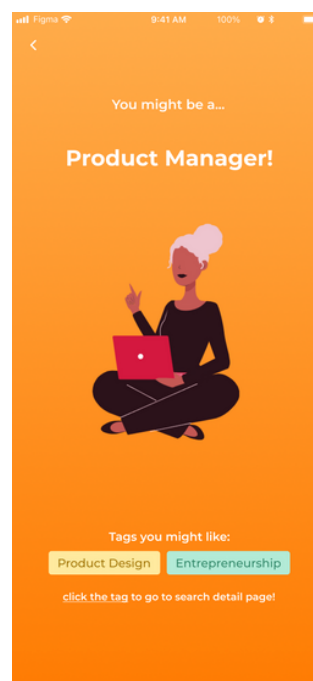
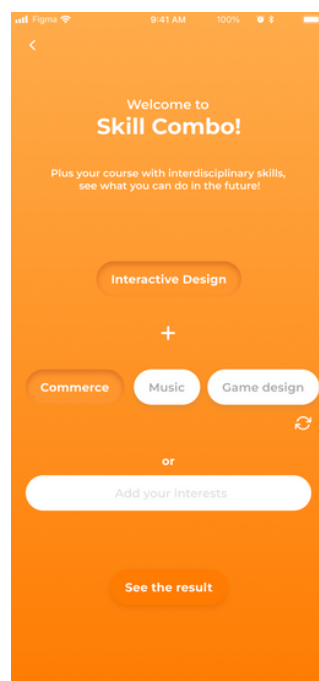
A paradox of our app is the gap between the board range of breadths provided by university and the actual amount of breadths that students actually get to know. In order to find a suitable breadth, students must take a lengthy and tedious process of searching and reading paragraphs by paragraphs. Our group intended to solve this problem, and one of the relevant technologies that inspired us was the slot machine.

Slot machine is a gambling machine that creates a game of chance for its players. By pulling a handle or pushing a button, player could activate three reels that randomly outputs symbols. Players could only win when getting 3 identical symbols. The rule is pretty easy to understand, and the uncertainty and chances of slot machine makes it really entertaining. This interesting random function inspired our team. The excitement of getting unpredictable results and the simple rules might improve users' willingness to make research. Besides, it is also a good chance for users to explore potential breadths they didn't know before.

Thus, we decided to develop a similar function that allows users to get random results about breadths. This function is called "lucky bread". Different from the repetitive process of searching and selecting breadth using "browse all", this function would allow users to get unpredictable results that helps them to further explore the possibilities of breadths. Users could select from three different area of interests and combine with their major. By pressing the "see the result" button, users could get a few breadth cards. These breadths are selected randomly based on users' choices. The lucky bread function intends to bring some entertainment to the researching process, while providing users with breadths that potentially fits their requirements.



Slot machine



Lucky Bread (Experimental Design)

## BREA(D)TH OUT

## MINGZHE - STOP1 POKER

University of Melbourne ALUMNI card

This piece of technology was created by the university of melbourne stop one team, the aim behind the creation of this technology is to help newly oriented students to better understand the services offered by the university, what opportunities lie within the university life and the different possibilities that are available. Aside from serving as an information provider, these cards also aim to motivate students and encourage them to perform tasks that potentially will benefit their university life and leave behind a positive impact. On each and every piece of the card there is a unique piece of information written on top of it, the information written above allows the new students to browse through the features that are offered by the university.

This piece of technology shares a similar functionality as the school's official website and the different official medias combined, but the way how information is presented is much more ready and available to the students, without having the need to go through the process to collect and arrange this information.

Based on the feedback from the students as well as the stop one staff member says that this card has helped the new students greatly when it comes to helping them find out what the university is offering to them. These cards have even helped ongoing students that have studied in the university for a long period of time to discover features within the school that they have not before realised that these existed. These cards are very popular among the new students as there is hardly any stock left after the orientation period.

The concept of inspiring students by displaying and informing them with all the different possibilities and opportunities that are available to them, this design concept has a similar nature to the purpose of our current design concept which is to inspire students and make them better informed about the events and opportunities that are available to them within the school. This technology can be used as a reference when shaping the development of the current design concept.



The handbook of the University of Melbourne

Version

Course Levels

Campuses

Faculties

[View advanced fields](#)

[Reset search](#)

Students generally need to follow the course structure which corresponds to the year they commenced their course. Students generally need to follow the course structure which corresponds to the year they commenced their course. students can check all the course offerings for their major, including course titles, lecture content, class times, credit settings, exam arrangements, etc. The course structure corresponds to the year they commenced their course. They can also find subjects, course offerings and rules to help you enrol. the year links to other information such as the prerequisite of a subject, and quotas that apply to subjects.

The application we designed is specifically focused on the breadth of subjects from the handbook. breadth subjects are subjects taken from outside Most University of Melbourne undergraduates take breadth subjects. the breadth will provide students with a greater understanding of the world and allow students to tailor their course to fit their individual passions and career ambitions.

**About this subject**

- Overview
- Eligibility and requirements
- Assessment
- Dates and times
- Further information
- Timetable [🗉](#)
- Contact information

Please [refer to the specific study period](#) for contact information.

Handbook is more like a well-functioning search engine that requires users to know what they are thinking about and conduct a more refined search. Browsing through Handbook to get what you want is like looking for a needle in a haystack, but if you are sure what to search for, you will get what you wish at rocket speed. The filter function in the handbook is also very powerful and has a very highly functional classification. As it is complete, you can get the results you want in a speedy way. The content of the subject detail page is also very comprehensive, covering basically all aspects. But there is a lot of text stacking that will inevitably make new students and users who have been searching for a long time feel tired.

THE UNIVERSITY OF MELBOURNE

Handbook > Search

The University of Melbourne's official source of course and subject information

Search for

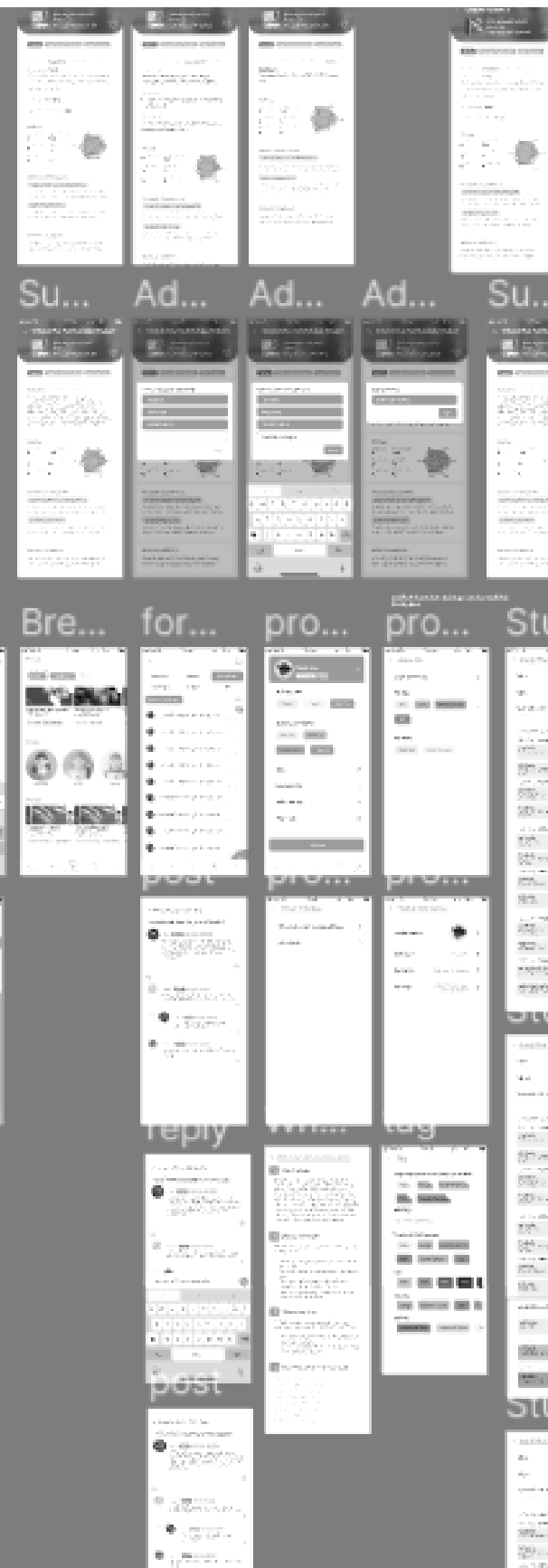
Show only

- All result types (6,955)
- Courses (577)**
- Subjects (6,265)
- Breadth Track (113)

**BREA(D)TH OUT**

# Main Prototype Development

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## **PLEASE NOTE:**

**This is our final version of the prototype. Some changes are made after the user-based evaluation (recommendation page, browse all page, home page) but we couldn't manage to conduct another series of interviews because of time constraints. For previous versions of the prototype, please refer to the appendix. Thank you!**

# Main Prototype Development

Birds Eye View of All Prototype Pages

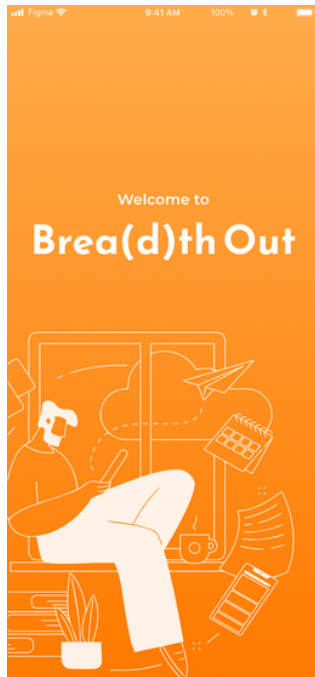
Created using



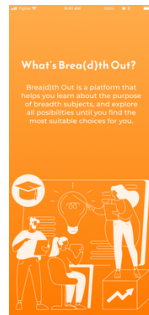
<https://www.figma.com/file/hiOFdmxzQVRmkO74nCONvs/combine-wireframe?node-id=438%3A4821>

# Main Prototype Development - 1

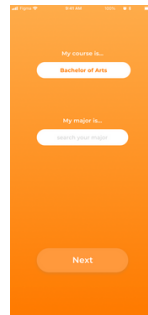
\*This section only shows important pages. For full user flow please refer to appendix.



Launching Pages



Intro



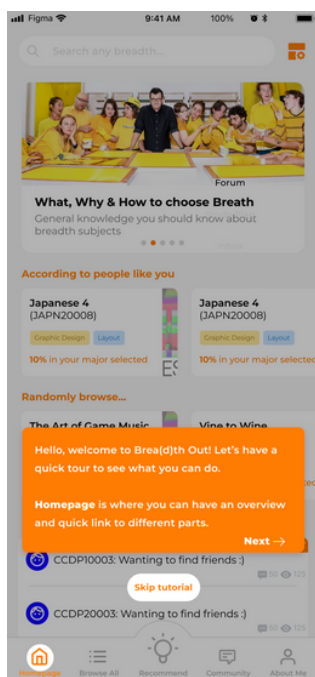
Select course/major



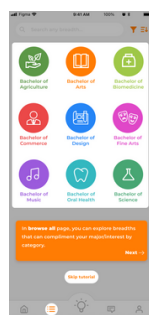
Select Interest

Launching pages are used to introduce our purpose to users, and allow them to input their course/major and interest, as sources for later breadth recommendation.

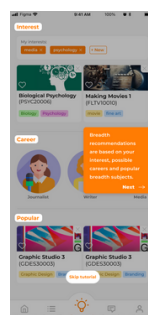
The launching pages use bright orange for background, attracting users' interest to the app.



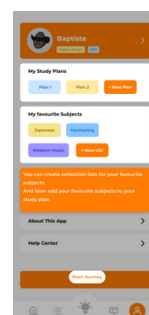
Tutorials homepage



Tutorials Browse all



Tutorials Recommend

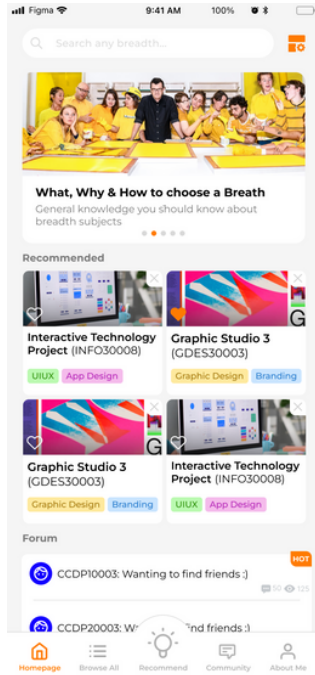


Tutorials Profile

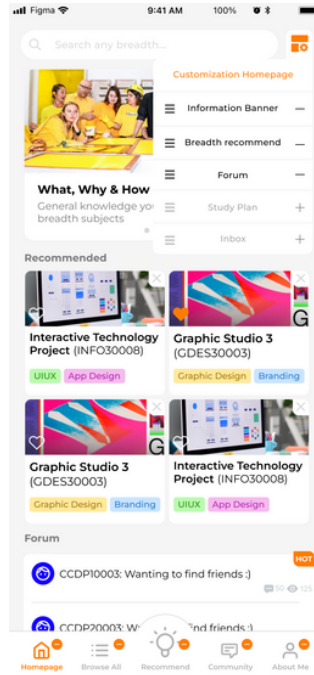
A short tutorial is provided upon the user's first entry, this is the refinement based on our user interview results. It demonstrates the main functions offered by Brea(d)th Out, making the app friendly for novice users.

# Main Prototype Development - 2

\*This section only shows important pages. For full user flow please refer to appendix.

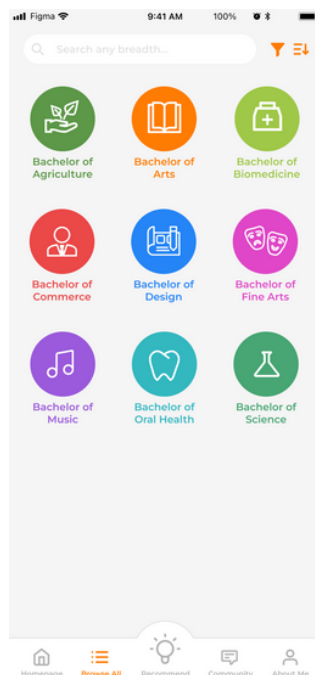


Homepage

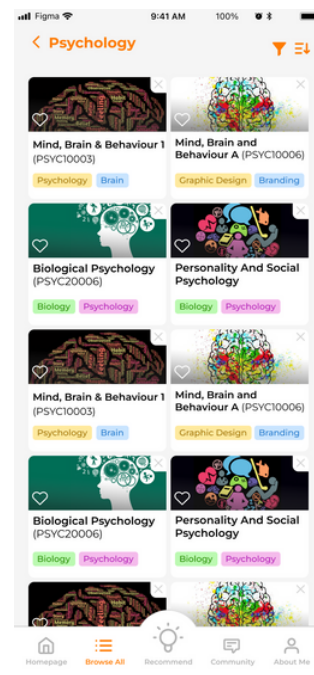


Personalization

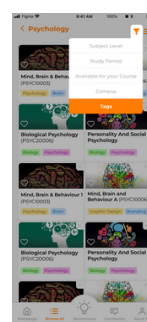
Homepage is an overview and quick access to our main functions. And we allow users to rearrange sections on the homepage freely based on their preferences.



