



University of Westminster Undergraduate Degree program

Module: 5COSC025W: Human Computer Interaction & Usability

Assignment Type: Group

Course work 1 – Report

Date of submission: 29th of November 2021

Group Number: 7

Group Members

Member Surname	Member First Name	Email or Other Contact Information
Fernando	Gavin	gavin.20191079@iit.ac.lk
Perera	Navindu	navindu.20200502@iit.ac.lk
Senarathne	Ashen	ashen.20191221@iit.ac.lk
De Zoysa	Thulith	thulith.2019755@iit.ac.lk

Table of Content

Table of figures	2
Acknowledgement	3
Problem area	4
Identify user needs and requirements	5
Persona and scenario	
User Journey map	12
Low fidelity prototype	14
	16
Re-Design of Low fidelity prototype	17
Conclusion	19
References	20
Table of figures	
Figure 1 : Question 1	5
Figure 2 : Question 2	
Figure 3 : Question 3	6
Figure 4: Question 4	7
Figure 5 :Question 5	7
Figure 6 :Question 6	8
Figure 7 : Question 7	8
Figure 8 :Question 8	9
Figure 9 : Low fidelity 1	14
Figure 10 : Low Fidelity 2	15
Figure 11 : Full Low fidelity	
Figure 12 Re design of Low fidelity Porto type	17
Figure 13 Re Design Low fidelity prototype part 2	18

Acknowledgement

"Human computer Interaction and Usability" has been a very special module, brought to fruition through the efforts of some very special people. Our team would like to express our deepest appreciation to all those who provided us the possibility to complete this coursework. A special gratitude we would give to our lecturer in "Human computer Interaction and Usability", Ms. Theja Perera and Mr. Banu athuruliya, whose contribution in stimulating suggestions and encouragement, helped to coordinate especially in authoring this project

Problem area

Today, humans are one of the world's fastest-growing and most technologically advanced beings. As a result, human beings have to face both positive and negative effects in life. Such an adverse effect is that people have to be confined to their homes due to the current pandemic and have to carry out their daily activities. Due to this situation people have been facing various complications such as changing their life style and the daily working routines therefore this has brought the fast moving world into a standstill.

The impact of this will affect the people in various ways such as breaking down the mental concentration and specially people are forced not to engage in physical activities. The obligatory lockdown, leading to the closure of fitness activities, overall social life has hampered several aspects of the lives of individuals together with the routine fitness activities of the fitness freaks therefore that has resulted in varied psychological problems and high fitness and health concerns. As a result of this current situation people are more involved in experimenting new food and forgets the fitness and the health cycles that they have to be aware of, so therefore the lack of technology to come across this situation is needed such to inform and to get a better understating of what they are observing and how to be aware of the future threats.

Identify user needs and requirements

In order to identify the user needs our innovative team have come up with several paths of identifying the user need materials. Our Innovative idea is about the bad food routines and helping the user to experience how to get rid of various health disorders. In order to that the user is given the following experiences about our application,

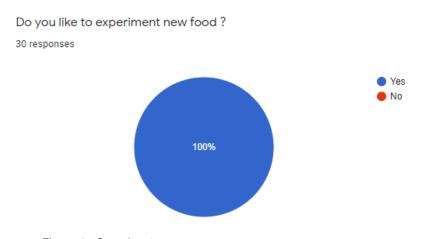


Figure 1 : Question 1

The above graph will show that the users are more likely to experiment new food. So it is clear that the users are more into junk food and get the experience. It will show that we should be concern about the food that people are consuming.

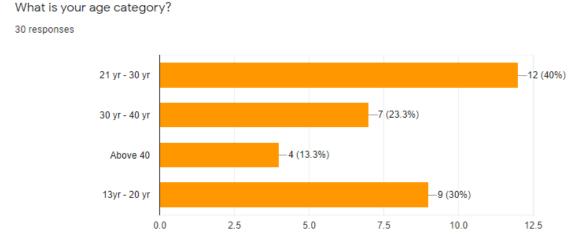
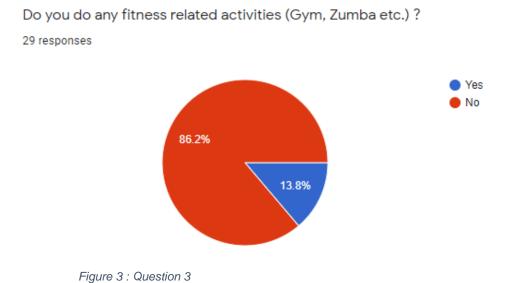


Figure 2 : Question 2

This graph will show the age categories of the users. This will clearly show that age between 21 years to 30 years are more likely to use the application. And secondly the age category of age 13 years to 20 years and age 30 years to 40 years and finally the age above 40 years are interested in the application.



