Deliverable 1,
Project Proposal

University of New South Wales
Requirements & Design Workshop (SENG2021)
by Team BugFreeSince93

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1.0 Problem Statements

1.1 The Problem Contextualized

The problem we aim to address is the difficulty of socialising and making friends at University. The problem mostly is observed in students that are transitioning from high school into university. However, this problem is not limited to high school students as international students also face difficulty making friends. They have often left their families and old lives behind to attempt to build a better life but face difficulty adjusting and coping with the new environment that confronts them. International students make up ~38% of the student demographic in UNSW (UNSW Annual Report 2018)[1] so it is a considerable problem. Furthermore, for local students, it is comparatively easier to make friends in high school as students have shared classes and break schedules. This in conjunction with the fact that they are not taught advanced social skills means they may face difficulty in university. This is because in university, making friends requires significantly more effort as everyone works to a different schedule. Thus, as we can extrapolate, this problem is affecting the entire student body of university - both local and international students face difficulty making friends either due to a lack of social ability or being put in an environment drastically different than what they were accustomed to.

1.2 Analysis of Existing Systems

From our research and as far as we are aware, there are no available systems that target the specific issue we have contextualized. Although there are no exact systems, there are social platforms that share traits with what we are trying to achieve. These platforms include Facebook, Tinder, Linkup, Meetup and Timeweave. However, the fundamental target market and aims of each of these platforms are different from the system we propose to implement and consequently, they lack features that are critical to increasing the accessibility of making friends.

Although Facebook has effective mechanisms for tracking events and messaging users, it lacks features that are important to making friends. An example of this, is the inability to find a person or group who is interested in attending a certain event. Ideally, they would also share some interests and hobbies with you. Furthermore, the large scale of facebook makes it hard to browse events easily.

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[1] UNSW Annual Report 2018
https://www.unsw.edu.au/sites/default/files/uploads/UNSW%20Annual%20Report%202018%20170120.pdf

Similarly, Tinder has useful features that allow finding, filtering and matching with people that hold similar interests. However, due to the nature of it being a dating platform, it has a totally different target market and thus lacks features that making friends would require. One such feature that Tinder lacks is the option to match in groups and track social events to attend.

Linkup aggregates and categorizes social events taken from Facebook, and displays the information concisely. However, this is the extent of the application's features - it is more of a website that provides data and does not have any other features beside the aggregation and categorisation of data.

Additionally, Meetup is a system that carries the same fundamental essence of making friends doing what you love - however, these groups are very large with thousands of members attending each event, we wish to have a more smaller and personalised experience to create long-lasting friends you can meet day to day at university.

Timeweave is a good system for managing both your own and your friends timetables to know when you are able to meetup. However, the user experience of the application is very unrefined with constant glitches and bugs. Furthermore, we wish to expand further beyond simply being able to see a friend's timetable. This app is only useful for viewing current friends timetables and there is no way to message people to see if they want to meet-up through the app, nor is there a feature that allows you to make new friends.

1.3 Consequences of Leaving the Solution Unsolved

If this problem is left unsolved, many students will continue through University struggling to refine their interpersonal and social skills which are critical for building networks and entering the industry. The consequences extend beyond University and into the workforce as effective communication and team skills are a vital component of success.

In support of this, the academic paper Friendship supported learning - the role of friendships in first-year students' university experiences[2] highlights that friendships are vital to health and wellbeing. It also expresses that good interpersonal, social and communication skills are a major component in achieving academic and career success, and, as a result of increased sense-of-self, increase the prospect of a student completing their degree.

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[2] by Catherine Picton, Ella R. Kahu, and Karen Nelson accessible at
https://pdfs.semanticscholar.org/c633/84937ea58210b4e33655566f040bebe442e8.pdf

1.4 The Purpose and Uniqueness of our System

We want to create an application that leverages the strengths of the platforms we analysed (Facebook, Tinder, LinkUp, Meetup, Timeweave) to increase the accessibility and ease of making friends at University. We wish to do so using society events as a medium to match people with similar interests so they are able to find someone who they can relate to. This will ensure that they do not feel overwhelmed, which might be the case if they go alone. Having a friend will also provide a greater sense of social confidence which will allow them to socialise and fit in easier. Thus, our proposed system is an integration of the above existing systems - we plan to take the strengths of each platform and utilize them to solve our specific problem by providing a platform where users are able to find new friends easily.

1.5 Summary Statements

To reiterate the problems that must be addressed and provide a clear guide towards the features we should implement, summary statements are listed below:

1. Both domestic and international students struggle to make friends in university.
2. Students find it difficult to approach and talk to new people without a stimulus.
3. It is hard to find people to go to society events with, and it can be intimidating going by oneself.
4. There is no highly integrated system that allows you to make friends at university.
5. These systems should be smart and find people that hold similar interests and are in the same area of study.
6. If this problem of social ineptitude is not addressed it extends beyond university and into adult life.
7. Friendships are vital to health, wellbeing and especially during university which can be one of the most stressful times of a person's life.
8. Without help, students continue to struggle to refine their interpersonal and social skills. Skills, which are critical for succeeding in industry.

2.0 Features

2.1 Account

- Register for an account with a university email and password

- Verify sign-up through verification email

- After verification, users select their age and faculty

- After verification, users select their interests from a list of interests

- Login with a registered email and corresponding password

- View profile details by clicking on the 'Profile' tab

- Edit personal details while viewing your profile

- Change interests while viewing your profile

- Enable/disable email notifications while viewing your profile

- Delete account while viewing your profile

2.2 Chat

- View a list of all group chats by clicking on the 'Groups' tab

- Each group chat contains the first names of the other users

- Each group chat contains the event that everyone is going to

- Each group chat contains the last message sent, who sent the message and the time it was sent

- Selecting a specific group chat opens up the chat.

- Opening up a chat allows a user to message the other users in the chat and view the chat history

- Text messages can be sent to the users in the group chat

2.3 Matching Users

- Match users going to similar events

- Match users based on similar interests, age and classes

- 3 users going to similar events are put into a chat chat

2.4 Events

- Browse from a list of society events and events outside university

- Filter events based on tags

- Tags are based on interest type and if it is a UNSW event

- Filter events based on a date

- Join society events by pressing on 'Go!'

- Selecting an event brings up the details of the event: Date, location, title, how many are going

- When viewing an event, users can add the event to their calendar

- When viewing an event, users can join the event by pressing on 'Go!'

- View a list of all events that you are attending

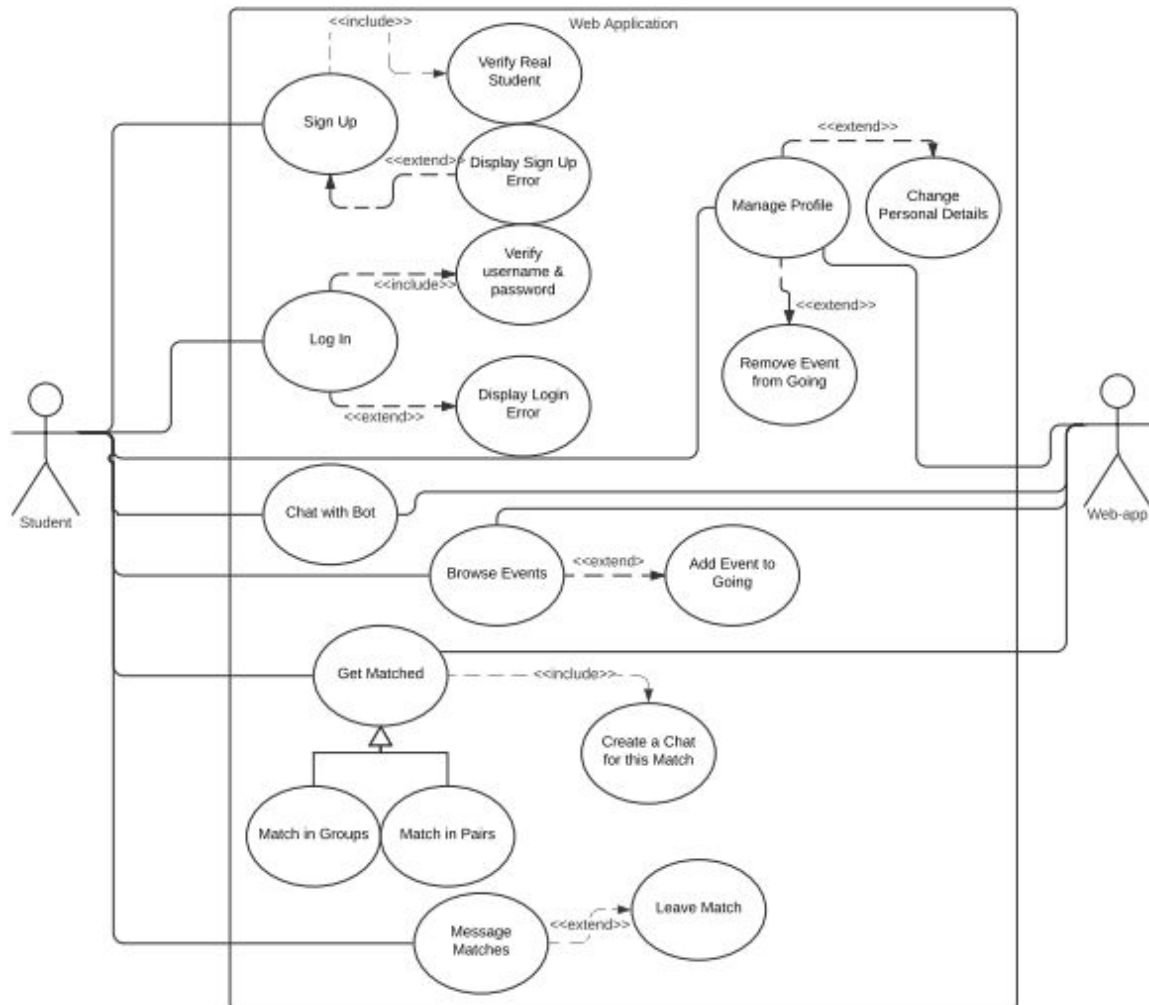- The list of all events contains past and upcoming events.

