iPhone Assignment Group Effort Form



Group Number: A1 - Group 14

Score range (10-7)	The group member made rigorous and regular contributions
Score (7-5)	The group member was mostly present and contributing, with minor lapses
Score (5-3)	The group member was average in terms of contribution, disappeared from time to time
Score (3-0)	This group member made minimal contribution and was disengaged for most of the project.

1tj.— Use the Self-assessment rubric above to come up with a final score for each of the group members in the team. The values should reflect the relative percentage of contribution.

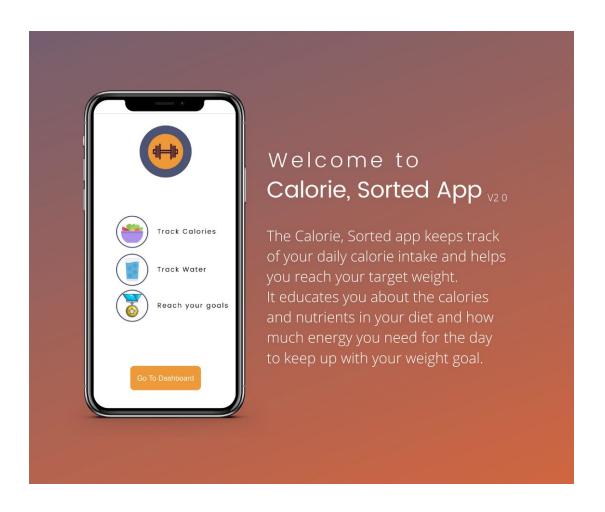
The scoring should be done by group consensus and should be updated weekly through the period of the assessment. If any student is rating low then the group should put in a plan for the student increase their contribution.

Group Member (Name Student Number)	Score #
Sample: Jane Doe 3333333	
Student 1: Abida Mohammadi s3811920	10
Student 2: Timal Pathirana s3703235	10
Student 3: Joshua Barua s3610346	10
Student 4:	

 2^{nq} – Discuss this amongst yourselves and rate the efficiency of your group dynamics. Enter a score from 1 to 4.

1 = awful; 2 = average; 3 = most of the times; 4 = always

Group dynamics	Score #
We were in complete sync with each other.	4
We communicated on a regular basis.	4
We had positive disagreements.	4
We were very productive in terms of outcomes.	4
We took initiative.	4



Group Members

Abida Mohammadi s3811920

Timal Pathiranage s3703235

Joshua Barua s3610346

Git URL

https://github.com/rmit-S2-2020-iPhone/a1-s3811920 s3703235 s3610346 s3771369.git

Table of Contents

App Statement	4
App Preview on App Store	6
Research (Other Apps)	7
Summary (Selling Points)	13
REST-based API	14
Sketches - Low	
Fidelity	18
Sketches - Medium Fidelity	20
Sketches - High Fidelity	21
Design Themes (Apple)	22
Clarity	
Depth	
Deference	
Design Principles (General)	24
Contrast	
Repetition	
Alignment	
Proximity	
Student Log	28

App Statement

App Name: Calorie, Sorted

Slogan: 'The app to keep you on track'

Main Purpose:

The Calorie, Sorted application keeps track of your daily caloric intake and helps you reach your target weight by simply tracking your day to day meals. It educates you about the calories and nutrients in your diet and how much energy you need for the day to keep up with your weight goal. In addition, it will help you to keep track of daily water intake.

Selling Points:

With an emphasis on intuitive design and ease-of-use, Calorie Sorted intends to create a simple platform for users to track and maintain their caloric goals. With an abundance of fitness based apps, few are intuitive, funtiontional, and above all, free. Our goal is to bridge a divide experienced through the mundanity of daily logging, empowering users to reach their targets simply, and effectively without all the unnecessary junk (food).

There are a few key features that are common across every app to assist the user such as the barcode scanning feature, which could be a future addition to the currently proposed app, but apart from that we believe that our app could distinguish ourselves from the pack with a simple, clean-cut UI that doesn't overload the user with information and other features they weren't looking for.