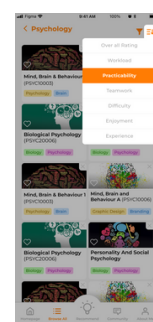
Browse all



Subject listing



Filter



Sort By

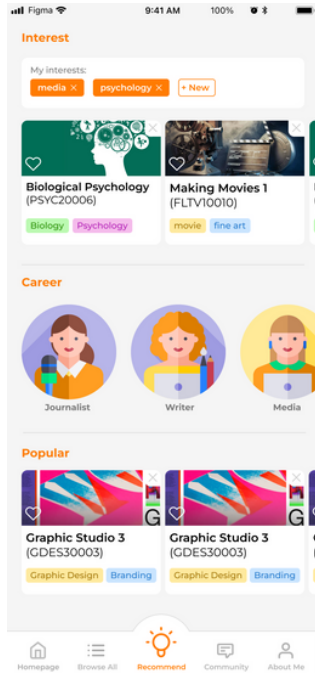
The browse all page allows students to browse breadth subjects in different disciplines.

The filters function helps users source the most suitable subjects to fulfil their individual needs and see all available choices.

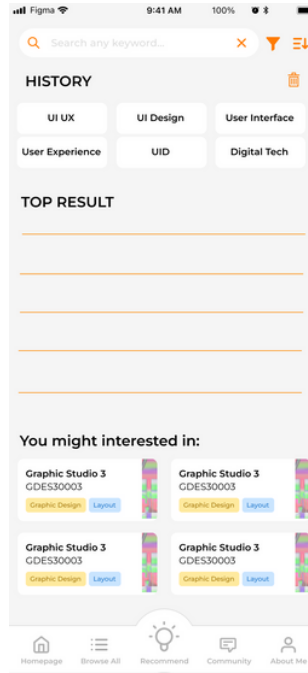


# Main Prototype Development - 3

\*This section only shows important pages. For full user flow please refer to appendix.



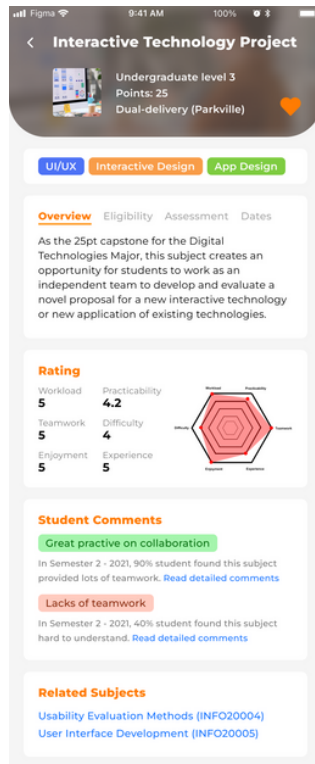
Recommendation



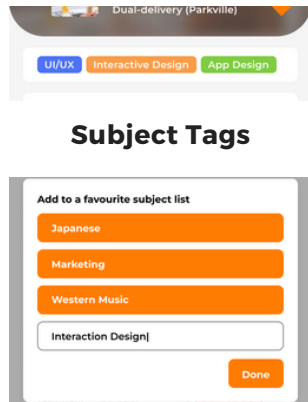
Search

Recommendation provides students with breadth based on their preferences in interest and possible career. Popular breadth are also recommended here for their reference.

The search page helps users make accurate searches. Allowing users with clear purposes to directly access the subject they are after.



Subject Details



Add to Favourite



Quick Read

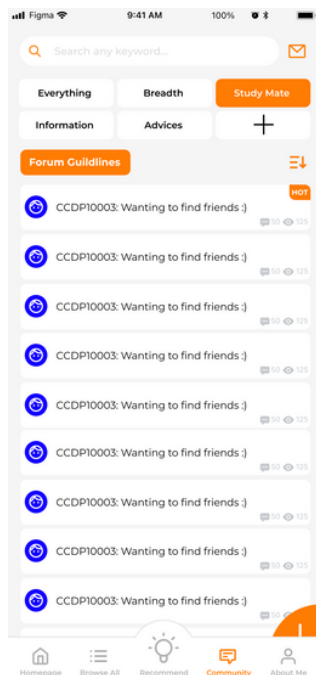
The subject detail page provides both official information and feedback from students, along with a radar diagram, helping students to develop a comprehensive understanding of a subject. Tags help students to know about the subject content at first glance.

Quick read appears when users tap and hold on the subject card. It is a shortcut for expert users.

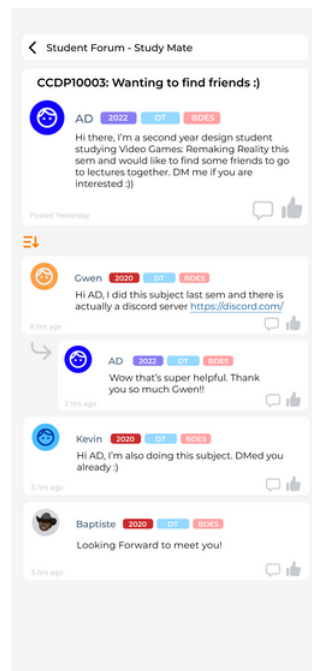
The favourite function allows students to collect potential breadth, and create a subject list for future planning.

# Main Prototype Development - 4

\*This section only shows important pages. For full user flow please refer to appendix.

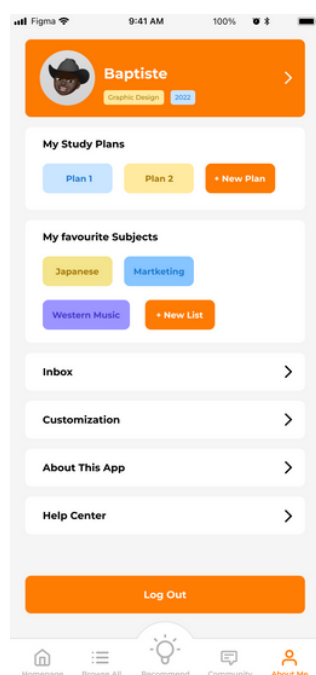


Forum



Forum Post

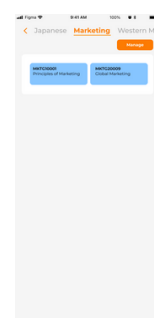
The forum page is a peer support community system that helps students to find friends while getting advice on subject selection.



Profile



About Me

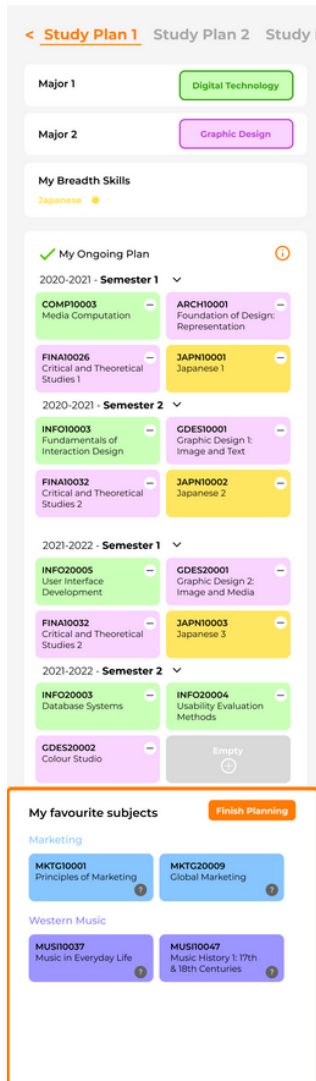


Favourite Subject List

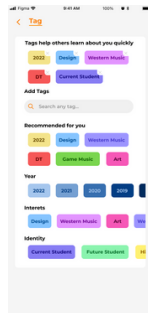
Profile page allows users to modify their profile information, view and manage their favourite subject lists and study plans. General setting functions and information about the app are in profile page as well.

# Main Prototype Development - 5

\*This section only shows important pages. For full user flow please refer to appendix.



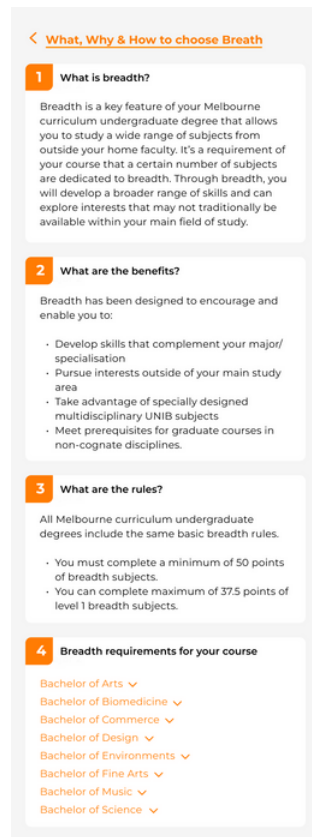
Study Plan



User Tags + Interest Tags

The Study plan does not only give students a chance to manage their breadth study, but also educates specific breadth structure based on faculty for error prevention.

Students Tags can both represent student in social aspect and also be the data source of breadth recommendation.



Breadth Education

The breadth education page conveys the definition, purpose, benefits and rules of breadth system, aiming to encourage students to utilize their study opportunity. This page can be accessed both from homepage - information banner and profile page - about this app.

BREA(D)TH OUT

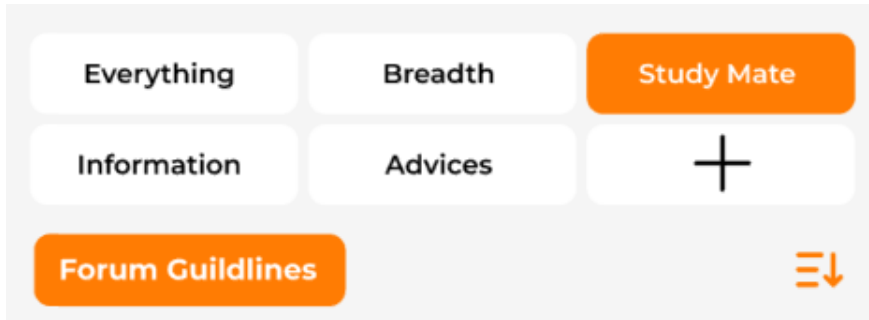
# Usability Design Rationale

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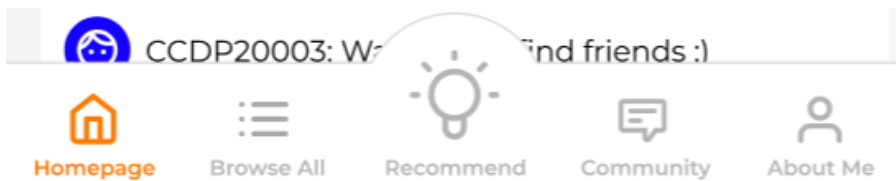


## VISIBILITY OF THE SYSTEM STATUS

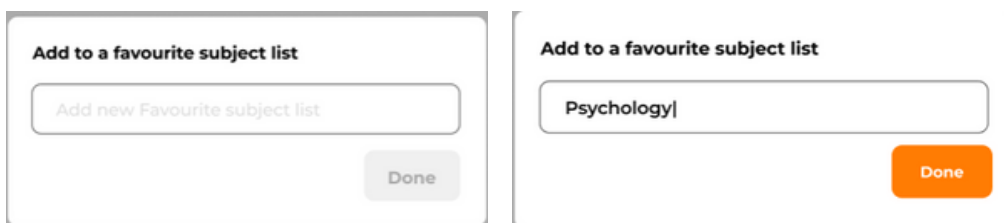
Throughout the application we have implemented a consistent style of usage of colours, we opted for the #FF7C03 a vibrant orange that is purposed to evoke a sense of energy and liveliness that synergises with our primary target audience which is the current undergraduates.



We have also taken into account the visibility of the system status and have implemented a highlighting feature to inform the user of the current browsing page. Apart from the navigation

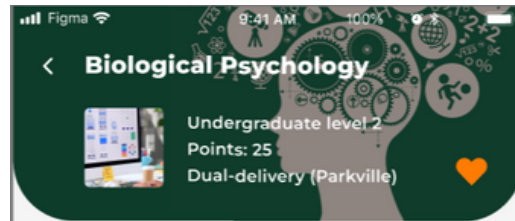
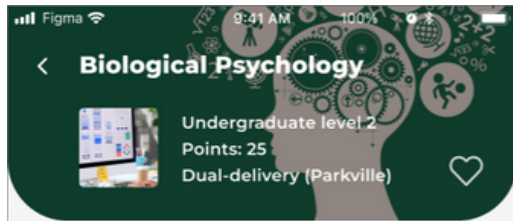


Before the user types in any input the button which completes the task will be displayed with a gray background signifying that the state of that function is unavailable and that something needs to be filled in the text box. Upon detecting that there is an input made by the user, the button will light up and turn the text into white color which sends out a signal to the users that they can complete the task by clicking on the button.



## USABILITY DESIGN RATIONALE

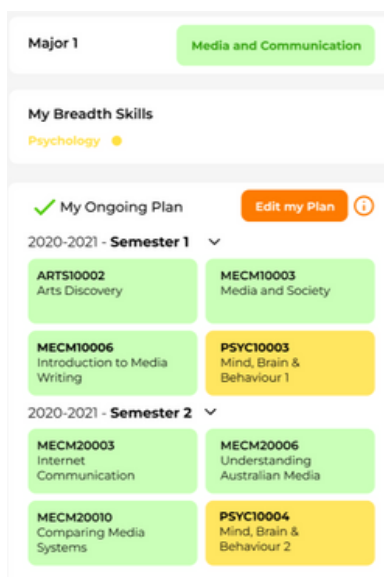
When the user has done adding a subject to their favorite list, the original hollow heart will be filled with the orange color used throughout the entire application, signaling to the users that this subject has already been added to their favorite list.



For subjects that falls under the category of the users' interest, they will be highlighted in their respective tag color in the study plan section, this informs to the users that this particular subject is one that fits their interest, this allows the user to better observe the current state of their overall study plan and what percentage of the subject actually fits their interest.

As for the subjects that fall under the compulsory/ core subjects of the users' major, they will be represented in their respective color of the major of which it belongs.