2.5 Achievements

- Gain badges by reaching milestones

- Badges not achieved yet are hidden

2.6 Milestones and Stats

- View how many groups you've joined

- View how many badges you have earned

- View the score you've earned as a progression graph

2.7 Use Case Diagram

3.0 User stories

3.1 Sign Up / Sign In / Onboarding

Epic 1: As a student, I want to sign up and log into Holler so that I can start using the app

1. As a student, I want to sign up for Holler so that I can start making friends.
● Given a user is in the landing page, a 'Sign Up' button is available
● Given a user is on the sign up page, then a user should be able to input an email, password and confirmation password
● When a user puts in a password and confirmation password, then they must match
● Email must be valid and must not have been used to create a prior account
● When an invalid input is put in, then an error message must be printed
● When all the inputs are filled and they are valid, then a confirmation email is sent to the user

2. As a student, I want to log into Holler so that I can start using the app.
● Given a user is in the landing page, a 'Login' button is available
● Given a user is in the login page, then a user can input an email, password and re-enter password
● When a user logs in with an email, the email must be valid and registered email
● When a user puts in a password, then it should correspond with the email they use to log in with
● When an invalid input is put int, then an error message must be printed
● When I login and the signup has not been fully completed, then users are returned to onboarding
● When I login and registration has been fully completed, then users are sent to the 'Explore' tab

3.2 Events

Epic 2: As a student, I want to search for society events so that I can indicate if I am interested in the event or not.

1. As a student, I want to browse society events so that I can find events I am interested in.
- Given a user is in the homepage, then an 'Explore' tab is available
- Given a user is in the 'Explore' tab, then users are automatically presented with society events that match their interests
- Given a user is in the 'Explore' tab, then society events are displayed in a list
- Given a user is in the 'Explore' tab, users are shown an image of the event/society, name of the event, date of the event, location of the event, the tags of the event and how many people are going.
- Given a user is in the 'Explore' tab, then a 'Go!' button is on the bottom right of each event
- Given a user is in the 'Explore' tab, when they click on the event, then it brings up a description of the event and all prior details

2. As a student, I want to filter society events by category so I can find events that match my interests.
- Given a user is in the 'Explore' tab, then a searching icon bar is available near the top of the screen
- Given a user is in the 'Explore' tab, when they click on the search bar, then users can type in the search bar for event names
- Given a user is in the 'Explore' tab, when users click on 'tags' users can filter events by tags
- When a user is filtering by tags, then events can be filtered based on interests (e.g. Language, Music, Dancing, Games)
- When a user is filtering by tags, then events can be filtered by location (e.g. UNSW society event or outside event)
- Given a user is in the 'Filter' menu, when a user selects a category and searches, then events that match those tags will be displayed
- Given a user is in the 'Filter' menu, when a user selects no categories and searches, then it will have no effect
- Given a user is in the 'Filter' menu, then a user can select multiple categories at a time
- Given a user is in the 'Explore' tab, when users click on 'date' users can filter events by a time range

- Given a user is in the 'date' menu, when a user selects the start date and end date, then the start date must be less than the end date

3. As a student, I want to join society events I am interested in so that I can start talking to people.
- Given a user is in the 'Explore' tab, when a user clicks on the 'Go!' button, then a user will indicate they are interested in that society event.
- Given a user is in the 'Explore' tab, when the 'Go!' button is pressed, then it changes to 'Going' with a tick.
- When a user is going to a society event, then they are matched with 2 other users who are also going to the same event.

3.3 Matches / Chat

Epic 3: As a student, I want to be matched with users going to similar events and who have similar interests to me, so that I can meet like-minded people.

1. As a student, I want to be matched with users attending similar society events so that I can avoid going alone.
● When a user indicates they are going to a society event, then they are matched with 2 other users who are also going to the same event.
● When a user indicates they are going to a society event, then users are matched 48 hours before an event starts
● When a user is finished being matched, then the matched users are put into a chat

2. As a student, I want to be matched with user with similar interests so that I can meet like-minded people
● When a user is being matched, then users are matched based on interests, age and classes
● When a user is being matched, then users are matched with the most similar users
● When a user is being matched, and users have matched before for that event, then they cannot match again.
● When a user joins an event, and the user joins within 48 hours before the event, then they are matched with 2 random people, regardless of matching interests.

Epic 4: As a student, I want to chat with multiple people so that I can get to know more people.

1. As a student, I want to send messages so that I can communicate with other users.
- Given a user is in an opened group chat, then users can send text messages
- Given a user is in an opened group chat, then past messages are saved and can be viewed later

2. As a student, I want to have a list of all my chats so that I can keep track of multiple conversations at once.
- Given that a user is in the home page and they are logged in, then a 'Groups' tab is available in the navigation menu.
- Given that a user is not currently in the 'Groups' page, then clicking the tab brings up a list of all current chats.
- Given that a user is in the 'Groups' page, then a user should see each group chat with: the first names of the users in the chat, the most recent message, who sent the most recent message and when it was sent, and which event the group is going to.
- Given that a user is in the 'Groups' page, when a user clicks on the group chat, then it opens up the chat
- When a user is matched, then a chat is created with 2 other users
- When all users leave the chat, then the chat is deleted.
- Given that a user is in the 'Groups' page, when they are waiting to be matched, then the event is shown in the matches screen with a note labelled "Matching with other users…"
- Given that a user is in the 'Groups' page, when they are waiting to be matched and it is more than 48 hours before the event, then a timer is put next to the event and after it is 48 hours before the event, then they are matched with 2 other users with similar interests.

3.4 Profile

Epic 5: As a student, I want to view my profile and change my settings so that all my details are accurate, and I can keep track of my progress.

1. As a student, I want to set my personal details so that I can be matched according to my preference.
- When a user is signing up and logging in for the first time, then users can set their details
- Given a user is in the onboarding section, then users must put their first name
- Given a user is in the onboarding section, then users must put their date of birth
- Given a user is in the onboarding section, then users must select their faculty
- Given a user is in the onboarding section, then users must select their university (UNSW by default)
- Given a user is in the interests section of the onboarding process, then users can select from a list of various interests
- Given a user is in the interests section of the onboarding process, then a user must select at least 5 interests

2. As a student, I want to update my personal details, so that my interests and details are up to date.
- Given a user is in the 'Profile' tab, when they click on edit profile, then they should be able to see their profile editing screen
- Given a user is in the profile editing screen, then users can change their list of interests by checking or unchecking from the list.
- Given a user is in the profile editing screen, then users can change their faculty
- Given a user is in the profile editing screen, then users can change their first name
- Given a user is in the profile editing screen, then users can change their date of birth
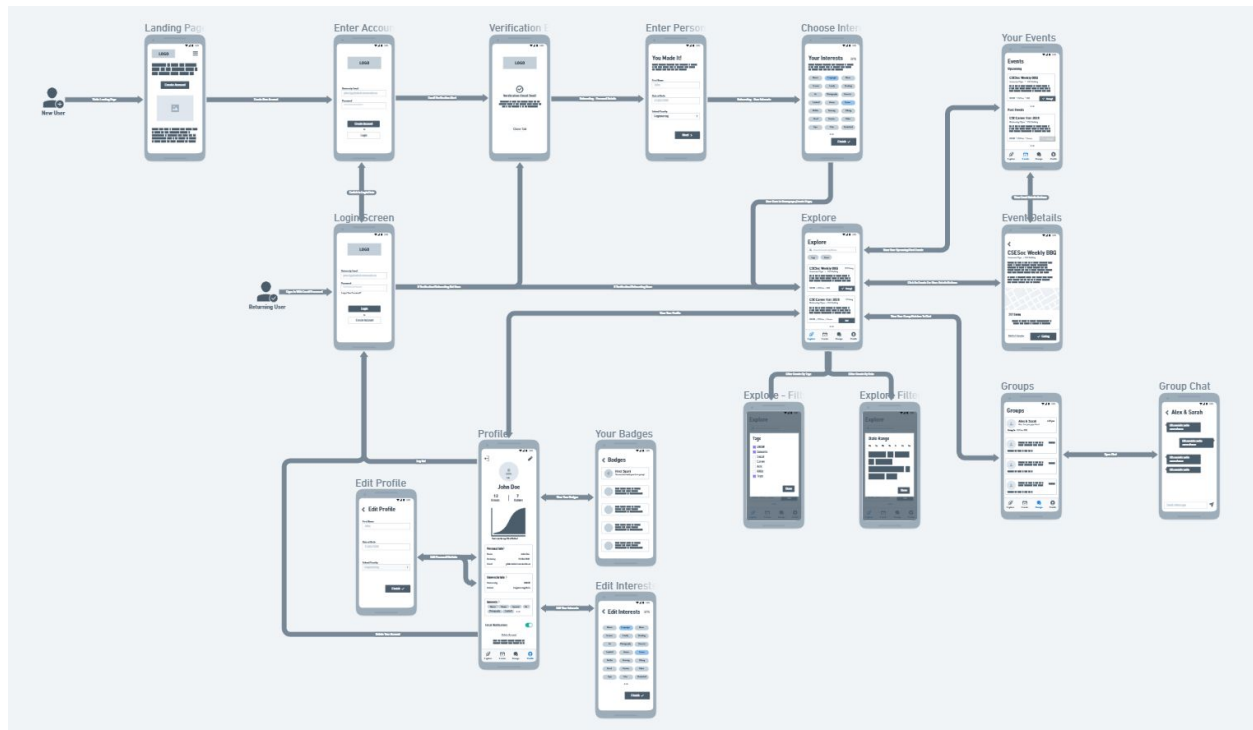
Epic 6: As a student, I want to view my achievements and statistics so I can keep track of how much progress I have made in the app.