Our application will assist users in achieving their health and weight management goals by keeping track of their calories and macronutrients. It will allow users to create custom meals that they can save and add on the fly.

Use Case:

Tired of always being left out of the good stuff? Sick of paying extra for the premium features?

We totally get it! That's why we've dropped the extra fees, ditched the annoying sign-up processes, and delivered a truly competitive Calorie-tracking app! Download Calorie Sorted now and keep track of your daily intakes. Simple to use, totally free, and be notified of your progress.

Keywords:

Fitness, Calorie track, Macro track, Free fitness tracker, Free calorie tracker.

.

App Store Preview



Calorie, Sorted

The app to keep you on track #10 in Health & Fitness

Screenshots







The Calorie, Sorted application keeps track of your daily caloric intake and helps you reach your target weight by simply tracking your day to day meals.

It educates you about the calories and nutrients in your diet and how much energy you need for the day to keep up with your weight goal. In addition, it will help you to keep track of daily water intake.

Tired of always being left out of the good stuff? Sick of paying extra for the premium features?

We totally get it! That's why we've dropped the extra fees, ditched the annoying sign-up processes, and delivered a truly competitive Calorie-tracking app! Download Calorie Sorted

Ratings and Reviews 4.7 out of 5 1.1M Ratings ***** annica304, 08/08/2020 perfect. I've always had issues with eating properly. See A **** Mlazarx, 09/02/2020 Great app for people serious about losing ... I started using this app seriously in mid-July. This app is very easy to use to log the food

COSC2645

Research (Other Apps)

1.MyFitnessPal

URL: https://apps.apple.com/us/app/myfitnesspal/id341232718

Whether you want to lose weight, tone up, get healthy, change your habits, or start a new diet, you'll love MyFitnessPal.



	MyFitnessPal	Our App
Calorie Count	Yes	Yes
Exercise	Yes	No
Track Water Intake	Yes	Yes
Social Community	Yes	No
Create a Meal and Calculate Calorie Count	Yes	Yes
Requires Login	Yes	No

Simple To Get Started	No	Yes
Scan Barcodes For Nutritional Information	Yes	No
Premium Option	Yes	No

UX/UI

The app requires user registration/login to begin and overall feels a little clunky with some unintuitive design. It would be quite difficult for someone who is not well versed in technology to become fluent with this app.

App Store Review

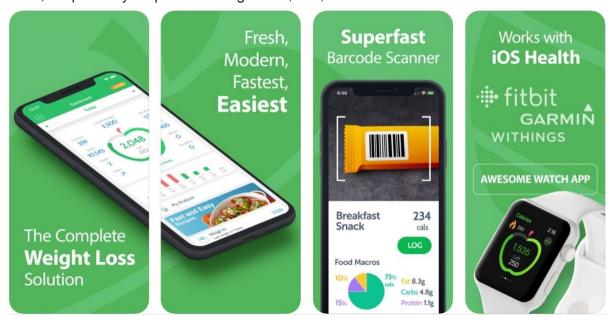
Lots of functionality, but not a very good app

"This app is a good utility, but if they gave the UI and functionality a bit more polish here and there it could be great. Some things are just clumsy and/or glitchy which makes using it throughout the day kind of a pain. I'll continue to use it, but as other similar apps arise I'll definitely keep checking them out as there's nothing really tying me to this one.

2.MyNetDiary

URL: https://apps.apple.com/us/app/calorie-counter-mynetdiary/id287529757

Discover the diet app that takes care of what the other apps don't. MyNetDiary - sleek, smart, simple. It's your personal weight-loss, diet, and nutrition assistant.



