



UNIVERSITY of LIMERICK

OLLSCOIL LUIMNIGH

HCI Assignment #5

Designing a Finished & Complete App

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Course: Computer Games Development

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Project Idea

Our idea is to be a fitness application that allows users to create and discover new running routes in their area and to allow these users to track their diet plan within the app, removing the use of secondary diet trackers. The users can calculate their calories and be informed on the calorie count on foods. To help motivate and connect users, they can connect with their friends and compete on leaderboards, whether it is local or global to try and attain the #1 time trial. The idea is to unify all aspects of a person's fitness regime into one application and still be able to socialise with their friends. From our research, we were able to specifically identify our target groups. Below are our revised user-types:

- Fitness enthusiasts looking for an all-in-one application to aid their exercise and diet tracking.
- Working people who are short on time and want an application that can offer standard routines to follow.
- Unmotivated people who want to become motivated again and gain a fun hobby and socialize with people.
- Unhealthy people who never exercised and rarely go outside who are unsatisfied with their lifestyles.

Key Tasks That Our Interface Supports

Home

The Home Screen features three cards. Each card corresponds to one of the app's main function areas, which are:

1. Exercise

Planning and tracking a user's exercise, both on and off of defined routes. This card gives the user a glance at their exercise statistics for the day, as well as quick access to start a planned run. The background is the map of the next run.

2. Diet

Planning and tracking a user's diet. This card gives the user information on their calorie intake, compared to their goal for that day. It also tells the user when their next meal is planned for and allows quick access for the daily meal plan. The background image is their next meal.

3. Social

Allowing users to connect to one another, encouraging friendly competition and peer-support. This card gives the user quick access to the latest update from one of their friends.

Navigation Tray

The Hamburger icon on every screen will open the Navigation Tray. From here*, the user can access each major component of the app. They are as follows:

- **Home**

Return to the Home Screen.

- **Profile**

Here the use can review their profile and make changes.

- **Exercise**

Here the user can review their exercise data, by daily, weekly or monthly intervals. They can start a run in one of two ways. A Quick Run simply tracks the user's run, regardless of context. A Current Run, dependent on the user's exercise plan, will display and track progress along a route.

- **Map**

The map screen allows users to find key locations, such as the starts of routes or nearby gyms. A dropdown menu allows the user to control this.

- **Diet**

The diet plan tracks how many calories the user has eaten, compared to the day's target calories. The user can select individual days to view the planned meals and edit them.

- **Goals**

Here the user can view their current progress to their goal, as well as the required exercise sessions remaining for the week to achieve this goal. They can edit their goal, changing target dates and goal criteria.

- **Friends**

On the Friends Screen, the user can see a feed of their friend's exercise activity, as well as receive challenges. To add a friend, other users can be searched for using their email or username, or a QR code can be scanned in person. Selecting the QR icon at the top of the screen opens the QR in full size. Selecting another user will open their profile, which hides some personal information. From here, the user can issue challenges.

- **Leaderboards**

Here the user can see leaderboards for exercise performance. These can be narrowed down to specific groups and/or specific routes. The user can select a person on the leader board to view their profile.

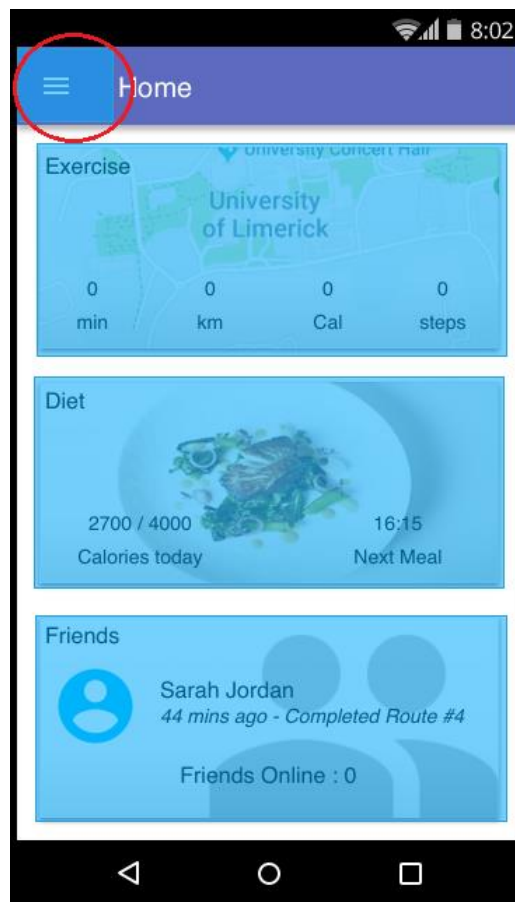
** Due to the inability to scroll in InVision, a "More/Less" button had to be used. Selecting this moves the Navigation Tray down to access the remaining items.*