This graph will show the fitness related activities that are done by the users. It will clearly show that the majority of the users are not involved in physical activities, Therefore it is very important that the user are more involved in the physical activities.

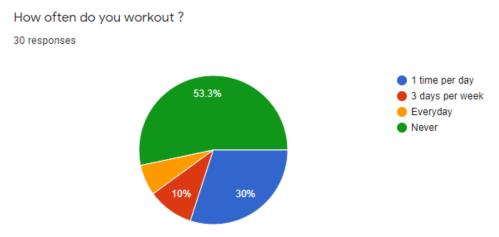


Figure 4: Question 4

This graph will show you about the workout time sudations of the users. It is clear that due to the busy schedules people are not involved in physical activities. But considering the graph it will show us 30% of the responders are at least working-out one day and 10% of the responders are working 3 days per week.

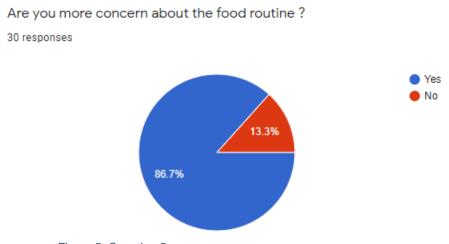


Figure 5 : Question 5

This graph will show that the users are more concern about the food routine that they are having every day. 86.7% are responding as they are more concern about the food routine that day get. And 13.3% of the responders are not concern about the food that day intake.

How often do you eat junk food?

30 responses

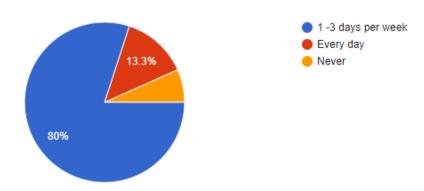


Figure 6 : Question 6

This graph will show the percentages of the junk food that people take in daily basis. About 80% of the total responders they take consume junk food 1 to 3 days per week. And that will show the risk that the users are facing by taking that much of junk food per week. 13.3% of responders are consuming junk food every day.



Figure 7: Question 7

This graph will show the responses for the users that showing the positivity for our innovative application. 60% of the total responders are willing to have an application. Therefore, our team is more concerned about to give the best user experience from our application and bring good solutions for this problem that people are facing.

If "YES" what features do you expect in the application?

3 responses

To track our calory

Warning the user to identify the consumptions of what they are eating and the threats

Reminder alert

Figure 8 : Question 8

The above graph will show that the users interests from our innovative application. And our team is ready to deliver every user needs from the application.

According to the above mentioned survey form it is clear that the users are more concern about the current situation that they are facing now. By considering the results of the survey form our team came up with the user needs that are effective to the user to experience. These are the features that we are providing the user to experience.

- 1. The user will need a system to select the food routines that they are consuming in days, weeks or months.
- 2. A system that identifies the calorie count of the user according to the food that each individual consumes.
- 3. A warning (indication) system for user to identify the food that they have already consumed according to the calorie input.
- 4. A feature based on the calorie consumption and the food based health disorders and threats indicator for the user to identify the health disorders.
- 5. A feature to notified for bad health habits and recommends the user all the physical activities(exercises) in order to get rid of the unwanted calorie consummations and to maintain a good healthy life.

Persona and scenario

Persona Template

	Name Hirushi Perera	
	Age 38	
	Psyche Extrovert	
Background	Hirushi is a Human Resource Manager who is too busy with work and taking care of her to worry about her health and she is concerned about her body and wellbeing. She loves to be organised when it comes to her health but with the busy lifestyle she has it is tough for her to achieve that with the limited time she has between work and family	
Emotions and attitudes	Hirushi does not have that much of a passion for technology but has somewhat of a knowledge about technology to work her job as a Human Resources Manager in a leading company	
Personal traits	Being a workaholic Not having time to be with her famiaving an unfit body	
Needs	To be organised and have a healthy life To give a healthy life to her family To keep track of every aspect of her life	
Situations		
Scenarios	Hirushi needs to find a fitness solution with minimum exercise because she cant afford to spend time on exercising	