	MyNetDiary	Our App
--	------------	---------

Calorie Count	Yes	Yes
Exercise	Yes	No
Track Water Intake	Yes	Yes
Account Required	No	No
Create a Meal and Calculate Calorie Count	Yes	Yes
Coach	Yes	No
Simple To Get Started	No	Yes
Scan Barcodes For Nutritional Information	Yes	No
Watch App	Yes	No
Premium Option	Yes	No

UX/UI

The app doesn't require registration which is a big plus, there is a dark mode available for users who want the option, and it is a lot more simple to use than other options on the market. Not clunky nor cluttered.

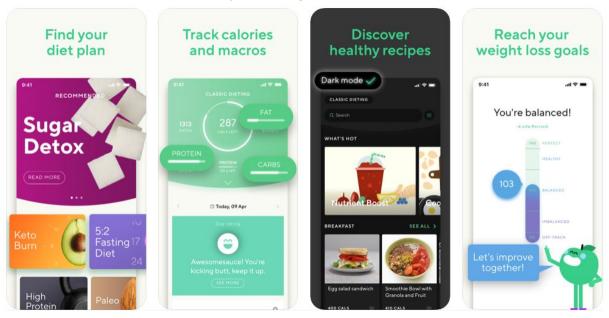
App Store Review Helps if you're honest

"Just deducted a star since they seem to be removing features from the free version - no longer see the macronutrient fat, carb, protein listing under the daily meals - only the summary of the day. For my needs the free version offers all I needed, I can't justify the cost to subscribe just to see the breakdown by meal. I don't need any of the extra features of the paid version. I got no major dietary issues to track."

3.LifeSum

URL: https://apps.apple.com/us/app/lifesum-diet-macro-tracker/id286906691

Personalized Diets and Meal Plans, food and exercise tracking, calorie counter, and healthy recipes, all in one place. Get healthy and feel great.



	LifeSum	Our App
Calorie Count	Yes	Yes
Exercise	Yes	No
Dark Mode	Yes	Yes
Create a Meal and Calculate Calorie Count	Yes	Yes
Personalized Diets	Yes	No
Simple To Get Started	Yes	Yes
Gamified Weight Loss Helper	Yes	No
Monthly Subscription	Yes	No
Scan Barcodes for Nutritional Information	Yes	No
Easy to use UI/UX	Yes	Yes

UX/UI

The app is easy to navigate and the design is very clean. There are a few screens that have a lot of information but are beneficial to the user. Overall, very intuitive design and simple to use. The complexity is between MyFitnessPal and MyNetDiary. The big downside is that most of the app is behind a paywall.

App Store Review

Pretty, but all the features require a premium upgrade

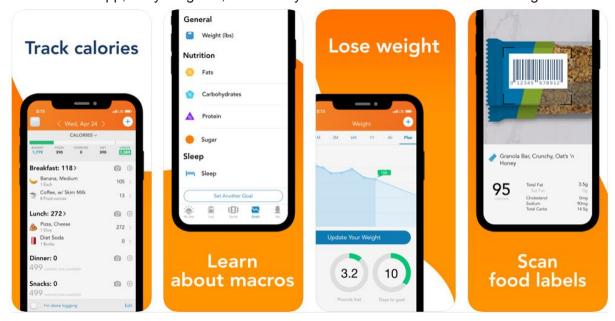
"So far I like the layout and the user-friendly nature of this app. It's easy to use and it has a nice aesthetic. The versatility of this app separates it from other fitness apps.

However, I wish it was more clear on which features come with the free version and which features are premium. I understand that the developer is trying to encourage people to upgrade (the price seems reasonable) but I've realized that almost all of the features listed in the description are premium features. I wish I had been told upfront what I can do in the free version rather than having a popup telling me I've encountered a premium feature as I'm touring the app."

4. Lose it!

URL: https://apps.apple.com/au/app/lose-it-calorie-counter/id297368629

Lose It! is a calorie counting app that helps you reach your weight loss goal. Simply download the app, set your goals, and track your foods and exercises to lose weight.



