EndorFIT

RMIT Social and Cycling App for Android

Drew Diakonow   S3728984

Lucas Perlind   S3718854

Matthew Potts   S3652348

Duncan Do   S3718718

Table of Contents

Introduction

About the App

The purpose of this project is to design a mobile application on the Android system in order to help RMIT university students become more active in terms of community, clubs and fitness. This application will help to offer alternative ways to get to university other than public transport or driving.

This application is mainly targeted towards the students attending classes at RMIT. Some of the major components of this approach is to increase the number of students riding, walking and running to the university as well as boost the social aspects by increasing awareness of various clubs, their activities and their events. By increasing these components of university life, it will become more enjoyable for students as well as reduce the cost of living due to not needing to catch public transport or pay for fuel.

The client of the application is RMIT, in it's concern for both the physical and mental health of the students attending. Thereby the university has commissioned a new application to be designed in order to help benefit the attending students in these aspects of their personal health.

The 'EndorFIT' app will support many different features that will be available to all users, however some of the major functions are:

- A journey planner for both running and cycling that will allow users to plan their routes to their classes as well as award them different point values for choosing a slightly harder route.
- A leaderboard that shows the top participants as well as their scores. This gamification should create some friendly competition between the varying students participating and motivate them to continue improving their fitness/health.
- Clubs that the user will 'enrol' in and be able to participate in various events as well as keep track of what is happening via announcements and be able to take part in general discussions between members.
- To help students to meet up effectively the option to 'friend' and talk to other users will allow them to plan meetups between themselves while also enabling general conversation.

Thus with these goals and general features in mind, the Android app called 'EndorFIT' has been designed to match and fulfill these set conditions by helping to communicate with the users about various events as well as keep track of their progressive fitness data.

User Groups

Fitness Enthusiasts

Demographic	- University Student (Probably aged 18 – 25) - Gender inclusive - Most likely Victorian residents - Any year level of university
Attributes	- Wants to get active and get/stay fit while juggling university life/work - Able-body person who can partake in certain fitness activities
Domain Knowledge	- Knowledge of the club type/hobby he/she is interested in - Understanding of game progression and rewards
Skills	- Knows how to use a mobile phone and modern features such as a touch screen - Can understand mapping mobile applications or mapping as a mobile function

Fitness newbie

Demographic	- University Student (Probably aged 18 – 25) - Gender inclusive - Most likely Victorian residents - Any year level of university
Attributes	- People new to having a fitness regime scheduled into their lives - Wants to get active and get/stay fit while juggling university life/work - Not necessarily very fit
Domain Knowledge	- Knowledge of the club type/ hobby he/she is interested in - Understanding of game progression and rewards
Skills	- Knows how to use a mobile phone and modern features such as a touch screen - Can understand mapping mobile applications or mapping as a mobile function

Social Butterflies

Demographic	- University Student (Probably aged 18 – 25) - Gender inclusive - Most likely Victorian residents - Social people (extroverted*) - Any year of university
Attributes	- Wants to network and meet new people while at university - People who want to further their interest into a particular hobby/activity/interest around people who share said interest
Domain Knowledge	- Knowledge of the club type/hobby he/she is interested in - Knowledge of the subsequent terminology and colloquialisms associated with that hobby - Understanding of game progression and rewards
Skills	- Knows how to use a mobile phone and modern features such as a touch screen - Knowledge on how to use mapping mobile applications or mapping as a mobile function

Club Organisers

Demographic	- University Student (Probably aged 20 – 30) - Gender inclusive - Most likely Victorian residents - People who have an interest in "X" - Most likely not in their first year of university
Attributes	- People who want to further their interest into a particular hobby/activity/interest around people who share said interest by hosting club events - People wanting to notify club members of interesting events held in the community
Domain Knowledge	- Knowledge of the club type/hobby he/she is interested in - Knowledge of the subsequent terminology and colloquialisms associated with that hobby
Skills	- Knows how to use a mobile phone and modern features such as a touch screen - Knowledge on how to use mapping mobile applications or mapping as a mobile function

Personas, Context Scenarios and Key Path Scenarios

Joe Perlind

"Time to turn the flab into abs"

Persona 1: Fitness Newbie

Background
- 22 year old
- Lives near the city campus
- Student of Engineering - Second year