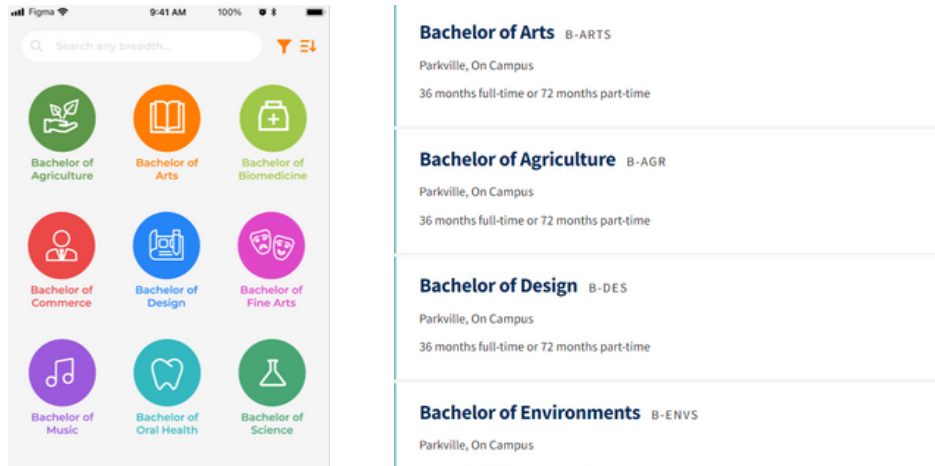
By displaying subjects of different categories with distinct colors we hope to provide the users with a more obvious method of distinguishing the origins and natures of these subjects.



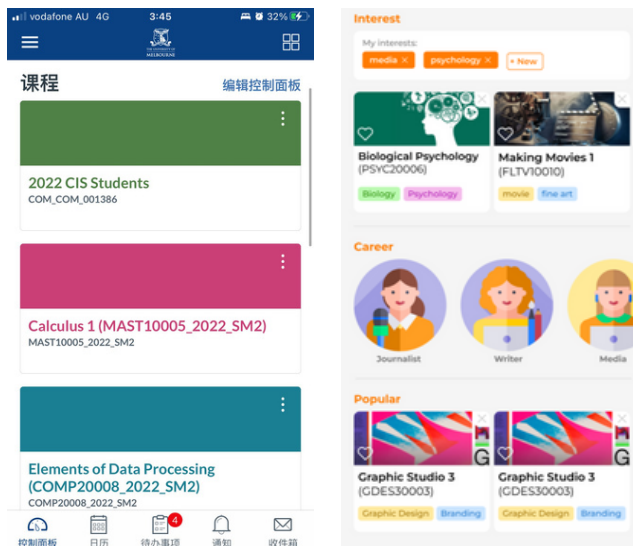
# USABILITY DESIGN RATIONALE

## MATCH BETWEEN THE SYSTEM AND THE REAL WORLD

In order to reduce the amount of effort needed for the user to navigate within the application, as well as provide a sense of familiarity we have implemented a similar style of categorisation as per the format used by the student handbook. This is so that when the targeted audience is using the application it will come about naturally for them to know what is going on within this section of the application as well as where to find their choice of interest.



The second most used application by the students is the canvas application and thus we have chosen to do a similar style of subject information layout as the canvas application, and on top of that, we have introduced the addition of our unique tag classification system to clearly label the area of relevancy of the displayed subjects.



Aside from the subject cards, we have also applied a similar layout of the navigation bar as the canvas application to provide a sense of familiarity for the users with the aim to evoke an emotion of comfort from using a familiar interface for the navigation.



## USABILITY DESIGN RATIONALE

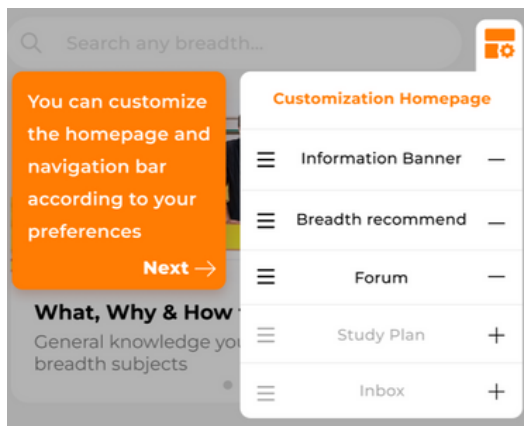
### ERROR PREVENTION

When the user is editing their study plan, they have to manually click on the “Edit my Plan” button in order to be able to make changes to their current study plan, and when the process of editing their study plan is completed, the users then have to confirm again that the process is completed through the “Finish Planning” button in order to finalize those changes that they have made.

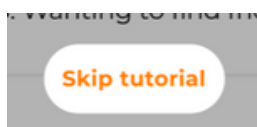


### USER CONTROL AND FREEDOM

The setting button at the top right of the homepage allows the users to customize the homepage and decide what information should be displayed on that page to their own personal preferences.



While we offer a detailed tutorial that introduces all of the features that we have within the application, we have decided to give the user the choice of freedom to let them explore the application on their own by allowing the users to skip the tutorial at any phase of the process of going through it.



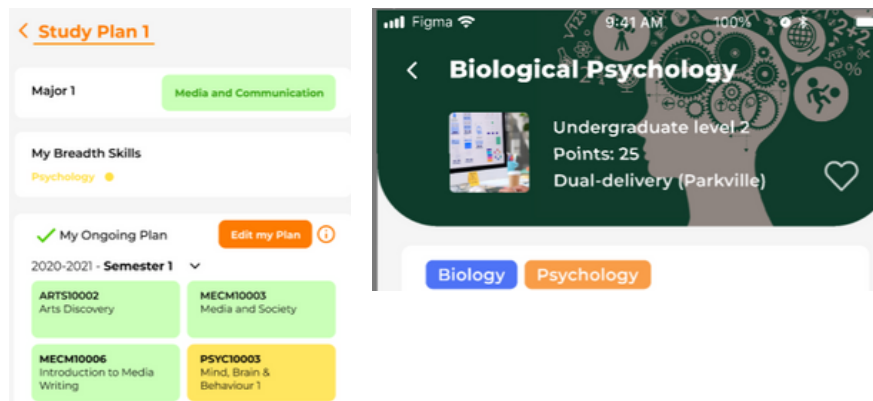


### RECOGNITION RATHER THAN RECALL

Our initial prototype decided to use only the icons to represent the different functions that are available. However, after a series of interviews and evaluations based on playtesting of the prototype we have discovered that the purpose of certain buttons is very ambiguous and evokes uncertainty from the users who are using the application for the first time. With this feedback, we went on further adding a line of text under the majority of the icons to describe their purpose and function while also removing and modifying certain icons that pre-existed.

### FLEXIBILITY AND EFFICIENCY OF USE

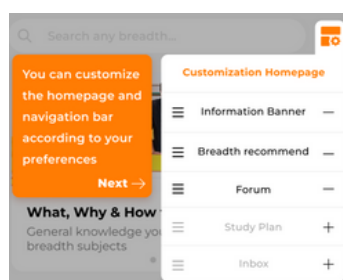
During the design process we have considered both the experienced users who are fairly familiar with a similar style of application as well as the ones who are having a first-time experience with an application of this sort. For experienced users, they can directly go to the profile page to edit their study plan by filling in the desired subjects of their choice, while new users can slowly explore the different recommendations offered by the application



As for the new users who are not as familiar with the application they can go through the process of discovering a subject of their interest, then add that subject to their favourite list and then eventually moving on top the study plan page to then place the subject within the study plan.

### HELP AND DOCUMENTATION

We created a detailed tutorial to guide users through the application upon their first arrival in the application. The tutorial will clearly guide users through the primary functions of the application, while going through the tutorial the user has the freedom to skip the process at any phase.



**BREA(D)TH OUT**

# Persona & Scenarios

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**XENIA - Jane**

**YUEQI - Akki**

**WENDY - Vivian**

**MINGZHE - JOHN**

**JEREMY - Alex**



## **JANE**

- 20 years old university student
- from China, insufficient in English compared to native students
- Studying Design, majoring in digital technology
- Not sure what to do for a career yet
- Interested in learning about all areas of study to expand her knowledge scope

## **PERSONA**

Jane is a 20-year-old Chinese girl, currently a first-year student majoring in digital technology at the university of Melbourne. Due to her insufficiency in English, she needs to spend more time and effort researching and deciding on her study. She also does not have many friends in Melbourne, so she does not have access to many suggestions thus she needs to make decisions all by herself. She really hopes that there is some kind of information that she can understand quickly and easily. She chose this major because she is interested in digital design, but she does not know exactly what she wants to do for a career, because it is hard for students to get to know the working environment and positions available. She is interested in many things and can not decide what is best for her, so she wants to utilise every chance where can learn about different things and develop a comprehensive understanding of society.

Jane thinks breadth is a good chance where she can expand her knowledge.

Among all aspects, she thinks her future career is the most important thing about choosing subjects, so she would like to know what impacts can a subject bring to her career. She also wants to get suggestions about what she can do in the future and what information is valuable and that she should learn about. She really wants to utilise all her time in studying and learning solid skills. If possible, she thinks it would be nice that she can make connections with students and teachers in the subject.

**JANE**

## **SCENARIO**

The next semester is about to start, Jane wants to learn about subjects that are valuable to her, so she went to stop 1 for advice. When Jane was in stop 1, she heard from staff about an app “brea(d)th out”, that can help her choose breadth, so she went home and downloaded it, and had a try to see what it can do. She opened the app and input her major “digital technology” and did not input interest because she was not sure about it. After entering the main part of the app, she browsed everywhere first and then noticed that there is a “career” section recommending a page that attracted her attention. This part introduced about what are the possible careers for her major. She clicked into the career cards one by one to learn about the brief description of the career and saw some recommendations about related subjects for each career. She was very interested in the information she found, but she could not make choice between “product manager” and “interactive designer”. She went to google and youtube to search for some further information about these positions. She then found a forum section in the app, so she wrote a post to ask for advice about which subject to choose and which position is suitable to her. She got a lot of feedback from other users and finally decided that she is going to take some commerce subjects because she thinks this area of study can help her learn more about society and broaden her vision. The next step is to decide which particular commerce subjects to take. She went to category page and looked through all commerce and business subjects available as a breadth to her. Combining all the information she has gathered, she chosed the “principle of marketing” as a level 1 breadth. She was very satisfied with the information she saw in the subject detail page. In the “related subjects” section, she saw a level 2 subject “entrepreneur and product innovation”, which is a continuation of “principle of marketing” and can help her develop innovation skills. She then added a few other subjects to her favourite subject list, then created a study plan in the profile page so she can see clearly what she is going to take. She made some friends in the forum, especially some students that are going to attend the same commerce subject as she does. When the time for class arrives, she goes to class and met the students that gave her advice in the classroom and became friends.



## **AKKI**

- 20 years old university student
- Studying science, majoring in computing and software systems
- Dreaming of becoming a full-stack developer and building her own start-up studio
- Interested in UI/UX and start-up
- Concerning breadth workload, relevancy and planning

## **PERSONA**

Akki is a 20 years old fresh-year student majoring in Computing and Software Systems, focusing on full-stack website development. She dreams of her future to be a full-stack developer and eventually build a startup studio all by herself because Akki enjoys the feeling of working in a small team that shares one goal and works hard towards it to make some difference. Therefore, other than coding, Akki has a strong interest towards UI/UX and entrepreneurship and would like to take breadths to develop a range of design thinking and business strategies regarding these two areas besides her coding classes. She would love to meet more people from other faculties and see if she could network with some of them for her future career. It is worth noting that, Akki is also working in retail during the weekends to prepare the funding for her start-up studio.

However, the coding classes and her part-time job takes up too much of her time, so she would like to choose breadth with fewer workloads. Akki would usually go to her friends from the same major for advice, but none of her friends is taking any of the breadths she was interested in. Therefore, Akki needs to know more about UI/UX and business breadth including how much workload would be involved and what skills would she be able to develop. She also really wants to make careful decisions since there is only one breadth slot for each semester. Thus, Akki needs to build a plan to help her to organise her breadth options. She would really appreciate it if the plan could show a clear path of her breadth throughout the three years course and the relevancy between them so that Akki could generate a comprehensive view of her study.



AKKI

## SCENARIO

During the holiday, Akki needs to choose one breadth for her study before the semester starts. She aims to do something design or business related since Akki knows that this is a precious chance to compliment her cross-disciplinary skills and prepare for her startup. Although with a clear purpose, she was struggling to find the most suitable subject because all the breadth is from other courses and Akki is not familiar with the subject structure, specifically the relevancy of contents and workload.

She had done some searches on the Unimelb handbook with the keywords "UI/UX" and "Start-up" but ended up with only a few results available. Besides, she could not find information regarding workloads and the relevancy of the subject with UI/UX and start-up on the handbook page. She was also confused about the prerequisites of the UI/UX courses. From her friend, Akki heard about an app called "Brea(d)th Out". After downloading the app, Akki entered the launch page and selected her course as Science and Major as Computing and Software Systems. She scrolled a bit from the interest page and selected UI/UX as her interest. The tutorial gave her a concise introduction to the main functions. After entering the homepage, Akki looked around and saw the subject "*User Interface Development*" in the Recommended section. She clicked on the subject details and saw that the long explanations from the handbook are now summarized and organized neatly, along with student feedback from last semester which helps her to decide from another angle. The tags from the top helped her to generate a quick overview of the subject and she also found the radar diagram extremely helpful, since it shows the workload in numerical values. Akki is quite interested in this subject after browsing the details, she, therefore, clicked the heart icon to favourite this subject in a new list called UI/UX.

Furthermore, Akki would like to see other options, she found the tags almost look like buttons. Therefore, she experimentally clicked the User Interface tag. As a result, the app led her to a search result page, showing all subjects with the tag User Interface. Akki felt a bit overwhelmed at first glance, but she quickly spotted the sort by icon and sorted the subject based on workload, from low to high. The subject "*User Interface Development*" showed up on her page again. Akki thought this might be the right breadth to choose, she then goes to the profile page, created a new study plan and added User Interface Development. The app prefilled the subject "*Fundamentals of Interactive Design*" in the previous semester and reminded Akki that this is a prerequisite of UID. Akki is glad that the system reminded her about prerequisites and did some research again on subject details. She is satisfied with this breadth route since it covers her full-stack needs of designing and developing websites individually. As a result, Akki decided to take these two breadths this year and planned to post on the forum to find friends before the semester starts.



## **VIVIAN**

- 21 years old university student
- Studying media and communications
- Dreaming of becoming a translator
- Interested in Japanese
- Concerning difficulties, want to make friends

## **PERSONA**

Vivian is a second-year student majoring in media and communications. Vivian loves to communicate with people and could speak three languages. She is planning to become a translator in the future, thus she wants to learn a few more different languages in college. She is currently interested in Japanese and wants to start learning Japanese during her undergraduate courses.

Vivian did some research on the handbook and found out there is a series of Japanese courses provided. She took the language replacement test and was allocated to Japanese 3. However, she is not confident with her Japanese skill and was worried that Japanese 3 would be too hard for her. She is used to receiving information about subjects from her friends in the same course, thus she would also like to hear by word of mouth about how much vocabulary and grammar are required in the class. Besides, Vivian also wants to network with peers that share the same passion as her for language studying.

