



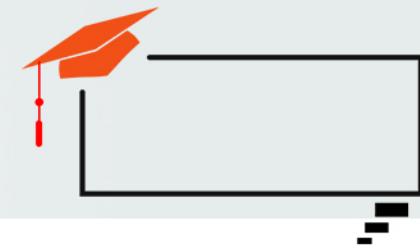
IDEA9106

Design Proposal

‘UsydMini’

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Introduction - Interpretation of Brief



Through combining our research, our initial research question ‘What are international students experience of loneliness’, has evolved to problem statement, **‘how might we best support international students as they integrate into The University of Sydney’**.

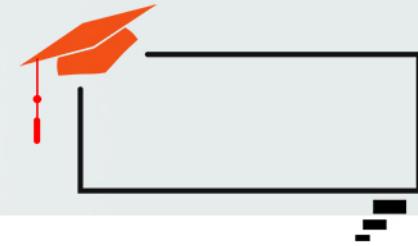
Our focus from ‘loneliness’ to ‘how do we best support’ was discovered through combining research and finding that key to international student success in Australia is promotion of a healthy sense of wellbeing.

Renowned psychologist, Carl Rogers, defines empathy as a process rather than a state. He describes it as ‘to feel, moment by moment, the internal frame of reference of another with acknowledgement and compassion for the emotional and meaningful components experienced, without judgement’.

As designers, we discovered that the key to unlocking positive experiences, promote a healthy sense of wellbeing and gaining empathic awareness and understanding is to try and plant ourselves in our users shoes and acknowledge users as the experts in their own lives.

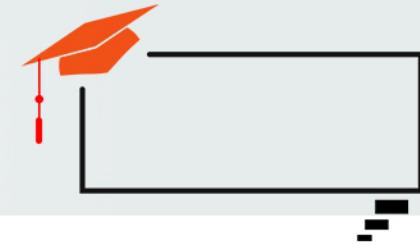
Empathy, compassion and altruism will therefore not be just a component of, but at the heart of our design. It will be important to build initial concepts around this notion to best address the design brief.

Main User Issues



From combining user research findings from interviews and questionnaires, we discovered that main user issues surround:

- Missing home - away from the life that they were used to
- Difficulty finding/building meaningful relationships
- Stress surrounds meeting academic expectations
- Difficulty finding an interest/group/local community to connect with
- Language and cultural barriers
- Feeling psychically more disconnected rather than connected
- Relationships with other students are not “real”, deep, satisfying
- All points above were found to contribute to a diminished sense of wellbeing



Introduction

Our project, ‘UsydMini’ is an intuitive, simple design solution that aims to best address our problem statement, “**how might we best support international students as they integrate into The University of Sydney**” along with our proposed user issues, needs, goals and values.

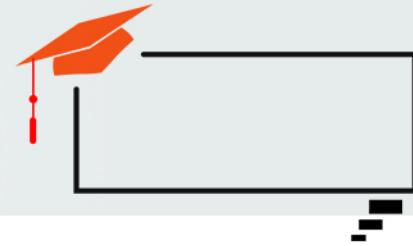
The initial stages of design included:

- Combining Research Pg5
- Brainstorming Initial Concepts Pg7
- Cross-comparison of Initial Concepts with Values, Goals and Needs Pg11
- Justification of Design Choice Pg14
- Research of Similar Concepts Pg15
- Sketching Pg20
- Mockups Pg21
- Persona Refinements, Storyboards and Walkthroughs Pg25

We then thoroughly tested our design solution using a series of design methods:

- First Stage of Design Paper Prototype Pg34
- Second Stage of Design Paper Prototype Pg35
- Changes Made to Design Based on Testing Pg37
- Usability Testing Pg39
- Post-experience Semi-Structured Interview Pg41
- Think-Aloud Method Pg43
- Final Discussion Pg46

Combining Research



'How might we best support international students as they integrate into The University of Sydney'

Our problem statement was reached through exploration of combined research with our main discovery being that students cope with and manage feelings of loneliness through a variety of activities that work for them.

Therefore, it was important to acknowledge that international students not only have different experiences of loneliness and manage in different ways, but are experts in their own lives and are resourceful in achieving a sense of wellbeing that is important to them.

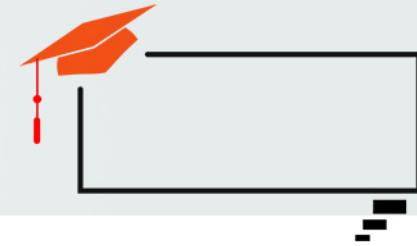
For example, an individual may value academic merit over finding meaningful friendships. This individual may then change this focus, depending on what they are prioritizing in their life at that moment.

We found through research that some students are experiencing small to nil amounts of feelings of loneliness and it is important to acknowledge these students as well.

Therefore, it was important to keep our problem statement broad. This was decided so to best include all types of users and their different ways of experiencing and managing life. However, we refined the space in which a design proposal would take place and therefore limited ourselves to just the University of Sydney campus and specifically, the students on campus.

In combining our research, we found that through conducting a person-centred issue, empathic qualities were inherent throughout. However, it would be appropriate for all design concepts and solutions to stem from the core value of empathy, compassion and altruism to best address the design brief.

User Values, Goals and Needs



'How might we best support international students as they integrate into The University of Sydney'

Through combining our research and discussing our main user issues we found that meeting the following user values, goals and needs were key to our addressing our problem statement and proposing a solution.

Values

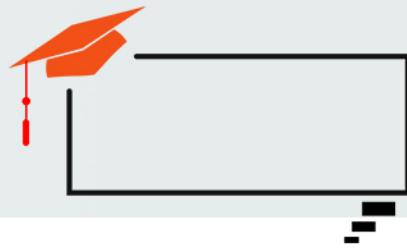
- ✓ Growth
- ✓ Balance
- ✓ Community
- ✓ Compassion
- ✓ Friendship

Goals

- ✓ Sense of belonging
- ✓ Sense of achievement
- ✓ Meaningful relationships
- ✓ Connection with interests
- ✓ Empathic awareness and understanding

Needs

- ✓ Bridging the gap between international and domestic students
- ✓ Reducing sense of loneliness
- ✓ Socialising within university
- ✓ Promoting a healthy sense of wellbeing

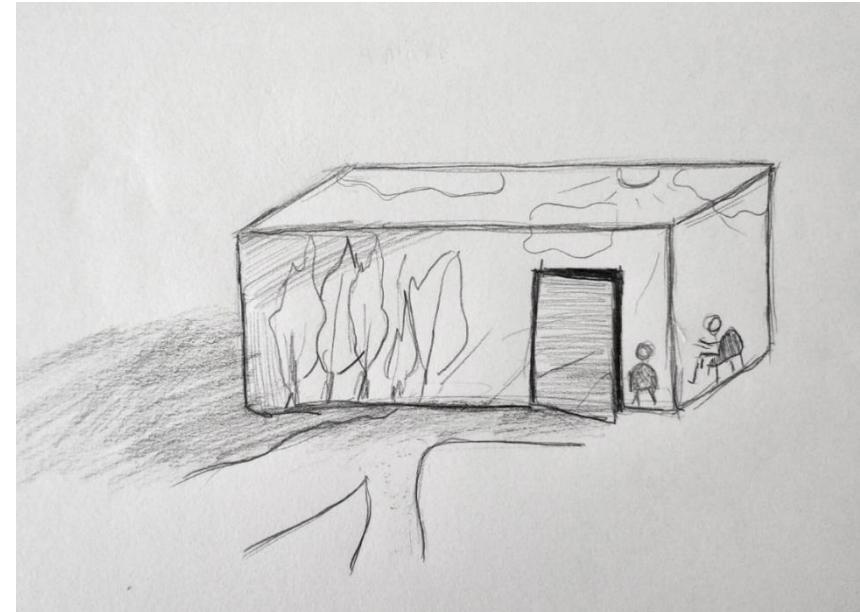


Brainstorming Initial Concepts



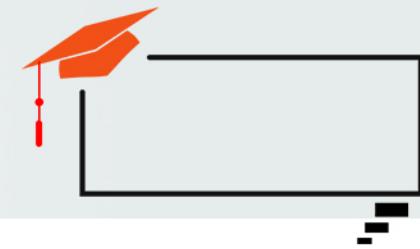
1. 'UniMates' An application which will connect you with other students on campus.

Login will involve Unikey. You will be matched with other users based on shared interests, hobbies and values. A user will then have a two day window to write with each other. After two days of interaction, a decision is made surrounding whether you want to meet and develop the friendship. If not, the conversation will automatically delete after two days.

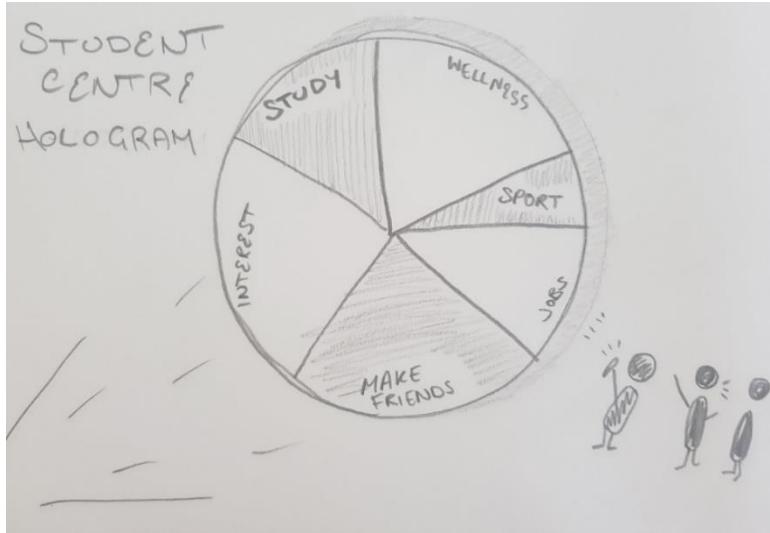


2. 'Mirrorbox' physical concept based in the middle of campus.

People outside see a mirror. People inside perceive it as glass. Users can book online and organise to meet in the space Eg: A study group. Likewise, students can book just themselves to allow time to reflect or use it as a 'chill-out' zone. The 'mirror-like' effect embraces a feeling of 'belonging' within the space without judgement or question from the outside.

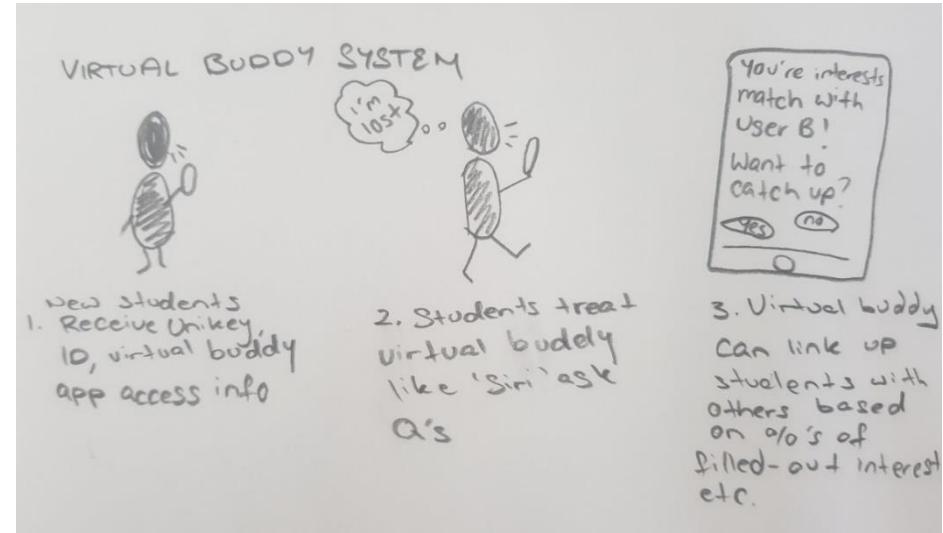


Brainstorming Initial Concepts



3. 'Wellbeing Wheel' Hologram within student centre

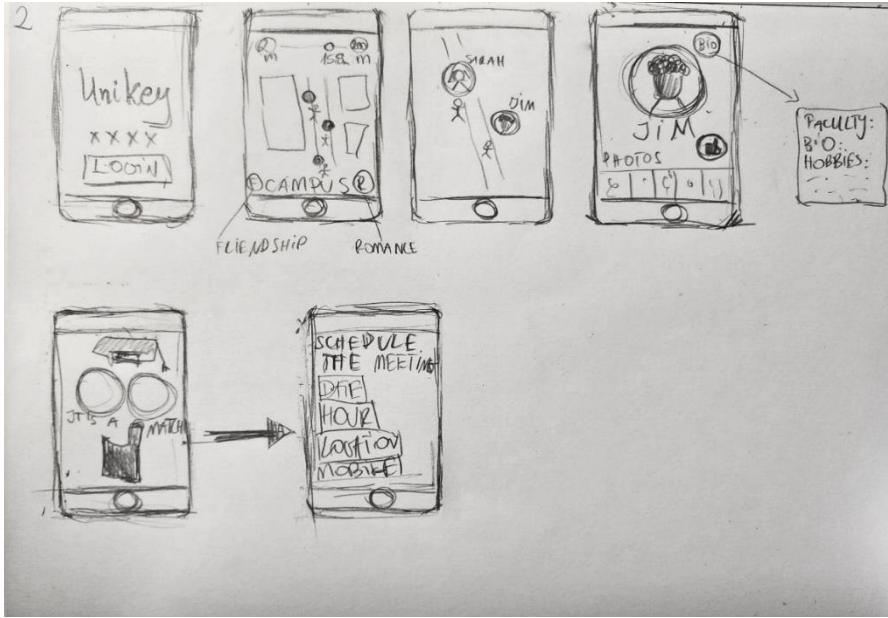
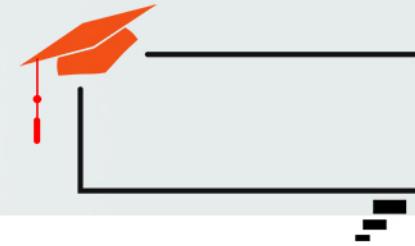
Students enter the student centre and connect to the hologram through their phones. After selecting their interests, motives, values etc. the hologram projects the percentage of users that chose the same interests. The hologram then encourages the users to interact together and form and create sub-groups to add to the hologram. Eg: In 'Make Friends', users could create a 'nature appreciation group'.