Needs
- Needs to be able to browse the activity choices available
- Needs to be able to use navigation to focus his search
- Needs to be able to read a description of the activity (including any expenses, what the activity entails, where it is held etc.)
- Needs to be able to substitute activities in his life with healthy alternatives (E.g. Active modes of transportation)
- Needs to have a motivation to continue his fitness activities when it becomes "too hard"
- Needs a checklist of fitness activities he must do so he has a sense of completion, progression and satisfaction when he does said activities
- Needs to be able to talk to others who share his desire to get active and schedule fitness sessions with them (And add them as "friends")
- Needs to know the route/location in which he will do these activities
- Needs to be notified of any announcements/changes to the regular program

Goals
- To become more fit/healthy and to get into shape
- Arrive at university on time

Skills and Experiences
- Is able enough to partake in said activities
- Knows how to use a smart phone with a touch screen
- Knowledge of how to use chat applications
- Can understand and use a qwerty keyboard
- Knows how to use a mapping mobile application/function

Context Scenario

It's a brand new day and Joe is woken by a phone notification prompted by EndorFIT. Staring at his overly large belly, Joe is motivated to change his ways and cycle to university. He sees that he is extremely low on the cycling leaderboard on EndorFIT and is compelled to cycle to uni. He uses the endorFIT app's cycling function to find a route to RMIT. The app presents a couple of different choices of rides from 'easy' to 'hard' and it presents their point value alongside them .

He chooses the 'hard' option and confirms the route, preparing for the journey ahead. After a long cycle taking the route given to him by the app he arrives at RMIT, riding 10 kilometers in total. The app notifies he has finished his journey and awards him points for finishing the trip. A large congratulations graphic appears for his hard work. He smiles seeing his positioning drastically jump up on the leaderboard. He feels his belly shrinking already and is ready to learn for the day ahead.

Key Path Scenario

#	User Action	System Response
1	No user input	Joe receives an app notification about cycling to university today
2	Joe presses the notification	App opens to the fitness panel
3	Joe clicks on the leaderboard icon	Apps opens up leaderboard and shows his position on it.
4	He returns back to the cycling panel and then clicks cycling	App presents the cycling page with a journey planner and some greyed out details
5	Joe then clicks on the journey planner button	Apps opens up the journey planner page and prompts him for a destination
6	Joe enters the location of the RMIT campus	App presents a couple of different routes which are labelled as 'easy', 'medium' and 'hard' along with their associated point values and distances.
7	Joe selects the 'hard' option	App highlights the path and prompts for directions
8	Joe presses the directions button	EndorFIT presents the directions alongside a GPS map
9	Joe follows the directions and arrives at RMIT safely	App presents a congratulations screen with how many points he gained and his new position on the leaderboard

Sue Potts

"Changing friends like changing seasons"

Persona 2: Social Butterfly

Background
- 21 year old
- Lives in an apartment in the Melbourne CBD
- Student of Social Work - Second year

Needs
- Needs to be able to browse through RMIT clubs
- Needs to be able to use navigation to focus her search
- Needs to be able to read a description of the club (including any expenses, what the club does/is about, where it is held etc.)
- Needs to be able to contact and talk to people who also use the app (possibly in the same club or a club she wants to join) (And add them as "friends")
- Needs to be able to contact the supervisor/admin of the club (A contact function or just a provided contact details list)
- Needs to know the route/location in which the club operates
- Needs to be notified of any announcements/changes to the regular program

Goals
- Wants to be more social
- Find people who are interested in the same topics as her

Skills and Experience
- Can be experienced or new to the club's activities
- Knows how to use a smart phone with a touch screen
- Knowledge of how to use chat applications
- Can understand and use a qwerty keyboard
- Knows how to use a mapping mobile application/function

Context Scenario

Sue has finished all her morning lectures and now must wait 5 hours until her practical later that day. In between this time Sue wants to check if any of her clubs are hosting an event or if there is a meeting today that she can attend. In order to check, Sue quickly opens the 'EndorFIT' app and navigates to the clubs page in order to see if there are any new notifications.

Seeing that the Vegan club has a few new notifications she checks their page to find a brunch being held. Hungry, she selects "Going" and quickly checks the location and the start time. Excited about the brunch, Sue sets off eager to meet new like minded people and to have some delicious greens.

Key Path Scenario

#	User Action	System Response
1	Sue opens the app and goes to the myClubs page	App presents the myClubs page and the latest feed of announcements from the clubs
2	Sue presses the myclubs button	App presents the clubs with the unread notifications of each club in a small circle
3	Sue selects the Vegan club	The App presents Sue with the page for the vegan club, consisting of recent posts/events
4	Sue selects the "Brunch" event	The App presents Sue with the page for the "Brunch" event including its title, description, time, location, people that are going etc.
5	Sue presses the going button	The app changes to show that she is going.
6	Sue presses the 'location' button	App presents a map with location data and directions to the destination

Jack Clubs

"Who else likes some good ol' cycling?"