**VIVIAN**

## **SCENARIO**

Vivian heard about Brea(d)th Out from one of her friends. Her friend suggested that this is an app helping students to explore breadths and provides student feedback regarding their study experiences. Vivian downloaded the app and opened it. She sets her major as Media and Communications, and her interest area as Language study. Vivian wants to obtain more information about the Japanese class in UniMelb, so she straightly went to the “browse all” page using the bottom menu bar. She clicked the search bar and typed “Japanese 3”, and entered the information page of Japanese 3 on the result page. She was firstly attracted by the tag listed under the subject title: “Japanese” “Language study” “Grammar and Vocab” and “Oral”, which helped her to have a general understanding of what Japanese 3 is about. She checked the Overview section and found out that students taking Japanese 3 is required to be able to recognize around 150 kanji. Then, she scrolled down and checked out the Rating section. She founds that the Practability of Japanese 3 was rated as 5, which satisfied her requirements of practicing language skills. Vivian checked the Student Comment section and read some comments about the difficulty and class experiences. She found this information really helpful as she was used to hearing student feedback and used them as references. Vivian believed that Japanese 3 is a suitable class for her, and she added this subject to her favourist list.

Vivian went to the forum page, and found out that many students are posting their ideas and experiences about breadths here. She wanted to get connected with other students who were also passionate about studying language, so she wrote a post about meeting peers. After a few hours, Vivian checked the forum and received a few replies. She got to know students who are also studying Japanese, and they decided to meet on campus the other day.



## BREA(D)TH OUT

MINGZHE ZHANG - JOHN



### JOHN

- 18 years old university student
- Studying computing
- Aims to work in the game industry
- Interested in Game and computing
- Having trouble choosing which specific area to focus down on

## PERSONA

A game enthusiast who has just recently finished his VCE education. During his high school years, John excelled in mathematics and computing subjects and he takes somewhat of an interest in these kinds of subjects. However, upon entering university he is suddenly overwhelmed by the number of paths that are available to him, this is something that has never happened before in VCE education where there are very few and distinct subjects for the student to choose from. Personally John is ambitious and has thought of the different possible future career that he personally places a great interest in which is to become a technician in a game company. With a clear destination of where he wants to end with John is wondering about the different side paths that he can choose to enrich his college years, John personally is opening to trying out things that he had never played before as well as going into territories that he had ventured before. As of now John has taken into consideration undertaking mathematics and computing subjects as his elective and is now considering whether to choose engineering and information related subjects or should he take courses that are completely not related to his electives such as design, art, music and law. While doing his studies John is also interested in accumulating working experience to better prepare for the industry.

**JOHN**

## **SCENARIO**

John is a first year student studying at the University of Melbourne and he is going to start his first semester of college in the coming week. However, He is still uncertain about which path in the undergraduate degree he should take for the rest of his bachelor course, as of now John has three different choices that are available to him, the first path is the major of Computer science as it is the one that is mostly related to his future career, the second choice that is available to John is the major of Data Science as this major offers a direction of which John has a personal interest in for his further education of a master degree, and lastly the third major that interests John is the major of Digital Technology as it seems to be a major that revolves around the concept of front-end development as well as the most crucial subject Game Design, however for this subject the information offered is a bit of ambiguous as it is a fairly new major and some of the information regarding the specific contents taught by the subjects do not have any clear and detailed explanation.

John is also curious about what subjects that are outside of his faculty for which he can partake in to enrich his university life and expand his current skill sets. While having interests in learning contents that are outside of his main curriculum. John is also keen to learn about subjects that are relevant and closely related to his area of studies. While trying to figure out which subjects to take as his breadths John is also looking for school mates who share a similar interest in certain subjects and undergo these subjects together so as to make some social interactions with like minded peers.

Due to some personal reasons John had missed out on the orientation and did not have the opportunity to consult with anyone on the course structure, and unfortunately there is currently no student mentors available to seek advice from, John is left all by himself to make all of the decisions in the quickest time possible or else the amount of workload for each subject will accumulate quickly as time progresses.

John is also curious about what kind of work experience/ employability opportunities and services the university provides to the students, also things like events that are going on within the faculty or to the students in general, or the different opportunities that are available at the time. While the canvas application does occasionally provide news feeds of certain event but majority of the events are being left untouched, and information regarding these events are scattered everywhere that needs a large amount of effort to collect in the first place.

## BREA(D)TH OUT

JEREMY JUNWEI - ALEX



### ALEX

- 21 years old university student
- Studying commerce, majoring in accounting
- Quiet personality
- He enjoys reading global history, art history, and books related to the humanities and arts.
- Want to study the breadth that he interested

## PERSONA

Alex is a 21-year-old boy with a quiet personality. His family has been migrating to Australia from overseas for almost five years. He spent a year in a language school in Australia and then three years in high school at a local public high school. Most of his friends are still his classmates from high school in Australia, but they have gone on to study at universities in other countries. He is now a student at the University of Melbourne, studying accounting in the second semester of his undergraduate degree in general studies, and because of the Internet, he has not made many friends at the university. However, he doesn't think it matters because he thinks quality solitude and serious study are more important to enrich his life. In addition to reading books within his major, he enjoys reading global history, art history, and books related to the humanities and arts. People who knew him said he was a nerd, but a mobile Wikipedia. He was so obsessed with the arts and humanities that when he had nothing else to do, he could spend a whole day in his room reading about them. He also has an entire wall of bookcases at home filled with books he has read. His family lives in a suburb not far from the Melbourne CBD, but he doesn't go to the CBD very often either. He works part-time at a bookstore and does odd jobs on weekends. He used the money from his part-time job to buy himself an iPhone so he could study and live better. He doesn't like to do meaningless and useless things or research without exact goals. He is relatively straightforward and will not hesitate to fix or accomplish his goals as long as they meet his requirements.

**ALEX**

## **SCENARIO**

The semester is ending, and it's time to choose classes for the new semester. Alex is feeling very annoyed. His major class was fixed, so he could choose it directly. However, he didn't have a clue about which subjects to choose as breadth. He had asked on the online forum, but the people who answered him all had different interests and career paths, and the advice and recommended subjects were not very interesting to him. He looked for relevant recommendations on search engines but did not find any satisfactory ones. He wanted to consult his friends directly, but his friends are all in other universities and are not too sure about the details of the Melbourne University program. He was troubled and torn, so he was introduced by his classmates and downloaded the app Breadth Out. His idea was that he probably wanted to choose some breadth subjects that could be related to his favourite global history, art history, humanities and arts, or some subjects that could help him to work with the skills that would complement his major in the future.

For the first time, he opened the app on his phone. He first filled in some basic information about his schools, such as the major he was studying and the faculty he was enrolled in. Then, he chose and filled in his hobbies and interests in his field of study. When he finished the tutorial guide of the app, he clicked on the recommendation in the middle of the bottom menu bar, and he was surprised and excited to see the customised recommendations for him, and he thought that the names of these subjects were of his interest. They were related to his favourite global history, art history, and humanities, and in the following column were recommendations related to his major. When he saw that there was a relevant tag on each subject, he was probably clear about what each subject was about. He clicked in and looked at the recommended subjects he was interested in, browsed official information and feedback from students about the subject, and found the radar diagram very useful. Finally, he chose a class called Indigenous History (HIST20088). He added this class to his favourite, and he thought he would browse a few more to compare and contrast, and finally chose two as his breadth subjects for the next semester and put them into his study plan. So he used the tags feature and selected a few more courses in the history category of subjects to his favourite, and after comparing them, he chose Modern Southeast Asia (HIST20034) and Indigenous History (HIST20088), which he also put into his study plan in the app. Alex was very satisfied that he had used a short time to get practical recommendations, and after doing a little research and comparison, he chose the subjects he was interested in.

**BREA(D)TH OUT**

# Photo Scenario

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# Story Board



# Photo Scenario

LINK TO SCENARIO VIDEO:

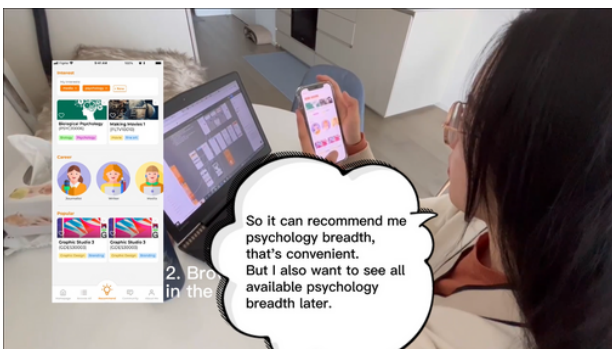
[HTTPS://YOUTU.BE/Y1HQBVXRDMQ](https://youtu.be/Y1HQBVXRDMQ)



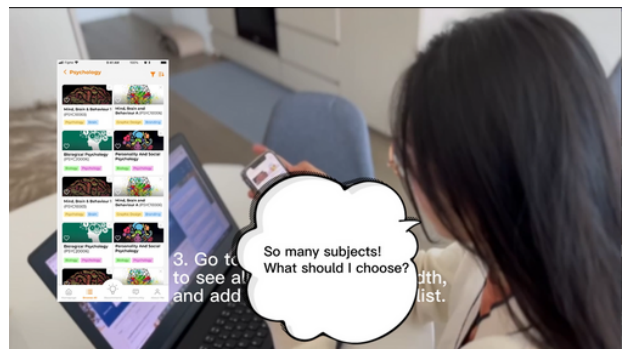
**Vivian learned about Brea(d)th Out at uni student service.**



**She downloaded the app, went through the launch pages and input major and interest.**



**After entering the App, she browsed all pages in the navigation bar first.**

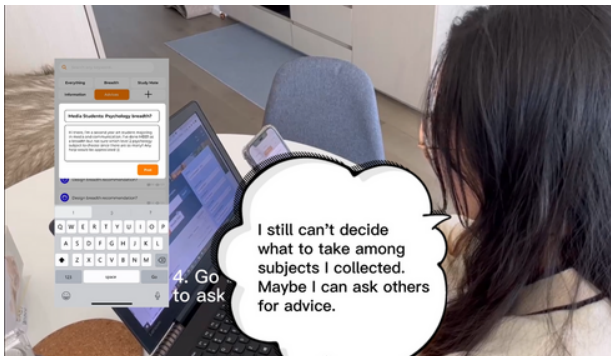


**Since she wanted to see all available psychology subjects, she went to "browse all" page, and add several subjects to favourite list.**

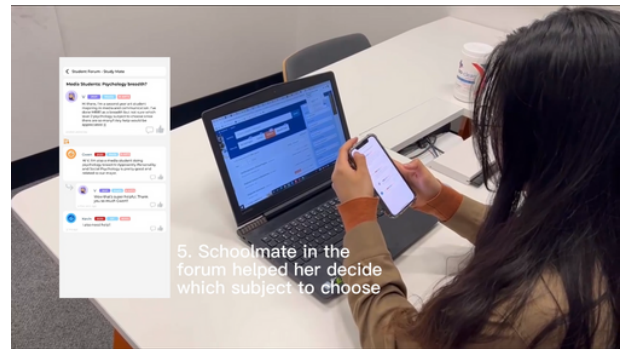
# Photo Scenario

LINK TO SCENARIO VIDEO:

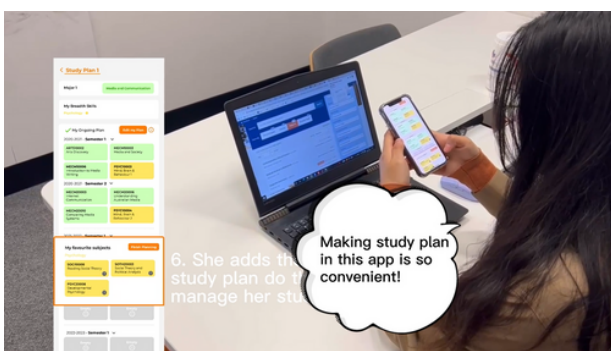
[HTTPS://YOUTU.BE/YIHQBvXRDMQ](https://youtu.be/yIHQBvXRDMQ)



4. Go to ask  
She still could not decide which subject to take, so she went to forum for help.



5. Schoolmate in the forum helped her decide which subject to choose.



6. She adds the breadth subject to her study plan so that she can clearly manage her study.



On the day of the class, Vivian goes to uni and meet the schoolmate that gave her advice.  
She met the student how gave her advice in uni, and expanded her connections.





# Observational Evaluation of Main Prototype

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**PLEASE NOTE:**

You might find some of the tasks not matching the functions we presented in the previous final prototypes.

During the process of our prototype development, we added many new functions as well as deleted some after user evaluation and numerous expert reviews. The **following user-based evaluation was conducted** based on the **second last version of our prototype**. Compared to the final prototype, the **main differences** occurred on the **Browse All Page and Recommendation Page**. Specifically, **the function Skills Combo was presented in the second last version as well as some of our tasks (Pg70)**.

We are aware of this difference but couldn't manage to do more interviews because of time constraints, this would be part of our future developments. Thank you!

# Participant Demography

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**P1**

22-year-old student, studying Master of Urban Planning at the University of Melbourne. She chooses breadth using breadth function from the study plan provided by the student portal, which categorises breadth by discipline and displays available subjects only. P1 is an expert user of many apps.

**P2**

21-year-old student, studying Bachelor of Digital Technology at the University of Melbourne. She especially values the feedback from peers and would like to attend the most popular breadths.

**P3**

21-year-old student, studying Bachelor of Digital Technology at the University of Melbourne. She values the practicability of the subjects very much, which is how the subjects can help her with future career.

**P4**

22-year-old university student, majoring in computing and AI. She doesn't need to choose breadth since this is not the curriculum model in her university, but she also has the need to choose subjects within her course. P4 is not familiar with many apps.

**P5**

21-year-old student, studying Education at the University College London. She didn't know the breadth system before and has a very clear understanding of her interested area and study goal.

# User Evaluation Summary

We conducted user interviews with a close evaluation on the four main areas of our app, they are:

## User interface and Usefulness

"Natural and smooth"

"I think with this app it's quite minimalist..., and I can see only like simple colors used and its pretty good."

"I know what i'm doing"

"Horizontal and vertical consistency"

"it's very breadth-focused in itself, from the get-go."

## Breadth Recommendation

"I think it would give me the opportunity to find things"

"Explore something way out of my degree rather than sticking very close and well-behaved to my degree."

"I'll choose the popularity first...people's opinion is the most important thing for me."

## Breadth Information

"Knowledge is power for me to make my decision"

"This app is just helping me give me as much information and knowledge as I can"

"I feel satisfied with the information I found"

"People commenting on each subject so I can know more information about it instead of only from my friends."