Changes Made From Assignment #4

The main objective for us in Assignment #5 was to refine our application with the feedback we received in our Usability Test. In Assignment #4 we detailed 14 proposed changes to our application we could try to make as a result of the feedback we received. Below are our deliberations on all of these proposed changes:

1. *Increase size of clickable elements*


In the Usability Tests we received feedback that the space where buttons were clickable was too tight, this was an InVision issue in which we rectified in our new InVision application as we expanded the clickable regions on all of our clickable elements, below is a screenshot of how far we expanded the clickable region on our ☰ option which opens our Navigation Bar:

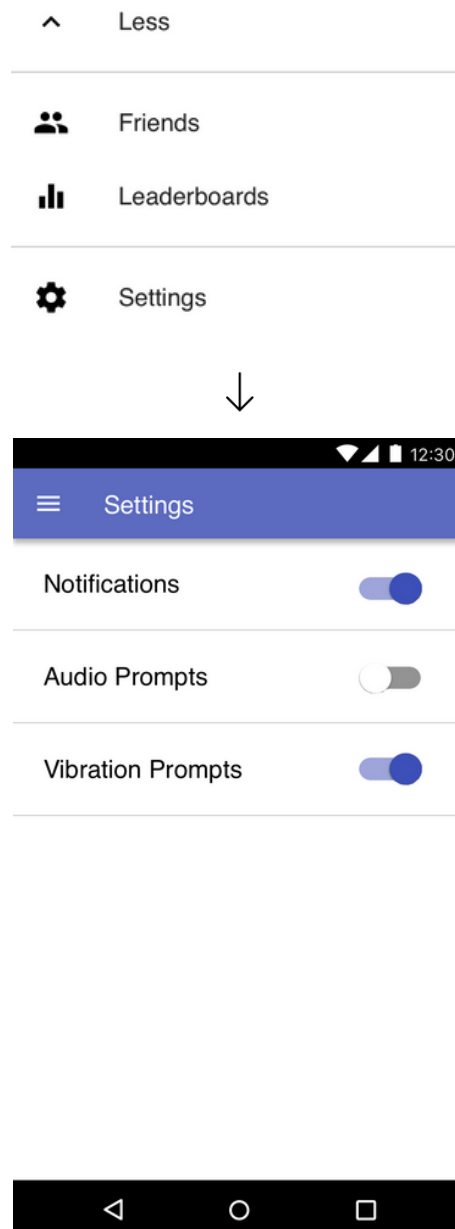


2. *Some buttons missing*

In creating our InVision prototype for Assignment #4, we overlooked various options that should have been clickable in our application, for Assignment #5 we revised every screen in our application to ensure all elements that should be clickable have that functionality.

3. *menu unhelpful, a dedicated Settings button is needed*

The primary piece of feedback received that the  menu was unhelpful; we took action on this to implement a dedicated Settings option in our Navigation Bar that holds all the relevant application settings.