4. University 'Virtual Buddy'

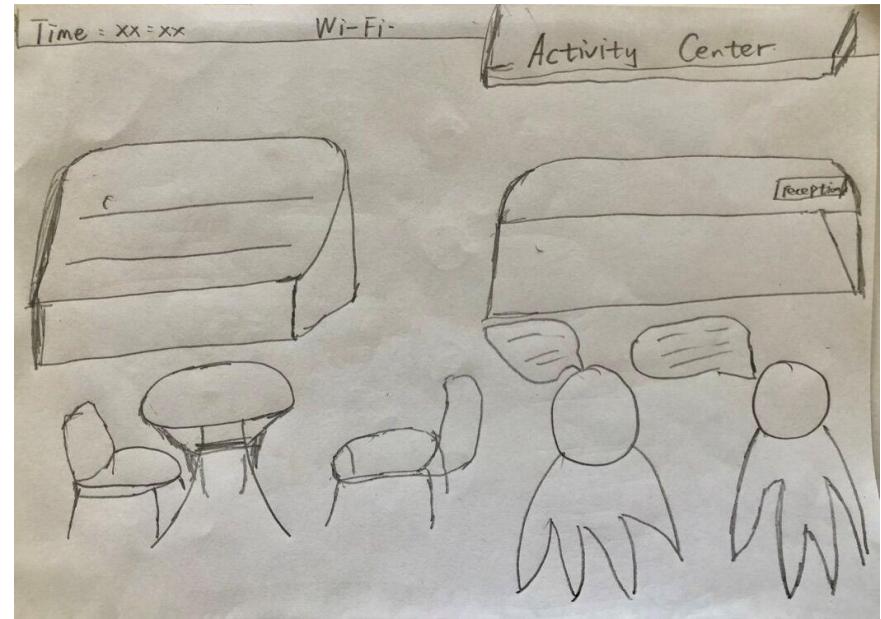
Inspired by iPhone 'Siri'. New students receive a virtual 'buddy system'. Users are prompted to fill out questionnaires on this system based on their interests, values, aspirations etc that the buddy can use as a reference for suggestions. Students can tell the buddy things such as, 'I feel lonely' and the application connects them to groups or individuals that they have something in common with.

Brainstorming Initial Concepts



5. 'Location Map' A location based campus application

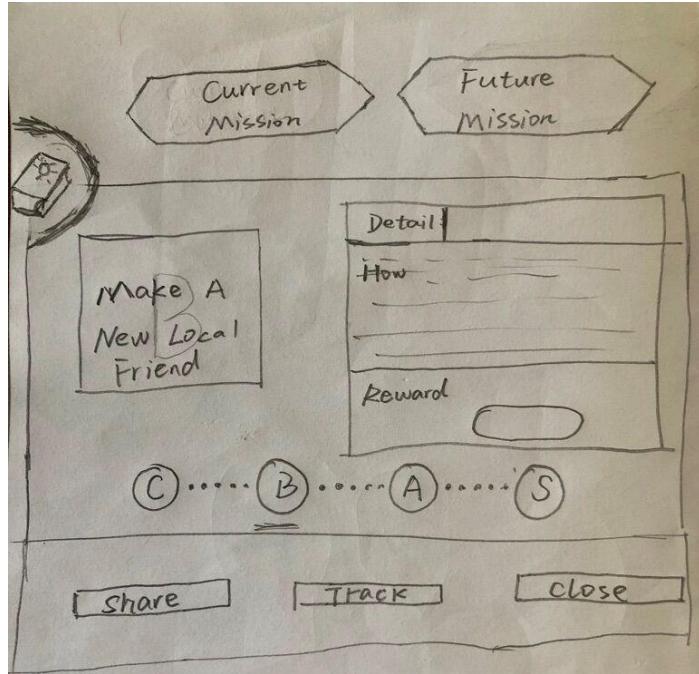
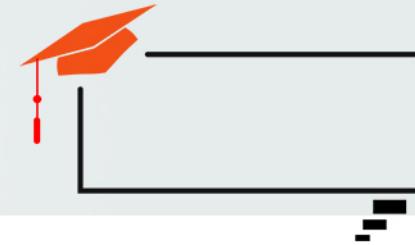
Whilst on campus, users can see other users nearby (2 meters to 200 meters) and can choose if they are looking for a friendship or romance. Users can check their profile, including photos and description of hobbies and interests and choose to 'like' them. If a person likes you back, it is a match and you will be able to schedule a meeting. No messenger would be inbuilt - this enables people to meet face-to-face instead of writing to each other.



6. Virtual Student 'Coffee Bar' Application

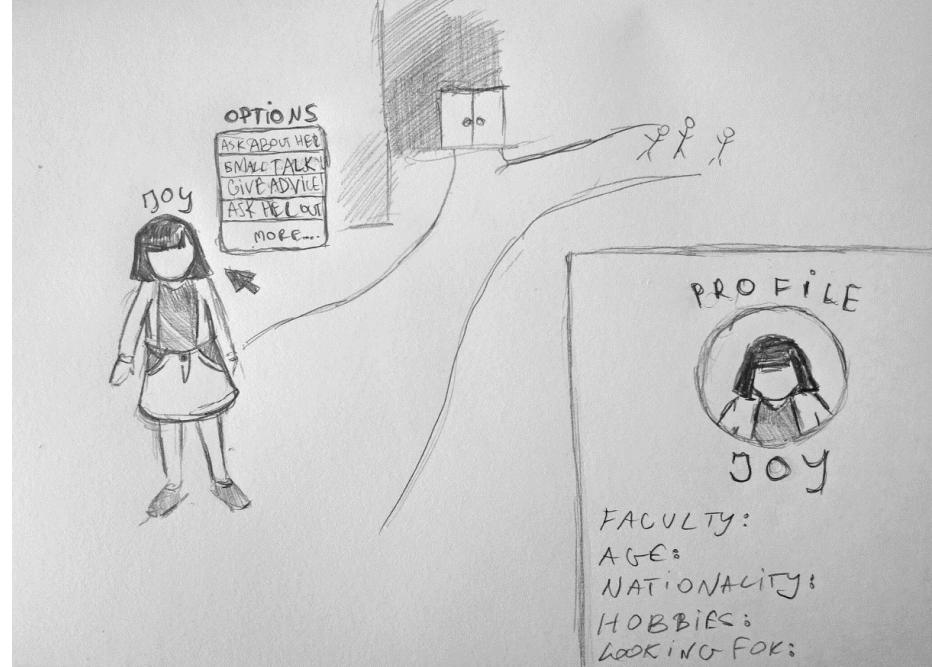
Users congregate in the online 'coffee bar' space to hold activities ie: clubs or societies, mitigate university issues and casually meet up with acquaintances or friends. The online space is set up like a coffee-bar and is inspired by Sim-city type game.

Brainstorming Initial Concepts



7. 'Mission Complete' Online application

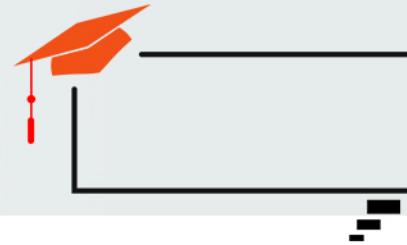
Addresses student loneliness and endorses emphatic understanding through following different steps that encourage and support users in completing tasks. For example, a student can participate in their 'current mission' or try a 'future mission'. You can view other user's 'missions' and support and share challenges with them.



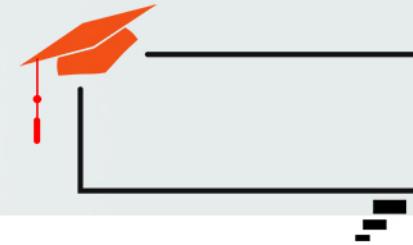
8. 'Usyd Mini'

Users use this application to find interests and specific meet-ups based on other users pinpointing their location on Sydney University online campus map and meet-ups in a simple and organised action eg: pinpointed users outside a library may have a speech bubble above saying 'Study Group. Any faculty. 1pm'. Application inspired by games such as 'Sim City' and 'Farmville'. Users can also create their own 'avatar' and 'profile' page.

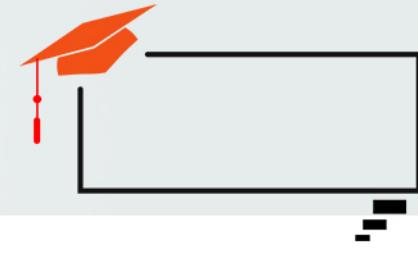
Cross Comparison of Initial Concepts



Cross Comparison Summary



- It was advantageous to create a cross comparison as it allowed us to investigate further into what design best met our problem statement and user issues, values, needs and goals.
- It was clear that during initial concept brainstorming phase that we endeavoured to propose designs that met specific user values and goals such as friendship, belonging and compassion.
- We had user needs strongly in mind throughout proposed designs. We feel that this is due to our needs being linked closely with our problem statement.
- Values and goals that were scarcely met throughout design were balance, community and achievement. We felt that all of these were important to meet in design as our research found that balance is crucial to promoting a healthy sense of wellbeing, that community enhances a sense of belonging and that a sense of achievement improves feelings of self-worth and identity.
- After conducting the cross comparison, we decided that the value of community could include ‘community’ on campus. This followed researching additional meanings of community and finding that community includes, ‘groups of people who share common interests’. Since everybody on campus shares the common link of attending, or working at, The University of Sydney, the meaning of community is applicable here.
- ‘Mission Complete’ and ‘UsydMini’ met the most user values, goals and needs. Mission Complete was unique in the way that it generated a strong empathic focus with the ability for users to be able to support each other through ‘missions’. ‘UsydMini’ addresses empathic qualities through students freedom of expression. For example, a domestic student fundraising for a charity by organising a pop-up sausage sizzle could ‘drop a pin’ of their location on campus, encouraging international students to try Australian cuisine. A meet-up could be created, ‘Want to try a good-o’-Aussie-bbq? Sausage sizzle 2pm fundraiser’.



Design Solution

‘UsydMini’ stood out as the design solution that best met our problem statement and proposed user issues, needs and goals.

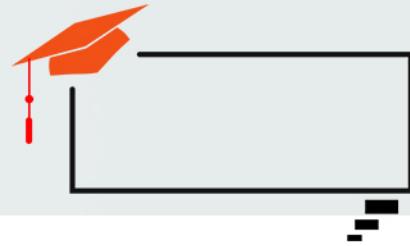
The solution also stands out because of the challenge it presented to our group and its unique focus around potentially providing solutions for a broad range of students who may be combatting loneliness or not.

The design proposed would be in mobile application form and primarily used as a ‘social application’ with its primary function to connect users through a map interface in a simple and easy way.

It’s user-centred focus inspires an empathic quality in which users can create meet-ups based on their unique experience. The act of pinning a ‘unique experience’ may not be an experience isolated to just themselves and other users may be drawn to what another student is offering.

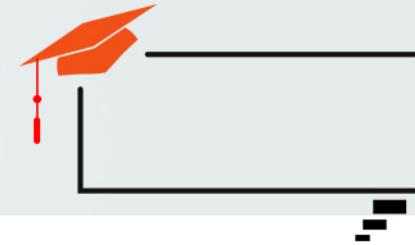
This allows the option to quickly connect and share in the real-world after being facilitated by the application.

'UsydMini' Justification of Choice



Values, Needs & Goals	We communicated and documented how we thought 'UsydMini' best meets these qualities
Growth	Users are free to express themselves through pinning 'events', 'announcements' and 'comments'. It is a platform for promoting self-growth through participation. Users create their own 'avatar' and past events are
Balance	The mapping feature allows users to find what they are looking for to achieve a sense of balance and wellbeing. For example, a user may zoom in to the sporting grounds to find a sporting event to join in with. Another day, they may zoom into the library to search for a study group event.
Community	The design evokes a sense of community through its 'campus map' design. It also creates a space for users to feel connected to the university community through application engagement, participation in events, keeping up with campus updates and observing their user icon on campus, encouraging a sense of belonging.
Compassion	The design draws on qualities of compassion through allowing students to freely express themselves through dropping their pin and creating a 'meeting', 'announcement' or 'commenting' anywhere on campus. The application allows students to broadcast anything from, 'anybody feel like a coffee and chat?' to 'I'm a new student and need help' which inspires users, that sees that the posting user is nearby, to stop and assist.
Friendship	Facilitating friendships is a dominant value that is directed by the user and their preferences throughout design. For example, the user may RSVP their attendance to a pinned event based on what interests them, what their needs are or what kind of friendship they are looking for. Friendships could be then formulated through participation.
Sense of Belonging	A sense of belonging overlaps with many user needs, goals and values. It is an experience that is personal and different to each user however, largely surrounds feelings of belonging to a group, place, time or even belonging to a sense of balance and wellbeing. Since the design strives to connect users, a sense of belonging is a central goal.
Achievement	Achievement looks and feels different to everyone, but often correlates with a feeling of self-worth and accomplishment. We wanted to acknowledge this in our design through an intuitive user-friendly interface that encourages students to pin what gratifies them and inspires themselves and others. For example, a user that organised a sporting meet up may pin next to the playing field, 'We really kicked some goals last week! Awesome to meet you all! Round two tonight at 7pm?'
Meaningful Relationships	Our design aims to connect users and generate an empathic response. When user have a positive interaction with not only the application, but the participation that stems from the design, the user is more inclined to use the application again to generate the same feeling. Deeper meaning, connection and empathic understanding occurs through multiple interactions.
Connection With Interests	Users can zoom into a specific place on the map or search via the search icon for places or activities on campus. This allows for quick connectivity to whatever interest the user is searching for. It also works for a student looking for an interest. The unique interface allows users to simply browse the campus map to see what is happening around them.
Generates Empathic Awareness	By giving users the control in pinning what they care about. Clicking on a user brings up their 'profile' with events they have participated/created in the past and brief details. Previews of past events allows users to connect with others prior to participation in an event and generate an empathic response on meeting.
Bridging the Gap Between International and Domestic Students	Since the application is available to all students, there is ample opportunity for international and domestic students to mingle through participation in pinned events.
Reducing Sense of Loneliness	The application's 'map' interface allows users to see what events are transpiring around them. Users who may be feeling a sense of isolation and loneliness can search for or even create an activity that reduces this feeling for them.
Promoting Socialisation on Campus	The more students using the application means the more opportunity for meet-ups and socialisation there will be. The design thrives on connecting users and increased participation will increase positive interaction with the design and vice versa.
Generates a Healthy Sense of Wellbeing	The design interface is fun and easy to use. It promotes a sense of belonging on campus through student self-expression and therefore, caters for a variety of hobbies and interests on campus. A user can create or engage in these interests or activities to achieve a healthy sense of wellbeing.