	LifeSum	Our App
Calorie Count	Yes	Yes
Track Weight Loss Over Time	Yes	Yes

Nutritional Information	Yes	Yes
Create a Meal and Calculate Calorie Count	Yes	Yes
Personalized Diets	Yes	No
Simple To Get Started	Yes	Yes
Requires Login	Yes	No
Monthly Subscription	Yes	No
Scan Barcodes for Nutritional Information	Yes	No
Easy to use UI/UX	Yes	Yes

UX/UI

A very user-friendly app that takes a more bare-bones approach to the UI. The app is good but, again the paywall seems to be a big determining factor in user retention and experience.

App Store Review

Good App. Poor Subscription Model

"Why should I be tempted to pay a continuous subscription to an app that is at best an estimator. A LOT of healthy features are reserved for premium users. No ads based premium version. No option to just buy the app because you have to pay continually - why? Wouldn't you rather spend it on a gym subscription? Because the app is not checking your blood pressure or anything — you have to feed it the data yourself. The calories on the boxes of items and defaults don't match. Editing beyond that is just a hassle. It's a nice fancy logger which has a lot of potentials - alas! the pricing model is too greedy."

Summary (Selling Points)

After having reviewed multiple apps it seems that a low barrier to entry, i.e. no login/registration, no premium subscription, and an easy to use UI, is of paramount importance. People that are trying to lose weight or stay healthy need fewer excuses and not more to start their fitness journeys.

There are a few key features that are common across every app to assist the user such as the barcode scanning feature, which could be a future addition to the currently proposed app, but apart from that, we believe that our app could distinguish ourselves from the pack with a simple, clean-cut UI that doesn't overload the user with information and other features they weren't looking for.

Our application will assist users in achieving their health and weight management goals by keeping track of their calories and macronutrients. It will help users log their weight over time. It will allow users to create custom meals that they can save and add on the fly.

REST-based API

1. Nutritionix API

https://developer.nutritionix.com/

URL Request: GET

https://api.nutritionix.com/v1_1/search/mcdonalds?results=0:20&fields=item_name,b rand_name,item_id,nf_calories&appId=da6ded5d&appKey=ba4444d5ebe219f0a185 ad113e80c954

```
Sample Response:
```

```
{
        total hits: 1,
        max_score: 2.0903163,
        hits:
        [
          {
               _index: "f762ef22-e660-434f-9071-a10ea6691c27",
               _type: "item",
               _id: "592925df9e0aa2e1332e1d60",
               score: 2.0903163,
               fields:
item id: "592925df9e0aa2e1332e1d60",
item name: "Chicken Pizza",
brand_name: "Lunchables",
nf calories: 220,
nf_serving_size_qty: 1,
nf_serving_size_unit: "serving"
}
}
]
```

2. The FatSecret Platform API

https://platform.fatsecret.com/api/Default.aspx?screen=rapiref2

URL Request: GET

https://platform.fatsecret.com/api/Default.aspx?screen=rapiref2&method=food.get.v2

```
Sample Response:
"Food":{
       "Food id":"4384",
       "food_name":"Plain French Toast",
       "food_type":"Generic",
       "food url": "http:\/\/www.fatsecret.com\/calories-
nutrition\/generic\/french-toast-plain",
"Servings":{
       "Serving":{
               "Added_sugars":"10",
               "Calcium":"8",
               "Calories": "159",
               "Carbohydrate": "20.02",
               "Cholesterol": "90",
               "Fat":"6.13",
               "Fiber": "0.8",
               "Iron":"9",
               "measurement_description": "regular slice",
               "metric_serving_amount":"65.000",
               "metric_serving_unit":"g",
               "monounsaturated fat": "2.298",
               "number of units": "1.000",
               "polyunsaturated_fat":"1.578",
               "potassium":"80",
               "protein": "5.58",
               "saturated_fat":"1.585",
               "serving description": "regular slice",
               "Serving id":"16758",
               "serving_url": "http:\/\/www.fatsecret.com\/calories-
nutrition\/generic\/french-toast-
plain?portionid=16758&portionamount=1.000",
```

```
"sodium":"320",
    "sugar":"4.87",
    "trans_fat":"0",
    "vitamin_c":"0",
    "vitamin_d":"2"

}

Food Database API

https://developer.edamam.com/food-database-api-docs

Request: POST request to access nutrients for retrieved food item

{
    "uri": "http://www.edamam.com/ontologies/edamam.owl#6cabde74-6a45-4da5-b100-f4138a587484",
    "yield": 1,
    "calories": 22,
```