"Figuring out about breadths to its fullest potential rather than getting mixed up in other things like electives"

## Breadth Planning

"much more neat and aesthetic"






"it makes more sense because it all can also keep track of my semester by semester subjects"

"looks much more relaxing for someone with high anxiety and ocd"

# Tasks & Reflections

## Participant 1

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Tasks	1. Open the App and set your major as Digital Technology in the guide pages.	2. Find the Product Manager Result Using Skill Combo function	3. Find a subject from recommendation page under "According to people like you" category	4. Search for subject "Interactive technology project", and add that to your favourite subject list "Interavtion Design".	5. Go to forum, find hot post called "CCDP10003 looking for new friends". And post a reply.	6. Find your study plan "plan 1". Edit the plan, add subject "Japanese 3" into a blank subject holder.
Completion status						

### Q1: TO WHAT EXTENT DOES THIS APP MOTIVATE YOU TO EXPLORE MORE POTENTIAL BREADTH SUBJECTS? HOW?

Answer: A lot. Because it's very breadth-focused in itself, from the get-go. So yeah, that really specific focus kind of helps me, figure out about breadths to its fullest potential rather than getting mixed up in other things like electives, and everything else, like a barrage of information that overwhelms you and then you feel like a depressed person who doesn't wanna get out.

### Q2: IN WHAT WAY DO YOU THINK THE APP IS HELPING YOU TO FIND SUITABLE BREADTH SUBJECTS?

Answer: I think it would give me the opportunity to find things like that and explore something way out of my degree rather than sticking very close and well-behaved to my degree. So I could find something in music and arts, and I could do a first-year subject in music.

I think the main part about helping me pick the decision is when I click on one of them and then it shows me the information. That's the part where it helps me kind of make my decision because, at the end of the day, This help is just helping give me as much information and knowledge as I can.

Cuz knowledge is power for me to make my decision. And my decision is my responsibility. So even if I make the wrong decision, it's not on you guys, it's on me. So as long as you're getting all the information out and the student feels, I feel satisfied with the information I found.

# Tasks & Reflections

## Participant 1

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### **Q3: DO YOU THINK THIS APP HELPS YOU TO UNDERSTAND MORE ABOUT BREADTH SUBJECTS?**

Answer: Yes. Cause not only do you guys provide information on breadth subjects, it kind of helps me understand through the process of using this app. From the start where you're like, oh, it's very simple where it's like, choose your course, choose your major, and then you guys kind of ask me, choose your interests. And from that, I'm like, Breadths. So that means I kind of understand the concept of breadth. For example, if I'm a student, an international student, I don't know what breadth is at all, then I kind of know that breadth is based on exploring different skills. It doesn't have to be related to my course. But it's mainly related to my interests and the skills I wanna pick up. So yeah. Kind of helps me through the process to know those breadths. So put that in the middle, like this thing kind of highlights that or sense that message indirectly.

### **Q4: RECOMMENDATION AND BROWSE ALL: WHICH ONE WOULD YOU USE MORE OFTEN?**

Answer: Like at the start, I would probably go based according to my interests. And then over time as I kind of ease into it, I would probably kind of explore different subjects to out of sight, more interests.

### **Q5: DO YOU FIND THE RECOMMENDATION PAGE REASONABLE?**

Answer: It's really reasonable. It's pretty colourful too. Like how on Canvas you have the picture for the subject. The way that it matches kind of helps me keep consistency is great. You know, Consistency is safe. It feels comfortable. Consistency doesn't make me feel like I'm in a different world. So it's consistent across the app. And it's also consistent across universities, and different platforms. So that's like horizontal and vertical consistency.

### **Q6: DO YOU THINK THE FORUM IS HELPFUL IN THIS APP?**

Answer: It's a place where I can connect with people. It's connection building, I feel like I can make it kind of, just kind be a bit traumatic here. Because you're introducing this, it also will need moderation. That nobody's gonna post something like, Oh my God, did you hear that this student did this? And then bullying starts. Just like when, when they really hate one subject. No hate and like there should be guidelines. What's allowed, what's not allowed. Guidelines. Probably the one section could be, if someone wants to rent, there would be advice. Just general life advice. Because I get the feeling that sometimes. Like despite like of the perfectness of like providing information and like student comments and everything. Sometimes like that humanizing aspect we need to look out for each other's mental health or well-being. Like if someone's struggling while they're doing the subject. So they wanna kind of find help and they're like, Go to advice. Yeah. And there's a post like, Oh, I'm really stuck, struggling and I can't keep up. It's helping out each other.

# Tasks & Reflections

## Participant 2

Tasks	1. Open the App and set your major as Digital Technology in the guide pages.	2. find the recommendation page, that recommend breadths according to your interest	3. Search for subject "Interactive technology project", and add that to your favourite subject list "Interavtion Design".	4. Go to forum, find hot post called "CCDP10003 looking for new friends". And post a reply.	5. Find your study plan "plan 1". Edit the plan, add subject "Japanese 3" into a blank subject holder.	6. Find "what, why and how to choose breadth" subject page
Completion status						

### Q1: TO WHAT EXTENT DOES THIS APP MOTIVATE YOU TO EXPLORE MORE POTENTIAL BREADTH SUBJECTS? HOW?

if I still need breath subjects, so I, I'll probably go to this, this app because for handbook it's, it's kind of hard to me to, for me to filter the the chewable breath because it doesn't choose.t doesn't filter out based on my course. So I, I assume this one can help me more precisely finding the subjects that I can take. And, it also has like a foreign thing so I can see. People commenting on each subject so I can know more information about it instead of, from my friends. Cuz there's only a small number of friends taking one subject, so it's hard for me to distinguish and some of them will say, This subject is bad, and some of them will say, This subject is good. So if I can see like a lot of comments so I can, that I can decide if this one it's worth to choose.

### Q2: IN WHAT WAY DO YOU THINK THE APP IS HELPING YOU TO FIND SUITABLE BREADTH?

Okay, so because you have filter buttons here, they can help me better. Let me just click around see, So the first one I said's about the forum, like information from others. And comments. And also maybe this one recommended based on my interest.

### Q3: DO YOU THINK THIS APP HELPS YOU TO UNDERSTAND MORE ABOUT BREADTH SUBJECT?

when I first got into university I didn't quite understand what breadth is. At that time I was only getting information from other apps like discussion forum app. They would just say Breath from University of Melbourne. It's useless. It will only like occupying your time and money for studying nothing. And it's probably. Not good for your major because like for other universities, they don't have breadth subjects. But for University of Melbourne, I think the purpose of having breath subjects is more about letting you relax sometimes.

**Q4: ON RATING OF 1 TO 10, HOW USEFUL DO YOU THINK THE HOMEPAGE IS?**

First of all, it displays basic functions for this app, like forum and suggestions and information, and also a search bar. So I think the home page is quite useful like that because I can see the functionality what this app has and I can have like a quick entry from the whole page.

**Q5: ON RATING OF ONE TO 10, HOW USEFUL DO YOU THINK THE HOMEPAGE IS?**

That's pretty much. Is the, the, the everything that I want to see.

**Q6: ON RATING OF 1 TO 10, HOW REASONABLE DO YOU THINK THE RECOMMENDATION SCHEME IS?**

The people like you. I would say if you can just include this part to here. Like this one is based on your interest, And maybe this one based on the popularity, then you can have like for extension to this part.

**Q7: OVERALL, DO YOU HAVE OTHER SUGGESTIONS TO OUR APP?**

I think with this app it's quite minimal list and it doesn't need to be fancy, and I can see only like simple colors used and pretty good. But I think you can just improve the interface for the, like the first, the logging page. for that page, you used a lot of orange color there. And I was expecting after entering the rest of the page would be the same.

# Tasks & Reflections

## Participant 3

Tasks	1. Open the App and set your major as Digital Technology in the guide pages.	2. Find the Product Manager Result Using Skill Combo function	3. Find a subject from recommendation page under "According to people like you" category	4. Search for subject "Interactive technology project", and add that to your favourite subject list "Interavtion Design".	5. Go to forum, find hot post called "CCDP10003 looking for new friends". And post a reply.	6. Find your study plan "plan 1". Edit the plan, add subject "Japanese 3" into a blank subject holder.
Completion status						

### Q1: TO WHAT EXTENT DOES THIS APP MOTIVATE YOU TO EXPLORE MORE POTENTIAL BREADTH SUBJECTS? HOW?

Answer: I actually I like the forum function cuz I can find some students who have chose the same class, the same subjects with me. And I think they can share the opinion of some. subject. Yeah. So I can know about the subject before I choose it.

### Q2: IN WHAT WAY DO YOU THINK THE APP IS HELPING YOU TO FIND SUITABLE BREADTH SUBJECTS?

Answer: I think the skill combo function can really encourage the users to think about the first subject. Cause they can choose some subjects which can help their future career. Also, I really want to know something about the tutors and lectures, which I can see student comments and feedbacks.

### Q3: ON RATING OF 1 TO 10, HOW USEFUL DO YOU THINK THE HOMEPAGE IS?

I think there can be some more functions like this part. Cause I think there are some functions which are more important. I think it can show the subject the user chose, under the banner so they can easily access to the subjects that have already selected.





### Q4: DO YOU HAVE ANY OTHER IDEAS ABOUT THIS APP? DO YOU THINK IT'S TOO OVERWHELMING, TOO COMPLICATED, OR SOMETHING?

I think some functions can be more apparent, for example, in the first task you asked me to find a skill combo, but. it's a little bit difficult to find it. So maybe make that more obvious and more appealing. And for the search bar on the homepage, you can make it able to search for everything in the app, instead of onlly searching for breadth subjects. You can make it search for subjects in the category page.



# Tasks & Reflections

## Participant 4

Tasks	1. Open the App and set your major as Digital Technology in the guide pages.	2. Find the Product Manager Result Using Skill Combo function	3. Find a subject from recommendation page under "According to people like you" category	4. Search for subject "Interactive technology project", and add that to your favourite subject list "Interavtion Design".	5. Go to forum, find hot post called "CCDP10003 looking for new friends". And post a reply.	6. Find your study plan "plan 1". Edit the plan, add subject "Japanese 3" into a blank subject holder.
Completion status						

## FEEDBACK

### TASK 1

The process is easy and straight forward.

### TASK 2

Through steps of elimination the user was able to find the recommended page.

User: it is not very intuitive, there is elements of guessing, a guidance is needed for the user to find out about the recommendation page( Maybe a user tutorial)

### TASK 3

The search result is not obvious, the add to favorite function can be more highlighted,

A function to view the current favorite subject list, instead of plain imagery maybe add some text as guidance for the functions.

### TASK 4

To join a forum then be able to see the posts within the forum, a pop up window with a search query function would be preferred.

Notes: maybe edit the visual and interaction flow of the blank slot on the study plan page

## **TASK 5**

Customization is a little confusing of which function or page will be customized

## **GENERAL FEEDBACK**

A lot of guessing (user workload) required for the purpose of certain functionalities within the application. Lacks of clarity of functionality regarding the buttons in the app.

Using texts instead of imageries for buttons

Purpose of the interest and course category requires guessing.

# Reflective Questions

## Participant 5

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This user evaluation was conducted in the later stage of our design cycle, where we already discovered some problems from the result of previous interviews. Therefore, instead of completing tasks, we decided to probe the usability of our main features here for further refinements.

### TUTORIAL

Interviewee: Um, I guess you don't need that much components to describe this page. It could just be a orange block or a white block, and then you can just say that um, this page is going, is going to be arranged in two ways. One way is according to people who are similar to you, the other is just, it's just random recommendations for you, you know? Um, and you could edit your interest. and then maybe have an arrow pointing somewhere, or um, something like that. Yep. So it's just one thing. Mm-hmm. to look at. Not really all over the place. This page is on the light bulb page. Okay. I guess some indication in, um, pointing towards this light bulb cuz I'm, initially, I thought this is just a design that the middle one is orange or something.

### FORUM

Um, I guess another thing is how you're going to motivate everyone to post on these forums. Mm-hmm. . So, but you just won't use this function cuz you have nothing to. If I were only to come out here for 12 times for my entire three years bachelor, cuz that's how many times I having to choose my subjects. I don't, I wouldn't post anything on the forum

# Reflective Questions Participant 5

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## SKILL COMBO

To me, still combo skills, probably it will be like teamwork or communication or other transferable skills, but you don't really see any of that here. Uh, Okay, I see. So in terms of like, if I'm using the phrase skill, it means more about like leadership or as what you mentioned?

Probably, yeah. And rather than skills related to career or related to, um, academic. No, I, I mean, skill include all of it, but I don't see any of the words that indicates or connective skill here. Like I only see bachelors of different subjects, but I don't see anything that sane skills. Ah, yeah. It doesn't matter if it's academic or transferrable or career or any kind of skill.

It just, I don't see any skill. Okay. I see. And the fact that skill combo is bolded, I, I assume you want me to get attention to these two words, but I don't know what it means here

## HOMEPAGE

It's pretty straightforward. Yep. The first part of it's just probably some news that, um, gets updated very, um, regularly and you'll be able to see it.

I get it, it's customization, but, um, I don't see how it's gonna help me in terms of like, I guess it depends on how, how regularly I'm going to use this app. Mm-hmm. , I guess I'm just gonna explore a bit more and then come back to customization. Cuz if I, if I'm only gonna use it to select subjects for once a term or twice a term, I probably won't be bothered to customize it. Um, I see.

# Conclusions

In our Main design cycle we went through a series of steps. From persona, scenario and relevant technology, had a chance to gain more insight into user needs and design techniques. Based on these insights, we could narrow down our target needs to make the purpose of the app more clear, and finally defined our target as “help students to make sense of the breadth system, while assisting them in exploring the full possibilities about breadth”. This topic might be a marginal concern for students, but we identified that it should be much more valued than it is right now. We have continuously tested our prototype using interviews and modified it, through which we identified several different kind of users, and we found that it is hard for one app to fulfil the needs of all kinds of users. Additionally, constantly changing our design according to feedback is inadvisable, because users may have different needs, and they might not know what is the best way to fulfil their needs. We should discover and understand their fundamental needs.

We have met a lot of challenges through our design process. Firstly, we are targeting basically all bachelor students at the University of Melbourne, but we could not hold massive quantitative user research to examine our design idea, and the interviewees we tested with are very differentiated in their user needs, so it is hard to know what is the best way to design the app.

Secondly, we met challenge of motivating students to use app at a higher frequency. The function of our app is focus on helping students to select breadths, but this is a quite limited function and lacks motivation for users to use it frequently. On the other hand, if we develop functions that can keep the users keep using the application, will it goes against the initial design goal of this application? Or can we find the balance between them and finding a function relevant to breadth?

Thirdly, there is a huge amount of subjects and their area of study are very diversified. It is hard to find a way for students to learn about them all in the browse all page. Even the official classification method from the university has a huge amount. But if they can not learn about every choice, they might miss something.

We still see some possible improvements can be made to our project.

