HCI Assignment 2

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1 The Project Overview

I am designing a mobile app to help students to help them to eat more healthily. I am designing for UG student who are willing to live a healthier life and plan their weekly eating in a more scientific way at the University of Birmingham.

1.1 Explanation

According to the survey of students from the first year of 'Nurse' in the Trakia University in 2014 [1], over half of respondents stated in the reply that they know the principles of healthy and 37.5% said that they are only partly aware of them. It could be concluded that students in UoB may also have vague concept of healthy eating and are required more advice to help them pay attention to food nutrition. Therefore, providing students with some advice on how to balance their nutrition intake and let them know more about food nutrition become necessary. Except for lacking in understanding of principles of eating, according to the research from Sam Abraham and his colleges [2], although students have a fair knowledge of nutritional requirements for health, food choices they make are not necessarily healthy. Convenience and taste of food were priority. Therefore, more steps should be taken to help them form good eating habits, such as the supervising and sharing scheme to encourage them insisting eating in a healthy way.

1.2 High-Level User Requirements

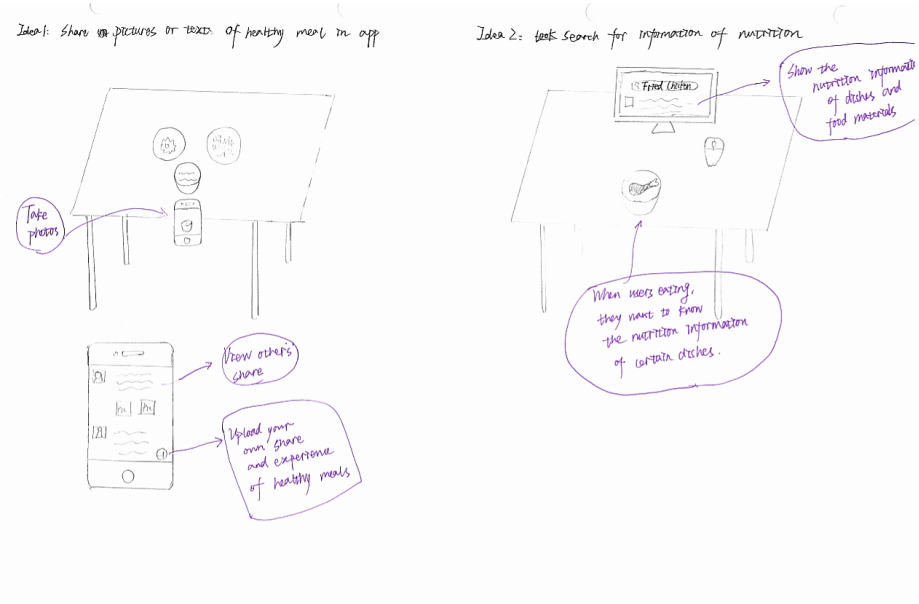
- The application should allow users to search for information of nutrition and calorie of different food.
- The application should allow users to record their daily eating food.
- The application should show the nutrition and calorie of the food recorded by users.
- The application should provide nutrition suggestions for users.
- The application should provide alternative food for the unhealthy food recorded by users.