Persona Template

	Name Kasun Fernando	
	Age 21	
	Psyche Introvert	
Background	Kasun is a Computer Science student at IIT who likes to eat different kinds of foods. He is frustrated about the fact that he spends hours in one place with his computer without doing any exercise because of the work he has to do and since he is a food lover he is concerned about his body being unhealthy.	
Emotions and attitudes	Kasun is a tech enthusiast who is all about technology and has a career in Computer Science at IIT that suits his passion	
Personal traits	Having to work in one place without any exercise Having an unfit body	
Needs	To spend less time working on his computer To Eat the food he likes and be healthy at the same time To have a good fit body	
Situations		
Scenarios	Kasun needs to have a fit body without giving up eating the foods he likes	

User Journey map

Customer journey example

Gavin Fernando | November 21, 2021

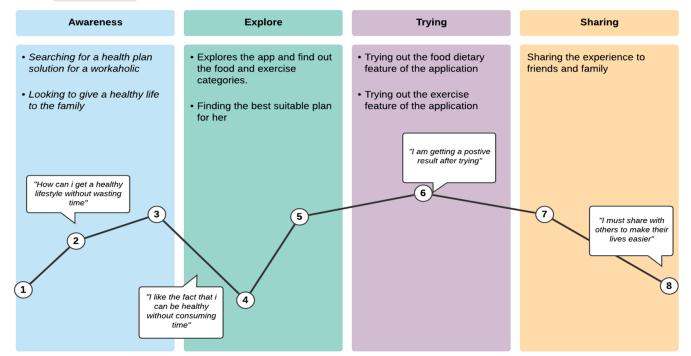


Scenario

Hirushi needs to find a fitness solution with minimum exercise because she cant afford to spend time on exercising

Expectations

- Ability to make a diet plan based on the food consumption
- · Ability to maintain a healthy lifestyle



Customer journey map kasun

Thulith de Zoysa | November 21, 2021

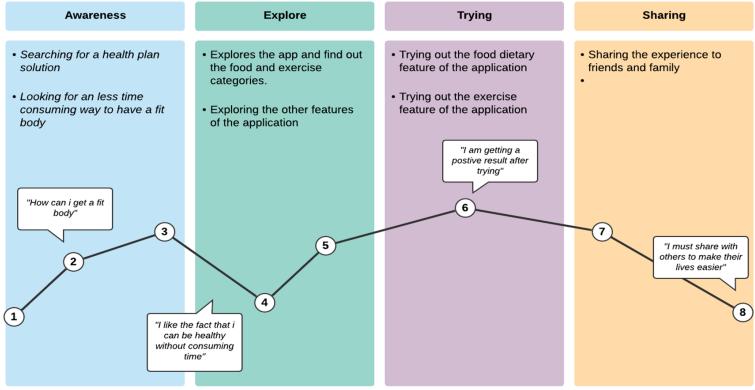


Scenario

Kasun needs to have a fit body without giving up eating the foods he likes

Expectations

- Ability to make a diet plan based on the food consumption
- · Ability to maintain a healthy lifestyle