1. As a student, I want to keep track of my achievements, so that I can feel a sense of pride and accomplishment.
- When a user completes a certain task for the first eim, then users are given a badge from a list of achievements (Examples: Change your avatar, Match with someone for the first time, Match with 10 people)
- Given a user is in their profile, when they click on 'Badges', then users can view the badges they have earned
- When a user earns a badge, then users are given 'points'

2. As a student, I want to view statistics related to my account, so I can keep track of how much I have used the app.
- Given a user is in their profile, then users can view how many groups they have joined
- Given a user is in their profile, then users can view how many badges they have earned
- Given a user is in their profile, then users are provided with a graph that tracks their score and their percentile rank
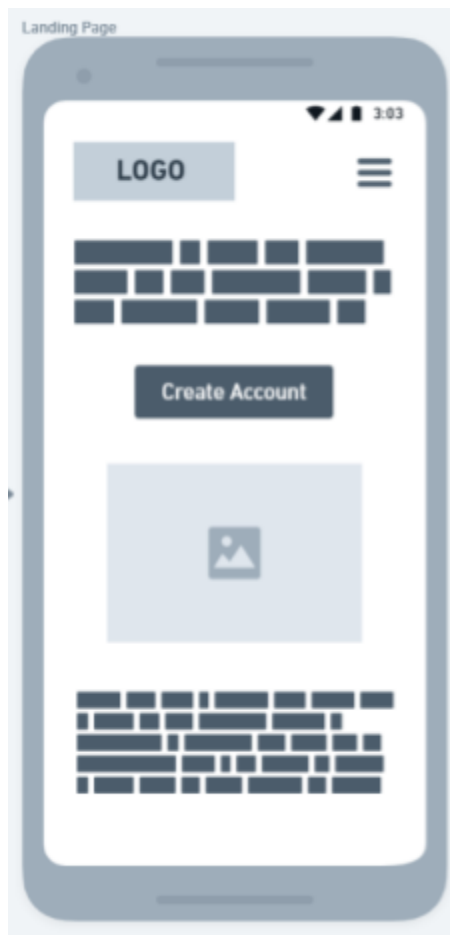
4.0 Low Fidelity Prototypes

4.1 Overview
This diagram gives an overview of the main screens and how they will interact with each other.

Mobile Link: https://whimsical.com/S4tzjuCznE6Vz6sH261DLb
Desktop Link: https://whimsical.com/TGD6sQD6k42uAC7JzUayzm

4.2 Landing Page

Landing Page

In this screen, users will be presented with images of the application and a brief overview of the functionality and features of the application. It is useful for introducing users to the app and generating interest.

4.3 Sign Up / Sign In / Onboarding

Create Account Screen
This screen captures what users will first see after navigating through the landing page.
Users must sign up with a valid email and password.

Enter Account Details

LOGO

Must create account or login using UNSW email

University Email
john.l@student.unsw.edu.au

Password
....

Create Account

Or

Login

Tapping on Login will switch to the login screen

Create account screen
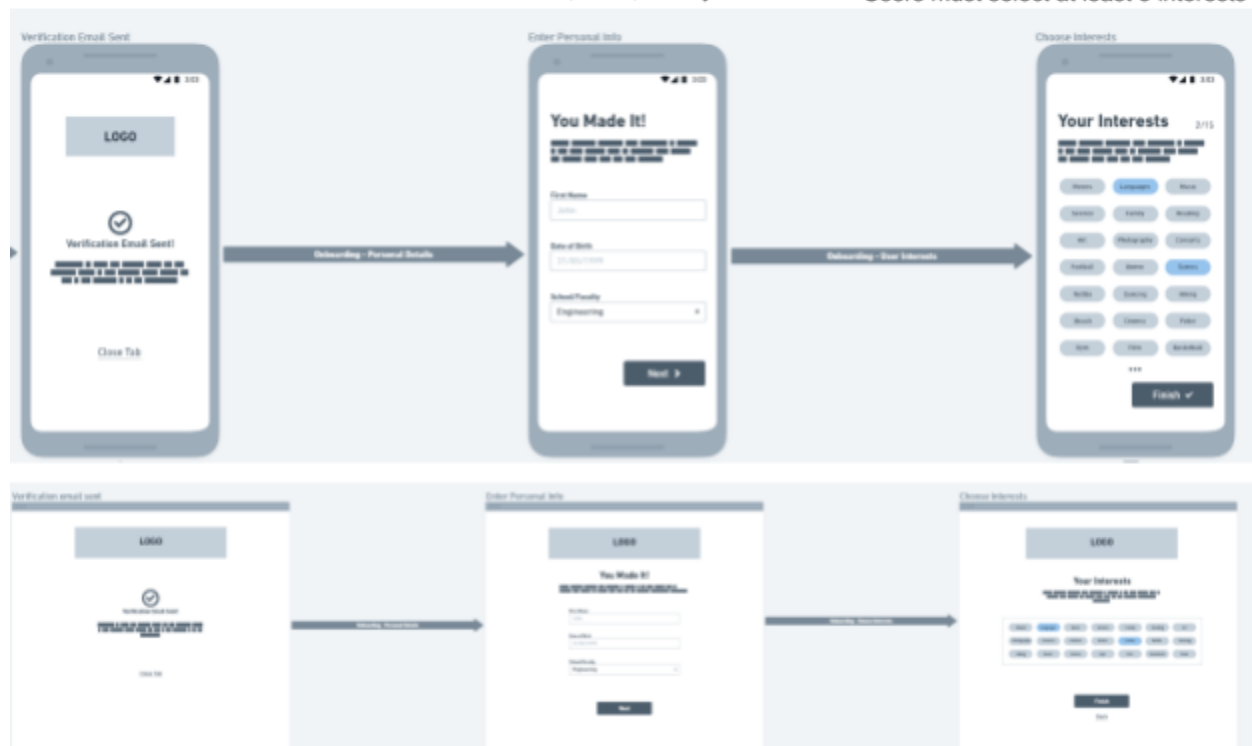
LOGO

University Email
john.l@student.unsw.edu.au

Password
....

Confirm Password
....

Create Account

The Onboarding Process
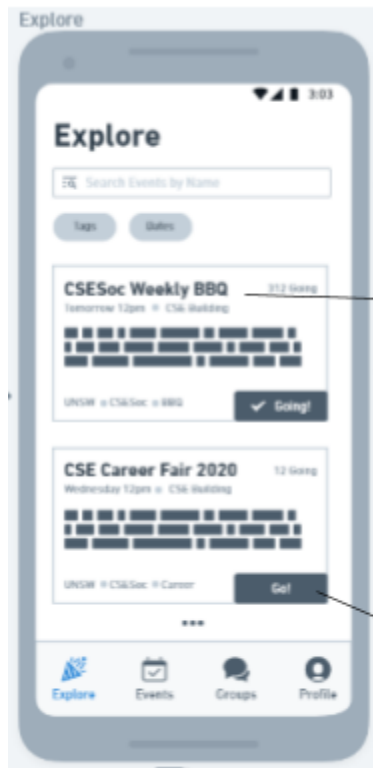*This shows all the details a user must put in before they can access the full application. By putting in interests, they can be presented with events and be matched according to their interests.*

Step 1: Verification

Step 2: User details
Name, DOB, faculty

Step 3: Select Interests
Users must select at least 5 interests

4.4 Events

Explore

Search Events by Name

Tags   Dates

CSESoc Weekly BBQ   312 Going
Tomorrow 12pm · CSE Building

UNSW · CSESoc · BBQ   ✓ Going!

CSE Career Fair 2020   12 Going
Wednesday 12pm · CSE Building
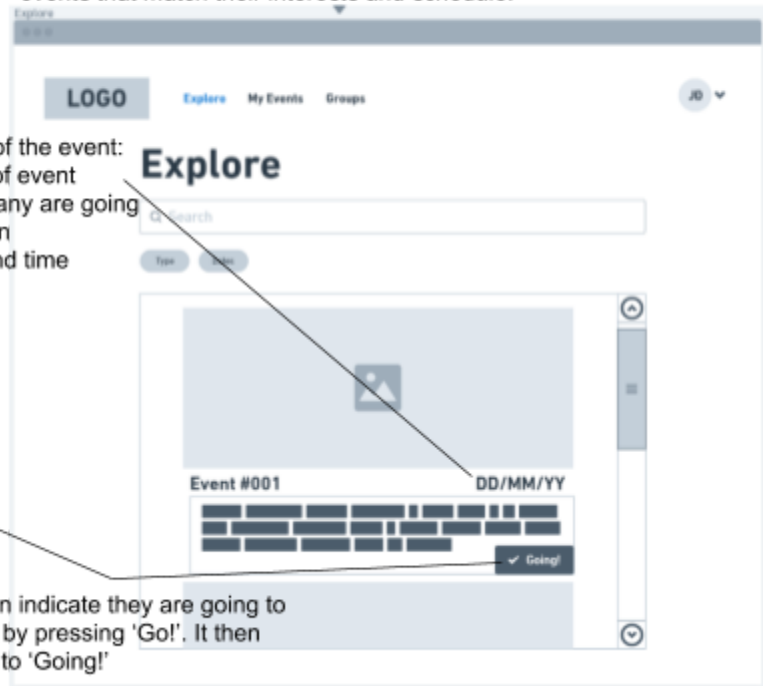
UNSW · CSESoc · Career   Go!

Explore   Events   Groups   Profile

'Explore' Tab
This screen is the default screen shown to users after logging in/signing up.
The start of any meetup begins here, as users can search for events that match their interests and schedule.