4. Colours need changing

This feedback wasn't gathered from Usability Tests but from our own internal discussion, some group members believed that the colours our application should change from our indigo-mix colour. After tests and deliberation we chose to stick to our original colour design. Below are colour schemes we tried:

800	#C62828	800	#AD1457	800	#6A1B9A
900	#B71C1C	900	#880E4F	900	#4A148C
A100	#FF8A80	A100	#FF80AB	A100	#EA80FC
A200	#FF5252	A200	#FF4081	A200	#E040FB
A400	#FF1744	A400	#FF0057	A400	#D500F9
A700	#D50000	A700	#C51162	A700	#AA00FF
Deep Purple		Indigo		Blue	
500	#673AB7	500	#3F51B5	500	#2196F3

5. Need to make it easier to add friends

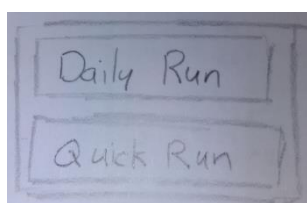
In Assignment #4 we did not add an option in Friends to re-direct users to our Find Friend feature; instead we hid it in a layered settings menu. We added this  as a button to easily direct users to the option in which they can add friends from within the Friends feature.

6. Diet card should link to today's meals

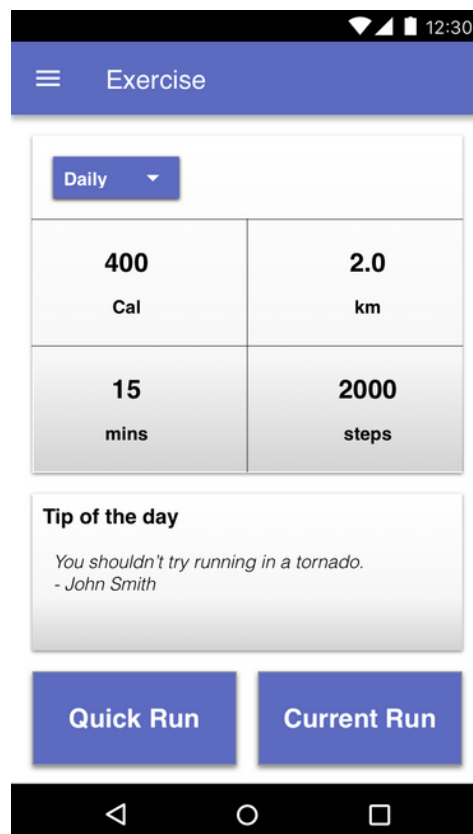
The group decided that it was more logical that when users press on the Diet card on the Home screen that it bring them to today's meals instead of "Add Diet Plan" as the information displayed on the Diet card show today's meal information.

7. Nowhere to access Current Run from within Exercise


Current Run was only accessible at the Home screen; it should also have been included in the Exercise feature. We tested various implementations of this, the first being a drop down menu within Exercise:

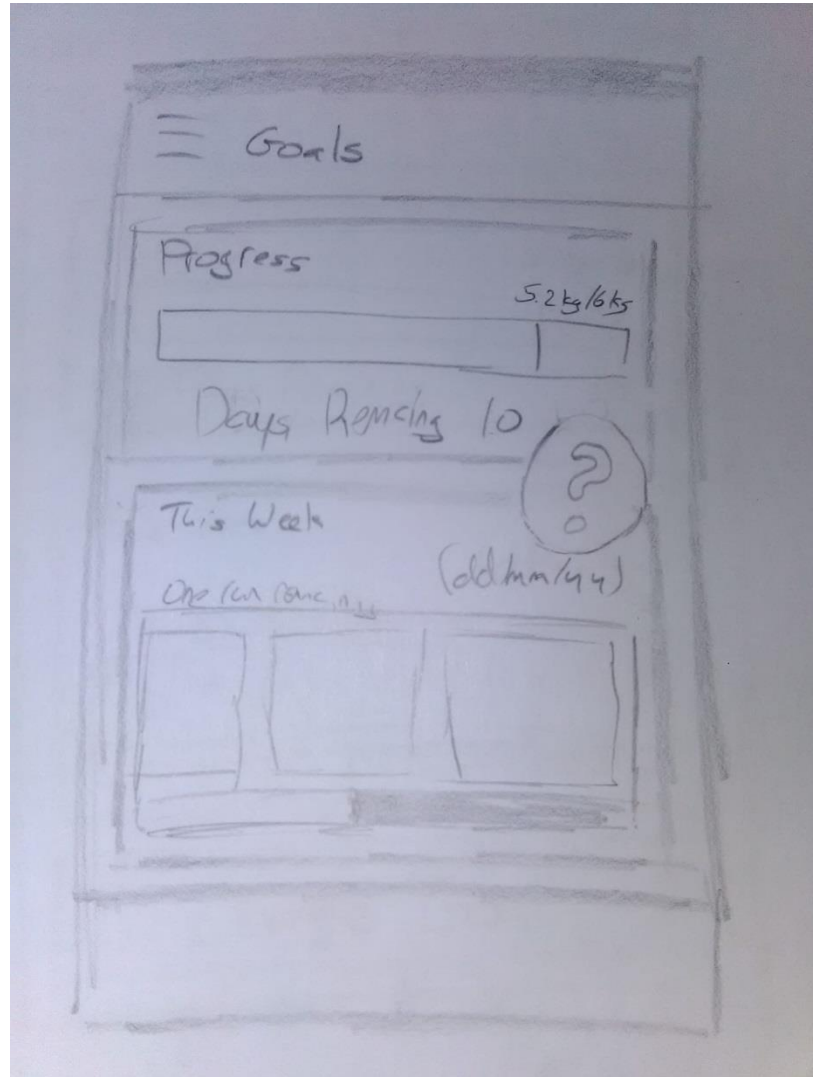


The second was to equally split the Start Run (now Quick Run) and the Current Run (seen here as Daily Run) as it is equally possible that users could want to choose one of these options so they should have the same screen presence. We decided on this implementation for our application:



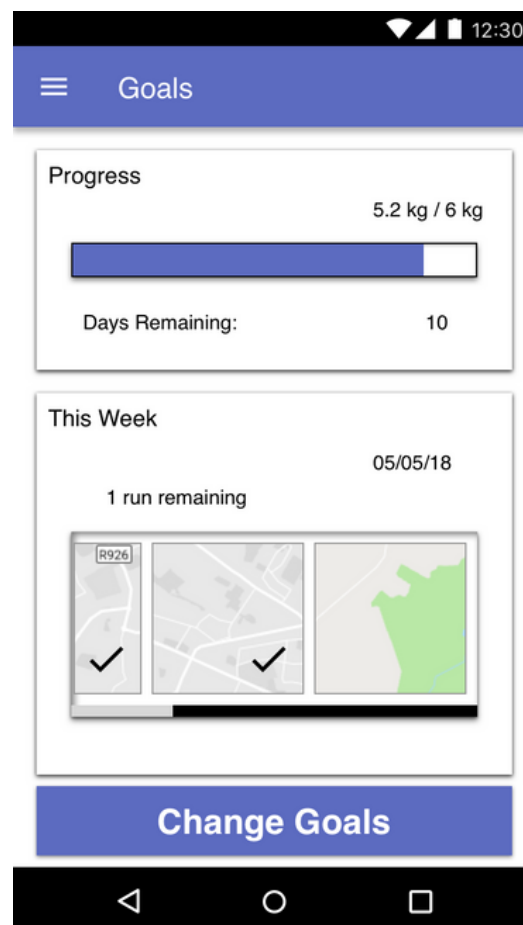
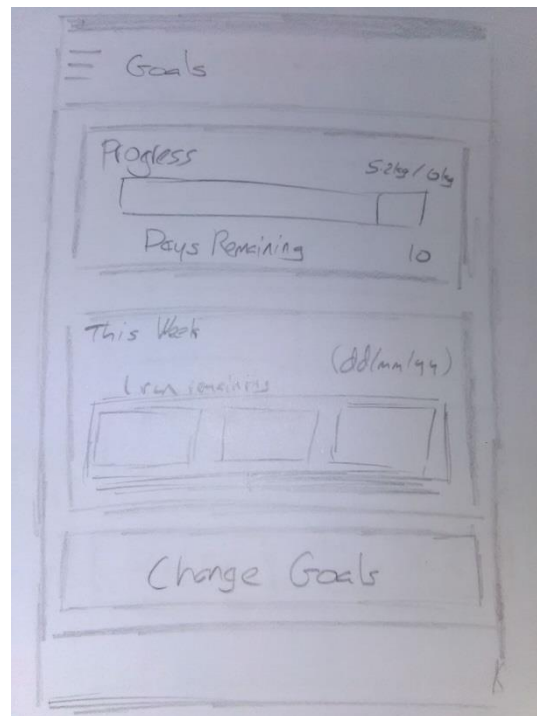
8. Nowhere to Add Goal from Goals screen