Design Research



Based on our design solutions, we wanted to design a simulated campus where each student was presented as a virtual character (ie: 'user' or 'avatar') on a virtual campus. In order to refine and understand our proposed interface of the virtual campus, and to avoid repetitive design, we researched simulation game products that currently exist on the market. We found that there are some successful game models, such as the example of SimCity and the Farmville.

These existing solutions best meet user needs such as socialization and interaction and connection with interests and the community. We felt that they did not meet our needs, goals and values as fittingly as our initial brainstormed concepts did. We understand that this is because these existing solutions are addressing their own set of user needs.

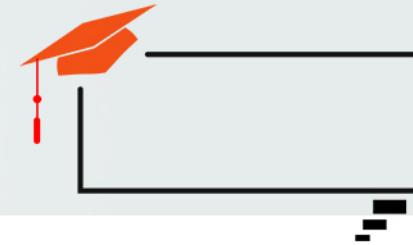
The following images are screenshots of SimCity and Farmville that we found during our research.



(Image: SimCity screenshot. Shaul, B. 2016)
<https://www.instant-gaming.com/en/153-buy-key-origin-simcity/>

(Image: SimCity screenshot, Shaul, B. 2016)
<https://www.adweek.com/digital/ea-mobile-previews-next-simcity-buildit-updates/>

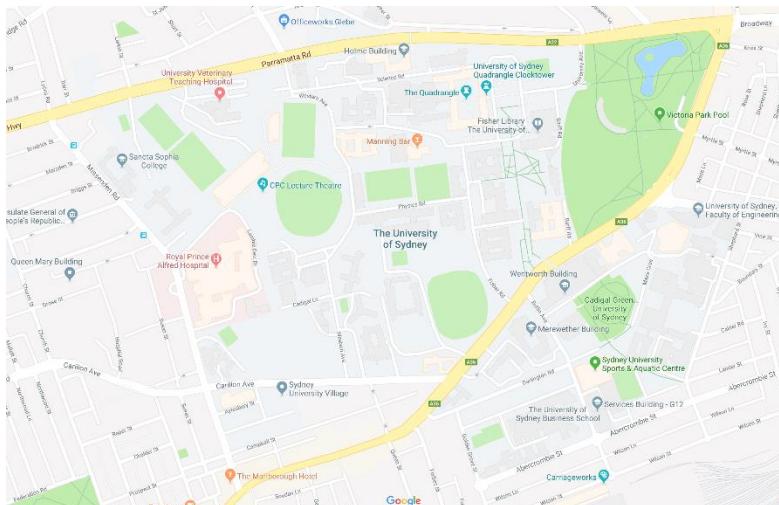
(Image: Farmville screenshot from Eye on Windows)
<https://www.eyeonwindows.com/windows-8-1-app-watch-farmville-2/>



Refinement of Design based on Research

In order to understand the effect of virtual maps, we aimed to imitate the pattern of electronic maps, especially virtual maps like streetscapes, into our design.

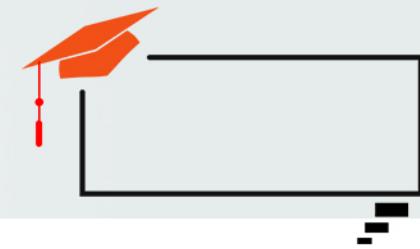
Most would agree that the most renowned electronic map product is Google Maps. Google Maps has a map function that is simple to use. Google Street View is based on real life shooting in Google Maps. This feature inspired us to learn more and contemplate including and refining a similar feature into our design.



(Image: Google map screenshot)
<https://www.google.com/maps/@-33.8882471,151.1873208,17.02z>



(Image: Google street view screenshot)
<https://www.google.com/maps/@-33.8877978,151.19002,3a,60y,342.79h,96.22t/data=!3m6!1e1!3m4!1sLzMANDMCfDsZuXJephVGCA!2e0!7i13312!8i6656>



Refinement of Design based on Research

In terms of the Events and Profile features within our design, we sought inspiration from many successful systems, such as the Facebook style for common user, LinkedIn style for business user and Tinder style for entertainment user.

We hoped to draw on the excellent typographic design and content display methods of these successful examples. Below is some screenshots of the related software found in our research.

A screenshot of Mark Zuckerberg's Facebook profile page. It shows his profile picture, name, follower count (119,408,674), and a summary of his education at Harvard University and work at Facebook.

(Image: Facebook profile style)
<https://www.facebook.com/zuck/about?lst=100017449270306%3A4%3A1540539118>

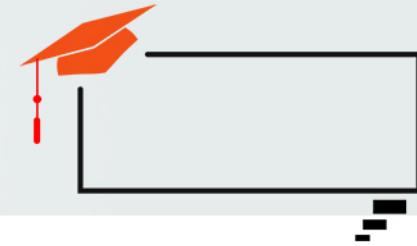
A screenshot of Roberto Sabatini's LinkedIn profile. It includes his profile picture, name, title as Professor of Aerospace Engineering and Aviation at RMIT University, and a summary of his work in intelligent automation and autonomous systems.

(Image: LinkedIn profile style)
<https://www.linkedin.com/in/roberto-sabatini-45853694/>

A screenshot of two Tinder profiles. The left profile is for Tina, 25, and the right profile is for Rosario, 26. Both profiles feature a large photo of the woman and a short bio.

(Image: Tinder style image. Murray, M. 2018)
<https://www.zoosk.com/date-mix/online-dating-advice/online-dating-profile-tips/tinder-profile-examples-for-women/>

Research Evaluation of Shortcomings



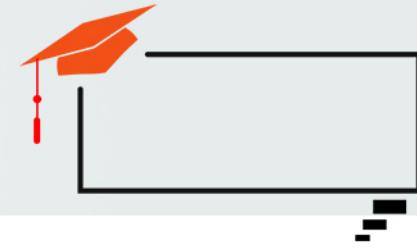
In evaluating the usability of these existing games, we found that these sim-style games lack a real-time communication function feature and a feature that reflects the current location of the user. This means that to a large extent, these existing game mode interactive systems cannot provide a psychological sense of belonging or generate empathy for our target users.

In addition, the existing games on the market are very commercial and more concerned with profit and a wider user target than rather than how to empathize with users, so our design is more inclined to add empathic elements.

Even though Google maps and Google street view are useful, their main orientation is not social media. Its primary function is as a navigation tool. We found that because Google Maps could not provide users with real-time communication and interaction, we deviated from further research into this design.

Finally, after evaluating features such as from Facebook, Tinder and LinkedIn we found that the interfaces were not suitable for our application. The Events or Profile interfaces were too detailed and our design aim is to allow for users to browse all the things they wanted in a short time.

Design Inspiration Based on Research

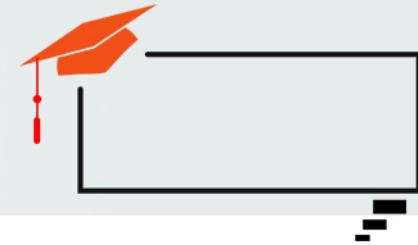


So that international students could best feel a sense of integration and gratification experienced by our design, we took aspects of SimCity and Farmville model, such as the Birds Eye View and drag and zoom feature, as inspiration.

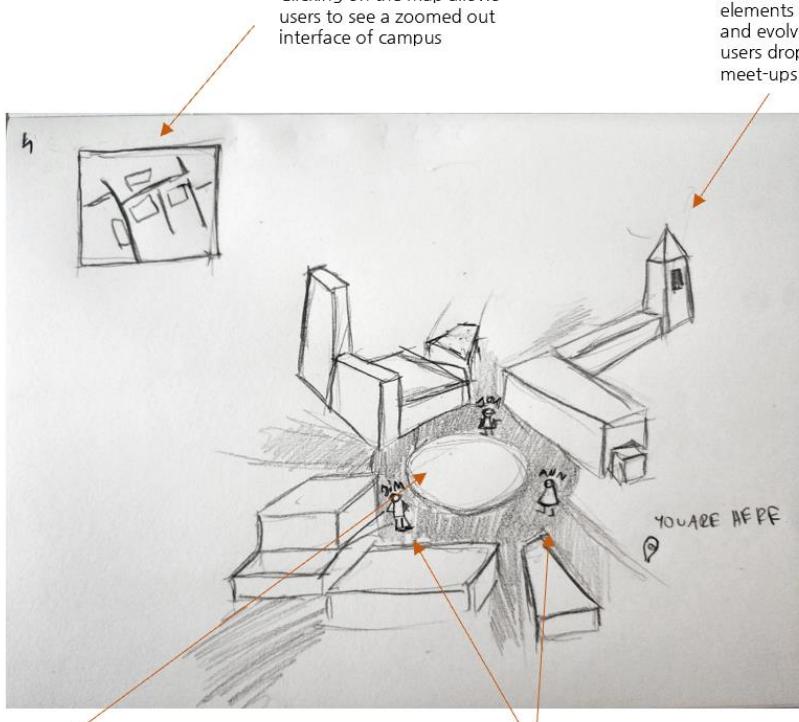
We have not found the same or similar game applications on the market, which also promotes our confidence to continue it. We believe that this reiterates the uniqueness of our product.

In addition, the UydMini is based on the University of Sydney campus map and most of the key information is shown in our ‘cartooned map’ design. In order to achieve the 3D perspective within our game and the visual effect of zooming in or out, we were inspired to use some existing commercial applications in the market such as Google Street View as the solution to our problems.

Another important interface are our Events and Profile features. We wanted to select a design that best reflected the compassion and empathy to users. On an existing basis, we referred to the mobile application of Australian Museum and social media systems such as Facebook, LinkedIn and Tinder. The difference between them is that we have specially designed a small pop-up window to display the status of the interactive user. The user can get a brief event activity or avatar information by clicking on this window.

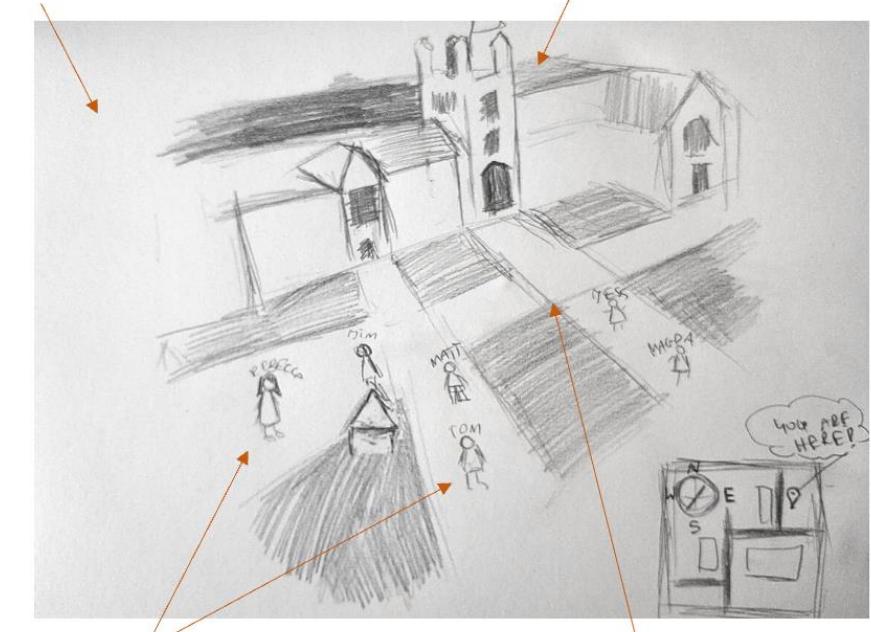


First Iteration: 'UsydMini' Sketching



Sketch of sporting field location on campus

Users that appear on screen are students that have signed up to use their application with their UniKey. Once they have signed up, they can either place themselves at location using phone-enabled GPS or 'pin' a meet-up, announcement or comment at a location on campus that best correlates with their needs.



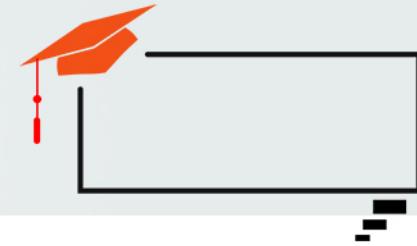
The application will identify in colour if users have pinned a 'meet-up', 'announcement' or 'comment' in general at their location on Campus. Is a convenient and simple way to voice events on campus and make them easy to find for students.

Sketch of main Sydney University quadrangle. Note that proposed design is that the interface will be illustrated and gamified as opposed to real imagery.

Application is fun, simple and motivates continuous involvement through visual elements and ever-changing and evolving interfaces as users drop their location for meet-ups.

Advantageous for new students who may be overwhelmed at the size of the campus. Students can enjoy the convenience of their pocket-sized virtual campus map.

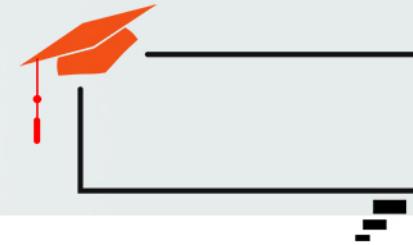
First Iteration: Mockups



On opening the UsydMini application, the user is instantly familiarised with the Sydney University Crest and colours. Already, a sense of belonging and community is harnessed by potential users through research of Sydney University online themes.