To further prove the needs and the usability of our prototype, a quantitative research can be carried out, which would be more persuasively than the feedback from limited number interviews. Besides, we would work on balancing between the necessary function of researching breadths and any extra functions the app might include in order to increase user engagement. Currently we introduces three different ways of recommending breadths on the recommend page. In the future plan we would like to make further analyse about the efficiency of these three methods.

We hope the designed “Brea(d)th out” may be fulfilled in some way to serve its purpose.

**BREA(D)TH OUT**

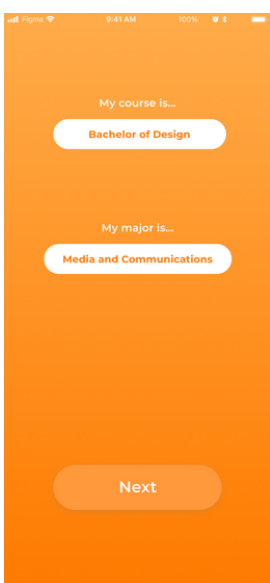
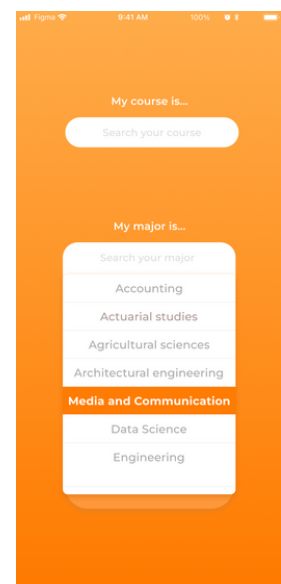
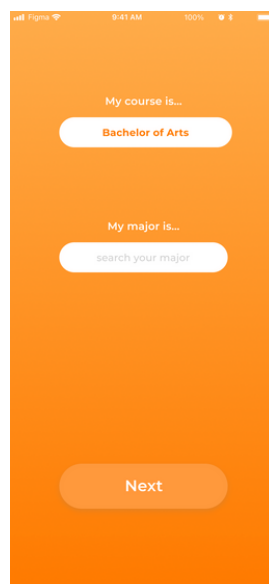
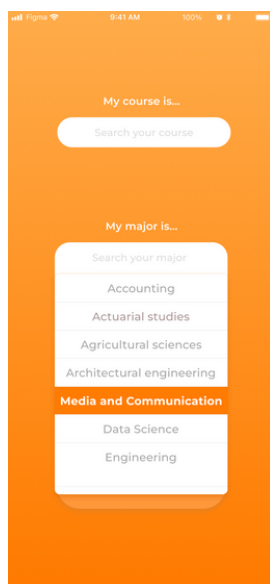
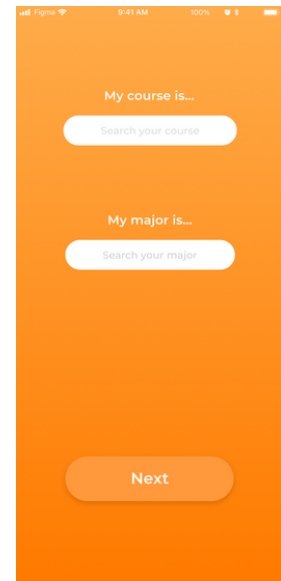
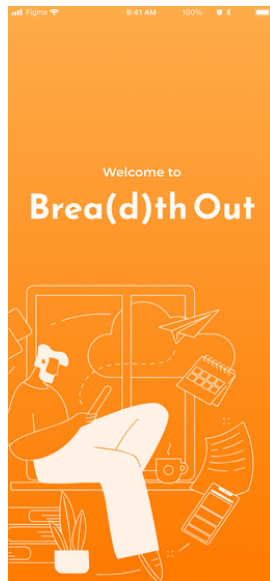
# Appendix

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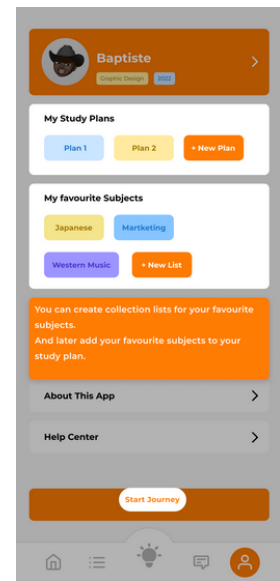
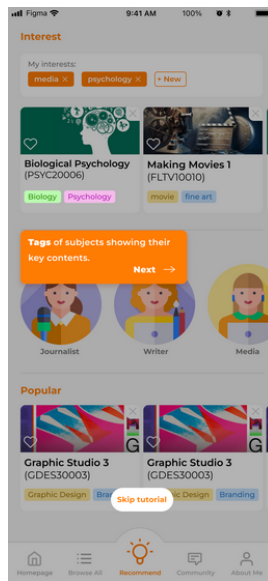
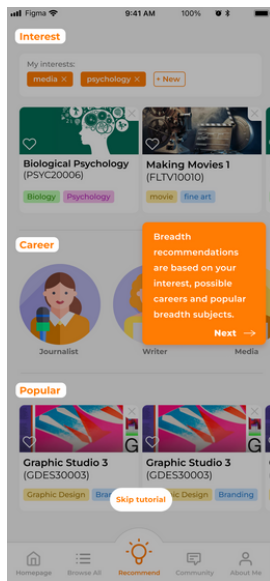
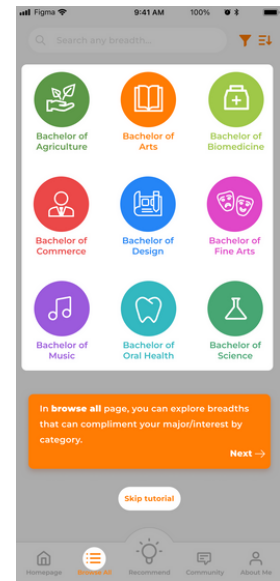
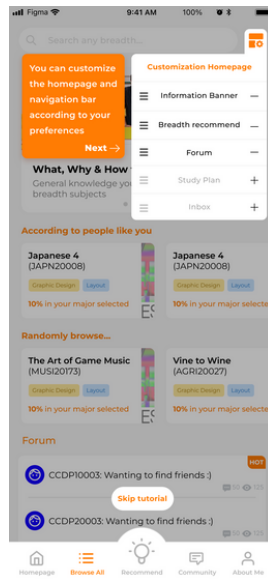
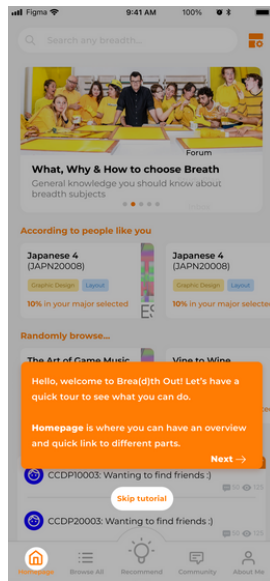
# BREA(D)TH OUT

## FINAL PROTOTYPE - LAUNCHING



# BREA(D)TH OUT

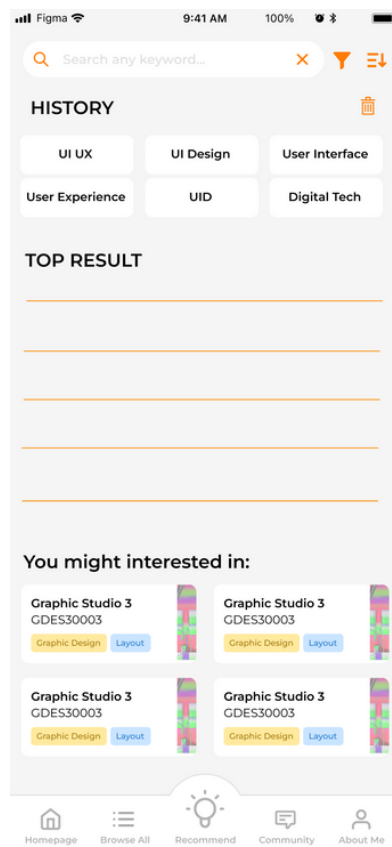
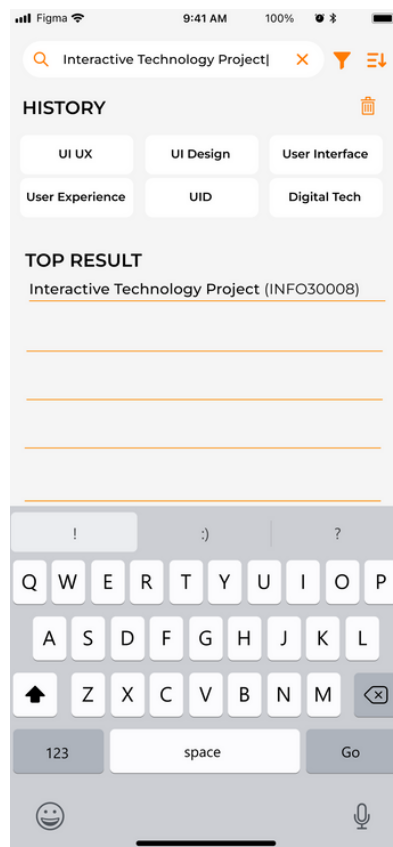
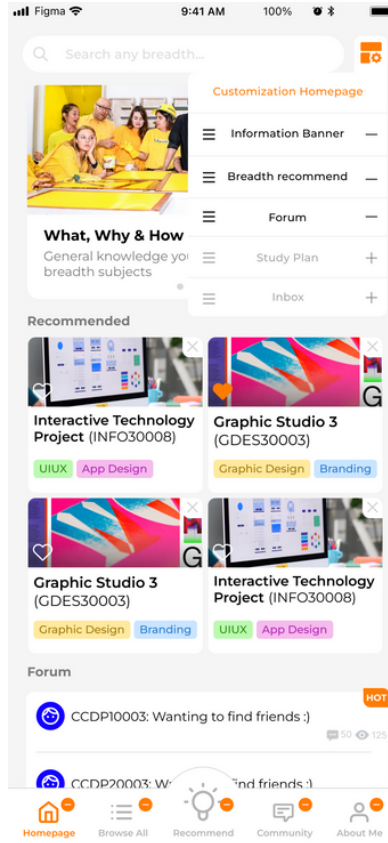
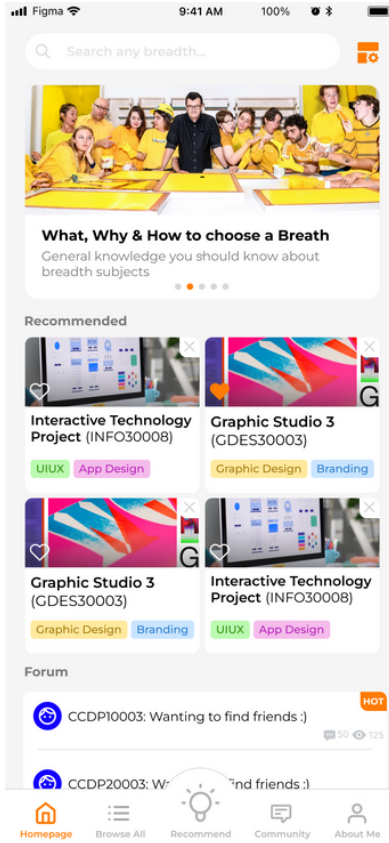
# FINAL PROTOTYPE - TUTORIAL