This option was in the  menu, we added this to the Goals screen instead as it is a prominent function within the Goals feature. Our first idea was to add some sort of button accompanied with an icon (? in the image) to guide users to the option:



We decided against this implementation as a small icon on screen would not accurately display the importance of this feature. Our second implementation held the feature to a higher regard and highlighted it at the bottom of the screen. It then brought the user to the Create Goal screen

which is the screen that the users were initially wanted to reach; this also holds a better logical flow so we implemented this:

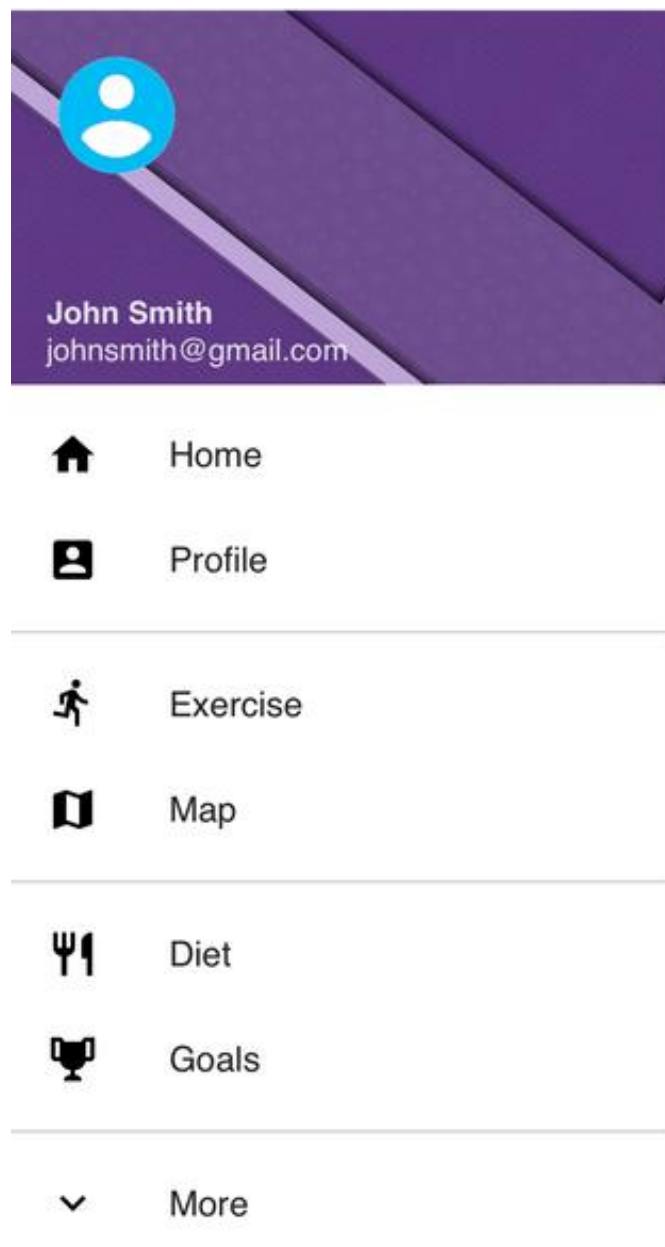


9. *Goals is difficult to access*

In Assignment #4 the steps needed to reach the Goals screen was:

Exercise → Exercise Planner → Goals


This was too much clicks for such an important feature so we moved the Goals feature to an area on the Navigation Bar as it is a feature that users said it was the reason they would come to the application:

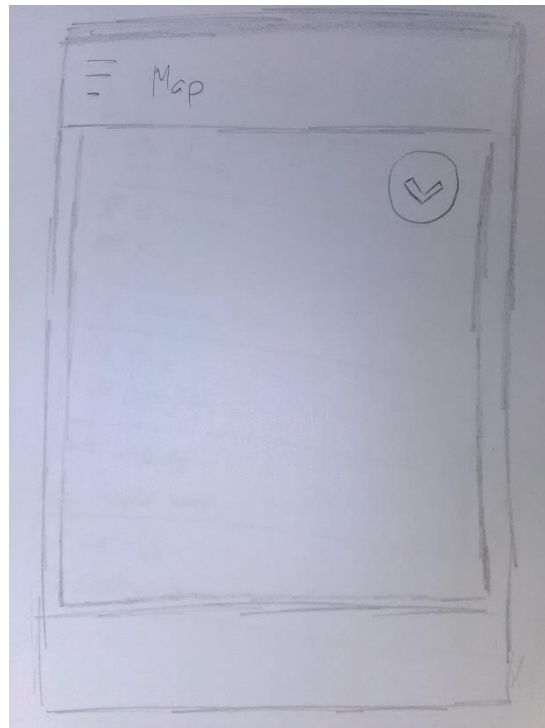


10. *Leaderboard should highlight user's best run*

A user gave feedback that the leaderboard may be better suited to be inside Leaderboards, but after discussion the group came to an agreement that your best run should be highlighted on your own profile as an achievement or sorts, which is why we decided not to implement this change.

11. *Map menu icon should be clearer*

Users gave feedback on how the  icon was confusing to understand. We discussed this as a group and sketched a possible re-designed icon on the Map screen:

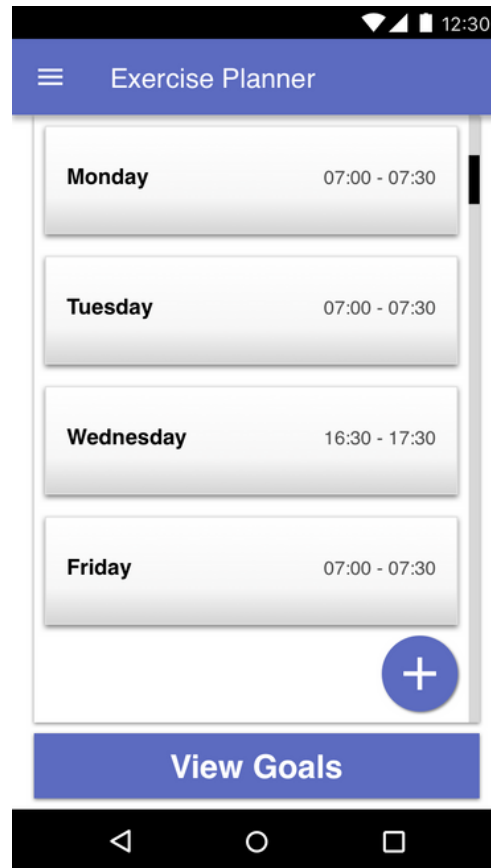


But after research, we concluded that we were adhering to Google's Material guidelines and Google used this exact icon on their Google Maps application. Therefore, we chose not to change this aspect of our application.


12. *Should have access to Create / Edit Goal from Exercise*

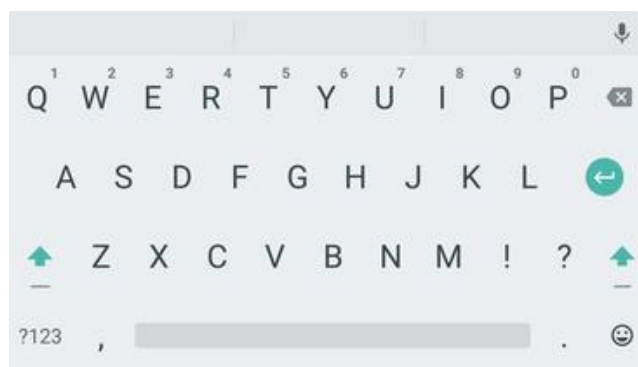
Within the Exercise Planner, users are currently unable to change their Goal easily, when logically there should be an option in here for this. Within the Exercise Planner, users were unable to go to Goals from that screen, when thinking logically; there should be an option there as they are

interlinked features. This is why we added a button at the bottom of the exercise planner that allows the users to enter the Goals options from here if they wish:




13. Need Edit Diet Plan Options / Screen

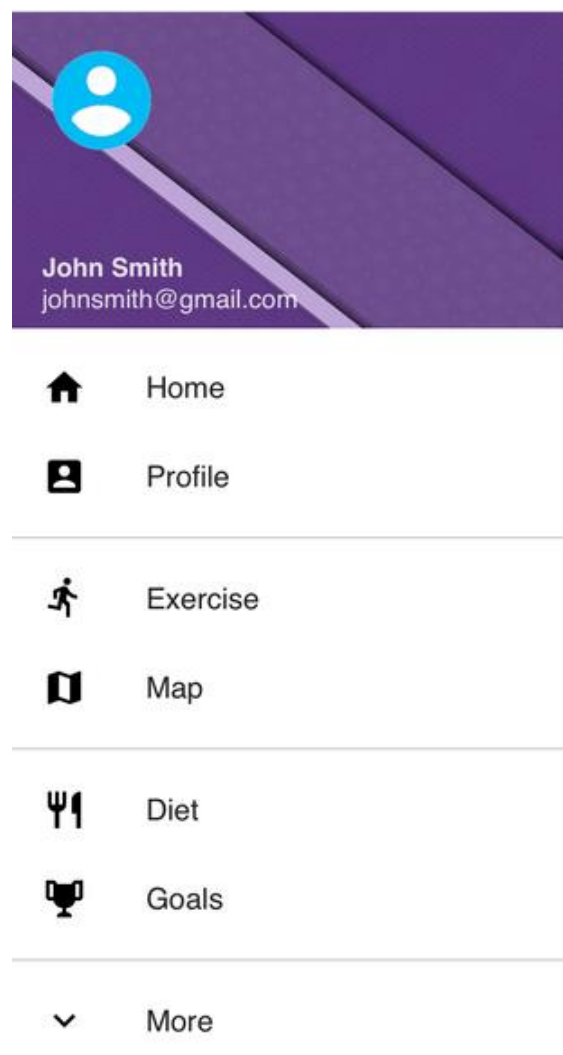
In Assignment #4 our Diet Plan led users to their Meals for that specific day, but when clicking on them we had no visual display that they could edit their meals for the day. This is why we linked  to the keyboard:



From this keyboard popping up, users can easily understand that they can now type information for their meals in the relevant card on screen.

14. Profile should be easily accessible

The user's profile was brought up to be very hard to navigate to, this brought around the discussion to more easily highlight the feature. The group decided on adding it to the Navigation Bar and to remove the  as it was unused:



Final Prototype

Our final, feedback-based prototype was implemented using the using InVision due to our familiarity with the tool with our Sketch-created images. (Sketch, 2018) Below is the link to the prototype:

Final Prototype

(InVision, 2018)

References

InVision. 2018. *Digital Product Design, Workflow & Collaboration / InVision*. [ONLINE] Available at: <https://www.invisionapp.com/>. [Accessed 25 April 2018].

Sketch. 2018. *Sketch - The digital design toolkit*. [ONLINE] Available at: <https://www.sketchapp.com/>. [Accessed 25 April 2018].

Appendix

Activity & Meeting Log

For referential purposes, group member names have been shortened:

B – Barry O’ Riordan – 13144278

C – Chris Mulvihill – 14173735

D – Darragh Higgins – 14145464

N – Nathan Murphy – 14173778

Workshops

Date: Monday 16th of April.

Location: CS3-004b.

Attendees: B, C, D, N.

Length of Meeting: 2 hours.

Notes: Reviewed proposed changes to application.

Date: Friday 20th of April.

Location: CS4-004b.

Attendees: B, C, D, N.

Length of Meeting: 3 hours.

Notes: Brainstorming solutions, based on sketches.

Date: Wednesday 25th of April.

Location: CS1-045.

Attendees: B, C, D, N.

Length of Meeting: 8 hours.

Notes: Implemented changes to Sketch Images.

Created updated InVision Prototype based off new Sketch images.

Non-Collaborative Activities

Date: Wednesday 18th of April

Task: Consider solutions to proposed changes. Create sketches.

Time Taken: 3 hours

Date: Thursday 26th of April

Task: Completed Assignment #5 Report.

Time Taken: 2 hours