Explore

LOGO   Explore   My Events   Groups   JD ⌄

Explore

Search

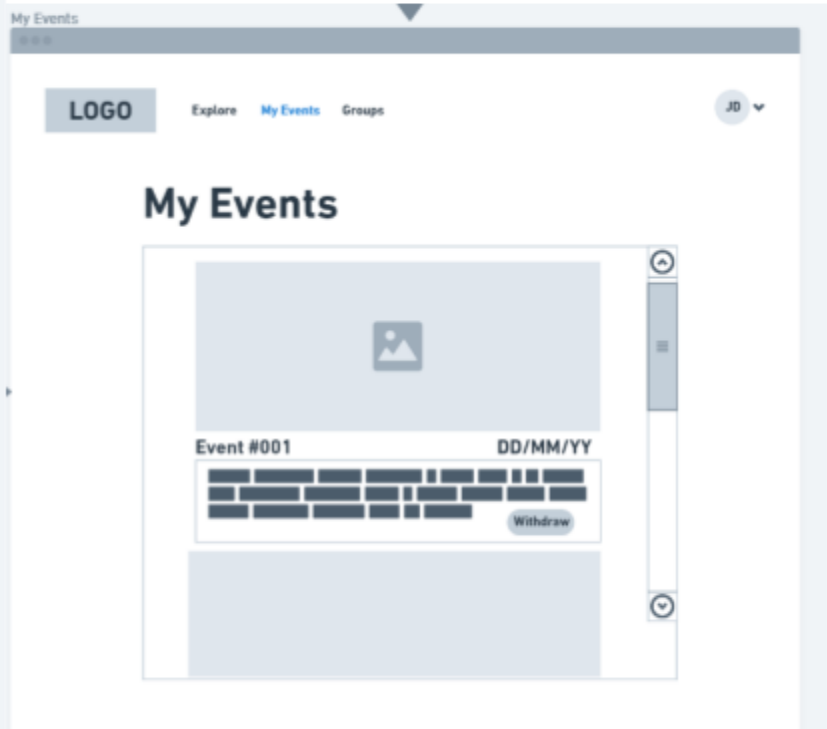Type   ...

Event #001   DD/MM/YY

✓ Going!

Details of the event:
-Name of event
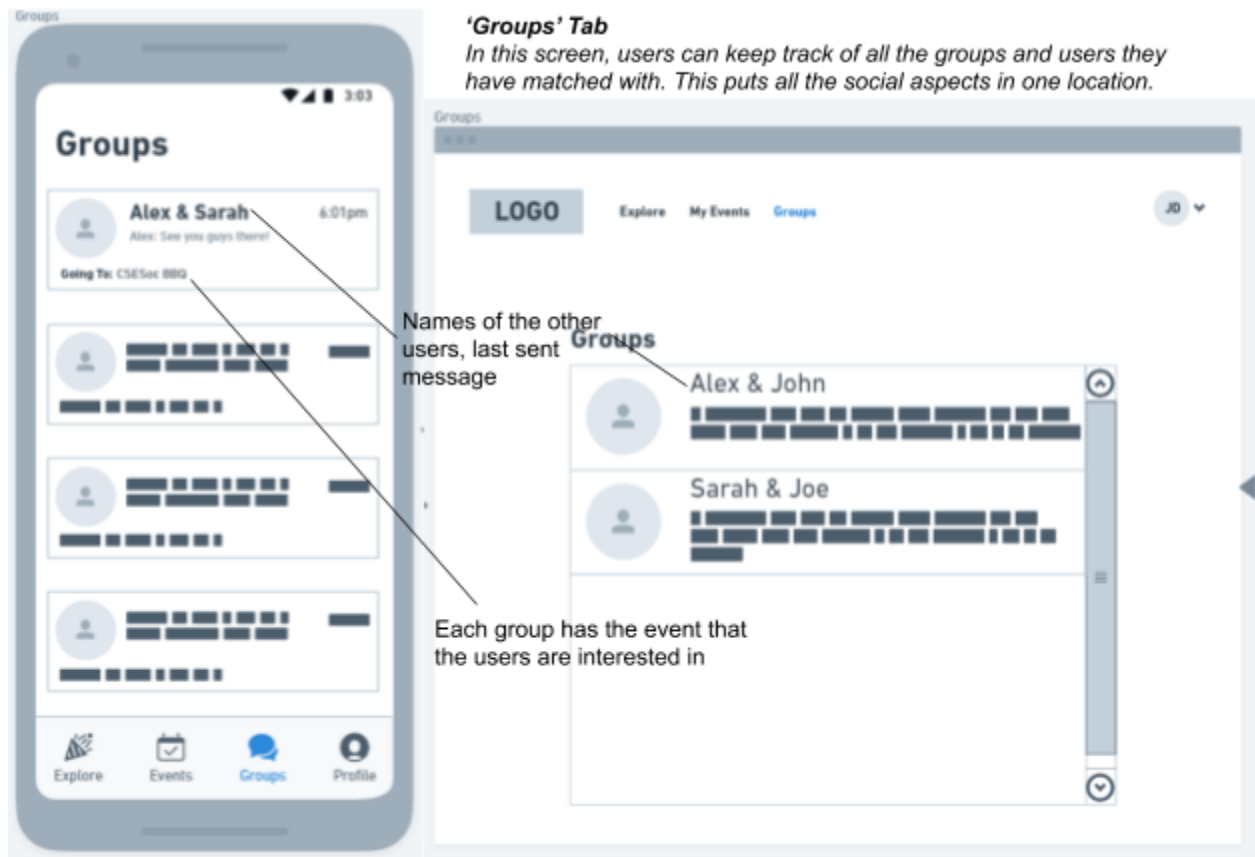-How many are going
-Location
-Date and time
-Tags

Users can indicate they are going to an event by pressing 'Go!'. It then changes to 'Going!'

'Events' Tab

This screen keeps track of all upcoming and past events. Rather than scrolling for the events they have joined in 'Explore', users can easily remember the events they are interested in. It is important as it allows users to find all the events they have joined in one place, and also leave any events they are no longer interested in.

3:03

Events

Upcoming

CSESoc Weekly BBQ
Tomorrow 12pm ◦ CSE Building

UNSW ◦ CSESoc ◦ BBQ   ✓ Going!

•••

Past Events

CSE Career Fair 2020
Wednesday 12pm ◦ CSE Building

UNSW ◦ CSESoc ◦ Career   ✓ Going!

•••

Explore   Events   Groups   Profile

LOGO   Explore   My Events   Groups   JD ⌄

My Events

Event #001   DD/MM/YY

Withdraw

4.5 Chat

'Groups' Tab
In this screen, users can keep track of all the groups and users they have matched with. This puts all the social aspects in one location.

Names of the other users, last sent message

Each group has the event that the users are interested in

4.6 Profile

Profile can be accessed through the desktop application by clicking on the profile image

User statistics

Personal details

Email notifications can be enabled/disabled

Delete account

'Profile' Tab
In this screen, any information related to a user's profile is put in one place. Here, users can view and edit their profile details.
By editing their profile details, users can have up to date information that can generate more compatible matches.
Users can also keep track of how many groups they have matched and how many badges/achievements they have collected.
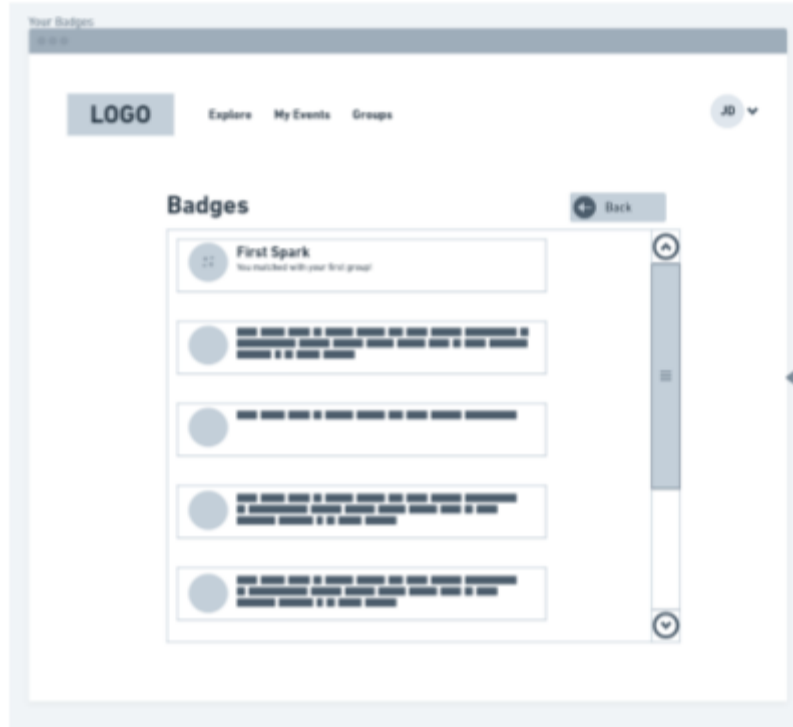
4.7 Badges