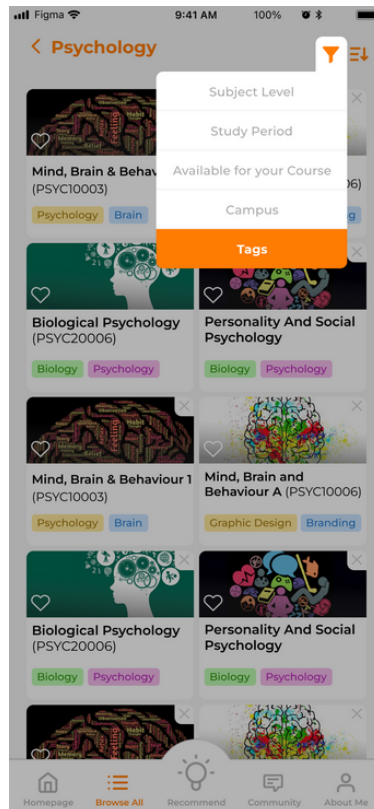
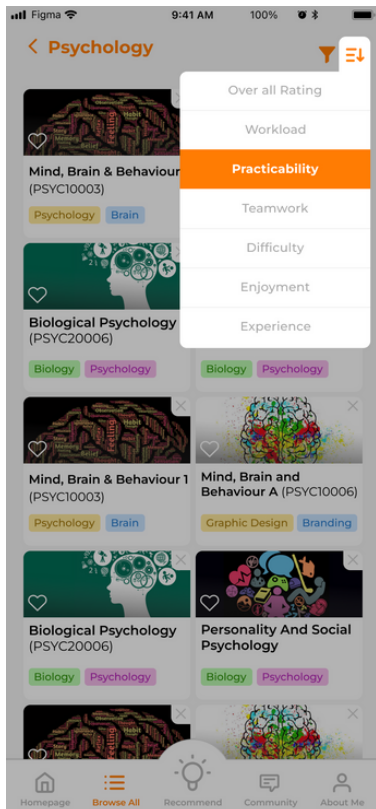
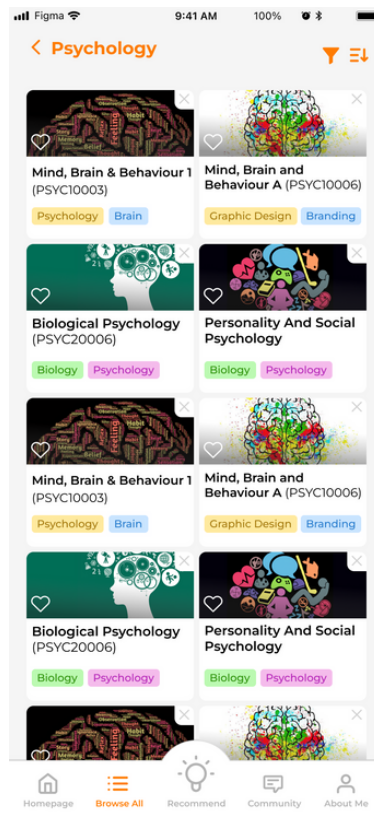
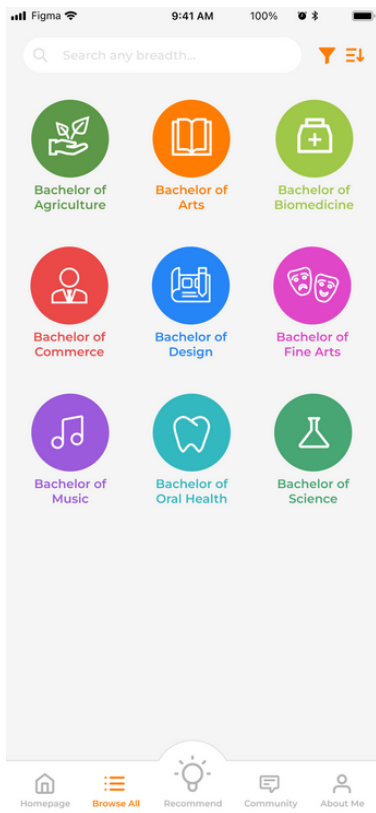
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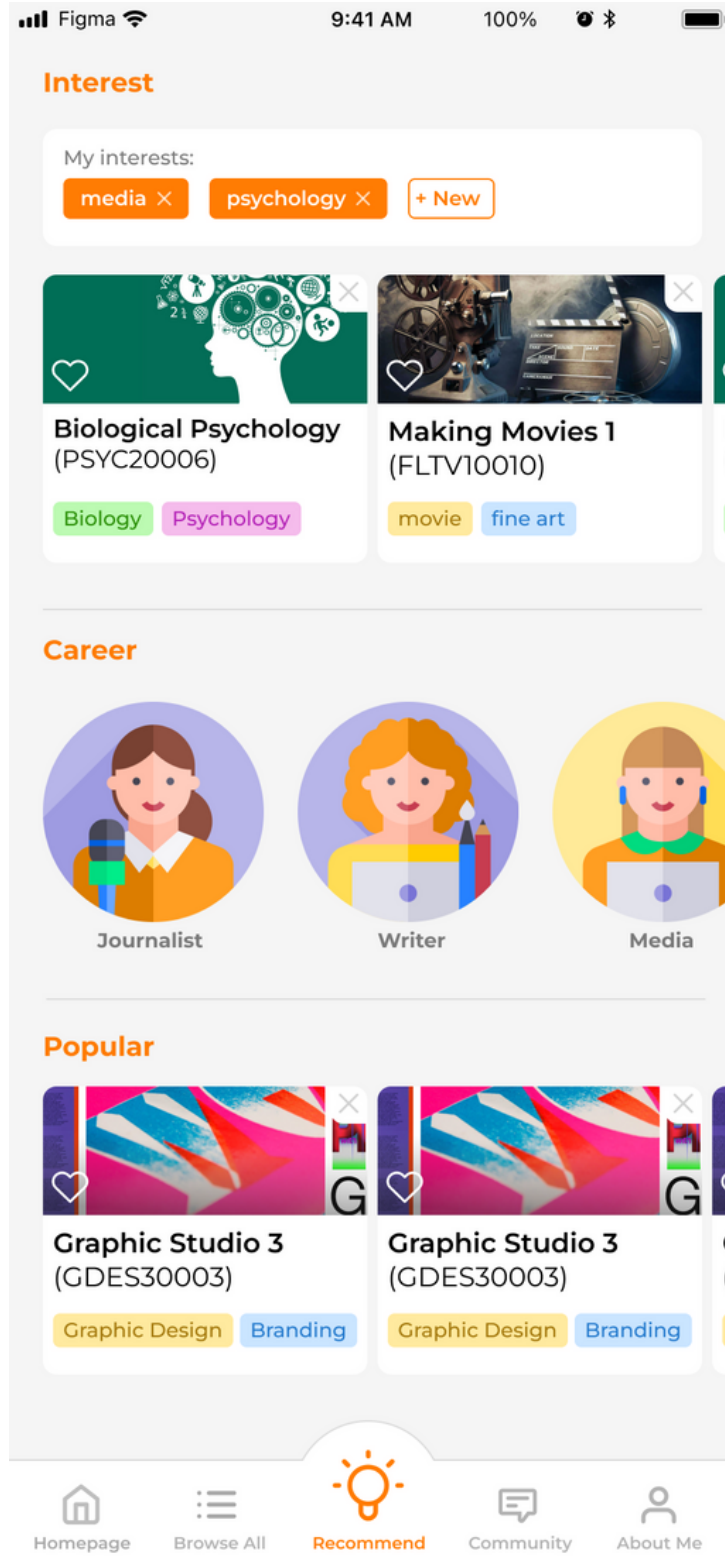
# FINAL PROTOTYPE - HOMEPAGE



# BREA(D)TH OUT

# FINAL PROTOTYPE - BROWSE ALL





# BREA(D)TH OUT

# FINAL PROTOTYPE - INFORMATION PAGE

**Interactive Technology Project**  
Undergraduate level 3  
Points: 25  
Dual-delivery (Parkville)

UI/UX Interactive Design App Design

**Overview** Eligibility Assessment Dates

As the 25pt capstone for the Digital Technologies Major, this subject creates an opportunity for students to work as an independent team to develop and evaluate a novel proposal for a new interactive technology or new application of existing technologies.

**Rating**

Workload	5	Practicability	4.2
Teamwork	5	Difficulty	4
Enjoyment	5	Experience	5

**Student Comments**

**Great practice on collaboration**  
In Semester 2 - 2021, 90% student found this subject provided lots of teamwork. [Read detailed comments](#)

**Lacks of teamwork**  
In Semester 2 - 2021, 40% student found this subject hard to understand. [Read detailed comments](#)

**Related Subjects**

[Usability Evaluation Methods \(INFO20004\)](#)  
[User Interface Development \(INFO20005\)](#)

**Graphic Studio 3**  
Undergraduate level 3  
Points: 25  
Dual-delivery (Parkville)

UI/UX Interactive Design App Design

**Overview** Eligibility Assessment Dates

Prerequisites/ All of:  
 Usability Evaluation Methods (INFO20004)  
 User Interface Development (INFO20005)  
[Add all to my favorite](#)

Corerequisites/ None

Non-allowed Subjects/ None

**Rating**

Workload	5	Practicability	4.2
Teamwork	5	Difficulty	4
Enjoyment	5	Experience	5

**Student Comments**

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**Related Subjects**

[Usability Evaluation Methods \(INFO20004\)](#)  
[User Interface Development \(INFO20005\)](#)

**Interactive Technology Project**  
Undergraduate level 3  
Points: 25  
Dual-delivery (Parkville)

UI/UX Interactive Design App Design

**Overview** Eligibility **Assessment** Dates

Assignment 1  
**Opportunity Identification and Digital Prototyping: Group project (3-5 students)**

Assignment 2  
**Evaluation of digital prototype: Group project (3-5 students)**

Assignment 3  
**An individually submitted digital innovation proposal (of 3000 words)**

**Rating**

Workload	5	Practicability	4.2
Teamwork	5	Difficulty	4
Enjoyment	5	Experience	5

**Student Comments**

**Great practice on collaboration**  
In Semester 2 - 2021, 90% student found this subject provided lots of teamwork. [Read detailed comments](#)

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In Semester 2 - 2021, 40% student found this subject hard to understand. [Read detailed comments](#)

**Related Subjects**

[Usability Evaluation Methods \(INFO20004\)](#)

**Interactive Technology Project**  
Undergraduate level 3  
Points: 25  
Dual-delivery (Parkville)

UI/UX Interactive Design App Design

**Overview** Eligibility Assessment **Dates**

**Semster 2**  
Teaching period : 25 July 2022 to 23 October 2022

**Rating**

Workload	5	Practicability	4.2
Teamwork	5	Difficulty	4
Enjoyment	5	Experience	5

**Student Comments**

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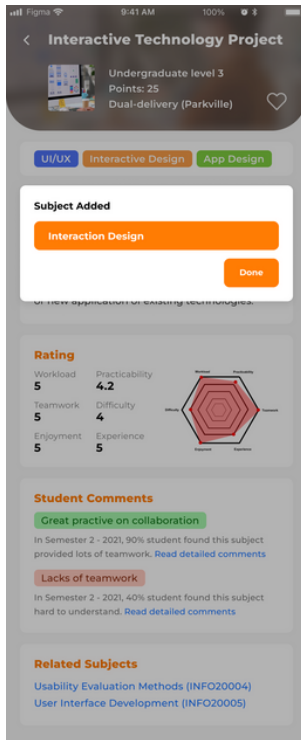
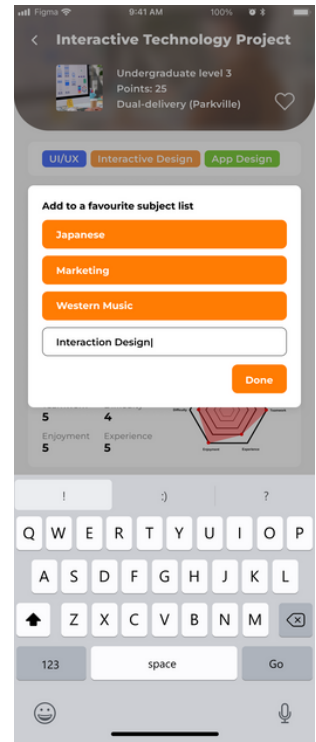
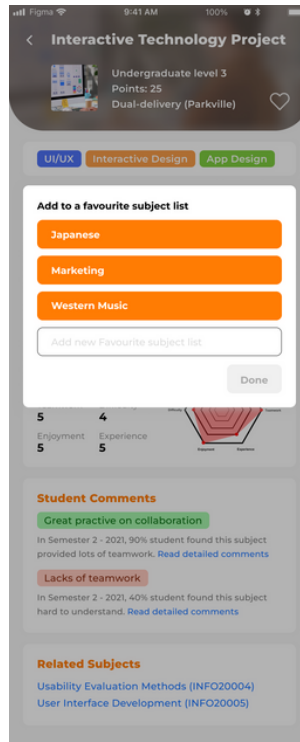
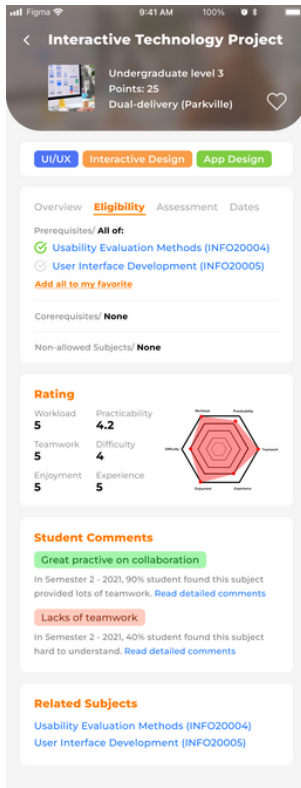
**Lacks of teamwork**  
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**Related Subjects**

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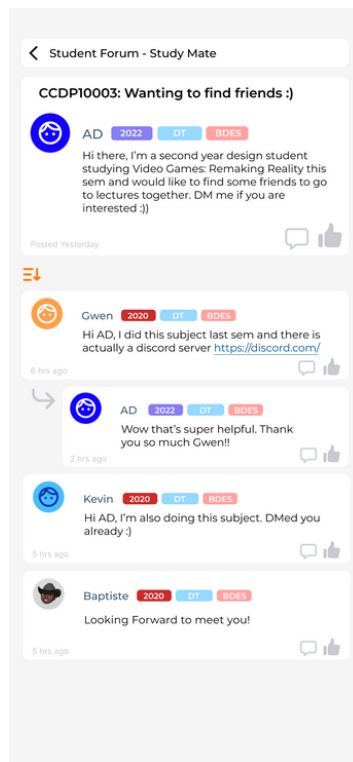
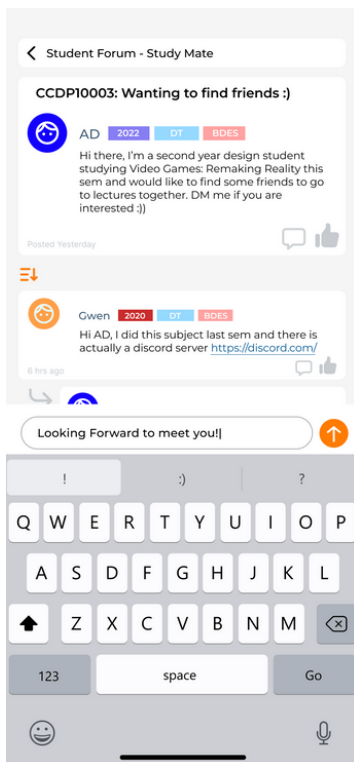
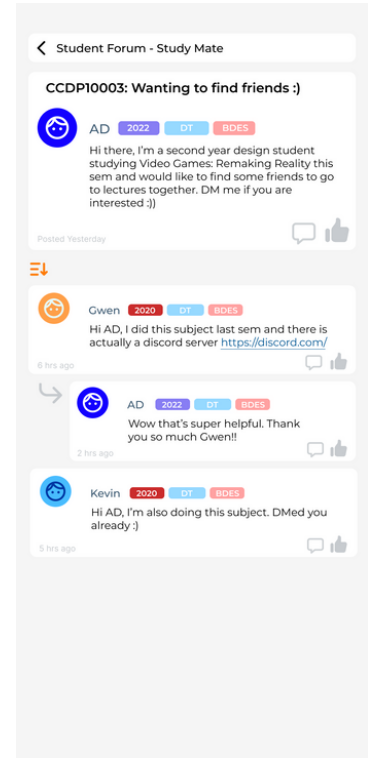
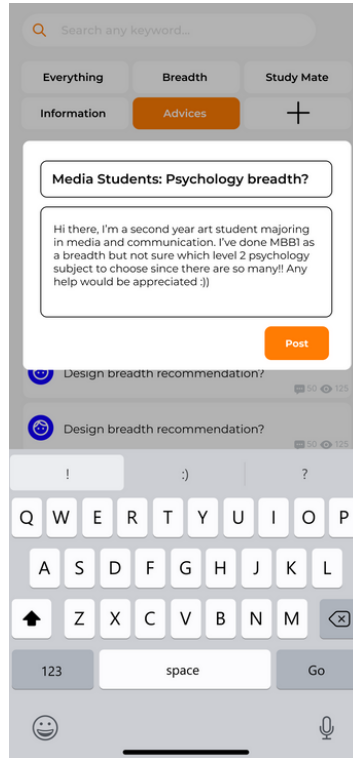
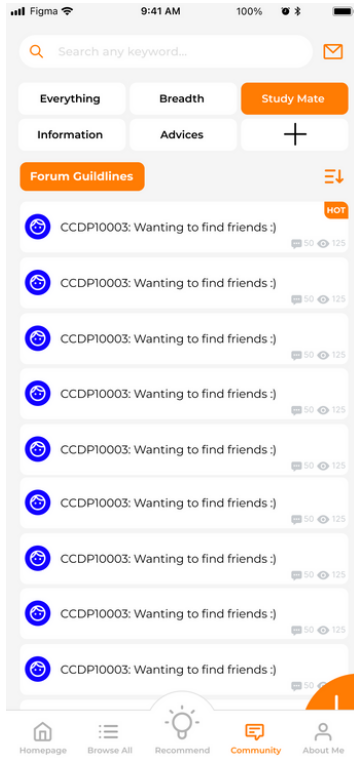
# BREA(D)TH OUT