Persona 3: President of the Cycling Society (Club Organiser)

Background
- 21 year old
- Lives somewhere in Melbourne
- President of the Cycling society
- Student of Psychology - Third year

Needs
- Needs to be able to edit the page for the club
- Needs to be able to make club events
- Needs to be able to contact and talk to other organisers of the club
- Needs to be able to set the route/location for the club events
- Needs to be able to make announcements to the club members

Goals
- Update club events and details
- Check who is going to events
- Notify all members of the club with new events and announcements

Skills and Experience
- Has knowledge of the club's "type/focus"
- Knows how to use a smart phone with a touch screen
- Knowledge of how to use chat applications
- Can understand and use a qwerty keyboard
- Knows how to use a mapping mobile application/function

Context Scenario

Jack is the president of the Cycling society at RMIT. He was recently approached by a local gym that wants to give a talk to the club about cycling tips, tricks and fitness opportunities as well as offering discounted memberships to the university students. After some back and forth between the gym and Jack they decide on a time, date and place for the talk.
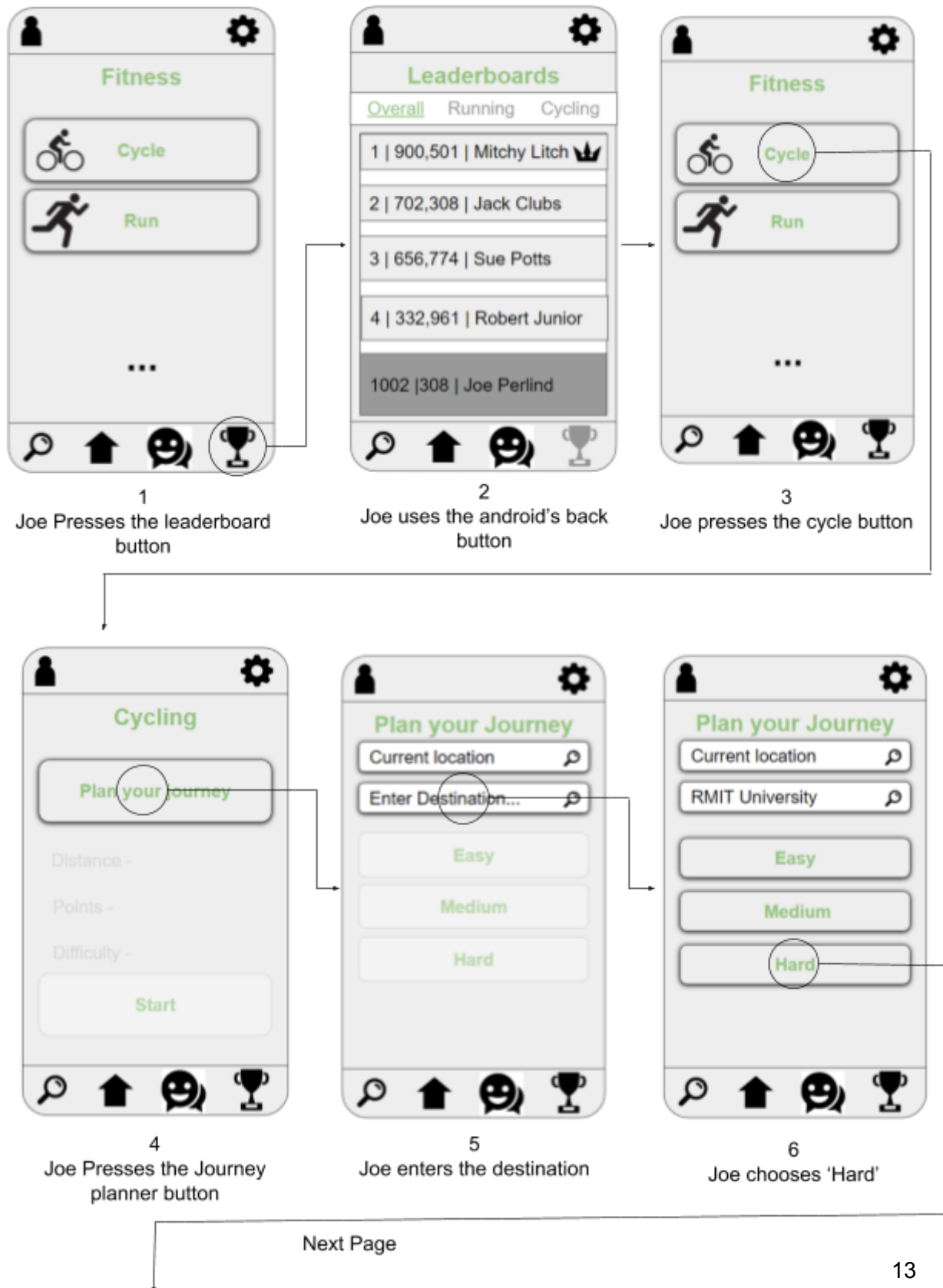
Jack then opens the 'EndorFIT' app and goes to the clubs page and clicks on create new event. He gives it a title, time, location, description and all other relevant information such as the gym's name. He posts the event and an announcement is sent to all members of the club. Jack then closes the app and eagerly awaits for responses and comments from the members.
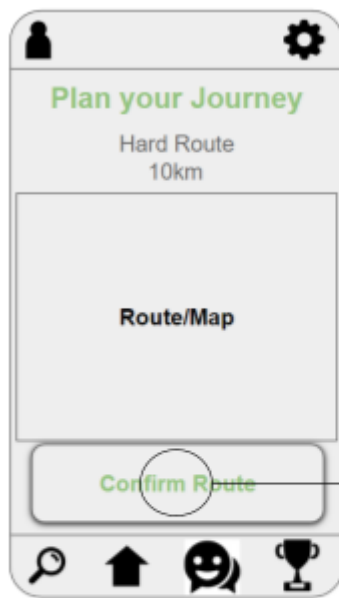
Key Path Scenario