Badges

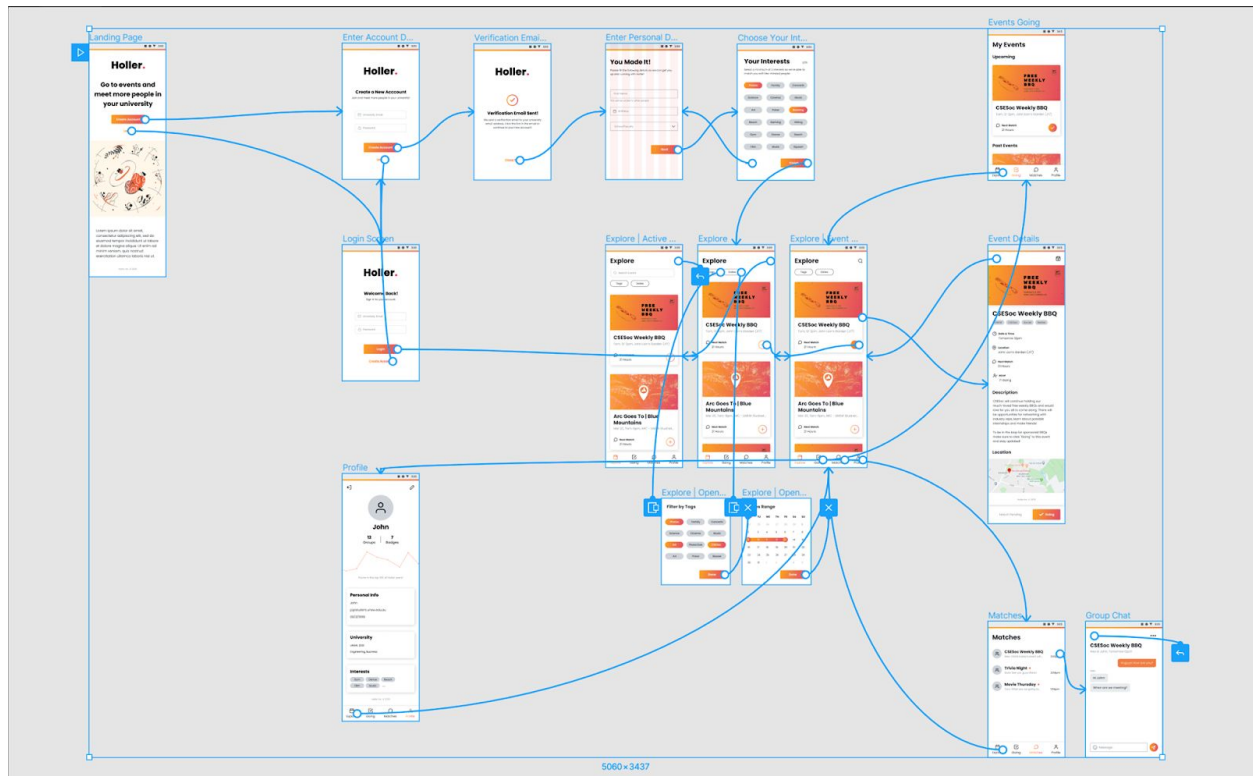This screen can be accessed via the profile. Badges are important for increasing awareness and prolonging usage of the app. Gamification of the app can cause users to return to the app and also allows users to feel a sense of pride and accomplishment through making friends.

5.0 High Fidelity Prototypes

5.1 Overview
This diagram gives an overview of the main screens and how they will interact with each other.
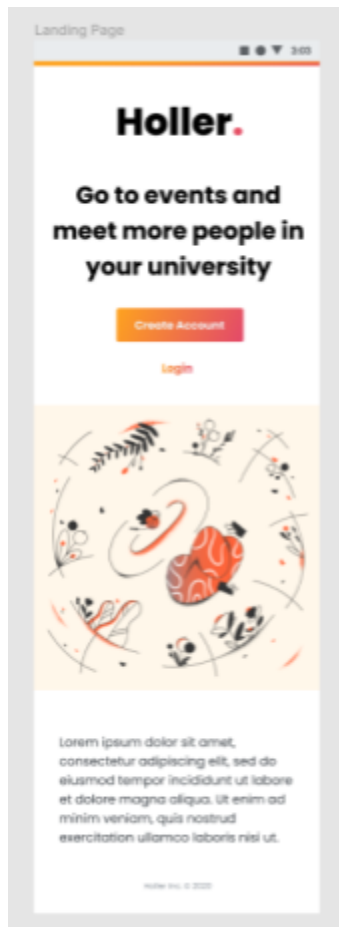

Mobile Link: https://www.figma.com/file/I8orwYI867ufVefo4dIalk/Holler-v1?node-id=1%3A3

Desktop Link: https://www.figma.com/file/I8orwYI867ufVefo4dIalk/Holler-v1?node-id=1%3A4

Functional Prototype:
https://www.figma.com/proto/I8orwYI867ufVefo4dIalk/Holler-v1?node-id=112%3A249&scaling=scale-down

5.2 Landing Page

Landing Page
In this screen, users will be presented with images of the application and a brief overview of the functionality and features of the application. It is useful for introducing users to the app and generating interest.

5.3 Sign Up / Sign In / Onboarding

Create Account Screen
This screen captures what users will first see after navigating through the landing page.
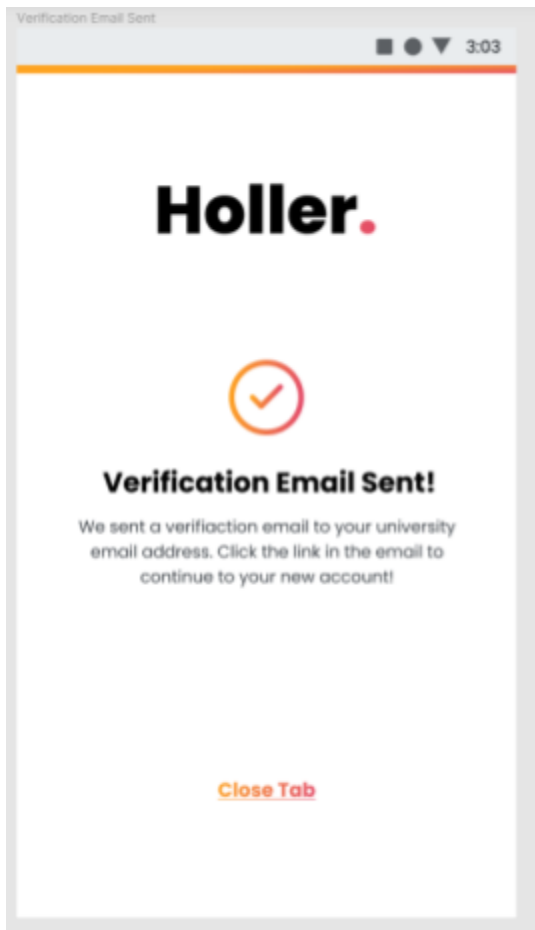*Users must sign up with a valid email and password.*

■ ● ▼ 3:03

Holler.

✓

Verification Email Sent!

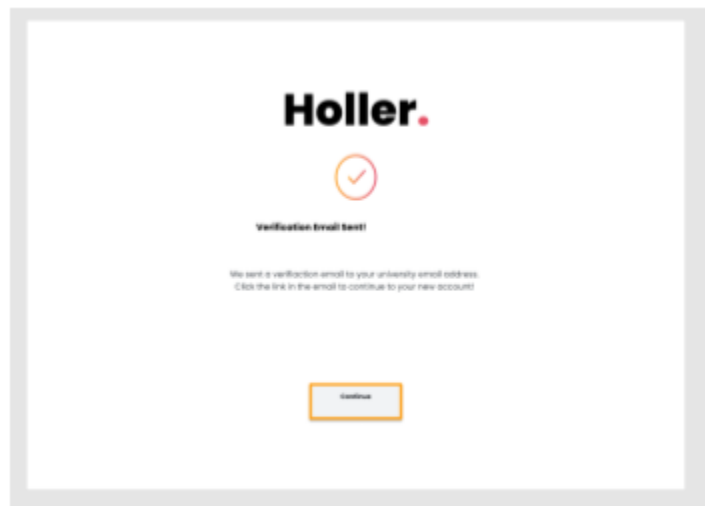We sent a verifiaction email to your university email address. Click the link in the email to continue to your new account!
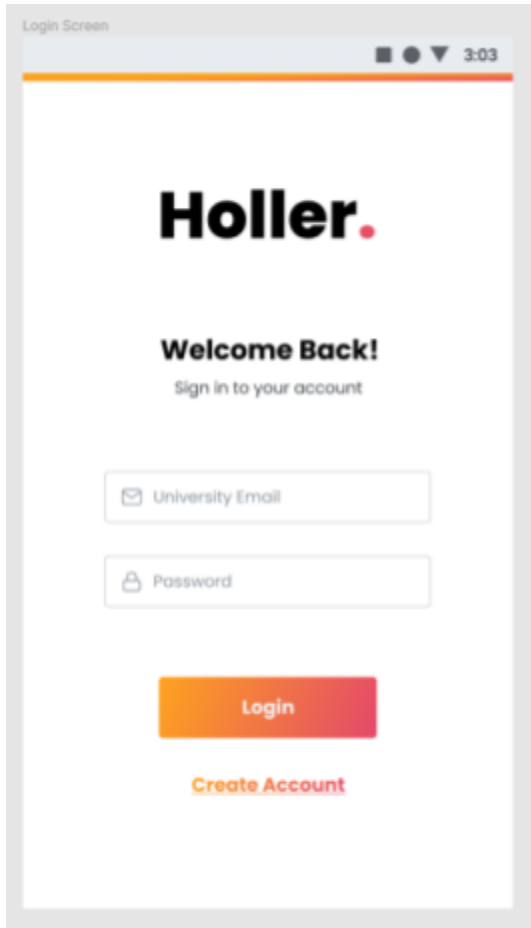
Close Tab

Verification Email Screen
After signing up, a verification email is sent to the email that the user signed up with. Users cannot progress further until they have verified the email.

Holler.

✓

Verification Email Sent!

We sent a verifiaction email to your university email address.
Click the link in the email to continue to your new account!

Continue

■ ● ▼ 3:03

Holler.

Welcome Back!
Sign in to your account

☐ University Email

🔒 Password

Login

Create Account

Login Page
On this screen, users can login to the application using a registered email and its associated password

Holler.

Welcome Back!

Sign in to your account!

☐ University Email

🔒 Password

Login

Create Account

You Made It!

Please fill the following details so we can get you up and running with Holler!

First Name

This will be visible to other people

Brithday

School/Faculty

Next

After verifying their account, users must put in their details (first name, DOB, Faculty), so other users can learn more about them.

Holler.

You Made It!

Please fill the following details so we can get you up and running with Holler!

1/3

Holler.

Your university

Please fill the following details so we can get you up and running with Holler!

2/3

■ ● ▼ 3:03

Your Interests

2/15

Select a minimum of 3 interests so we're able to match you with like-minded people!

Photos	Family	Concerts
Science	Cinema	Music
Art	Poker	Running
Beach	Gaming	Hiking
Gym	Dance	Beach
Film	Music	Squash

Back   Finish

List of Interests
Users are presented with a list of interests and must select 3 of them so that they can be matched with similar users.

