

Executive Summary

Nowadays, people are paying more attention to nutritional facts and calories in food. Many want to track their eating habits and establish a healthy way of living. But this process can be cumbersome and costly as people have to either write down the food they eat everyday or pay for online food tracking services to record their eating habits.

My program may be an easier and cheaper alternative way for users to monitor their eating habits. It allows users to easily check food nutrition from an online database, save food facts into their own databases, track food for individual days, and most importantly, set goals so that users can monitor how close they are hitting their goals!

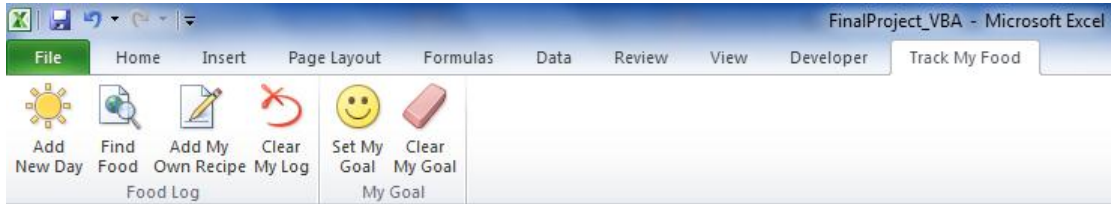
System overview

The program has two tabs -- Food Log and Food Database, and it has six buttons in the Track Food tab on the Excel Ribbon:

1. **Add a new day** to the Food Log
 - a. Error check – two days with the same date cannot be entered
 - b. Automatic date entry – leave the textbox blank to enter today's date
 - c. Chronological order – the date in the Food Log will be in chronological order
2. **Find Food** user form
 - a. Search food facts in an online database
 - b. Add the food into Food Log
 - c. Save the food into the user's own database
 - i. Error check – same food can only be saved once in the database
3. **Add my own recipe** user form
 - a. Type in the name and nutrition facts of the food
 - b. Choose to add the food to a day or save it into the database
 - i. Error check – same food can only be saved once in the database
4. **Clear the log**– clear all dates and all food
5. **Set my goal** user form
 - a. Calculate the suggested calories intake based on the users' age, gender, height, ideal weight, and weekly work load
 - b. Users can post their goal on top of the food log
 - i. Automatic check -- The program will compare the user's daily total calorie intake with the goal, and warn the user when he/she hit or exceed the ideal calorie
6. **Clear goal** and reset the goal

Implementation

When a user opens the excel file, he/she will see a Ribbon Tab called “Track My Food” and two groups of buttons on this tab. The first group of buttons allows users make changes to the Food Log and the Food Database, while the second group allows users to set goals. (see below)



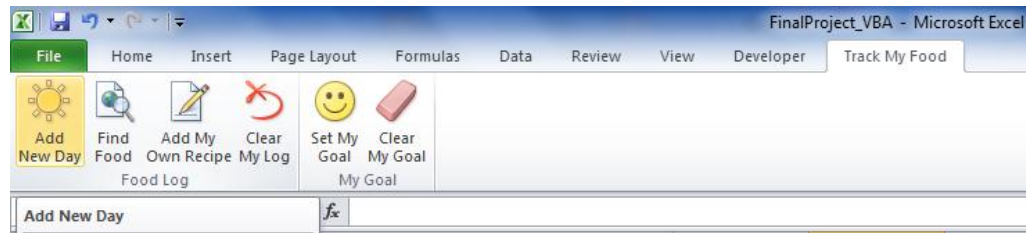
I will introduce the six buttons respectively as follows:

Add New Day

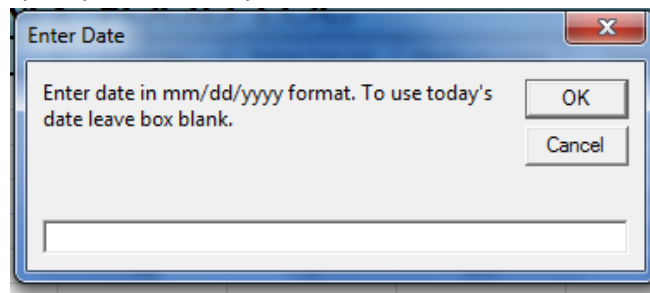
The user can create a new day to the Food Log. This new day will be used to track food information.