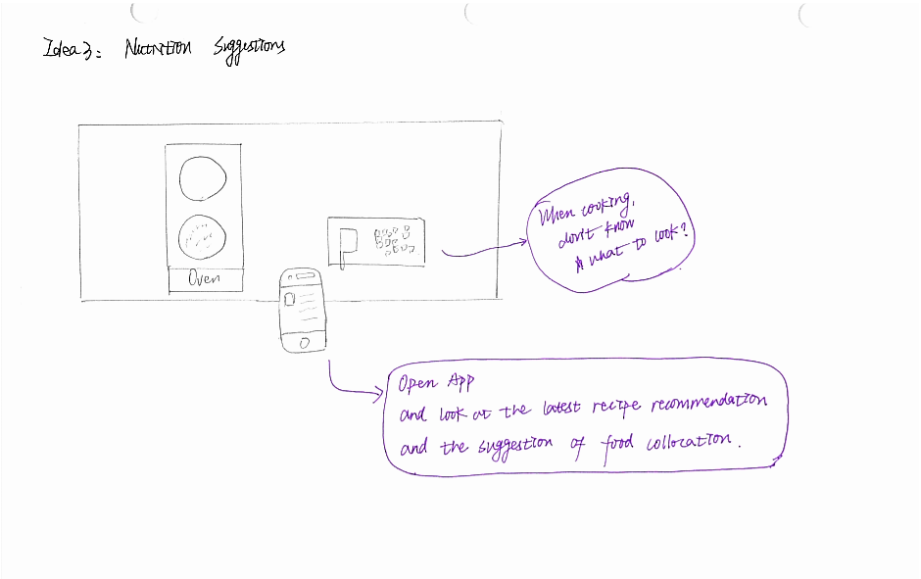
- The application should provide advice on the time of food intake in one day based on user's schedule.
- The application should allow users to share their daily eating on the app, including the format of pictures and text.
- The application should generate link and pictures to let users share their daily eating on Facebook or other social medias, outside this application.

2 Sketches of Ideas

2.1 Sketch 3 ideas

- Idea 1: User can share pictures or texts of her/his healthy meals in the app.
- Idea 2: User can Search for nutrition information of food in the app.
- Idea 3: User can look through Nutrition Suggestions in the app.