Holler.

Your Interests

Select a minimum of 3 interests so that we're able to match you with like-minded people!

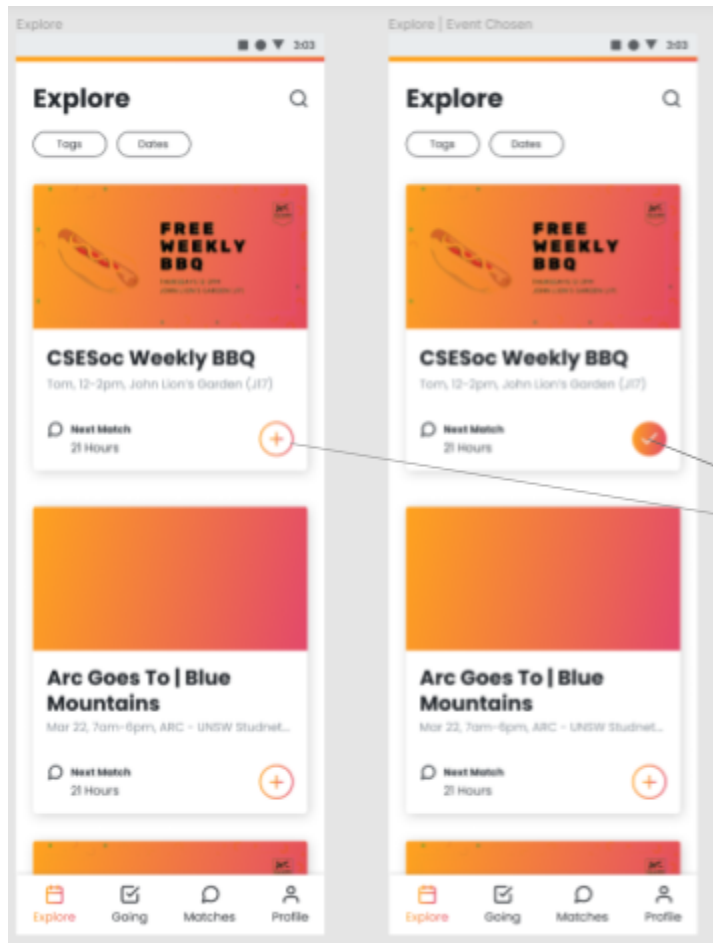| Photos | Family | Concerts | Science | Cinema | Music | Art |
| Poker | Running | Beach | Gaming | Hiking | Gym | Dance |
| Study | Film | Music | Squash | Party | Food | Exam |

3/3

Set up account

Back

5.4 Events

Browsing Events
After logging in or completing signup, users can browse through events and indicate they are attending those events.
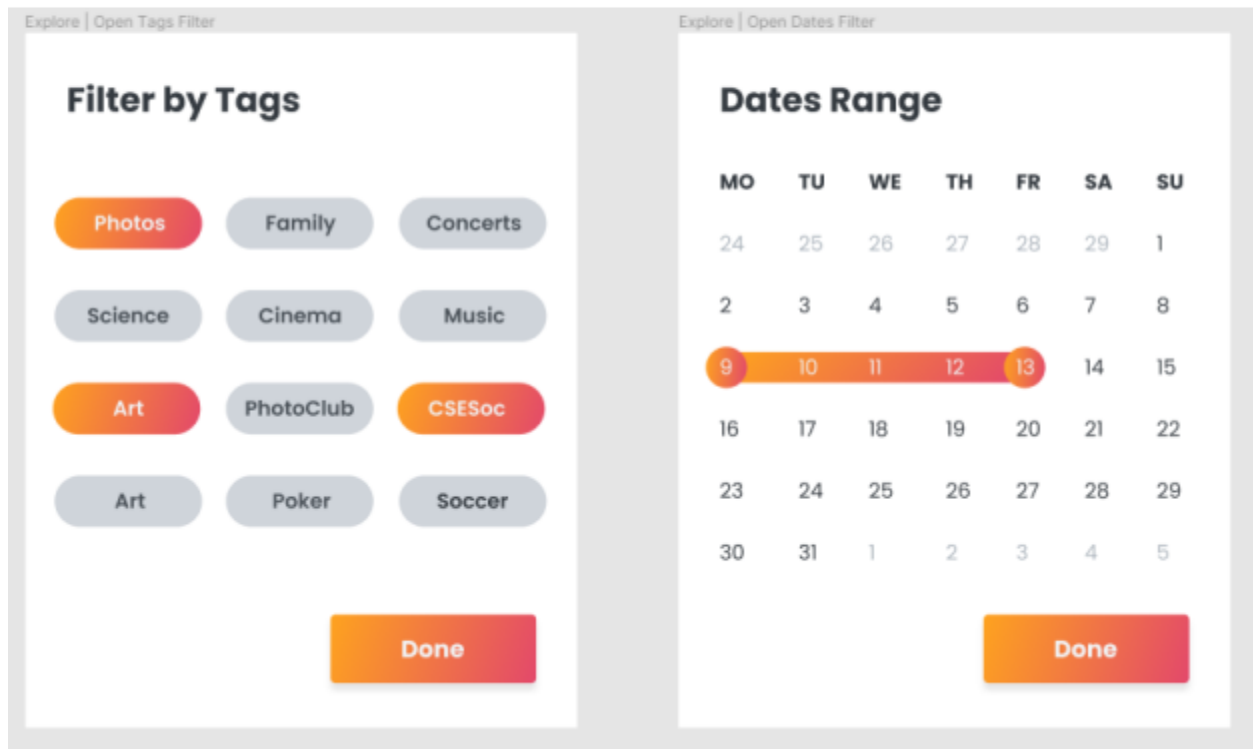*Users can also filter based on event tags and their date.*

After pressing the '+' button, a user indicates they are going to that event and a tick appears in place. A user can then press the tick button to withdraw from that event, returning it back to a '+'
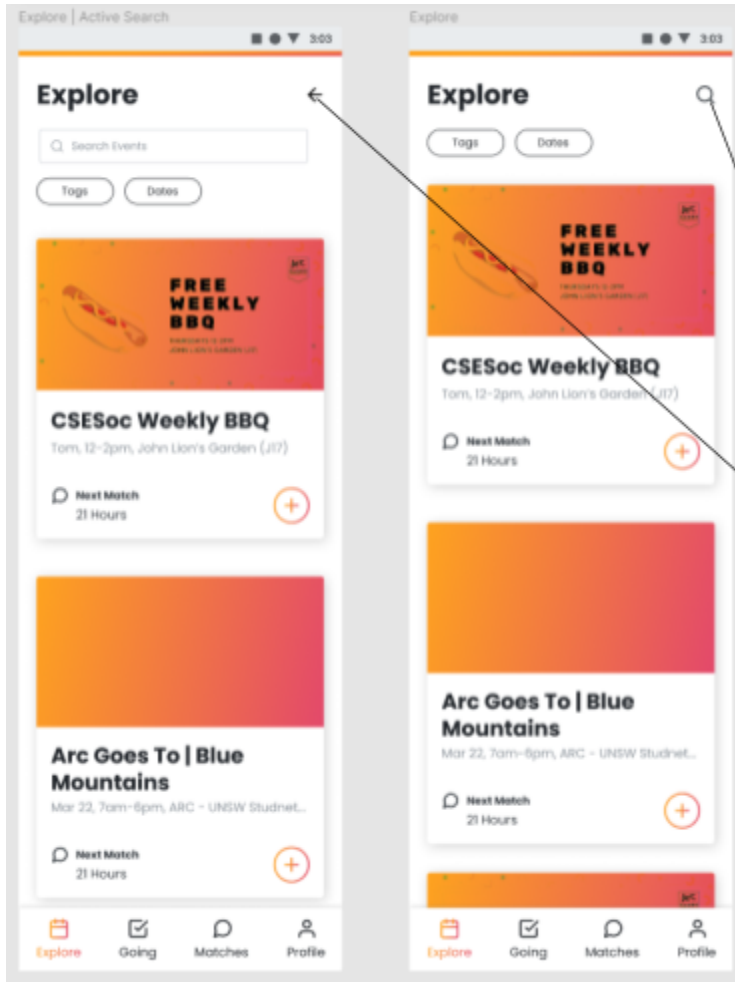
Filtering Events

These two screens are pop-ups that appear when selecting 'tags' or 'dates'. They are two different ways a user can filter events; by tags and time range.
Note: The desktop version will look near identical to this mobile version.

Filter by Tags

Photos	Family	Concerts
Science	Cinema	Music
Art	PhotoClub	CSESoc
Art	Poker	Soccer

Done

Dates Range

MO	TU	WE	TH	FR	SA	SU
24	25	26	27	28	29	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5

Done

Explore

Q Search Events

Tags   Dates

FREE
WEEKLY
BBQ

CSESoc Weekly BBQ
Tom, 12-2pm, John Lion's Garden (J17)

◯ Next Match
21 Hours   ⊕

Arc Goes To | Blue Mountains
Mar 22, 7am-6pm, ARC – UNSW Studnet...

◯ Next Match
21 Hours   ⊕

Explore   Going   Matches   Profile

Explore   Q

Tags   Dates

FREE
WEEKLY
BBQ

CSESoc Weekly BBQ
Tom, 12-2pm, John Lion's Garden (J17)

◯ Next Match
21 Hours   ⊕

Arc Goes To | Blue Mountains
Mar 22, 7am-6pm, ARC – UNSW Studnet...

