

Contextual Bibliography

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Topic Description

Our team intent to make an recipes application to help and motivate the users make their food plan in a sustainable and healthy way. Basically, the application contains various recipes in categories, the tutorials for the recipe and the literacy of the ingredients, and food planning function with the sustainability and health index graph. For now, we have finished the first paper prototype and its testing. Though most of the frame work has been completed, still there are some functions require more research and development. The theoretic backup and methods for calculating sustainability and healthy level for each recipe. We have to achieve these main features from the overall looking in the paper prototype we have now. We expect to find a scientific and practical way to calculate the nutrition compositions and the sustainability level for each recipe. Coming with these functions, we want to find a way to make them more motivating as the feedback from user testing seems not ideal about the users' willing to use this application. We have to find out additional reasons and the solutions to promote users to choose our application and the healthier diet. In addition to these, considering one of my main duty is to communicate with users(interview and user testing) and the inadequacies in the work i have done, i researched a paper about interviewing people, intending to refine my interview skills and prepare for the next user testing.

Paper 1 :The creation of a healthy eating motivation score and its association with food choice and physical activity in a cross sectional sample of Irish adults

Through the first round user testing about our low fidelity prototype, we learned that most of the users don't show a strong willingness to use our products, as they prefer to eat whatever they want without the consideration of health or sustainability , or don't think they can keep using this application because the lack of motivation. Therefore i want to search the reasons behind it and try to find the solution to better motivate users to eat in a healthy way. In this paper, the authors aimed to determine how various motivation would affect the dietary choosing to inform the health promotion interventions. By conducting a cross-sectional survey among 1262 adults in Ireland about the food intake, lifestyles, attitudes towards food choosing and the physical activity, they came to the conclusions that dietary self-control and self-regulation are the key promotion to eat healthier for women and older adult, but the weak attitudes towards healthy food is the main factor for men and younger adults. This paper is beneficial to our project as it's scientifically affirm that people would eat a healthier diet if strongly motivated, and it would be easier to be successful if the intervention is combined with enhancing diet and lifestyle. What's more, we have to consider various motivation towards different user groups. When it comes to our application itself, besides indicating the nutrition and health level for their meal plan, we could label the recipes in different features(for losing fat, for the body builder...) to meet various need from groups of users.

Paper 2 :Beyond calorie counting: assessing the sustainability of food provided for public consumption

In our production, the sustainability of recipe is another concern besides health. We intend to make index and graph of the sustainability level for each recipe and the food plan for a week, providing a visualized and intuitive data of users food plan. We wish it could motivate the users to adjust their food plan in a more sustainable way. However, for now, we just have came out this concept, but have not got the backup and the method to calculate the sustainability level of the food. Therefore, i found this paper and hope to extract the solution. This paper provides an innovative tool to measure the sustainability of food for the public consumption. When it comes to the definition of the sustainable food, there is no uniform standard. The understandings in this paper include protecting biodiversity, avoiding environmental impacts, providing healthy and safe food...which are same with perspectives of our understanding in the project. Thus the standard they applied and the tool they developed for measuring sustainability could be a reference for our project. They took social, economic and environmental factors of each categories in food into consideration, and gave a score to each category, making the sustainability measurable by points from 0 to 100. However, this tool is used for measuring a larger amount of food provide by some organization, and what we want to measure just narrow down to a meal level. Thus the accuracy remains to be verified.

Paper 3: Making healthy food choices using nutrition facts panels. The roles of knowledge, motivation, dietary modifications goals, and age

In this paper, the importance of the Nutrition Facts Panels(NFPs) is discussed and the people with dietary modification goals and more knowledge would pay more attention and make more comparisons between different NFPs is examined by several experiments using eye tracking methodology. It means that people with more knowledge about the nutrition information or have a dietary goal would care more about the nutrition contents for their food. At first, this paper help find out the reason why the users for our first paper prototype express their unwillingness to use our product. The results in this paper show that the older adults concern a lot more about the nutrition information is because of their increased risk for diet-related diseases, the age not only brings them more knowledge but also the disease and the necessary to take care of their body. However, the younger don't have to worry a lot about their diet since they don't think they need a healthier habit with the great health condition they are now in. And then, it's also helpful to know the NFPs is a essential way to indicate the nutrition information. The users with dietary modification goals are concern about it , and the visualized nutrition compositions is a motivation to choose healthier food plan in some degree as well. At last, the literacy of the nutrition is essential. From the paper we could know that, the people with more knowledge about nutrition concerned more when choosing the food. Therefore, we are confident to add the literacy part teaching users why and how each ingredient or recipe is sustainable and healthy.

Paper 4: Assessment of nutritional loss with food waste and factors governing this waste at household level in Pakistan

One third of the food produced is wasted, and the resources used in the production like water, crop land are wasted at the same time, making food wastage a sustainability issue. In this paper, the author calculated the food and nutrition wasted to evoke the people's awareness about reducing the food waste and eating in a sustainable way. They worked on finding the reasons why people waste such a huge amount of food as well. In our own application, we are aiming to motivate users make their food plan in a sustainable and healthy way, which is similar to the content in the paper. We want to calculate the healthy and sustainable level for each recipe in order to visualize the index number to let the users understand their food choice straightly. In this way, health and sustainability can be measured and arranged easily. Subsequently, we have to find out the scientific back up to calculate these level. In this paper, the author calculated the nutritional losses from food wastes. Therefore, i think the method used for calculating nutrition composition could be used to calculate the nutrition contained in each recipe in our own application. What's more, i can learn the reasons for food wastage in the household level so that these information can be presented in some way to inform the users. Several tables about the nutrition composition in different food are presented in this paper, therefore we can calculate the nutrients in each recipe in our application easily referencing these tables. And the reasons for the production of the wasted food in the survey including bad looks of the food, misplanning ot meal and incorrect cooking.