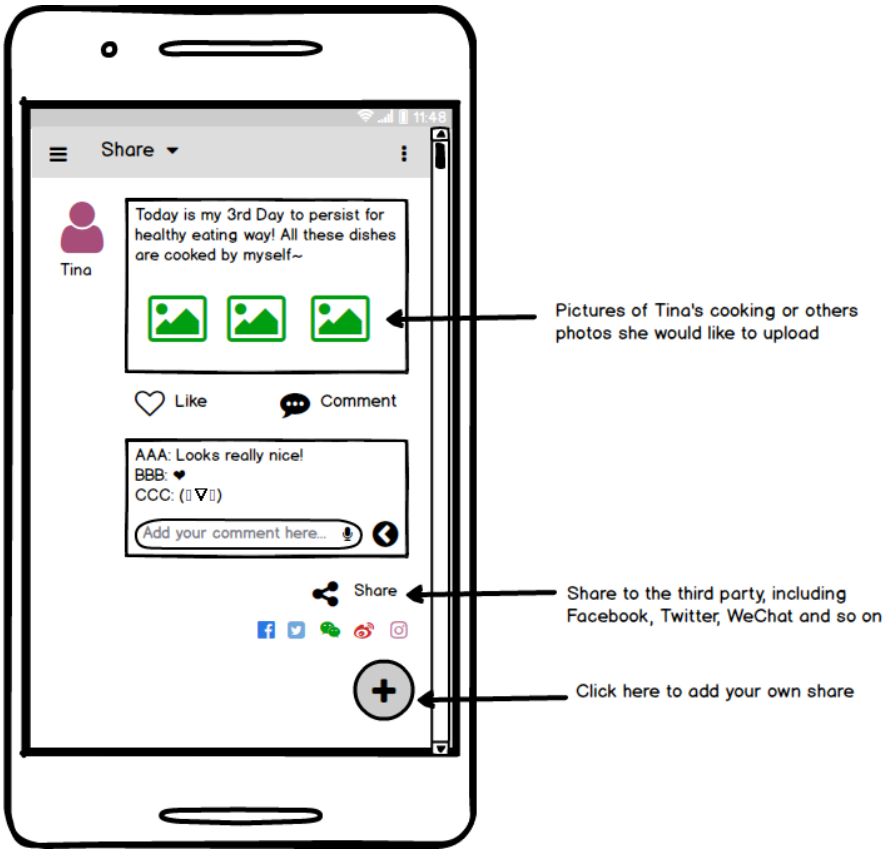


2.2 Scenario: Share Daily Eating in the App

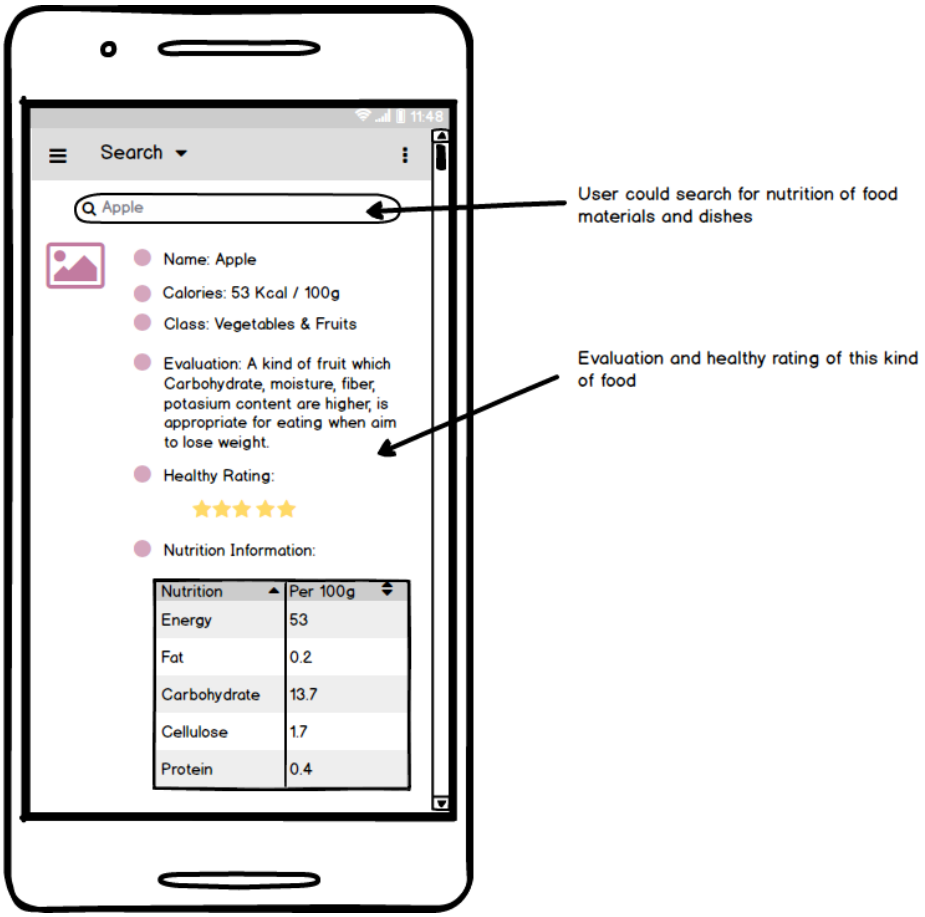
Tina is a third-year Business Management student in University of Birmingham, and after three years she has learned to take advantage for her free time between classes, and she paid high attention to the health of food she intake everyday. After her morning classes, she comes back home to prepare for the lunch. And because she doesn't have any classes after the morning class, she has enough time to cook. She would like to cook with one of her friend who is in the same major with her, so she invites her friend to her home. They both come from China, so they have similar cooking styles. First, they go to Tesco to buy the food they need, including fish, eggs, vegetables, and fruits. Then they arrive at Tina's house and cook the traditional Chinese dishes, including boiling vegetable soup and stewing fish. After they finish cooking, Tina takes photos of these dishes made by themselves, and opens the app to upload these photos. She clicks "Share" and uploads these photos, and write a few words to express her pleasant mood. After she shares these photos, she receives the "Like" and comments from her friends who use this app.