"glycemicIndex": 38, "totalWeight": 123, "dietLabels": [

"healthLabels": [

"..."

"ENERC_KCAL": {

"label": "Energy",
"quantity": 22.14,
"unit": "kcal"

"cautions": [],

],

"totalNutrients": {

},

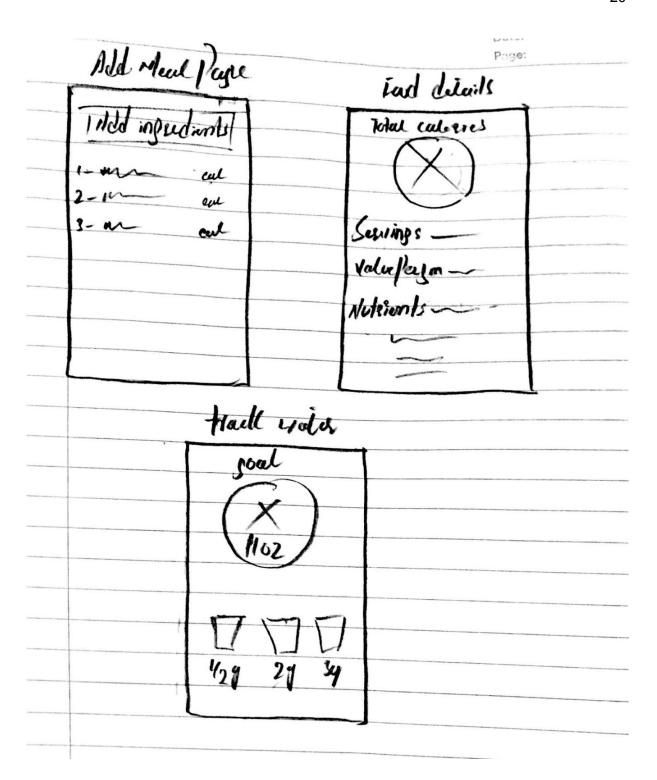
"LOW_FAT",
"LOW_SODIUM",

"FAT_FREE",
"VEGAN",

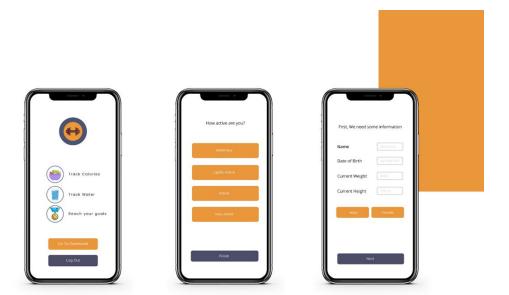
```
"FAT": {
               "label": "Fat",
               "quantity": 0.246,
               "unit": "g"
       },
               "...": {}
       },
       "totalDaily": {
               "ENERC_KCAL": {
                      "label": "Energy",
                      "quantity": 1.107,
                      "unit": "%"
       },
       "FAT": {
               "label": "Fat",
               "quantity": 0.37846153846153846,
               "unit": "%"
              "...": {}
},
"ingredients": [
       {
       "parsed": [
               "quantity": 1,
               "measure": "whole",
               "food": "Tomatoes, red, ripe, raw, year round average",
               "foodId": "Food_11529",
               "foodURI":
"http://www.edamam.com/ontologies/edamam.owl#Food_11529",
               "weight": 123,
               "retainedWeight": 123,
               "measureURI":
"http://www.edamam.com/ontologies/edamam.owl#Measure_unit",
                      "status": "OK"
              } ] } ]}
```