Low fidelity prototype

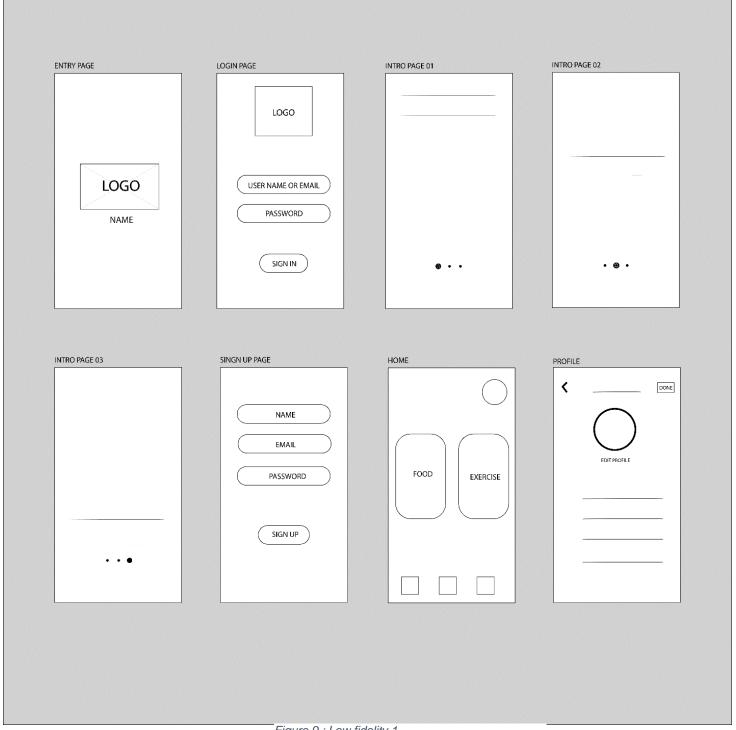


Figure 9 : Low fidelity 1

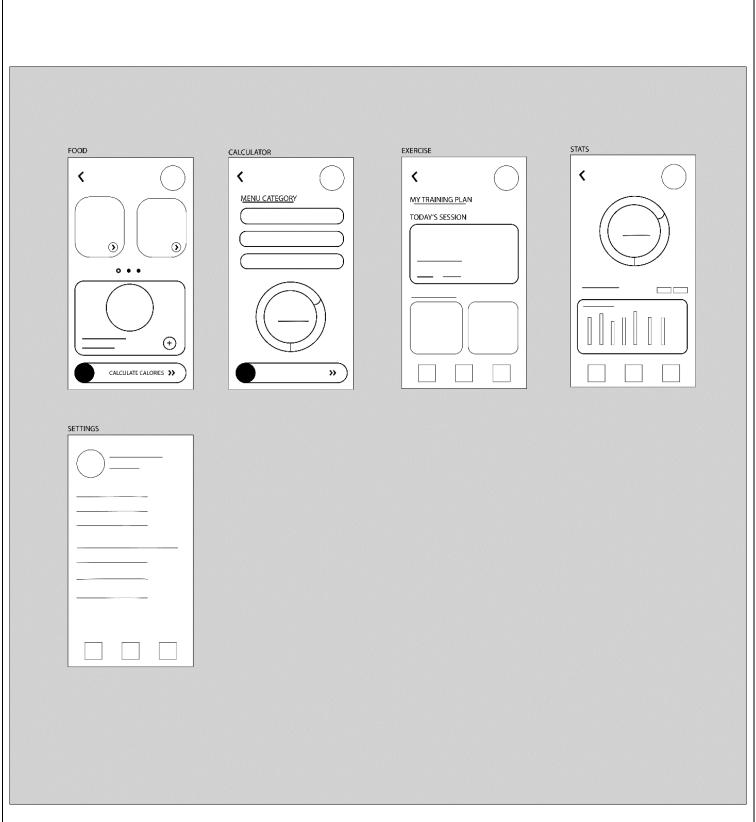


Figure 10 : Low Fidelity 2

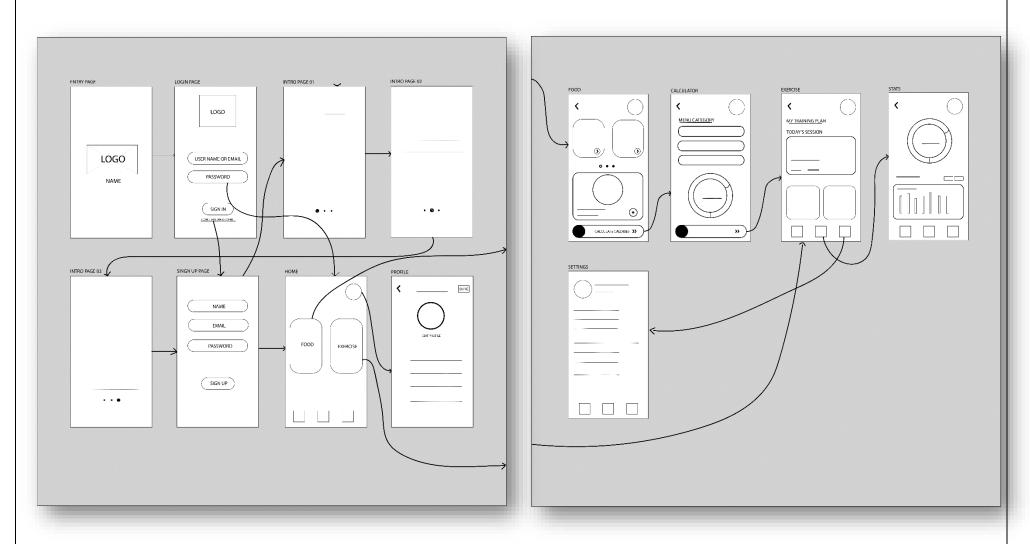


Figure 11 : Full Low fidelity

Re-Design of Low fidelity prototype



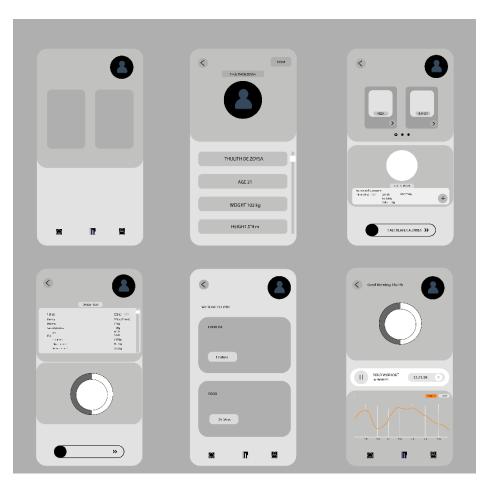


Figure 12 Re design of Low fidelity Porto type

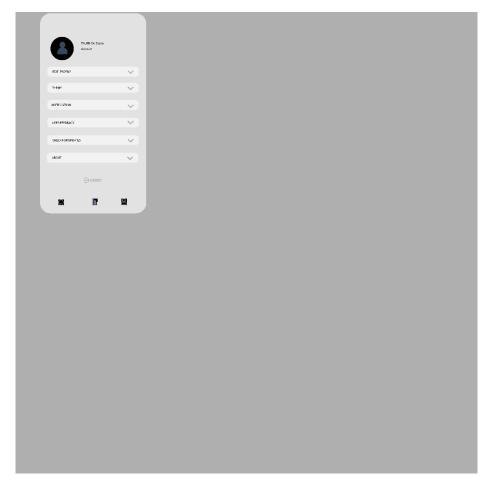


Figure 13 Re Design Low fidelity prototype part 2

Link for the Low fidelity prototype video:

https://youtu.be/TITI-EJhMiw

Conclusion

The obligatory lockdown, leading to the closure of fitness activities, overall social life has hampered several aspects of the lives of individuals. The lack of technology to come across this situation is needed such to inform and to get a better understating of what they are observing and how to be aware of the future threats. The survey has showed that people are facing numerous issues regarding the daily fitness and the lack of guidance. The innovative solution will be displayed by the low fidelity prototype.

References

Hartmann, R. and Meisel, H., 2007. Food-derived peptides with biological activity: from research to food applications. *Current opinion in biotechnology*, *18*(2), pp.163-169.

Nedovic, V., Kalusevic, A., Manojlovic, V., Levic, S. and Bugarski, B., 2011. An overview of encapsulation technologies for food applications. *Procedia Food Science*, *1*, pp.1806-1815.