Already, there are clear affordances making for simple functionality. The application can only be accessed by members of the university and shares the same login system as other University systems such as Canvas. A forgotten password is easily managed and users can have it sent to them via university email to be reset.

The opaque background with campus map suggests to users that something interesting is beyond the login page, encouraging motivation and purpose.



First Iteration: Mockups

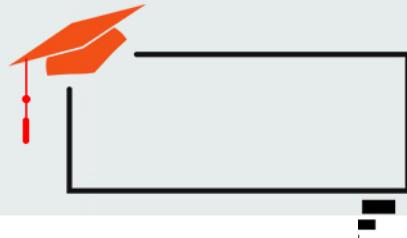


Beyond the login page, the user sees a map of the Sydney campus. Users are dotted throughout. Users can zoom in from the ‘birds eye view’ by dragging out with two fingers or touching the + or - toggle.

The middle mockup below features a small screen in the right corner that allows users to quickly navigate back to the main campus screen if they find themselves too zoomed in or want to focus on a different part of campus.

The third mockup features an expansion of the ‘search bar’. Users can type keywords to highlight certain parts of the map containing the key words. Examples of key words include, ‘Wentworth Building’, ‘Drinks’, ‘Photography’, ‘Study Group’ etc.





First Iteration: Mockups

Inspired by Google Street View, we used screen shots from the Google Street system and manipulated them in photoshop to give them a cartoon-esk effects.

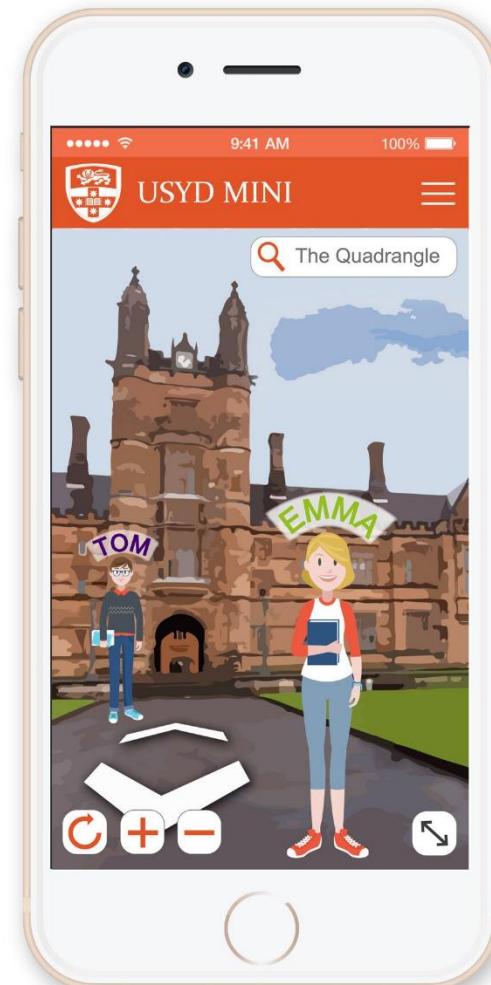
This mockup previews the most zoomed in view within the application. It allows users to see other user's 'avatars' in a detailed environment.

It is a space that generates empathy for others; an online representation of users going about their 'university experience' and generating events based on wanting an improved experience.

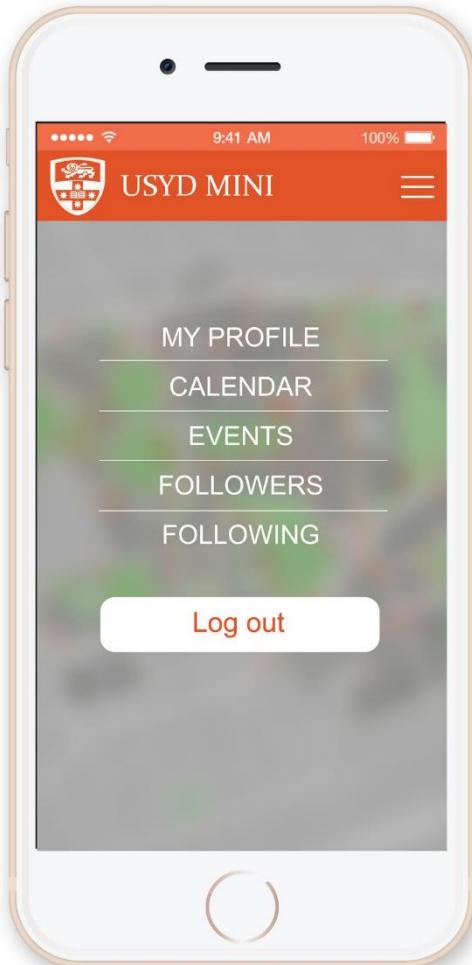
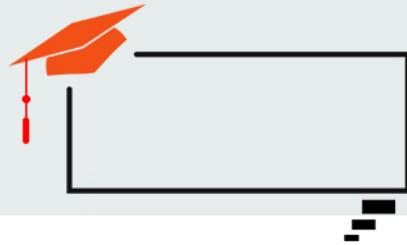
Avatars are used instead of real, user photographs in order to avoid any user judgement as we found through research that this is a common phenomenon, particularly in Facebook.

The two colours of the user's name represent their current purpose. Green indicates that they are simply 'online at that location'. Other users can click on that user to see their profile and connect with them.

The purple colour indicates that the user has pinned an event or announcement at that particular location. When users zoom in or touch that user, an explanation of the event is revealed.

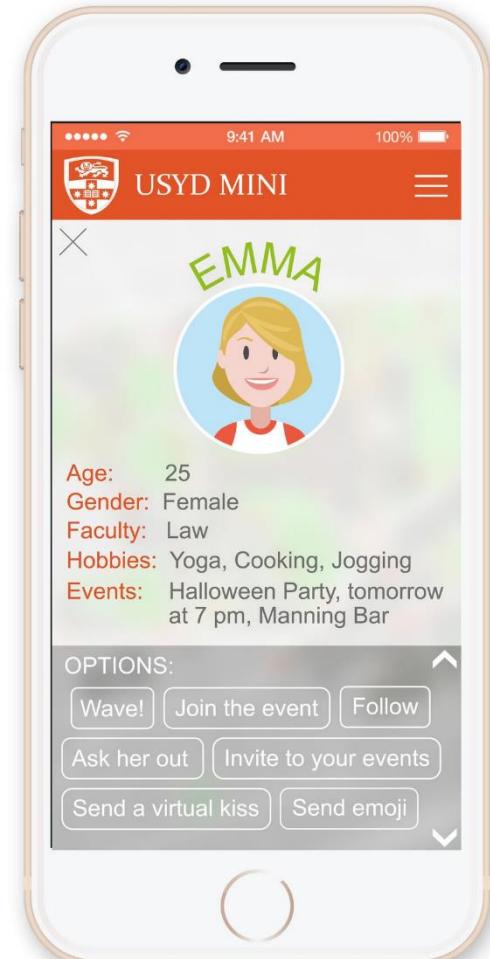


First Iteration: Mockups

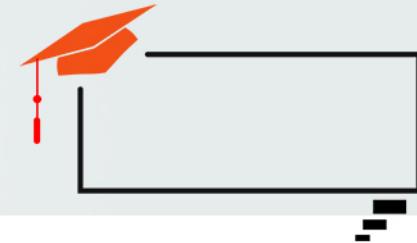


The application menu is consistent with the login page, utilising the same opaque background and layout. The menu contains the smallest amount of necessary information possible to allow for a simple and straightforward experience for the user. 'Followers' and 'Following' allow the user to connect with users and events they have encountered before in an efficient manner.

The profile on the right is an example of a user accessing another user's profile and the options given upon accessing it. The options allow a variety of tasks to be achieved to meet a user's needs.



Revised Persona



Persona created by Jessica

Arianna



Back Story: Australia is my first experience of travelling outside of my home country of Malaysia. It is such a rush experiencing a different culture and completely new way of living and I am loving it so far! Young people in Malaysia are fairly influenced by the West so there are some things I expected but I am mostly waking to new surprises every day. Back home in Kuala Lumpur, I was worked hard after high school to save money, along with help from my family, to come out here. I think the experience taught me to be humble and appreciative of what I have. I miss my family but I feel like I have grown and learnt so much already. Embracing my international student experience so far!

Frustrations: Poor internet connection in speaking with my family back home, getting lost on this huge campus and diff making quick and easy friendship connections.

Quote: "Be kind whenever possible. It is always possible" -Dalai Lama

Age: 20

University of Sydney Student: Yes

Nationality: Malaysia

Time in Australia: Two months

Motives: Making friends, travelling Australia, learning about a new culture.

Interests: Art, fashion, freedom of expression.

Worries: Meeting Australian academic standards, fitting in, missing home.

I am motivated by...

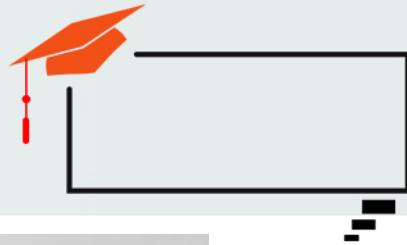


I am inspired by...

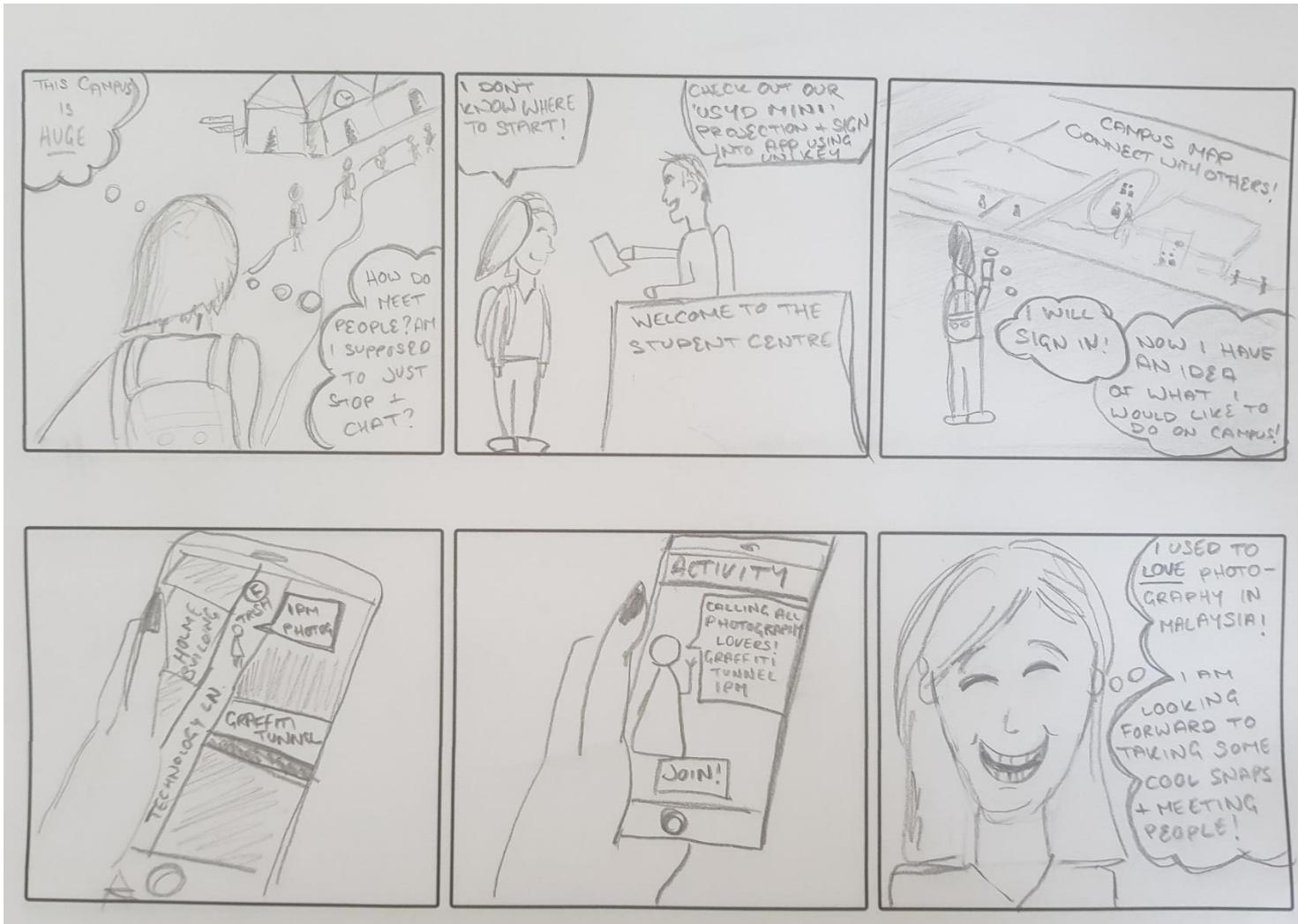


I would be more inclined to...