Process:

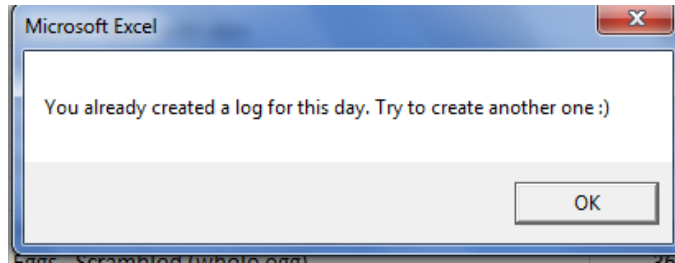
1. User initiates the function by pressing “Add New Day” button



2. An input box will pop up, which allows the user to enter the date in the text box. If the user doesn't specify a date, today's date will be used.



3. If the user creates a date that is already in the log, a warning message will appear reminding the user of creating a different date.



4. The dates that the user entered will show in the Food Log, which allows users to add food later on. The dates on the Food Log will be in *chronological order*. (see below)

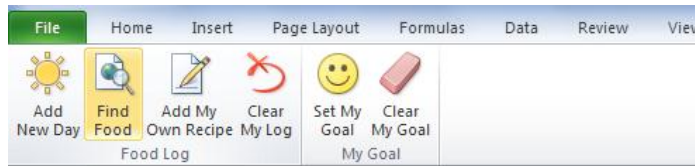
1	MY FOOD LOG					
2	Date	Food Description	Calories	Total Fat (g)	Sodium (mg)	Sug
3	4/11/2012					
4	4/10/2012					
5	4/5/2012					
6	4/4/2012					

Find Food

The user can find the food they are looking for in an online database, then the user can choose to add/save the food information in either the Food Log or Food Database.

Process:

1. Click the “Find Food” button



2. A new window will pop up. The user can enter the full or partial name of the food they are searching. For example, if you are looking for “scrambled egg whites”, you can simply type “egg” in the text box, and then click “Find Food” button. (see below)

A screenshot of the 'Find Food' dialog box. It has a title bar 'Find Food'. Inside, there is a text box labeled 'Food Name (full or partial name):' containing the text 'egg'. To the right of this text box is a 'Find Food' button. Below the text box is an empty text box. To the left of the empty text box are four input fields: 'Calories:', 'Total Fat:', 'Sodium:', and 'Protein:'. To the right of these fields are four input fields: 'Sugars:', 'Protein:', and two empty fields. To the right of the input fields are three buttons: 'Add', 'Save', and 'Cancel'.

3. Clicking the “Find Food” button will lead you to a website where you can choose the specific food that you are looking for, for example, in our case “scrambled egg whites”. (see below)



4. When the user clicks on the specific food (“scrambled egg whites”), it will go to a new webpage where nutrition facts about this food are listed. The user needs to do nothing but wait one or two seconds for the information to return to the Find Food window. (see below)

The "Find Food" dialog box displays the following information:

Food Name (full or partial name):
egg
Meijer - Scrambled Egg Whites

Calories: 43
Total Fat: 0 g
Sodium: 152 mg
Sugars: 1 g
Protein: 12 g

Buttons: Find Food, Add, Save, Cancel

5. Now the user can choose to add the food to the Food Log by clicking “Add” button, and a pop-up window will show to allow the user to enter the date that he/she wishes to add the food to. (see below)

6. After the user entered a date and click “OK”, the food will be added under the specific date to Food Log. (see below)

MY FOOD LOG							
Date	Food Description	Calories	Total Fat (g)	Sodium (mg)	Sugar (g)	Protein (g)	Total Calories
4/11/2012							
4/10/2012							
4/5/2012							
	Meijer - Scrambled Egg Whites	43	0	152	1	12	43
4/4/2012							

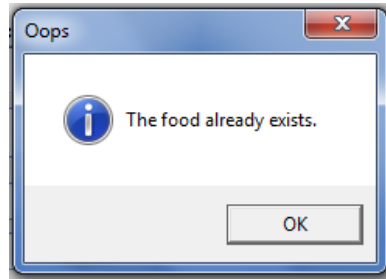
7. Total calories of the day will be automatically calculated after the user inserts food under the date. (see below)

MY FOOD LOG							
Date	Food Description	Calories	Total Fat (g)	Sodium (mg)	Sugar (g)	Protein (g)	Total Calories
4/11/2012							
4/10/2012							
4/5/2012							
	Deleted Duplicate Apple - Gala	72	0	0	17	0	
	Meijer - Scrambled Egg Whites	43	0	152	1	12	115