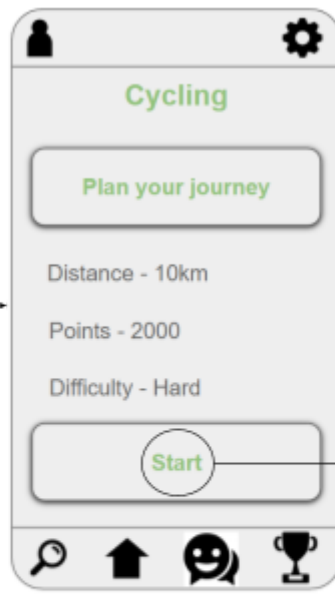| #	User Action	System Response
1	Jack opens EndorFIT and selects the myClubs page	The App presents the myClubs page
2	Jack goes to the cycling society page	The app changes to the cycling society page with the usual details in view
3	Jack presses 'Create New Event'	The app presents a create new event page where it prompts for the various event details
4	Jack enters the details for the event into the app and posts the event.	The app notifies that the event was posted and sends to all club members.

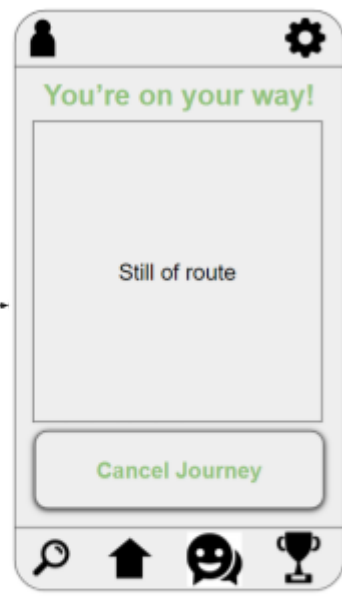# Wireframes and Design Principles
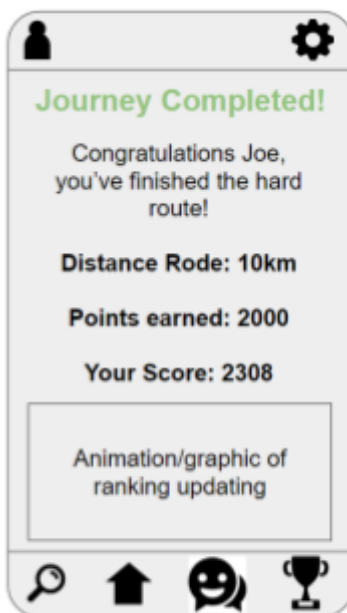
Joe Perlind (Journey Planner)

1
Joe Presses the leaderboard button

2
Joe uses the android's back button

3
Joe presses the cycle button

4
Joe Presses the Journey planner button

5
Joe enters the destination

6
Joe chooses 'Hard'

Next Page

Plan your Journey

Hard Route
10km

Route/Map

Confirm Route

7
Joe confirms the route

Cycling

Plan your journey

Distance - 10km

Points - 2000

Difficulty - Hard

Start

8
Joe presses 'Start'

You're on your way!