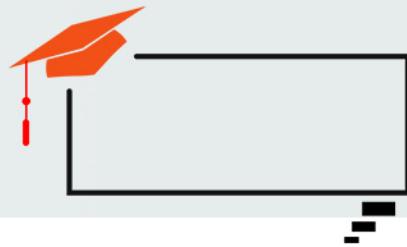




Storyboard 'Arianna'

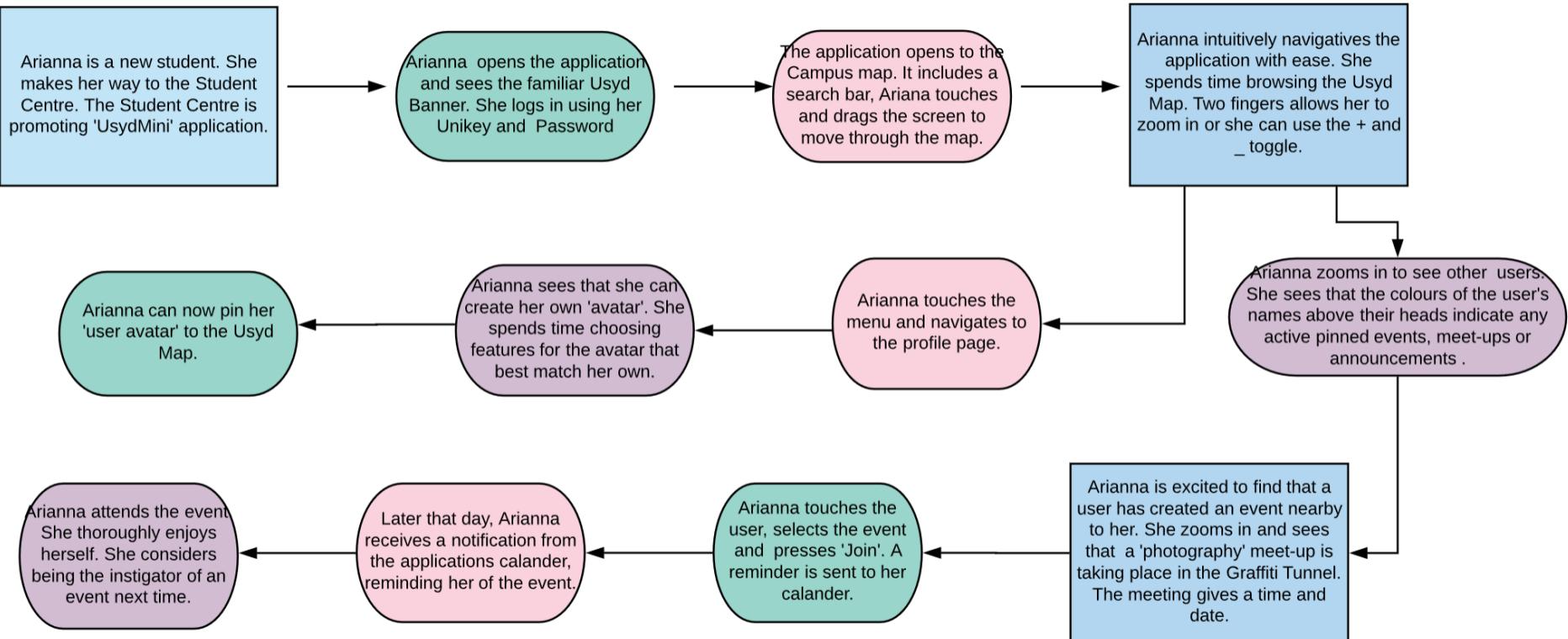


Arianna is a new student and wondering how to meet people>She visits the Student Centre for help>The Student Centre is promoting the Usyd Mini>Arianna downloads the application>She sees an activity near her location at the Graffiti Tunnel>Arianna sees that it is a photography meet-up>Arianna is inspired to attend as she enjoys photography and looks forward to meeting others with similar interests.

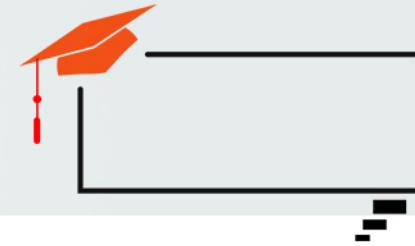


Persona-based Walkthrough

Second Iteration: 'Arianna'



Revised Persona



Persona created by Magda

Constanza



Back Story: After living my homeland - Chile I travelled to live in France. In fact, my Grandfather is French and I stayed at his place. He introduced me to the rest of the family and friends. I wasn't lonely at all. Now I live in Sydney and I have some difficulties with fitting in. Despite the fact that I have been there for 6 months, I don't know many people.

I have an impression that students isolate themselves from others by staying in "national" groups and/or studying all the time at home. Moreover, Studying at the University of Sydney is very demanding, since it is the first time I am learning in a foreign language. (French and Spanish are my native languages).

Frustrations: Sometimes I don't understand what others mean during a conversation, especially when they are talking fast. What is more, I haven't managed to develop real friendships, only shallow ones and I don't have an idea how to manage with this issue

Quote: "The quality of your life is the quality of your relationships" - Anthony Robbins

Age: 27

University of Sydney student: Yes

Nationality: Chile

Time in Australia: 6 months

Motives: Meet new people, develop real friendships, explore Australian culture

Worries: Being lonely, homesick, being depressed

Interests: History of art, going to exhibitions, graphic design

I am motivated by...



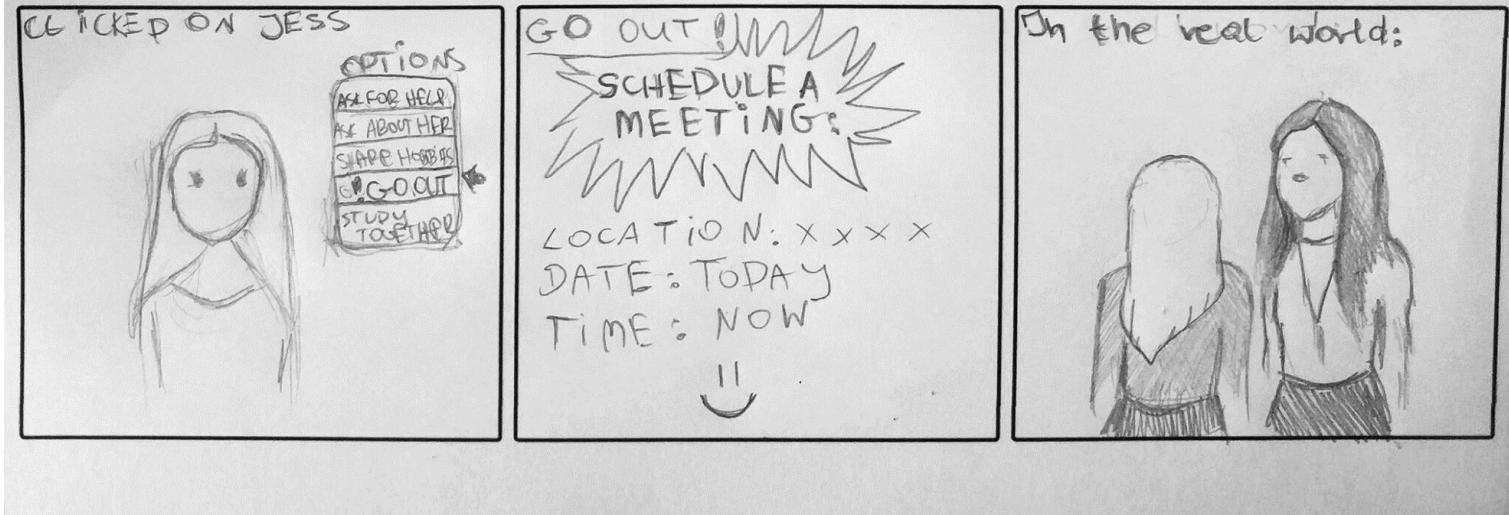
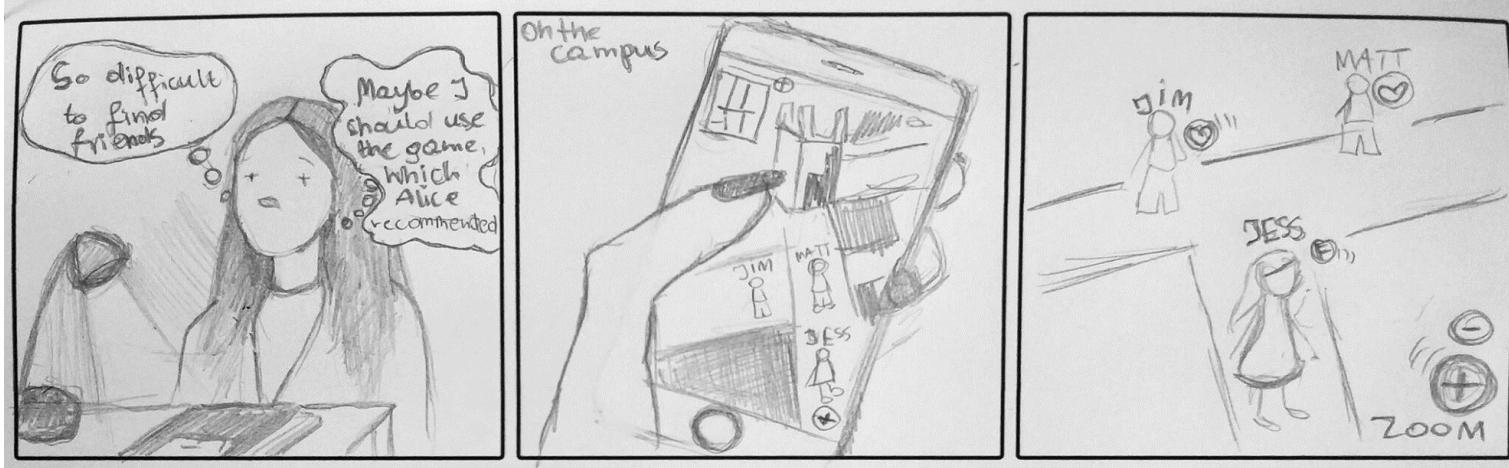
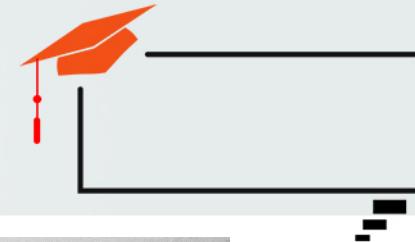
I am inspired by...



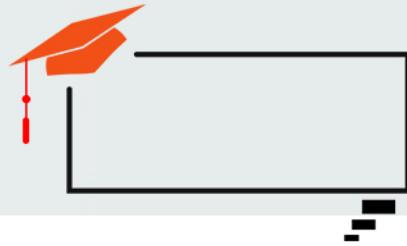
I would be more inclined to...



Storyboard 'Constanza'

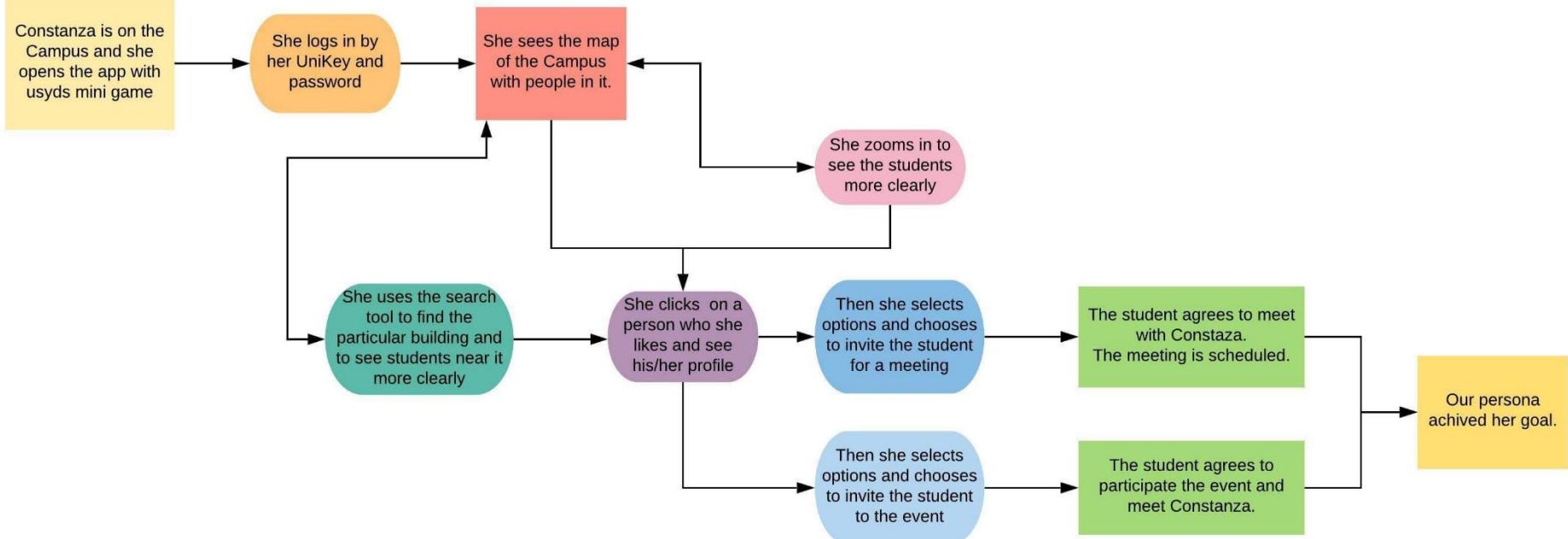


Constanza has never experienced difficulty in finding friends until she came to Australia. She hears about an application being used by other students>She downloads it to her mobile>She sees other users nearby to herself and is interested in meeting with a user with similar interests> Constanza pins a meet-up>The recipient agrees to meet up>Users meet in the real world.

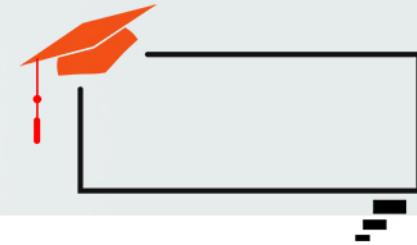


Persona-based Walkthrough

Second Iteration: 'Constanza'



Revised Persona



Persona created by [Chunliang](#)

Scott



Age: 22

University of Sydney Student: Yes

Nationality: China

Time in Australia: 8 months

Motives: Practicing English, make local friends, integrate into campus.

Worries: Introverted, afraid of failure

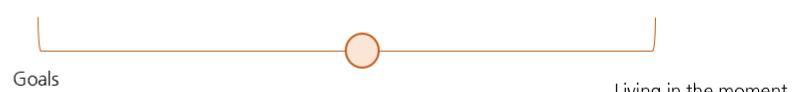
Interests: Exercising, reading books, technology

Back Story: Although coming to Australia to earn a degree is my second study abroad experience, Australia's local customs and beautiful environment made me deeply in love with it. However, there is also full of challenges in this land. The intense pace of life and some great studying pressure make me feel very lonely in the middle of the night. I often feel that I can't integrate into the huge campus. Fortunately my family gave me great support during this period, I also endeavour to make my life better.