Krustrup, P., Dvorak, J., Junge, A. and Bangsbo, J., 2010. Executive summary: The health and fitness benefits of regular participation in small-sided football games. *Scandinavian journal of medicine & science in sports*, *20*, pp.132-135.

Zavanela, P.M., Crewther, B.T., Lodo, L., Florindo, A.A., Miyabara, E.H. and Aoki, M.S., 2012. Health and fitness benefits of a resistance training intervention performed in the workplace. *The Journal of Strength & Conditioning Research*, 26(3), pp.811-817.

Ransdell, L.B., Rice, K., Snelson, C. and DeCola, J., 2008. Online health-related fitness courses: a wolf in sheep's clothing or a solution to some common problems?. *Journal of Physical Education, Recreation & Dance*, 79(1), pp.45-52.

Mackay, W.E. and Davenport, G., 1989. Virtual video editing in interactive multimedia applications. *Communications of the ACM*, 32(7), pp.802-810.

Lim, Y.K., Pangam, A., Periyasami, S. and Aneja, S., 2006, October. Comparative analysis of high-and low-fidelity prototypes for more valid usability evaluations of mobile devices. In *Proceedings of the 4th Nordic conference on Human-computer interaction: changing roles* (pp. 291-300).

McCarthy, S., O'Raghallaigh, P., Woodworth, S., Lim, Y.Y., Kenny, L.C. and Adam, F., 2020. The "Integrated Patient Journey Map": A Design Tool for Embedding the Pillars of Quality in Health Information Technology Solutions. *JMIR Hum Factors*.