3 The Balsamiq Wireframes

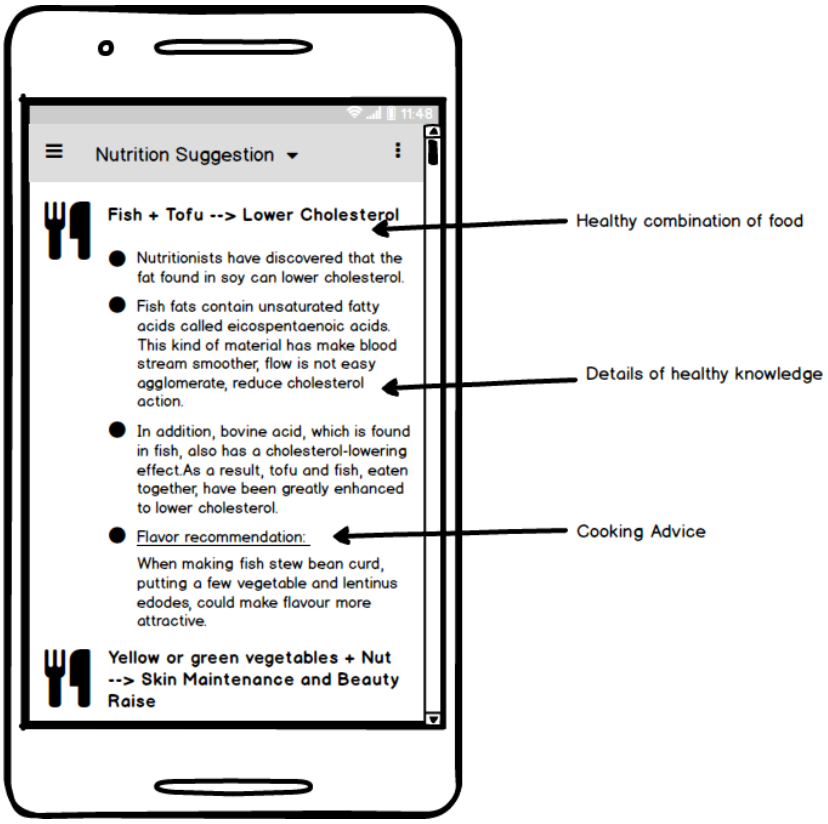
3.1 Share Daily Eating in the App



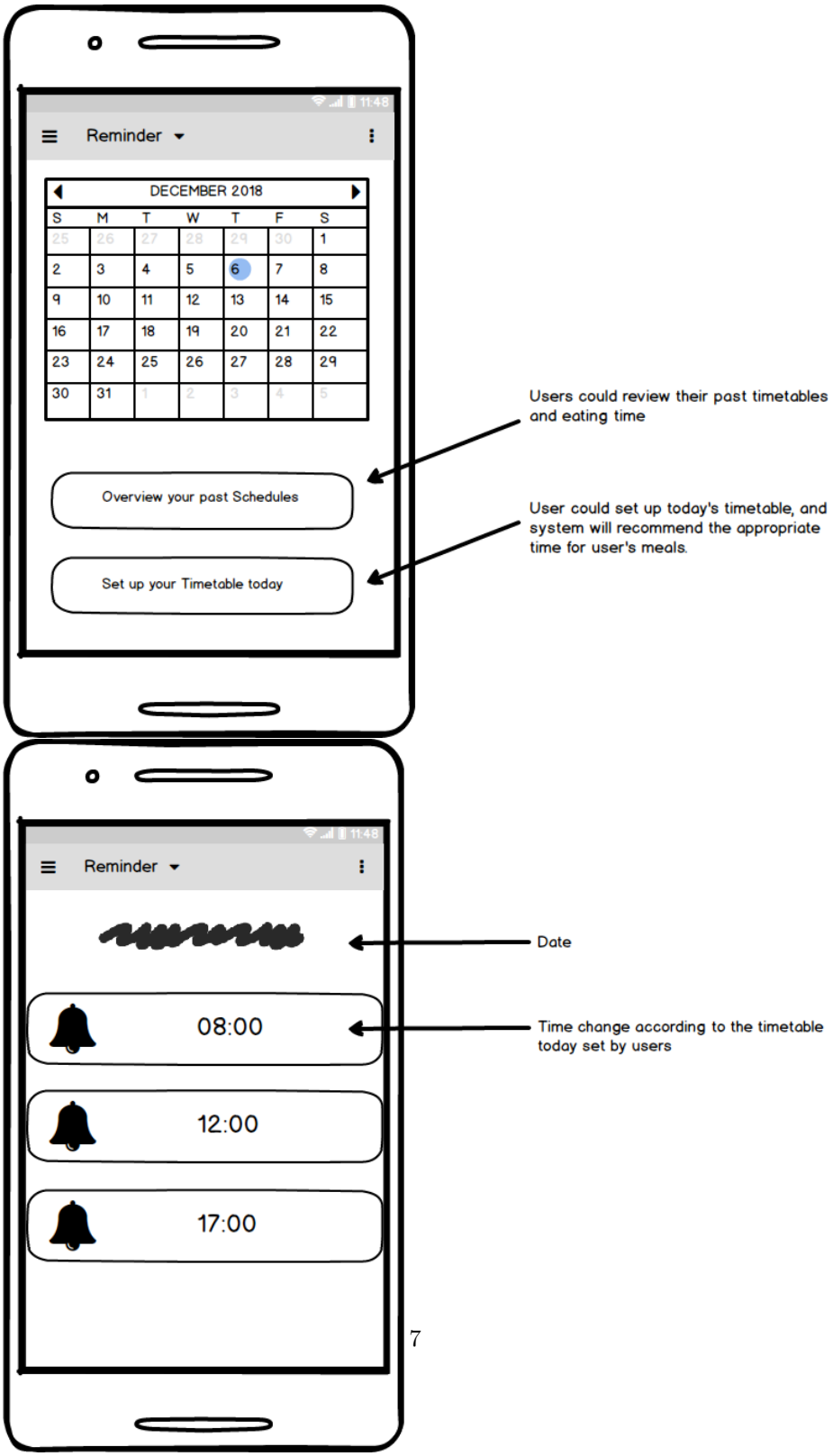
3.2 Search For nutrition information in the App