Frustrations: Not good at expressing in English, Sometimes I struggle alone but have nowhere to share the efforts of others.

Quote: "There is nothing permanent except change." - Heraclitus

I am motivated by...



I am inspired by...

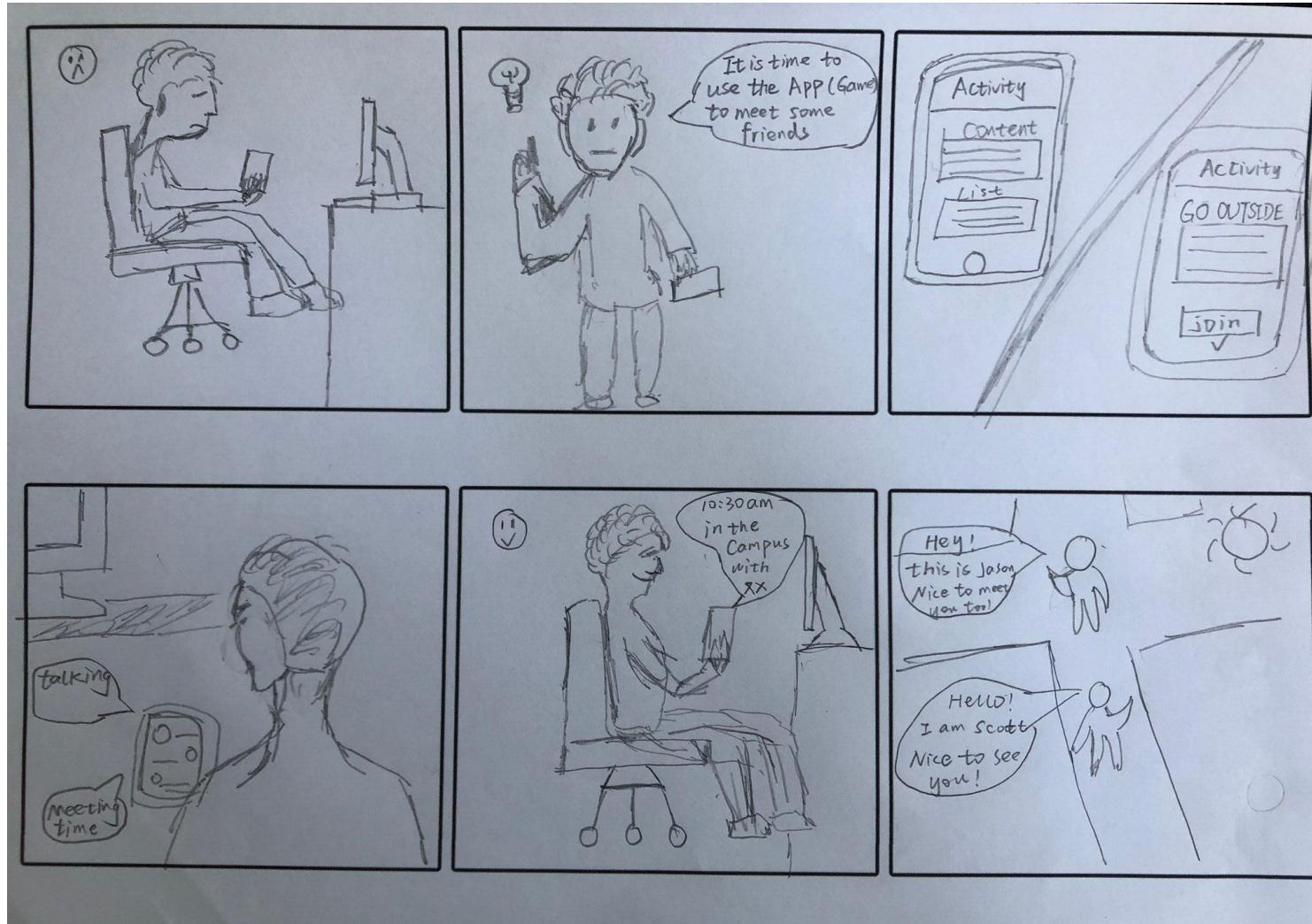


I would be more inclined to...

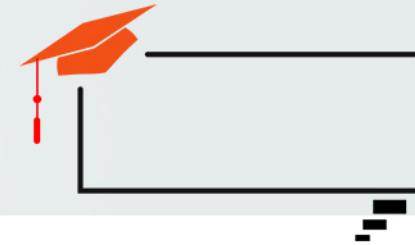




Storyboard 'Scott'

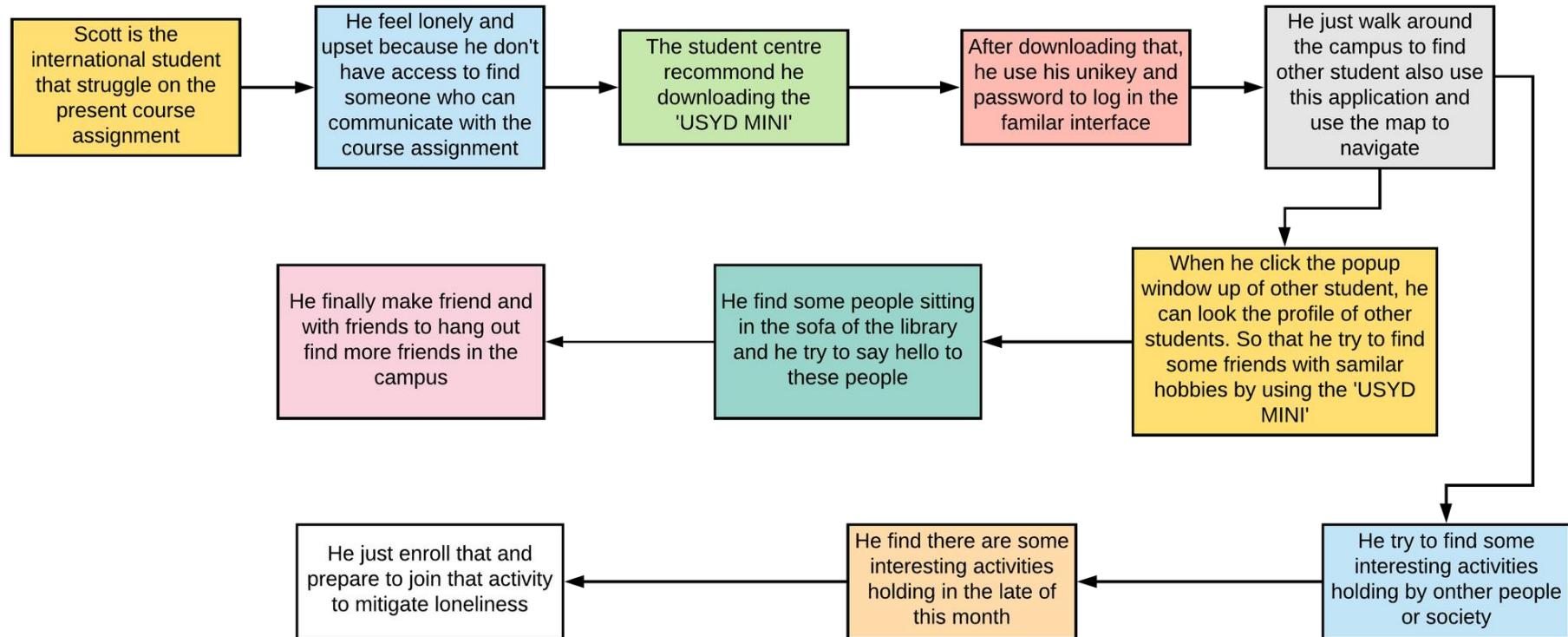


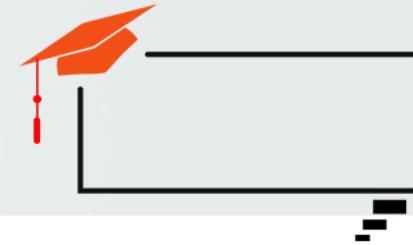
Scott is studying hard through an exam period and feels like he needs some fresh air>He accesses the UsydMini application>He sees that there is an activity pinned nearby that he feels he would enjoy>He joins the activity>He meets the activity participants and they enjoy getting fresh air together.



Persona-based Walkthrough

Second Iteration: 'Scott'





Third Iteration: First Stage User Testing

Our Four Participants in Initial User Testing: Joy, Kim, Lynn, Tom. We tested with these users during the very early stages of design.

We told users about our goal - to help students at the USYD to meet new friends and develop relationships. We also briefly described our application; firstly, we showed potential users very basic user scenarios and roughly sketched wireframes.

Then, we asked for feedback, as we needed it for our design evaluation, before preparing serious mockups. Unfortunately, the sketches and mockups were not enough for most participants, so we quickly prepared a very simple paper prototype. We interacted with it together to make clear what kind of features the app will probably have.

All participants are students at the University of Sydney. First of all, they complained about avatars - “we should have different avatars”, “a feature to customize avatar would be awesome”, “with the similar avatars, but with different names the app will be boring”, “definitely there should be inbuilt app in the app with the possibility of preparing your own avatar - avatars should look like users”.

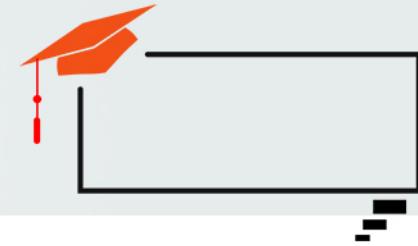
Secondly, a feature with events was missing: “Only clicking on the avatar with some options... Where are events? Where is a calendar? It doesn't make sense”, “An inbuilt calendar with schedule would be a nice option”, “on facebook you can invite people to events, parties etc. Think about it”, “without any special features it would be like second sims, just for a mobile”

Thirdly, two participants told us that the map after zooming in is not interactive enough: “when I see the whole Campus map its ok, but when I will Zoom in to street view it would be just an Image?? It should be interactive, more like google maps style. Do you understand what I mean??”, “It shouldn't be another campus map, it should be more like a game with some movement”

Actually, in the beginning, we wanted to keep the design very simple to make it as intuitive as possible, yet clearly, it is not enough. We have to implement some new features to encourage students to use the app. All feedback, especially critical feedback, is useful owing to the fact that our participants represent our client's needs.

Therefore, diverse avatars, inbuilt calendar, events, and the interactive map will be our new goals. We feel that these additional features will generate more bold and unique attributes to our design.

Further User Testing



We used the method of Paper Prototyping to test our application with others. In response to our last user tests, we used Sketch to create high fidelity mockups to better communicate and test our product. We gave users a set of pre-defined goal-orientated tasks which mainly surrounded successfully zooming into the map and clicking on a user. We showed our users our list of proposed goals, values and needs so the user had in mind what we were trying to achieve.

We asked friend Anna to participate in the prototype testing and to demonstrate how it looks like;

<https://youtu.be/fq7gqk5ACvYThen>

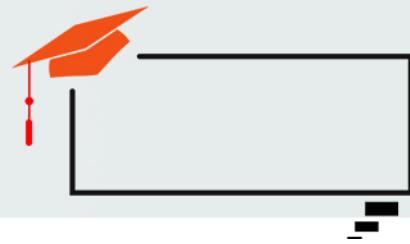
We asked another friend - Paweł to test our application as well;

<https://youtu.be/QHJvy8QEokgand>

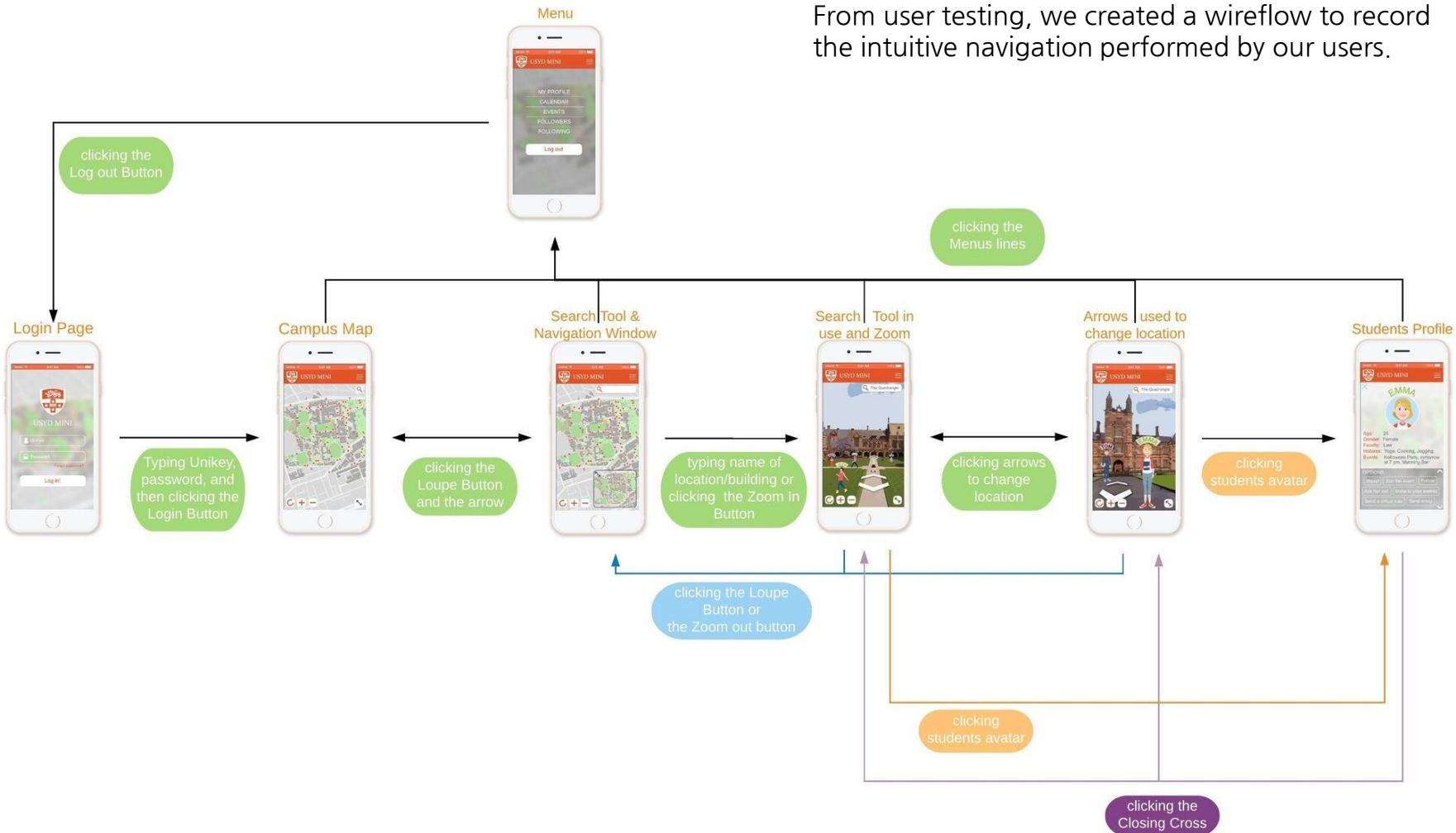
We recorded Paweł's feedback about the application and regarded potential concept improvements based on his response;

<https://youtu.be/qH-4l3iiy74>

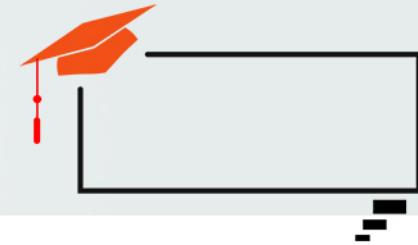
Wireflow created following user testing



From user testing, we created a wireflow to record the intuitive navigation performed by our users.