Paper 5: Application to Improve Distribution of Healthy Foods to Corner Stores in Baltimore City

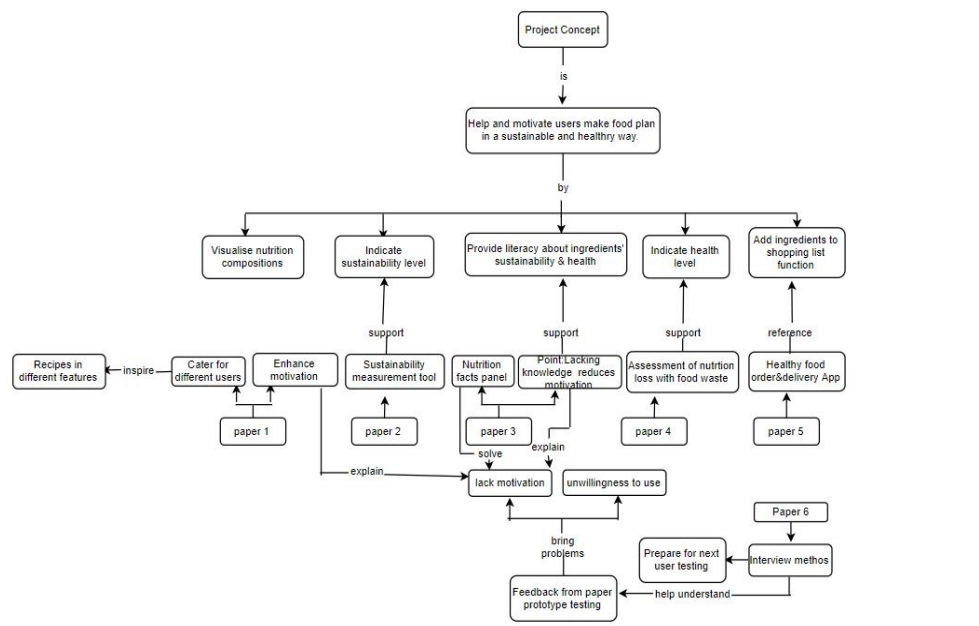
In this paper, the authors tried to make an healthy food distribution application for the corner store owner. Similar to the Design Life Cycle in Human-computer interaction, they collected information, established the requirements, proposed a mock up prototype, made evaluation and interviews. The reason why i chose this paper is that there is a similar function in our application, which we have considered but have not put it into our paper prototype. We planned to add an adding-to-chart function to each recipe, which could add the ingredients needed in one recipe to shopping list to make it easy to access the stuffs needed to buy. However, the application in this paper is an E-Commerce mall providing healthy food, which is slightly different from ours. But at the same time, it gives me an inspiration that this E-Commerce mall could work in our product as well. So that we could reference the interface, the task flow in this paper, which has been refined according to the research and feedback they collected.

Paper 6: Understanding your Users

In our design process, one of the main duty for me is to communicate with the users. For now, i have conducted three interviews to establish requirements and four user testing for our paper prototype. Though all the progress went successful generally, i could do it better if i have a deeper understanding of the interview methods. For example, if i asked more why for some simple "yes" or "no" answers, we could have more information about the specific understanding of the users. Hence, i looked through this article to improve my interview

skills and the ability to understand the users to prepare for the next communication session in our project. And summarize the key points i neglected or made mistakes as below:
skills and the ability to understand the users to prepare for the next communication session in our project. And summarize the key points i neglected or made mistakes as below:
1.Brevity : Question should be kept short.
I noticed that some users cannot understand my questions immediately and ask for repeat. That could because of the long questions i always ask. People can fell difficult to remember all the contents in a long question, so i should make it short and can make a long one into more simple questions.
2.Avoid vague questions:
This could be the other reason for the users' confusion about my question. I used to use some imprecise adverb a lot. This can let the users have different understanding of it and affect my interpretation at the same time. Use words like"How often" instead of "Do you usually" to avoid this problem.
3.Focus on outcomes:
To meet the design need or find the solution directly, i always asked the users for the solutions, which can result in a long silence in the interview, since it's difficult for people to come out a specific design to meet some design need, which is the job our designer should do. Instead of doing this, i can ask questions that can help me ascertain the outcomes they want to achieve.
4.Avoid asking interviewees to predict the future.
In the paper prototype protocol, there are some questions like"Will you use our application", which should be avoided. Instead, i can focus on what they want now, and then i can translate that into what they want.

Concept Map



Overview Statement

For now, our team just have finished the first low fidelity paper prototype and its testing, which brings us serials of problems:
Users's unwillingess to use this application;
Users's lacking motivation to eat in a healthier way;
Lacking certificated theory and methods to calculate the sustainable and healthy level;
Lacking certificated theory and methods to measure the nutrition compositions for a recipe;
These problems we are facing are the main block for our project processing. Since we have created the frame and most of the interface for pages. Once the peoblems mentioned above solved, the majarity part of the aplication would be completed.
Paper 1 and paper 3 explained and solved the question produced from the user testing. Some users expressed that they prefer to eat whatever they want, instead of taking the health and sustainable into consideration. Paper 2 and paper 4 provide the theory and method to calcute the sustainable and healthy level for the food, which we will visualise these into graph or icons to make it more motivating and easy to undersrand to users according to the assistance of nutrition facts panel in paper 3. Besides, i found an application is similar to one of the function in our products , therefore we can reference it and skip the data collecting, user interview and evaluation part for this function. At last, paper 6 takks about the interview methods, whichc is my duty in the group work. I want to refine my interview skills to prepare for the next user testing round.

References

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