3.3 Provide Nutrition suggestion for users



3.4 Recommend the meal time according to user's timetable



4 The findings of your Heuristic Evaluation

4.1 Problems

- User shall see progress bar when upload photos.
- User should go back to the top of the share page after double click the top menu bar.
- User shall see the error information of his/her share, including “no network”, “upload error” and so on.
- System should provide the search history for users, to minimize their memory load and make it easier to re-search the same content again.
- System should update and carefully select the nutrition suggestion information according to the statistics data of users’ accessing frequency of information in this part.
- System should allow user to add the widget in the mobile phone desktop, to provide a more convenient way for expert user to set timetable and get notifications.

4.2 Heuristic Form

Heuristic Evaluation – Form						
Interface	Issue	Heuristic(s)	Frequency 0 (rare) to 4 (common)	Impact 0 (easy) to difficult (4)	Persistence 0 (once) to 4 (repeated)	Severity = Sum Total of F+I+P /3
Share Daily Eating in the App	User shall see progress bar when upload photos.	Visibility of system status	4	1	0	5
Share Daily Eating in the App	User should go back to the top of the share page after double click the top menu bar.	User control and freedom	2	2	0	4
Share Daily Eating in the App	User shall see the error information of his/her share, including "no network", "upload error" and so on.	Help users recognize, diagnose, and recover from errors	1	1	1	3
Search For nutrition information in the App	System should provide the search history for users, to minimize their memory load and make it easier to re-search the same content again.	Recognition rather than recall	3	2	0	5
Provide Nutrition suggestion for users	System should update and carefully select the nutrition suggestion information according to the statistics data of users' accessing frequency of information in this part.	Aesthetic and minimalist design	2	1	2	5
Recommend the meal time according to user's timetable	System should allow user to add the widget in the mobile phone desktop, to provide a more convenient way for expert user to set timetable and get notifications.	Flexibility and efficiency of use	2	3	0	5

References

[1] Sam Abraham, Brooke R. Noriega, and Ju Young Shin. College students eating habits and knowledge of nutritional requirements. *Journal of Nutrition and Human Health*, 2(1):13–17, 2017.

[2] A Andonova. Information and Awareness of the Students' Healthy Eating. *Trakia Journal of Sciences*, 12:362–366, 2014.