◯ Next Match
21 Hours   ⊕

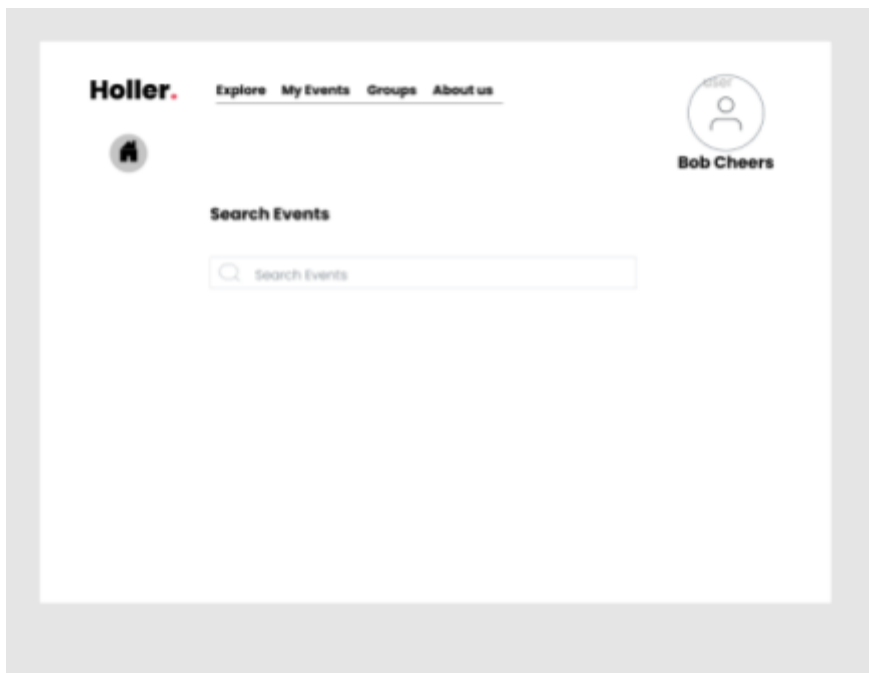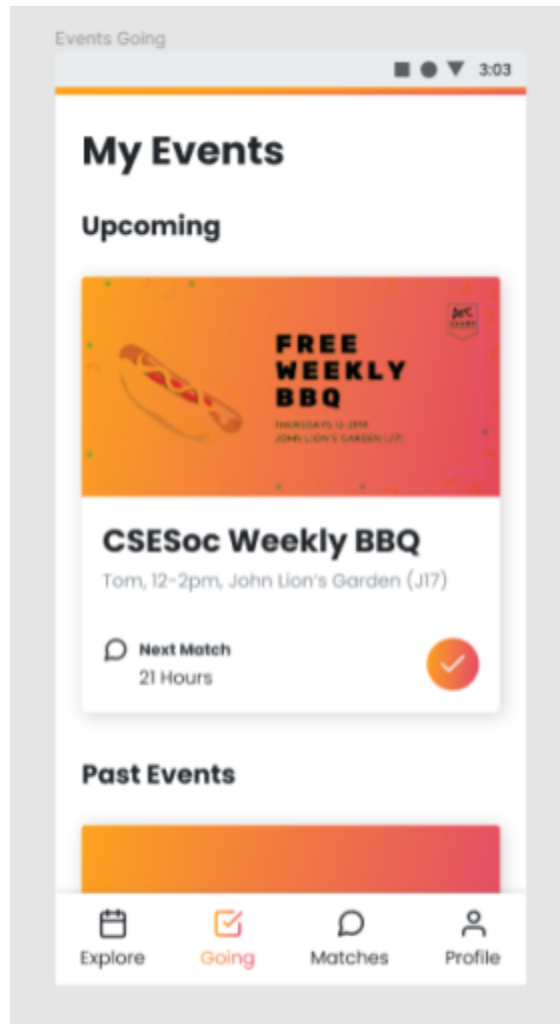Explore   Going   Matches   Profile

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Search For Events
Users can search for event names if they are looking for a specific event.
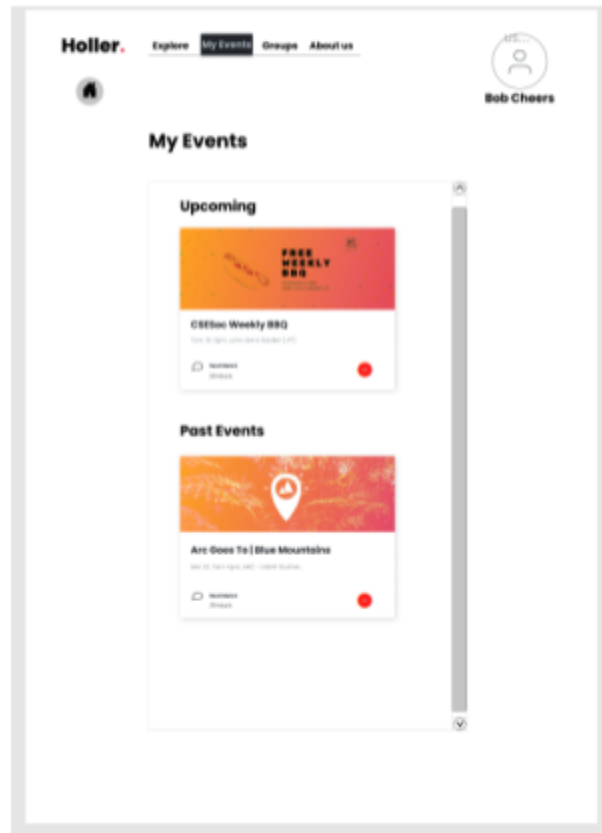
Pressing the magnifying icon brings up a search bar
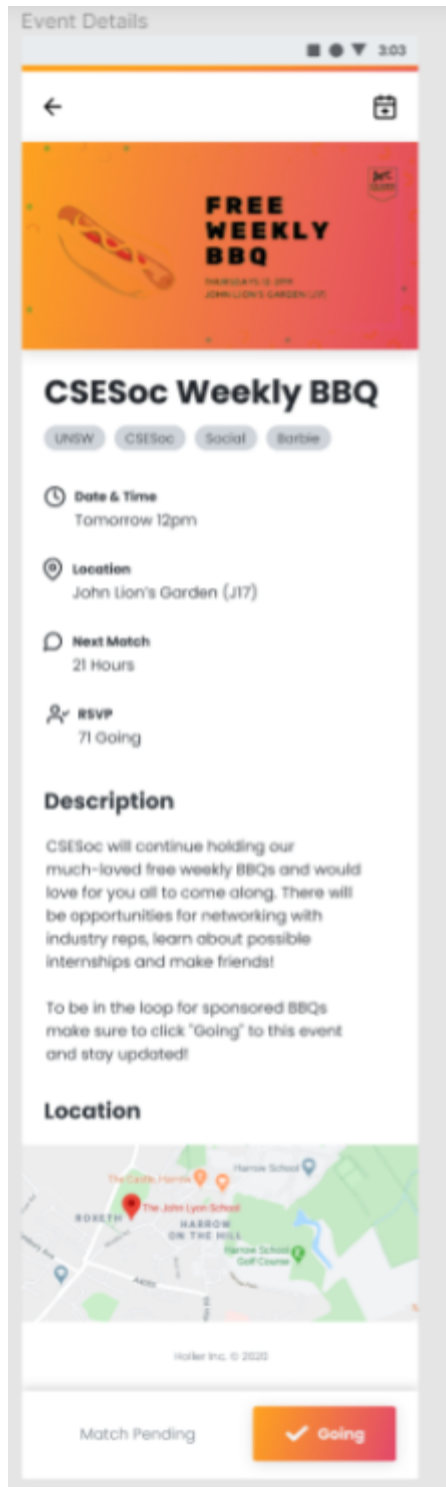
Pressing the <- icon collapses the search bar

Holler.   Explore My Events Groups About us

Bob Cheers

Search Events

Q Search Events

My Events

Upcoming

CSESoc Weekly BBQ

Tom, 12-2pm, John Lion's Garden (J17)