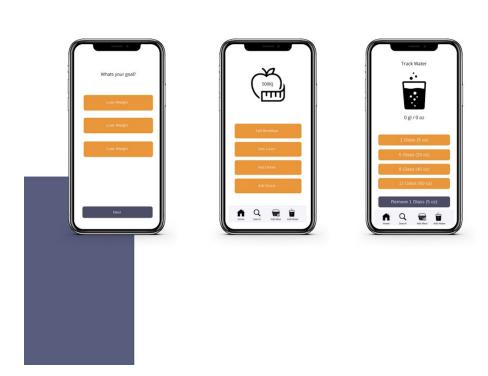
Sketches - Low Fidelity

False info	Acinty level	si poul
[Age]	Tricony Telesy Telesy	Tross weight [gair wight [Maintain washt
Collegiola Sur Their expands the	ion, e fields above islain Page Soloviel left	Search
	Bruggerit +	Record address
×	Dinnel + Snack + Wales +	



Sketches - Medium Fidelity





Sketches - High Fidelity













Design Themes

Clarity

Given the concept of clarity. The main dashboard screen focuses on adding meals and tracking calories for the day. There is no irrelevant information on the page. The two features of the "scene" are sharp and well-defined; the full-sized buttons, bright text color and font size that navigate to add food pages alongside a clear label showing the calorie sum. The icons are effective with each of the option's functionality that directs to a specific type of page, i.e. displaying the results for different types of meals. The text is readable and the white text color operates nicely as negative space that stands out against the dark background color of the buttons, but the same color as the overall screen.



Depth

Given the concept of depth in our apps design, all the pages work together to create an engrossing user interface. The screen transitions from one page to another in contextual flow. It navigates from outermost page to innermost page and back towards the root page. The starting pages; initial information page and main page transitions from bottom of the screen whereas the other consecutive pages transitions to forward right to show the flow of the pages and another level of depth with each consecutive next page, thus enabling context to be understood through utilization of the app when transitioning from screen to screen.





Deference

Our main app idea was to build it simple and aesthetic. Based on this objective, we have used minimal interface and implemented core functionalities. We opted for flowing movement that seems sharp and concise utilising swift's UIKit features that exist with navigation and tab controllers to control flow through each screen presented. Apple's default speed in animations has simplicity and elegance, aiding with the overall design. The pages have used three contrasting colours throughout the app with consistent implementation of colours to elements on all the pages, avoiding the use of shadows and bezels, maintaining a clear design aesthetic through a less cluttered interface, aiding in ease of use. All the contents on the page have good alignment, that makes it easy to scan or relate information. The text colour is large and well contrasted with the text background. All the pages have applied margins and presentable spacing between different elements of the screen. A distance of 8 pt is applied between the main content and borders of the page. The page is divided into sections with enough proximity and spacing among each section's elements providing a clear distinction between various sections of the page. The buttons and text boxes highlight clearly when selected to accomplish distinctness for user interaction.





Design Principles (General)

Contrast

Ensuring color and shapes contrast each other within the app ensures the proper visibility can be maintained to create easy functionality. Minimising too many colors and keeping fonts bold or using a darker colour to aide in invoking a highly contrasting appearance, provisioning visual intrigue in areas deemed appropriate, eg. a button, or selected option. By utilizing contrast effectively, the app gains clarity and appears simpler.



Repetition

Repetition refers to how a designer uses elements and colours of an user interface to maintain the flow. Using a selected number of fonts, colours, image styles and element patterns throughout the design will give the application a neat and tidy look. We have created custom style classes for buttons, text and labels classes to keep the design flawless and continuous throughout the application. We have done so using UIKit core features.







Use of Repetition for User information Interfaces

We decided to use only one font family for the entire application. "Helvetica Neue" is a sans-serif font type that derives from the Helvetica font family and it is available for iPhone devices as a default font setting.