Changes Made to Improve Version



Following user testing, several potential users had interest in 'User Avatars' as well as more 'Street View' features of the application.

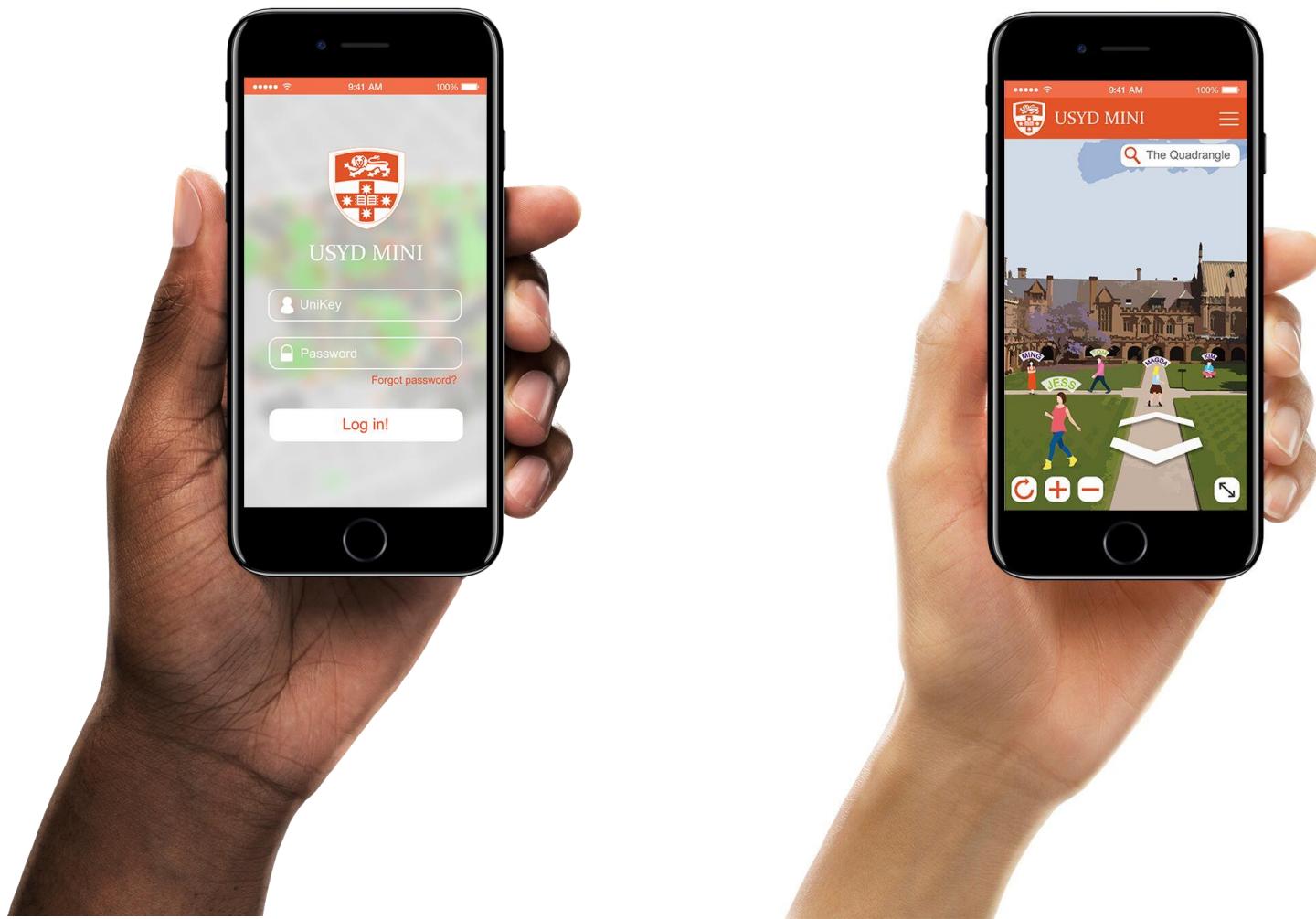
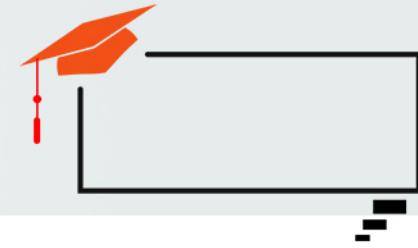
In response to users, we aimed to simulate stills of avatars 'going about their university life'. Avatars then face the user such as in the mock-up on the right once the user has zoomed into them.

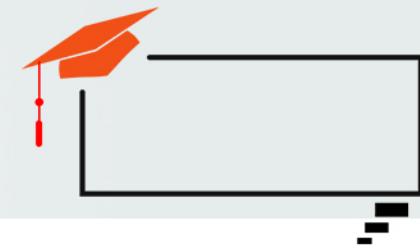
This feature adds to creating a unique experience for the user and further evokes an empathic response and increased connection to the university community through viewing other users interacting in the online environment.

We also tried to further individualise avatars and we brainstormed creating a feature in 'profile' that allowed a user to spend time creating a detailed build of their avatar. We agreed with this idea as it aligned with our aim of the application of wanting students to be able to 'express themselves' through the application.



Final Design Showcase





Usability Testing Method of Evaluation

Unmonitored, Remote Usability Testing Method employed by Magda

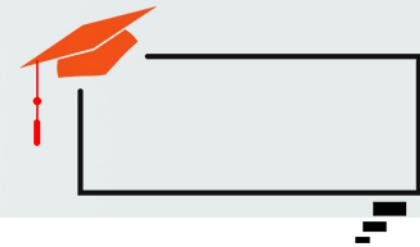
I basically sent participants a brief description of the application, mockups, flowchart and description of features and buttons in the application. Then I asked for a feedback (especially the negative one) and ask their feelings and impressions after testing.

MARTA - 26, law student

“Generally, the application is cool. The idea, everything is clear - about what the profile is about, also transparent. I like the graphics, as a student I would definitely use the app. I would feel safe using it, especially that I would be seen as an avatar. I think I would make an appointment with someone from this application. I think those avatars are great idea - it is so up to date and like in a game. Although it would be nice if you could make it more like something similar to yourself, like in the snap. You know - to dress it in your style, etc. but you know I'm a gadget maniac.”

DONNA - 33, Alumni

“The graphic is pleasant, clear, beneficial to these colours, feeling of lightness. It would be nice if you could find all the places at the university, with the current schedules in the rooms, opening hours, e.g. a cafeteria, a sports hall, etc. Possible attractions, events. It would be nice if after clicking on the avatar a chat box would pop out. If it will be possible to customize your avatar it would be great. Without it, there is no sense of using avatars. The fact that only students from the university can use the app would make me feel more comfortable and safer.”



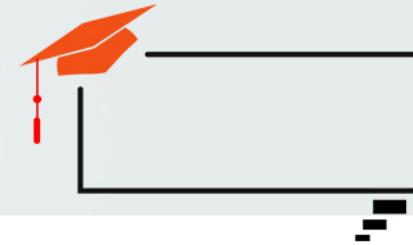
Ming - 24, Multimedia student

“The application looks friendly, professional, trustworthy, compatible with the style of the university, modern, clean, safe. I don't know if it wouldn't be a good idea to differentiate between intentions. At the moment I don't know if it's an application for a romance or for finding friends. . . If I invite girl for a meeting - because I'm looking for a friend - will she think that I am picking her up? Not sure. That is why I am worried. By the way, I like avatars the most. It is so funny. They are like pokemons.”

Barbra - 23, Marketing Student

“Very friendly design, easy to navigate. I would definitely give it a try, especially if I am new at the University, don't know people and have not time to search for events, places etc. The idea of being an avatar is very interesting, makes me feel like a part of community seeing others and their names. I am not sure I would feel comfortable being „followed” by others though - maybe it would need an option to switch that off to feel more comfortable moving around or to be able to be followed just by friends. For sure it would make it easier for me to join events but also to meet friends or go for a date. It would make it clear who is open for that.”

Post-experience Semi-Structured Interview



Method of evaluation employed by Jessica

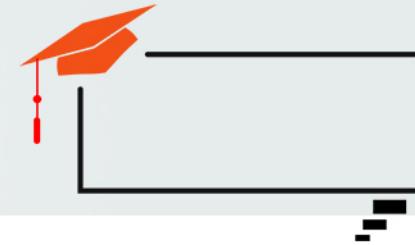
I generated the basis of my questions on two things;

1. The responses generated from user testing.
2. Linking back to our problem statement and goals, needs and values.

Firstly, I recruited participants who had already experienced the application, Anna and Pawel, and recruited a third, fellow Design Thinking student, Matt who I did a paper prototype with before conducting the interview.

I understood that my interview questions below were subject to change, given their semi-structured purpose, and was aware of avoiding leading questions to generate an answer I desired.

- What was your first impression of the application and why?
- What did you like or dislike most about the application and why?
- Do you think an international student in particular would benefit from this application? Why/Why Not?
- How did you feel whilst using this prototype?



Interview Transcript

- **What was your first impression of the application?**

"I like how it reminds me of playing Sims. Firstly, I thought it was like for children and then I saw that it is like a game for university students. Using avatars instead of photos was a bit distracting at first, but the fact that I could 'build' an avatar changed this view" - Anna

"The first thing that came to me was I reminder about Facebook as it began as a social application for Harvard Students." - Pawel

"My first impression was that I found it intuitive and that it served a specific function" - Matt

- **What did you like or dislike most about the application and why?**

"I quite like now that there is no photos of real people. I like the design - it reminds me of university. It is also fun and I like the game-style" - Anna

"I like that you can immediately meet other people on campus and find people with the same hobbies and interests. You never know if the person sitting next to you may be your next best friend. Things I dislike is the safety aspect - I feel that there should be a way to block people if you do not want them to know your location". - Pawel

"I like that the application provides a unique, social platform for users to connect based on their interests. I do not like the limitations of interactions. I think more could be addressed such as animated features."

- **Do you think an international student in particular would benefit from this application? Why/Why Not?**

"I think yes because when you are new, particularly in the first semester, it is overwhelming. I think this application is an easier way to meet people. Sometimes meeting in real life may be a bit scary. This application lets me easily connect with what I am interested in" - Anna

"Yes, of coarse they will. It is an easy and convenient way to meet other people." - Pawel

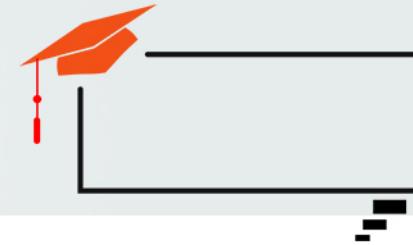
"Yes, I think an International Student would get great benefit out of this application. It is a simple and easy way to connect with other students" - Matt

- **How did you feel whilst using this prototype?**

"I felt interested and really would like to try this application in real life on campus. I think it is a great way to connect with others" - Anna

"I felt a personal attachment as I used the application - I could really relate to other people who also wanted to use the application for the purpose of meeting people in an easy and fun way." - Pawel

"I felt curious. I was motivated to learn what happened next in the interface. I found myself wondering about what kind of events or users I would connect with if this application was real" - Matt



Think-Aloud Method of Evaluation

Method employed by Elvin

In this research, we asked some related personal information about the participants, which includes Age, Occupation, Background and Similar experience. The purpose of these related information has been shown in the following part.

Age: Group of young people

Occupation: USYD Student

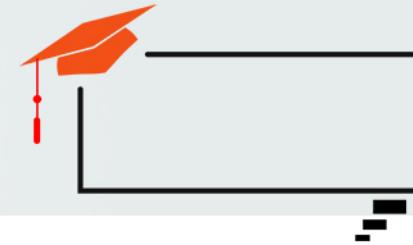
Background: Understanding of usability

Similar experience: Ability to use the app

All the users belong to the USYD student that are target group for our application. And also all of our participant have no experience of using the similar application, so that means some of our tasks possibly are a bit challenging for them. But for this reason, the think-aloud data are able to derive usability problems within our interface. And the comments and suggestions from participants can really help the researcher and designer better improve the application in the subsequent iterative development.