Still of route

Cancel Journey

9
Joe follows the directions
provided

Journey Completed!

Congratulations Joe,
you've finished the hard
route!

Distance Rode: 10km

Points earned: 2000

Your Score: 2308

Animation/graphic of
ranking updating

10
Joe is awarded points for
finishing the ride

Sue Potts (Event Finding)

1
Sue taps the 'Clubs' button

2
Sue presses the 'myClubs' button

3
Sue taps the 'Vegan Club' as it has 5 notifications

4
Sue taps on the 'Vegan Yum Time' announcement

5
Sue ticks that she is going
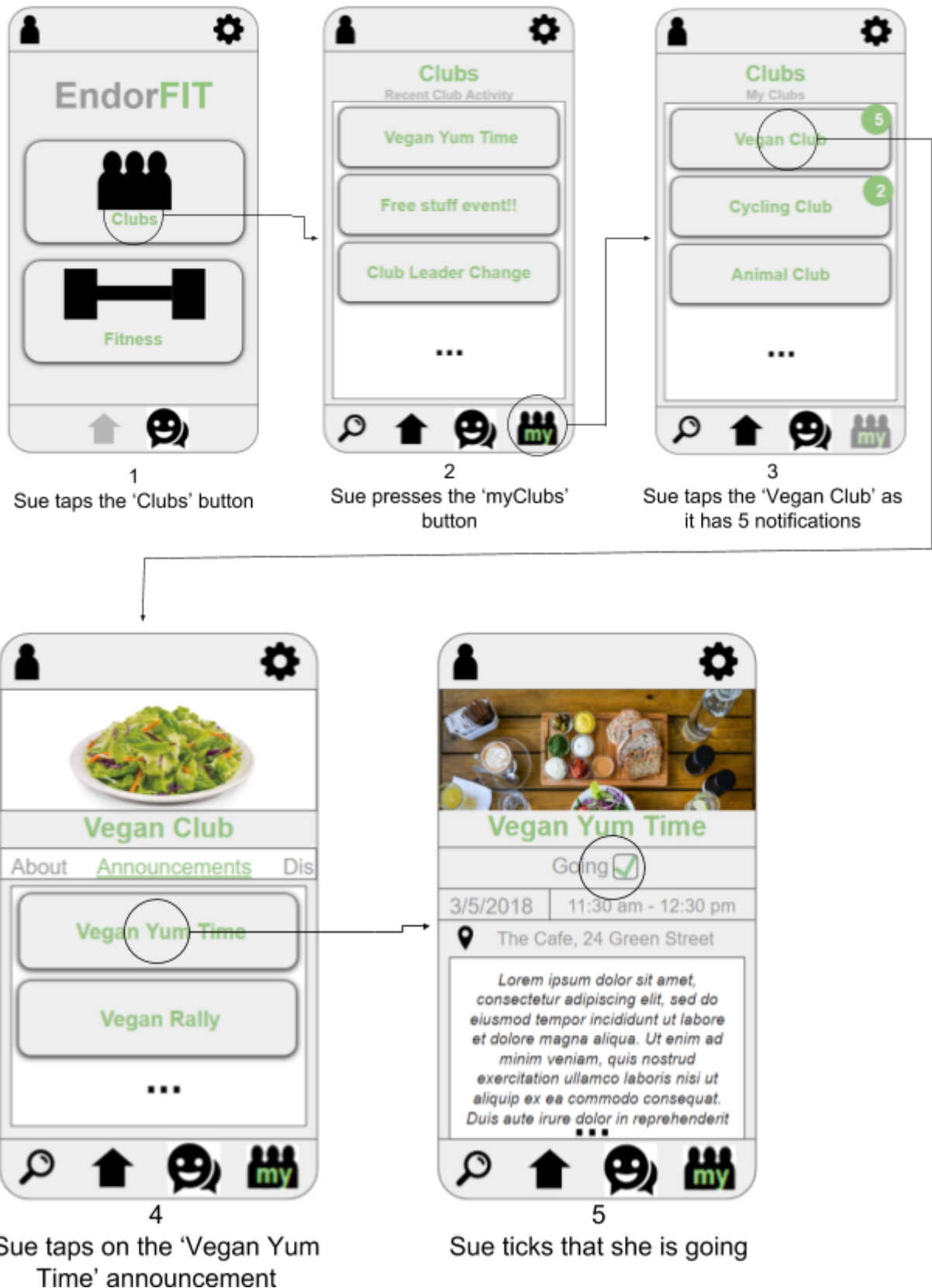
Design Principles

Nielsen's Heuristics

Match Between Real World and System

'EndorFIT' ensures that users can understand the various buttons and actions by following real world conventions such as the 'home' button being a house and the search button being a magnifying glass. This helps various different users to both understand the system as well as what actions are available at different times.