Helvetica Neue Regular

Helvetica Neue Regular AaBbCc

- Using Helvetica Neue Thin 25 for app title texts.
- Using Helvetica Neue Thin 18 for body and button texts.

In addition, we used separate storyboard segues patterns for different sections of the app. For example, we have used segue pattern 'Show (Push)' for all the interfaces for user input scenes. This storyboard includes 3 main interfaces which will form the first point of interaction with the client.

Alignment

Aliment simply improved the quality of an interface by creating a visual connection between all the elements on the screen. There are mainly 2 types of alignment,

- 1. Edge alignment
- 2. Center alignment

On the Calorie Sorted app, we used both alignment types throughout the application to enhance the user experience. We were very careful with choosing the best alignment suitable for each event.

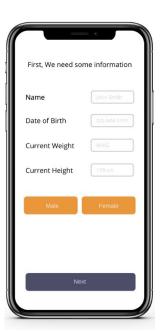


As seen in the dashboard interface, we used center alignment to place the design objects and elements on their center axes.

- Label which displays the KJ amount is centered.
- The icon around the KJ label is horizontally centered on the top half of the screen.
- Menu labels are aligned on their center to maintain the continuity.

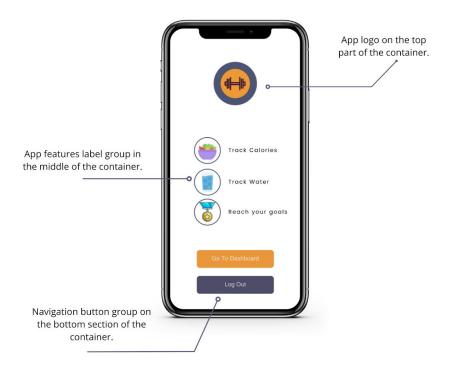
As seen in the interface with the sign up form,

- We used right edge alignment for labels and text fields to make it more tidy.
- Used centre alignment for button groups throughout the sign up interfaces.
- All the elements on the screen safe area are aligned horizontally in the container.



Proximity

Grouping related or similar objects, shapes and elements on an interface will address the proximity aspect of designing principles.



Keeping the same kind of elements together in a container while separating the element groups by whitespace creates a professional looking user interface. As for our welcome user interface, we have integrated the proximity,

- By grouping the main logo to the top ⅓ of the screen.
- By grouping the app features as a stack view and placing them on the middle of the screen with a noticeable amount of whitespace paddings from the top and bottom elements.
- By grouping the navigation buttons to the bottom ⅓ of the container with a noticeable amount of whitespace paddings from the top and safe area margins.

By following the proximity principle, we were able to successfully achieve the requirement of keeping the user interfaces minimal and professional.

Student Log

We have sadly had one group member take a leave of absence and had some trouble with github merges, resulting in a potential new file system, though now the conflicts have been corrected.

Week 3	S3771369	S3811920	S3610346	S3703235
Attended Meeting /Discussions (25%)	Y	Y	Y	Y
Contribute to Week Task Assignment (25%)	Y	Y	Y	Y
Completed Previous Week Task List (25%)	Y	Y	Y	Y
Completed Previous Week Tutorial Exercises and or research learning (25%)	Y	Y	Y	Y
Total	100%	100%	100%	100%

Agenda
Pick name and theme for the App
Present research findings to the team
Update the App information and selling points
Designing and documenting interfaces
Creating the github repository

Week 4	S3811920	S3610346	S3703235
Attended Meeting /Discussions (25%)	Y	Y	Y
Contribute to Week Task Assignment (25%)	Y	Y	Y
Completed Previous Week Task List (25%)	Y	Y	Y
Completed Previous Week Tutorial Exercises and or research learning (25%)	Y	Y	Y
Total	100%	100%	100%

Finalising the low and medium fidelity sketches.

Documenting finalised sketches and updating the project report.