# FINAL PROTOTYPE - ADD TO FAVOURIST LIST



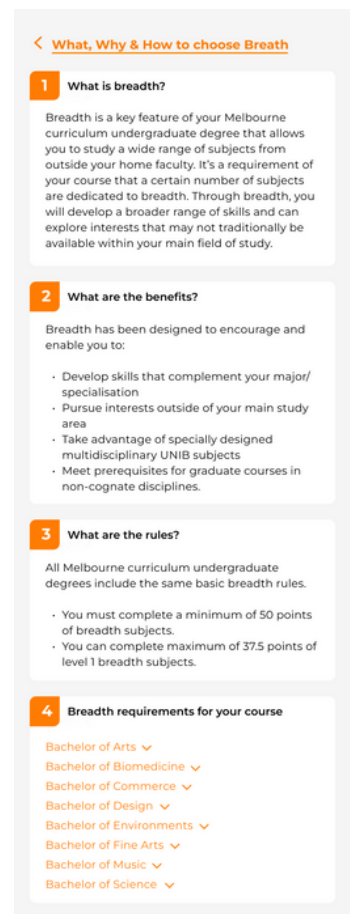
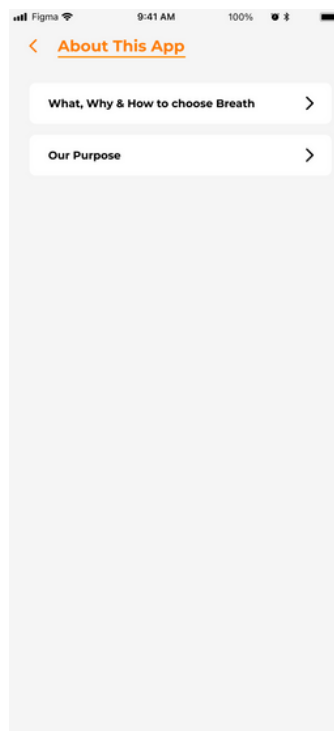
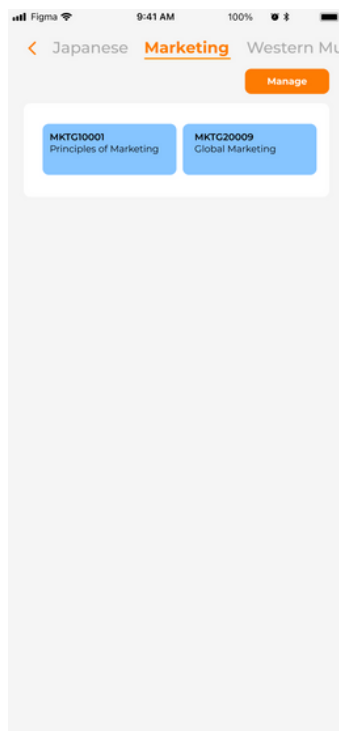
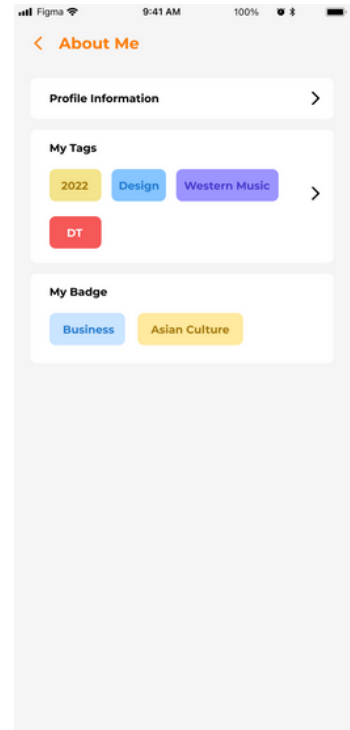
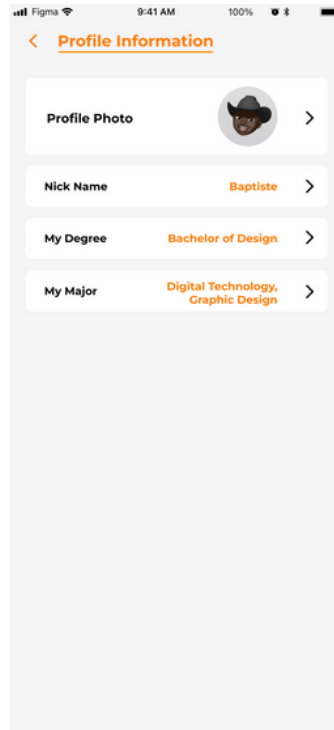
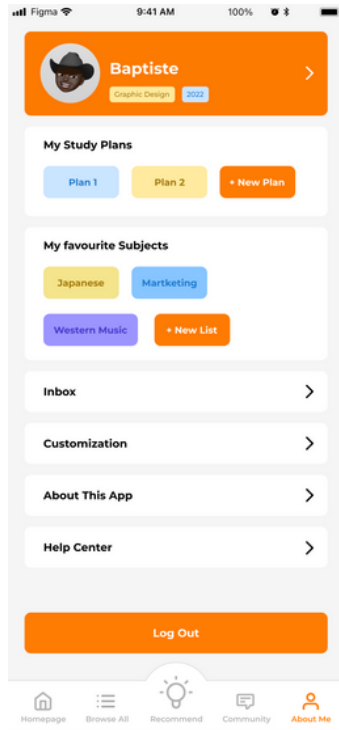
# BREA(D)TH OUT

# FINAL PROTOTYPE - FORUM



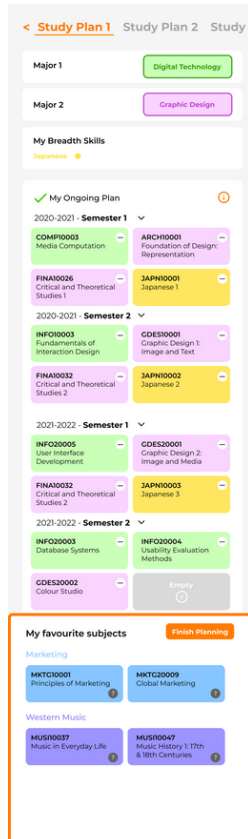
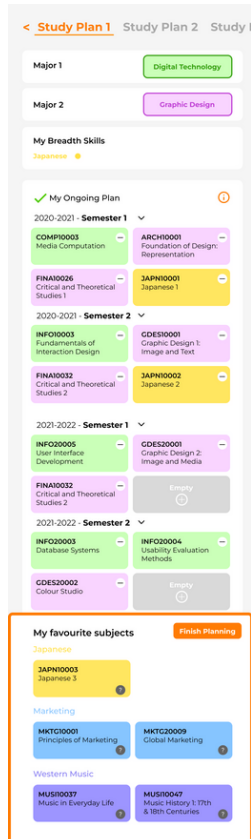
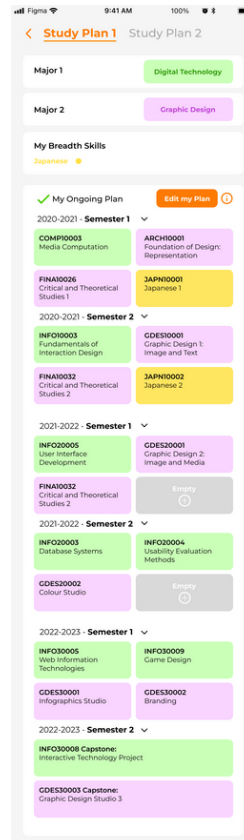
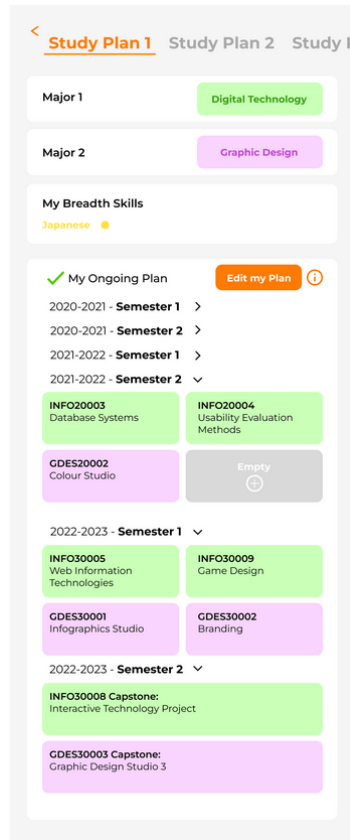
# BREA(D)TH OUT

## FINAL PROTOTYPE - PROFILE



# BREA(D)TH OUT

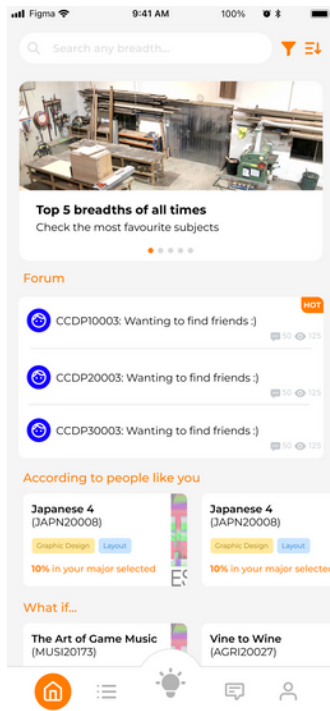
# FINAL PROTOTYPE - STUDY PLAN



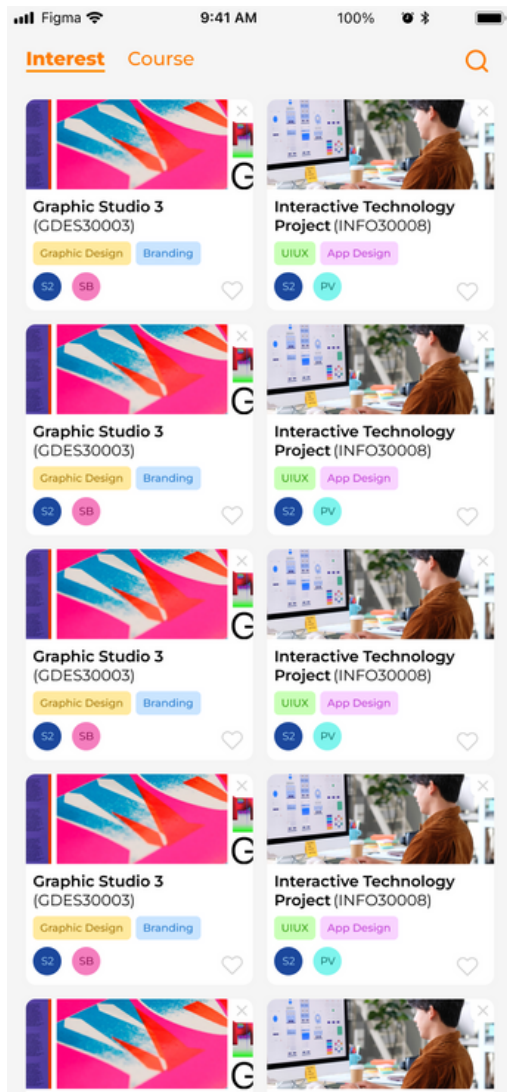


# BREA(D)TH OUT

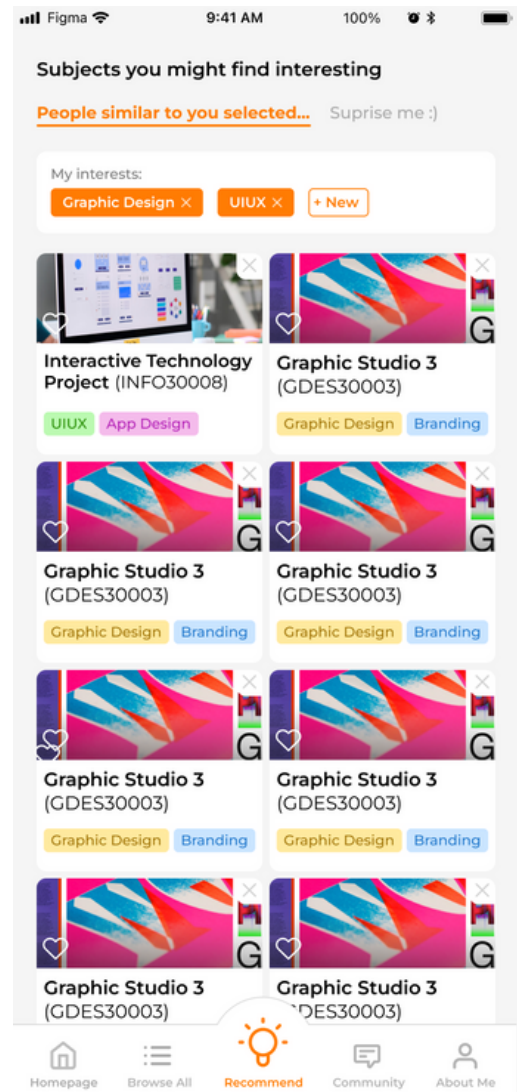
# SECOND LAST PROTOTYPE - HOMEPAGE



## RECOMMENDATION PAGE: VERSION 1



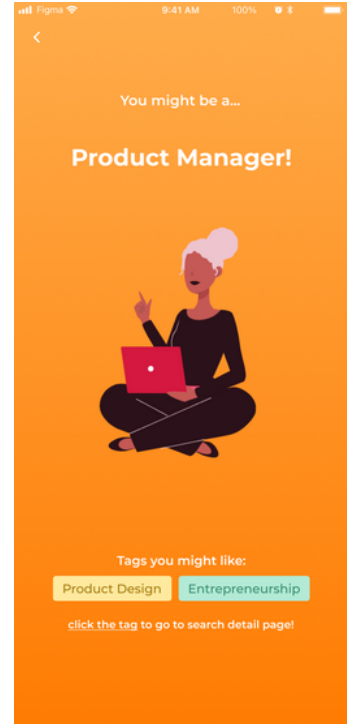
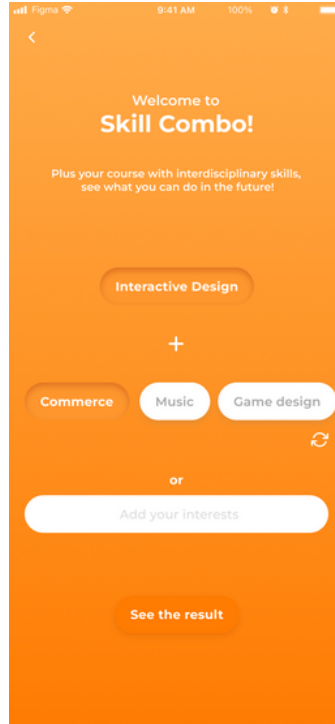
## RECOMMENDATION PAGE: VERSION 2



# BREA(D)TH OUT

## SECOND LAST PROTOTYPE - HOMEPAGE

### BROWSE ALL: SKILL COMBO



### BROWSE ALL: LUCKY BREAD