Next Match
21 Hours

Past Events

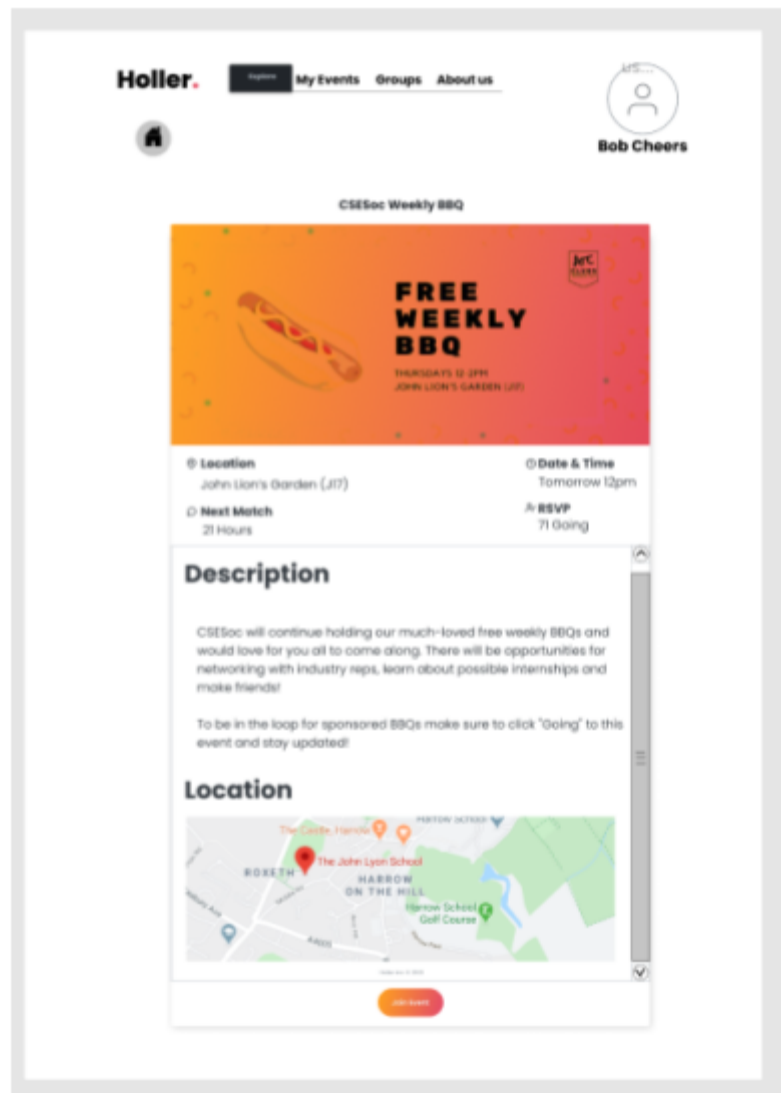Explore | Going | Matches | Profile

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My Events

Users can browse through upcoming events they are going to, and also search for events they were going to in the past. If they lose interest in any upcoming events, they can withdraw from that event.
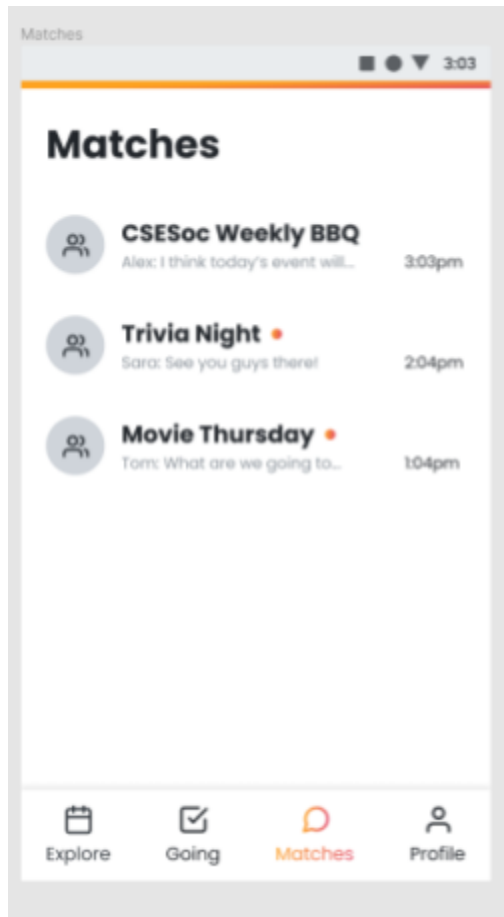

Holler. | Explore | My Events | Groups | About us

Bob Cheers

My Events

Upcoming

CSESoc Weekly BBQ

Past Events

Arc Goes To | Blue Mountains

Event Details

After selecting an event, users can learn more information about the event, as the event is listed in more detail (descriptions, tags, location etc.)
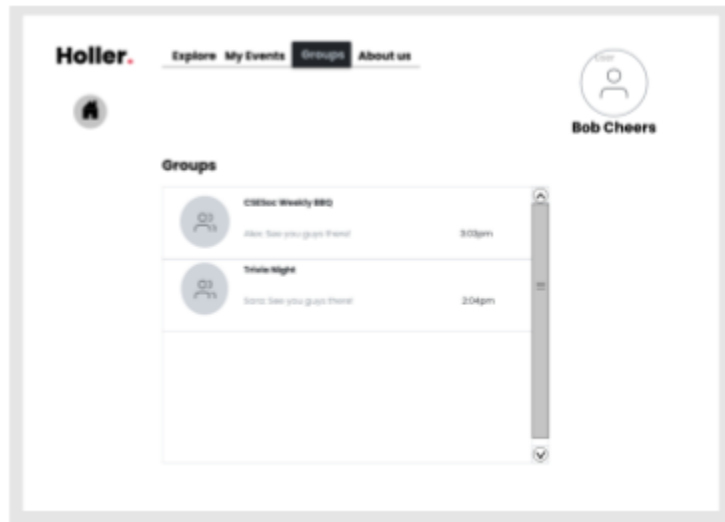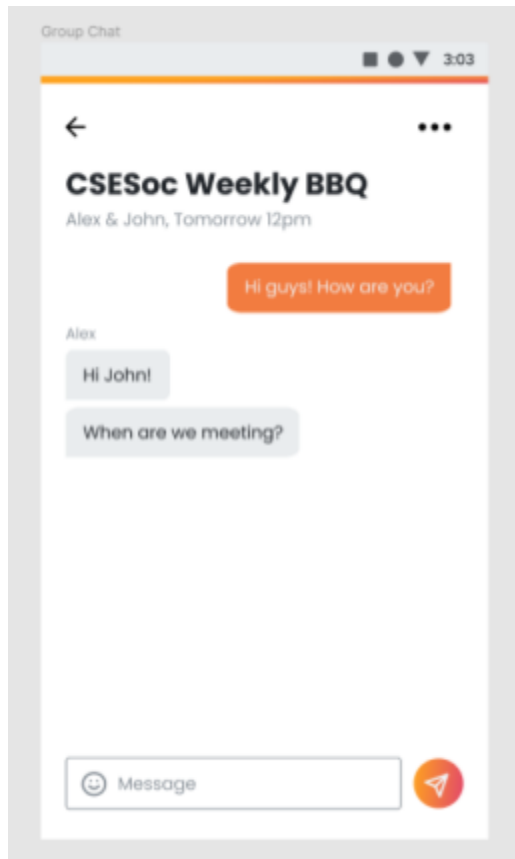
5.5 Chat

■ ● ▼ 3:03

Matches

👥 **CSESoc Weekly BBQ**
Alex: I think today's event will...   3:03pm

👥 **Trivia Night** ●
Sara: See you guys there!   2:04pm

👥 **Movie Thursday** ●
Tom: What are we going to...   1:04pm

📅 Explore   ☑ Going   💬 Matches   👤 Profile

Matches

After a user goes to an event, they will be later matched with 2 other users and put into a chat. Past events and chats are maintained.

Holler.   Explore   My Events   **Groups**   About us

👤
User
Bob Cheers

Groups

👥 CSESoc Weekly BBQ
Alex: See you guys there!   3:03pm

👥 Trivia Night
Sara: See you guys there!   2:04pm

Chat
Users can select a chat to bring up the chat history and talk with the other users. Users can send text messages and emoticons.
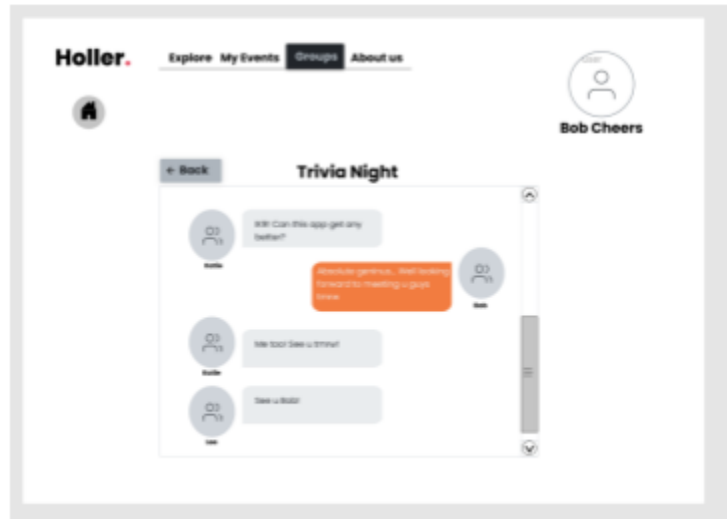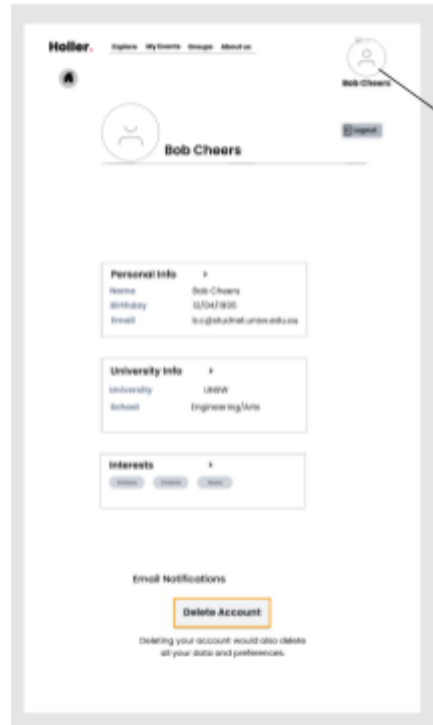
5.6 Profile

'Profile' Tab

In this screen, any information related to a user's profile is put in one place. Here, users can view and edit their profile details.
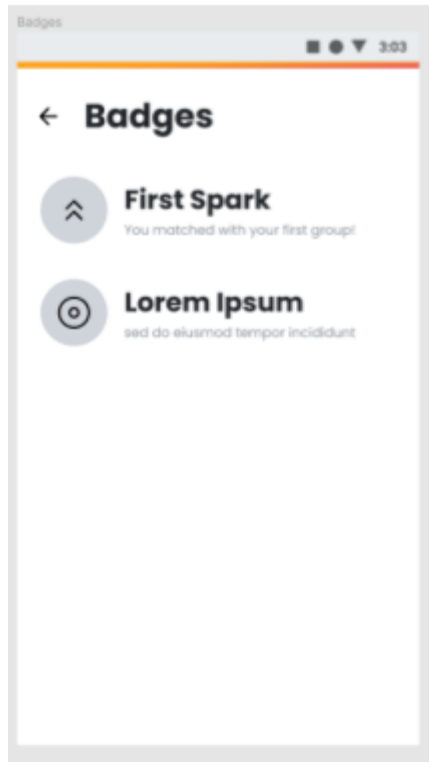By editing their profile details, users can have up to date information that can generate more compatible matches.
Users can also keep track of how many groups they have matched and how many badges/achievements they have collected.

Users can click on the profile image on the desktop version to access their profile

5.7 Badges

Badges

This screen can be accessed via the profile. Badges are important for increasing awareness and prolonging usage of the app. Gamification of the app can cause users to return to the app and also allows users to feel a sense of pride and accomplishment through making friends.