Planning the Xcode project and designing storyboards.

Finalising base storyboards and dividing storyboards among the team members.

Creating separate branches for each member and merging the finalised work with the github repository master.

Week 5	S3811920	S3610346	S3703235
Attended Meeting /Discussions (25%)	Y	Y	Y
Contribute to Week Task Assignment (25%)	Y	Y	Υ
Completed Previous Week Task List (25%)	Y	Y	Υ
Completed Previous Week Tutorial Exercises and or research learning (25%)	Y	Y	Y
Total	100%	100%	100%

Refining the UI designs for better user experience.

Working on the storyboards and introducing navigation and tab bars.

Absorbing the new workload and dividing accordingly among the current members due to one team member left the group.

Documenting new changes on the project report.

Committing new changes, resolving merge conflicts and updating the repository.

Week 6	S3811920	S3610346	S3703235
Attended Meeting /Discussions (25%)	Y	Y	Y
Contribute to Week Task Assignment (25%)	Y	Y	Υ
Completed Previous Week Task List (25%)	Y	Y	Υ
Completed Previous Week Tutorial Exercises and or research learning (25%)	Y	Y	Y
Total	100%	100%	100%

Finalising the first version of storyboards.

Planning the workload for coding the interfaces.

Gathering reference coding resources.

Start coding the interfaces.

Updating repository and report.

Mid semester break Week (Special Consideration Week)	S3811920	S3610346	S3703235
Attended Meeting /Discussions (25%)	Y	Y	Y
Contribute to Week Task Assignment (25%)	Y	Y	Y
Completed Previous Week Task List (25%)	Y	Y	Y
Completed Previous Week Tutorial Exercises and or research learning (25%)	Y	Y	Y
Total	100%	100%	100%

Resolving storyboard conflicts and git repository complications.

Finalising the basic classes, struts and main functionalities of the prototype.

Replacing placeholders and dummy text with final images, elements and texts.

Testing the prototype.

Finalising the prototype with team members.

Resolving conflict and merging all the finalised branches to the master branch.

Updating the project report and submitting the Assignment 1.

Week 7	S3811920	S3610346	S3703235
Attended Meeting /Discussions (25%)	Y	Y	Y
Contribute to Week Task Assignment (25%)	Y	Y	Y
Completed Previous Week Task List (25%)	Y	Y	Y
Completed Previous Week Tutorial Exercises and or research learning (25%)	Y	Y	Y
Total	100%	100%	100%

Agenda
Starting research on REST based API
Going through the tutor comments on the Prototype and discusses the strategies to overcome those.
Documenting the REST api sample data and links for discussion

Week 8 -10	S3811920	S3610346	S3703235
Attended Meeting /Discussions (25%)	Y	Y	Y
Contribute to Week Task Assignment (25%)	Y	Y	Y
Completed Previous Week Task List (25%)	Y	Y	Y
Completed Previous Week Tutorial Exercises and or research learning (25%)	Y	Y	Y
Total	100%	100%	100%

Agenda
Starting implementing the errors of previous assignment
Setting up the Alamofire and started coding REST api
Discussing the design changes
Discussing of adding a profile page to the app
Implementing master-detail features which we missed on prototype
Implementing proper auto and dynamic layouts
Start research on UI and Unit testing

Week 11-12	S3811920	S3610346	S3703235
Attended Meeting /Discussions (25%)	Y	Y	Y
Contribute to Week Task Assignment (25%)	Y	Y	Y
Completed Previous Week Task List (25%)	Y	Y	Y
Completed Previous Week Tutorial Exercises and or research learning (25%)	Y	Y	Y
Total	100%	100%	100%

Agenda
Finalsing Rest API to search food info from the database
Fixing github errors and resolve merge conflict to master
Finalising the documentation by adding used API data and updating high fidelity UI.
Going through the marking guide and tick all the requirements
Finalising UI testing
Finalising Unit testing
Submitting the Assignment 2