8. Or the user can click “Save” to save the food into Food Database. (see below)

MY FOOD DATABASE					
Food Description	Calories	Total Fat	Sodium	Sugar	Protein
Meijer - Scrambled Egg Whites	43	0	152	1	12
Cashew Chicken	500	200	10	5	20
Banana	90	5	0	5	0
Skim Milk-1 cup	50	0	10	0	10
Bubble drink	120	20	1	18	0
Eggs - Fried (whole egg)	92	7	94	0	6

- When the user wants to save some foods that are already in the database, a warning sign will appear. (see below)



Add My Own Recipe

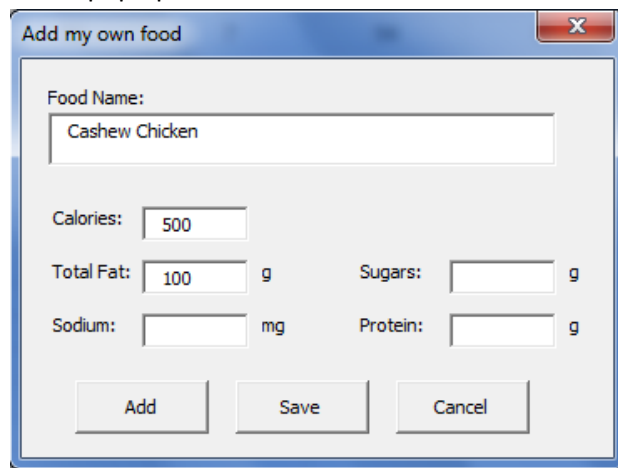
The user can add his/her own food to both Food Log and Food Database.

Process:

- Click the “Add My Own Recipe” button



- A window will pop up for the user to enter the food name and its nutrition facts.



- Similar process applies here as “Find Food”, the user can choose to add the food under a specific day or save the food in Food Database. For details, please refer to “Find Food”-Process 5 – 9.

Clear My Log

The user can clear all the days and food information in Food Log

Process:

1. Click the “Clear My Log” button.



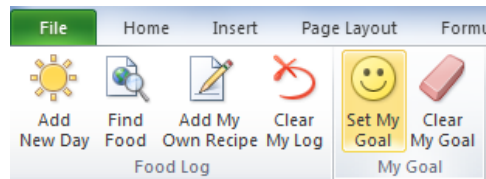
2. All days and food information will be cleared in Food Log.

Set My Goal

The user can calculate the calorie intake amount based on his/her personal condition. The user can post the suggested calorie in the Food Log.

Process:

1. Click the “Set My Goal” button.



2. A new window will pop up. The user can enter/choose his/her personal attributes, like gender, age, height, weekly exercise load. The program also allows the user to enter the ideal weight he/she wishes to achieve. Then the suggested calorie intake amount will show after the user clicks the “Calculate” button. (see below)

3. The user then clicks the “Post My Goal” button to post the goal calorie on top of his/her Food Log.

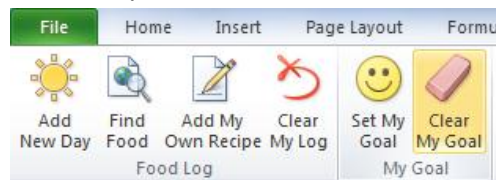
MY FOOD LOG								My Goal
Date	Food Description	Calories	Total Fat (g)	Sodium (mg)	Sugar (g)	Protein (g)	Total Calories	2357.906
4/11/2012								

Clear My Goal

The user can clear the goal that was set before.

Process:

1. Click the “Clear My Goal” button.



2. The goal on top of My Food Log will vanish.

Challenges and Difficulties

- I encountered my first difficulty when I was looking for food database that I can put into my spreadsheet. But I couldn't find any resource that allows me to download or save as excel file. Therefore, I decided to use the *agent function* and *web query function* that we learned in class

to retrieve the food information from an online database. It took me a long time to find the correct webpage source code so that I can import the correct webpage with all the information that I need.

- I spent a long time writing codes for Add New Day. I wanted to figure out how to shift row down automatically and how to compare the date so that the dates shown on the food log are in chronological order.
- The nutrition facts retrieved from the online database (total fat, sodium, sugar, etc.) come with units attached, so I need to delete the units using *Right()* and *Len()* function to make sure the format of the data from the web and the format of the data we entered are in conformity.
- To make the program more user friendly, I customized the ribbon of the Excel file and created six buttons connected to relative macros.

Thank you for reviewing my final project!