Think-aloud Background Demographics

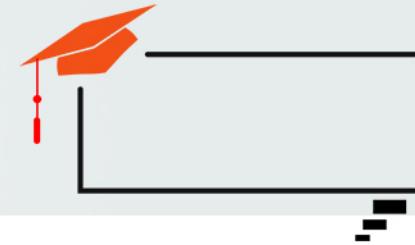
	P1	P2	P3
Age	23	25	24
Gender	Female	Female	Female
Background	Master of Information Technology	Master of Education	Master of Interaction Design
Similar Experience	No	No	No



Think-Aloud Participant Tasks

With the help of tool, InVision, participants experienced the application and completed tasks below through an electronic prototype.

Abstract tasks	Concrete tasks
Users can do the zooming operation	Suppose this is your first time using this app. Please show me how to zoom in the mini-map
Users can complete the searching operation.	You want to search the virtual users in the quadrangle building court, please show me how to do that
Users can realize the function of moving the lens within application by operating the GUI.	Suppose you want to move to the front door of the quadrangle building. Please show me how to do that
Users can check the menu.	Suppose you want to move to the front door of the quadrangle building. Please show me how to do that
Users can check other students' profile	Suppose you want to check the profile from the EMMA. Show me how to do that



Think-Aloud Findings

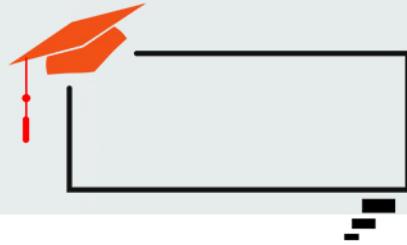
Qualitative Observation

Task	Summary of observations
Task 1	All participants made more or less mistakes. Most participants did it under the guidance of the researcher, and there was also a participant who did not complete the task.
Task 2	All participants could quickly find how to complete the searching operation.
Task 3	All participants could quickly find how to use the arrow within the application interface to complete this task.
Task 4	All participants could quickly and efficiently find the correct path to check the application menu.
Task 5	Some of the participant can find the path to go back to the main interface and do the checking operation to view personal information of particular people. However there are still having participant cannot find the right way to go back the main interface.

Performance Data

Task	P1	P2	P3
Task 1	●	●	✗
Task 2	●	●	●
Task 3	●	●	●
Task 4	●	●	●
Task 5	●	●	●

- Success
- With help
- ✗ Failure



Final Discussion - Methods

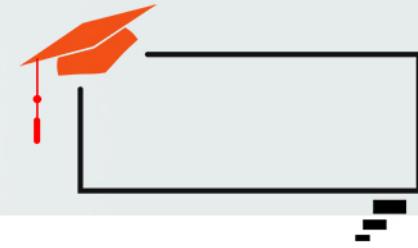
- **Usability Testing Findings**

The participants liked the appearance of the application and Avatars as well. The application gave them positive associations such as “clear”, “trustworthy”, “friendly”. Avatars made users feel like they were in a game but they would prefer advanced options whilst designing customized Avatar. Furthermore, because of trustworthy, professional appearance and owing to the fact that Avatars made them feel safe, students declared that they would like to try the application in real life, on the Campus. What is more, they state that they would meet with other students by using the app. I think it is first step to success, due to the fact that our application is able to connect virtual world with real one and evoke empathic understanding. Helping and supporting students through facilitating engagement in events and meet others is our goal. By persuading students to use the app and then to meet with others we are increasing level of empathy among students and decrease amount of lonely people who feel often disconnected from the community.

- **Semi-Structured Interview Findings**

Findings from interview participants revealed that the application successfully met a majority of our users needs, goals and values. Keywords from participants such as ‘connection’, ‘convenience’, ‘intuitive’, ‘unique’, ‘motivated’ and ‘personal attachment’ highlights the fact that our design has left a bold impression on users and ideas surround how to harness this feedback and apply it to the design if we were to improve it in the future. Improvements would surround improving safety aspects of the application since it is based on GPS location and perhaps inclusion of animation in the application.

Final Discussion- Methods



- Think-aloud Method Findings

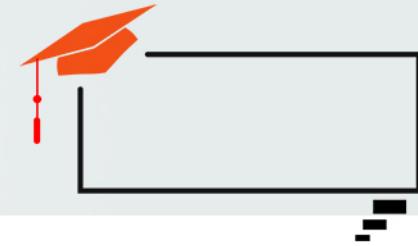
Strengths

1. The application interface provides multiple functions that can help people pay more attention in finding friends by immersive gaming experience.
2. The USYD MINI has a highly integrated interface that retains key features and omits unnecessary redundancy.
3. Think aloud with the assistance of prototype that is efficient and effective, and accurately providing design problems in the user interface. So that the data reveals the problems of interface design objectively and helps to improve iteration in the future.

Weaknesses

1. We conducted think aloud with only 3 users, the result might not be able to show all the problems.
2. The think-aloud testing based on the prototype, and the prototype just can provide some functions of whole application. So that the conclusion only can reflect part of whole application issues.
3. There are some interface flaws that can lead to some obvious errors such as missing ‘back’ icon in the menu interface.
4. The task need to be described clearly to avoid misunderstand.

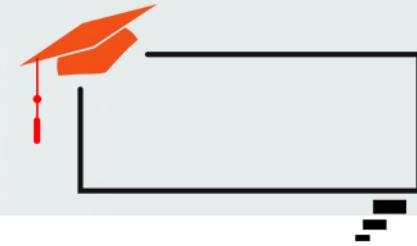
Final Discussion



The UsydMini application is a bold and unique solution to fill a much needed gap in the market in supporting international students at The University of Sydney. It is a unique solution for numerous reasons:

- Findings have shown that it meets the majority of our user needs, goals and values.
- Following extensive research, we have found that UsydMini is the first of its kind.
- Although it is the first of its kind, UsydMini shares similar characteristics to Google Maps and Street View and Social Media Platforms. Participants have given feedback surrounding its likeness to these and therefore, allowed for simplicity and intuitive navigation during user testing.
- The solution received largely positive feedback and feedback was consistent with user goals, needs and values.
- UsydMini aligns with the design brief's notion of empathy, compassion and altruism. With user feedback highlighting 'connection' as being the main thing that they felt whilst using the application.

Final Discussion



What is next for UsydMini? Findings have shown that our design could be improved through a variety of means. Mainly;

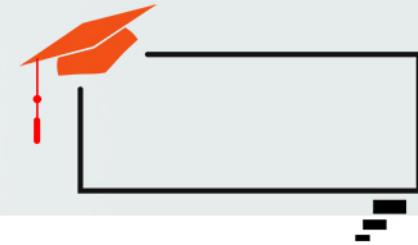
- Improving the interface: Numerous participants had interest in the ‘user avatar’ aspect of design and expressed interest in animation. Therefore, improvements to user experience could include a more ‘Sims-like’ effect (gamification explored in research) in which users can approach and speak to each other in the virtual world.
- Inclusion of safety aspects: Since the application is based on GPS location, it is imperative to ensure user safety. Whether this means allowing users to block others from seeing their location or users having access to their own privacy settings would be aspects to explore in future.
- Further user testing: With more time, we would have liked to explore more prototyping and testing with the InVision tool and create more high fidelity mock-ups until we had all main interfaces of the application active through InVision.

Reflection on Iteration Process: We found many methods useful in identifying what worked and did not work about our application. Mockups were useful as they visually represented what the user would see, as was paper prototyping as it allowed us to gain insight into the user’s experience of navigation.

We found the think-aloud method effective in collecting qualitative observational data and was very useful in determining whether our solution was effective with the wide student demographic we were targeting.

In our initial brainstorming concepts stage, creating a cross-comparison table to identify what solutions met what need, value and goal of users was particularly helpful in coming to a final decision. In future, we would aim to explore more methods of user testing, such as electronic prototyping (InVision) as well as questionnaires to acquire feedback about how the solution functions.

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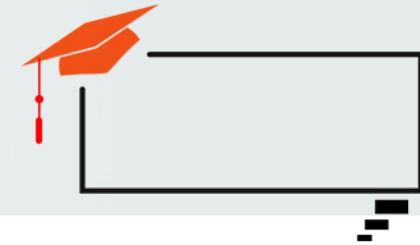
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Appendix

Think Aloud Method

ID	Gender	Age	Background	Similar experience
1	Female	23	Information Technology	No

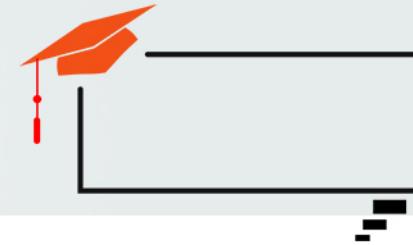
Task 1	Suppose this is your first time using this app. Please show me how to zoom in the mini-map
Success	Yes ✓ Only-with-help √ No
Time	29s
Observations	Firstly, the participant uses the '+' try to zoom in the map rather than mini-map. So the researcher give some hint about the task. Then the participant can finish the task
Errors	Error to click the '+' in the bottom side of map
User comments	Feel confused about the concept of mini-map

Task 2	You want to search the virtual users in the quadrangle building court, please show me how to do that
Success	Yes ✓ Only-with-help No
Time	15s
Observations	Click the search bar and then tap in the quadrangle building then click the searching to achieve that
Errors	No errors
User comments	No

Task 3	Suppose you want to move to the front door of the quadrangle building. Please show me how to do that
Success	Yes ✓ Only-with-help No
Time	5s
Observations	Click the forward arrow to move to the front door quadrangle building. The interface turn to the front door of quadrangle building
Errors	No
User comments	No

Task 4	Suppose you want to check the application Menu. Show me how to do that.
Success	Yes ✓ Only-with-help No
Time	3s
Observations	Click the top-right corner 'menu' of the application. The menu is shown.
Errors	No
User comments	No

Task 5	Suppose you want to check the profile of the EMMA. Show me how to do that.
Success	Yes ✓ Only-with-help No
Time	3s
Observations	Participant clicks again the menu icon to go back of the previous page. Then user find the Emma who standing in front of the quadrangle building, then click the name of Emma. The page turn to the Emma's profile interface.
Errors	Participant waste time in finding 'go back' icon
User comments	There is no obvious function to add friends within the profile interface



Appendix

ID	Gender	Age	Background	Similar experience
2	Female	25	Education	No

Task 1	Suppose this is your first time using this app. Please show me how to zoom in the mini-map
Success	Yes <input checked="" type="checkbox"/> Only-with-help <input checked="" type="checkbox"/> No
Time	19s
Observations	Firstly, the participant uses the '+' try to zoom in the map rather than mini-map. So the researcher give some hint about the task. Then the participant can finish the task
Errors	The participant ignores the task about the MINI-MAP. Zoom in is unconsciously lead to the '+'
User comments	There don't have obvious icon to show the mini-map

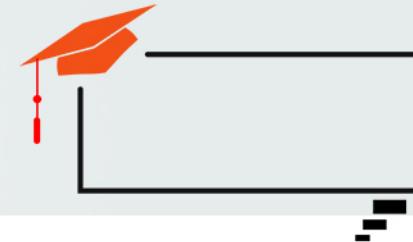
Task 2	You want to search the virtual users in the quadrangle building court, please show me how to do that
Success	Yes <input checked="" type="checkbox"/> Only-with-help <input type="checkbox"/> No
Time	5s
Observations	The participant just clicks the searching bar. Then input the key word, after that clicks the search icon. The interface changes
Errors	No errors
User comments	easy

Task 3	Suppose you want to move to the front door of the quadrangle building. Please show me how to do that
Success	Yes <input checked="" type="checkbox"/> Only-with-help <input type="checkbox"/> No
Time	4s
Observations	The participant clicks the frontward arrow. Then the page turns to the front door interface
Errors	No errors
User comments	No

Task 4	Suppose you want to check the application Menu. Show me how to do that.
Success	Yes <input checked="" type="checkbox"/> Only-with-help <input type="checkbox"/> No
Time	3s
Observations	The participant clicks the top-right icon. Then the interface turns to the menu
Errors	No
User comments	No

Task 5	Suppose you want to check the profile from the EMMA. Show me how to do that.
Success	Yes <input checked="" type="checkbox"/> Only-with-help <input type="checkbox"/> No
Time	4s
Observations	Within the menu interface the user clicks the menu icon again, then the interface turns back to then front building, user click the Emma. The interface turns to the Emma profile.
Errors	No
User comments	No

Appendix



ID	Gender	Age	Background	Similar experience
3	Female	24	Interaction design	No

Task 1	Suppose this is your first time using this app. Please show me how to zoom in the mini-map
Success	Yes ✓ Only-with-help No ✓
Time	7s
Observations	the participant tries to use their two fingers to zoom in the map rather than the mini-map. When the participant finds this prototype cannot achieve that function. The participant then click the '+' try to zoom in the map rather the mini-map.
Errors	No errors
User comments	Participant don't know what is mini-map. The term 'zoom in' is not clear enough to help the

Task 2	You want to search the virtual users in the quadrangle building court, please show me how to do that
Success	Yes ✓ Only-with-help No
Time	5s
Observations	The participant finds the searching icon to find the searching bar, then tap in the key words. Then turns to the quadrangle building court page.
Errors	No
User comments	No

Task 3	Suppose you want to move to the front door of the quadrangle building. Please show me how to do that
Success	Yes ✓ Only-with-help No
Time	2s
Observations	Click the frontward arrow the move the interface to the front door.
Errors	No errors
User comments	No

Task 4	Suppose you want to check the application Menu. Show me how to do that.
Success	Yes ✓ Only-with-help No
Time	2s
Observations	Click the top-right side of the page then the page turns to the menu
Errors	No errors
User comments	No

Task 5	Suppose you want to check the profile from the EMMA. Show me how to do that.
Success	Yes Only-with-help ✓ No
Time	8s
Observations	User wonder the whole try to find how to go back pervious page. But there don't have obvious icon to help to do that. So the researcher helps her to click the menu again. Then participant can click the EMMA to check her profile
Errors	The participant don't know how to go back to the main interface
User comments	There is no 'back function' can help user back to the pervious page