User Control and Freedom

The app 'EndorFIT' was designed as to provide many 'emergency exits' from the app which can be seen in the Journey Planner section which has a button labelled 'Cancel Journey'. This button ensures that users are not trapped in a journey if anything were to happen such as it begins to rain or if they decide to change their mind.

You're on your way!

Still of route

Cancel Journey
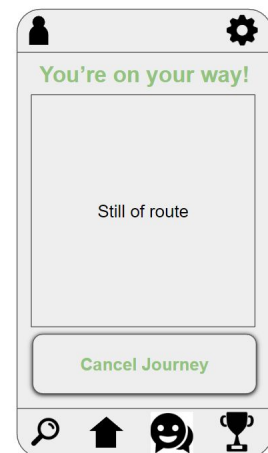
Patterns

Responsive Enabling

The design pattern of responsive enabling has been used in order to ensure that users only use relevant buttons. An example of this within the app is when the user is planning their journey and has not entered the destination and start point then the user cannot select the difficulty of the journey.
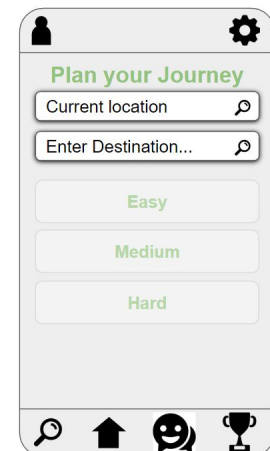
Center Stage

'EndorFIT' has used center stage to help display relevant and important information to the user such as club events or on the home screen in the center of the screen. This can be seen on the homepage of the app as the main two buttons are displayed in the center of the screen allowing users to easily locate the pair of them.

Card Stack

Card Stacks have been used in several places throughout the app in order to group relevant information as well as prevent massive scrollbars being used to display all of the information. A Card stack has been used at the clubs homepage in order to help group relevant information as well as allow users to easily navigate between the various cards to locate the information they want both quickly and effectively.
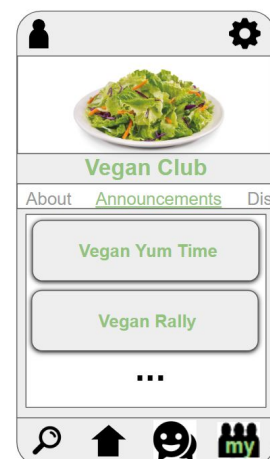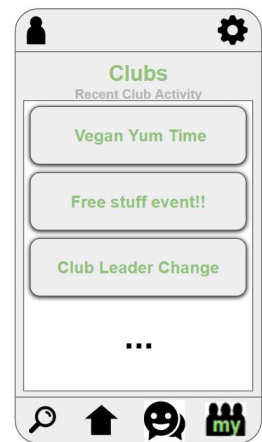
Principles

Contrast

Contrast has been used to help focus the user on the important information that is currently being displayed. An example of this is on the leaderboard screen where the user position is darker than the other places so as to let the user find themselves quickly.
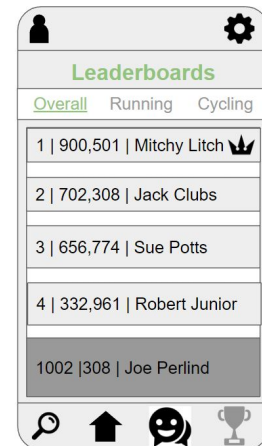
Prominence

The design principle of prominence has been used in the design of the app in many key locations however it is mainly demonstrated at the tops of each screen. This example of prominence helps users to know the main purpose of the screen that they are currently using. An example of this is the clubs page where the titles of all the clubs activities allow users to locate important events or notifications.

Bibliography

Salim, F. (2018). Nielsen's Principles.

Salim, F. (2018). Design Patterns.

Salim, F. (2018). Design Principles.