

Team 2 - EatWell
ITSC 3155 Final Project Proposal

Prepared by: Group 2
Date: 04/04/22

Table of Contents

1.1 Product Vision	3
1.3 Project Scope and Objectives	3
1.4 Ethical concerns	3
2 Project Resources	3
2.1 Group Members	3
2.2 Data	3
2.3 Hardware and Software Resources	3
2.4 Special Resources	3
3 Plan	3
3.1 Timeline Chart	3
3.2 Task/Milestone Descriptions	4
3.3 2.3 Resource Table	4
4 System Design	4
4.1 Use Case Diagram	4
4.2 DFD diagram	4
4.3 User Stories	4
4.4 Feature List	4
4.5 Storyboard	4
5 User Tests	4
5.1 Test procedure	4
5.2 User Test and Results	4
5.3 Conclusion	5
6 Lessons Learned	5
7 Future work	5
8 Appendices	5
8.1 Sketches	5
8.2 Software Repository	5

1 Introduction

- The goal of our final project is to help everyone to maintain a balanced diet by calculating the calories and nutrients in everything you eat. With our application, you would be able to input what you eat throughout the day and this will show you how many calories you have eaten, as well as nutrients you might be missing. This application will give you other food items you can eat to fill in the missing nutrition. The motivation for this project is to help everyone eat their required nutrients everyday to stay healthy. Especially us college students, many eat what they might find cheap and good but may not always be the correct choice. We want people to know what they are eating to help maintain a balanced diet.

1.1 Product Vision

- For people who care about health/nutrition, EatWell is a diet tracking web application that aids users in maintaining a proper diet. Unlike MyFitnessPal, our product provides accurate and personalized diets for users.

1.2 Customer Description

- People that value health/nutrition, Beginners, Bodybuilders, Nutritionist, Coaches, Athletes

1.3 Project Scope and Objectives

Define the scope of the project and the objectives (features) to be satisfied by this project.

- Description: making a mobile application called EatWell.
- In Scope:
 - Taking user info and using it to compute diets
 - Provide calories/nutrition of food items
- Out Scope:
 - Providing exercise routines
 - Tracking weight
- Objectives:
 - Dashboard and food logging

2 Project Resources

2.1 Group Members

1. Zack Clements
2. An-te Ku
3. Makayla Smith
4. Minh Anh Nguyen
5. Timothy Pelphrey

2.2 Data

<https://www.kaggle.com/datasets/kkhandekar/calories-in-food-items-per-100-grams>

- The open data set we are using is calories in food items. This dataset shows calories for each food item per 100 grams that people will consume. We will use this dataset to help add the correct calories that the person takes in.

2.3 Hardware and Software Resources

The project will not require any special hardware resources. Any usable computer with an internet connection can complete the project. Some of the software we will be using includes the Python programming language, Github, and more.

2.4 Special Resources

This project will not require any special resources. We will use the calories database to help make this project more accurate into our programming. This application is available for anyone with a device not necessarily connected to the internet to use.

3 Plan

This section contains a list of tasks and deliverables associated with the project, a Gantt chart depicting task durations, dependencies, and completion dates, and a summary of resource requirements and assignments for each task.

3.1 Timeline Chart

Our [Gantt Chart](#)

3.2 Task/Milestone Descriptions

Milestone 1 - Create both the Use Case Diagram and DFD

Milestone 2 - Create User Stories and Features to imply scenarios

Milestone 3 - Test the product

Milestone 4 - Finish the conclusion and what we learned

Milestone 5 - Organize and finalize the project

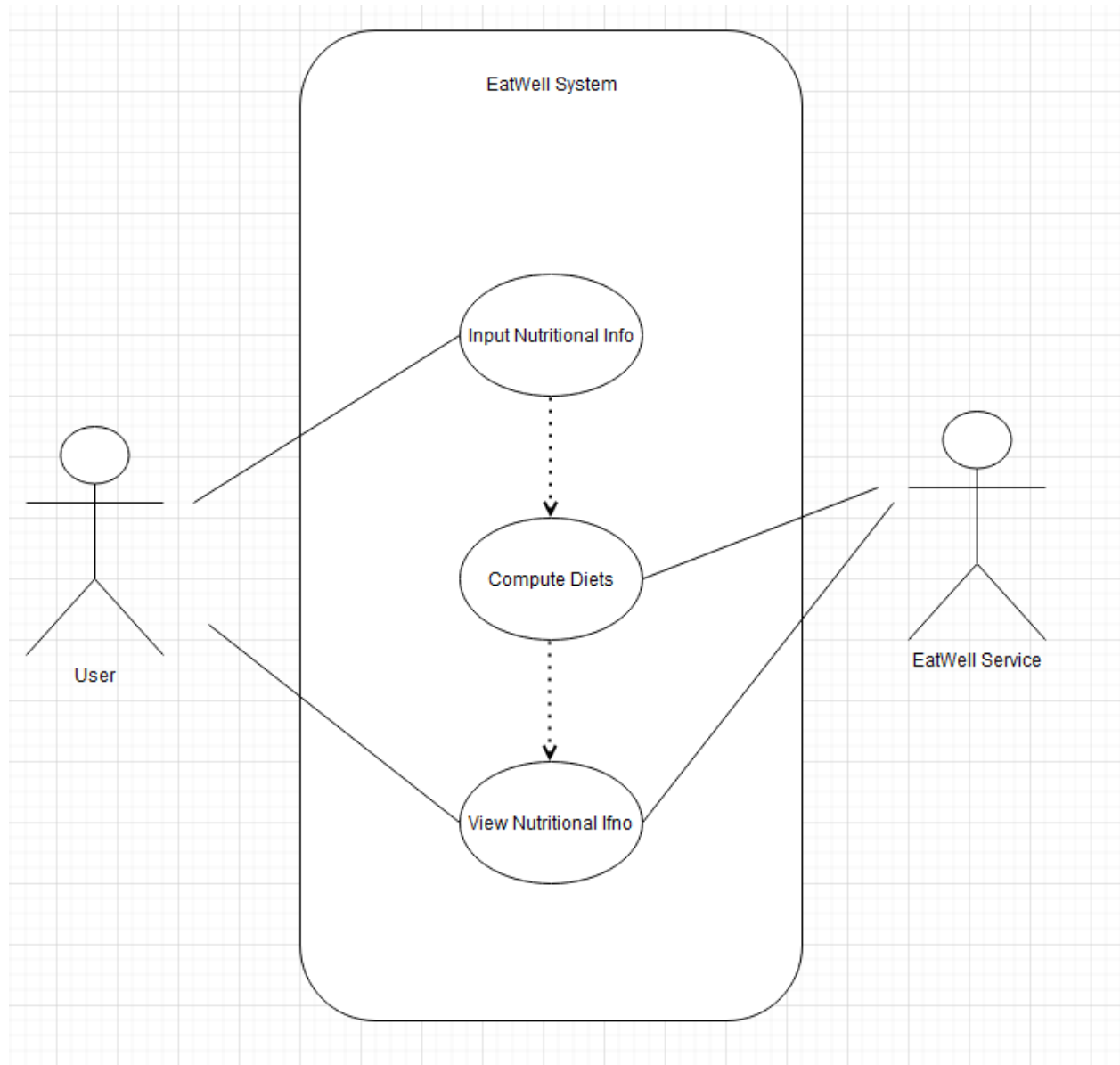
3.3 2.3 Resource Table

We are using [Github Projects](#) as our Software Development Board

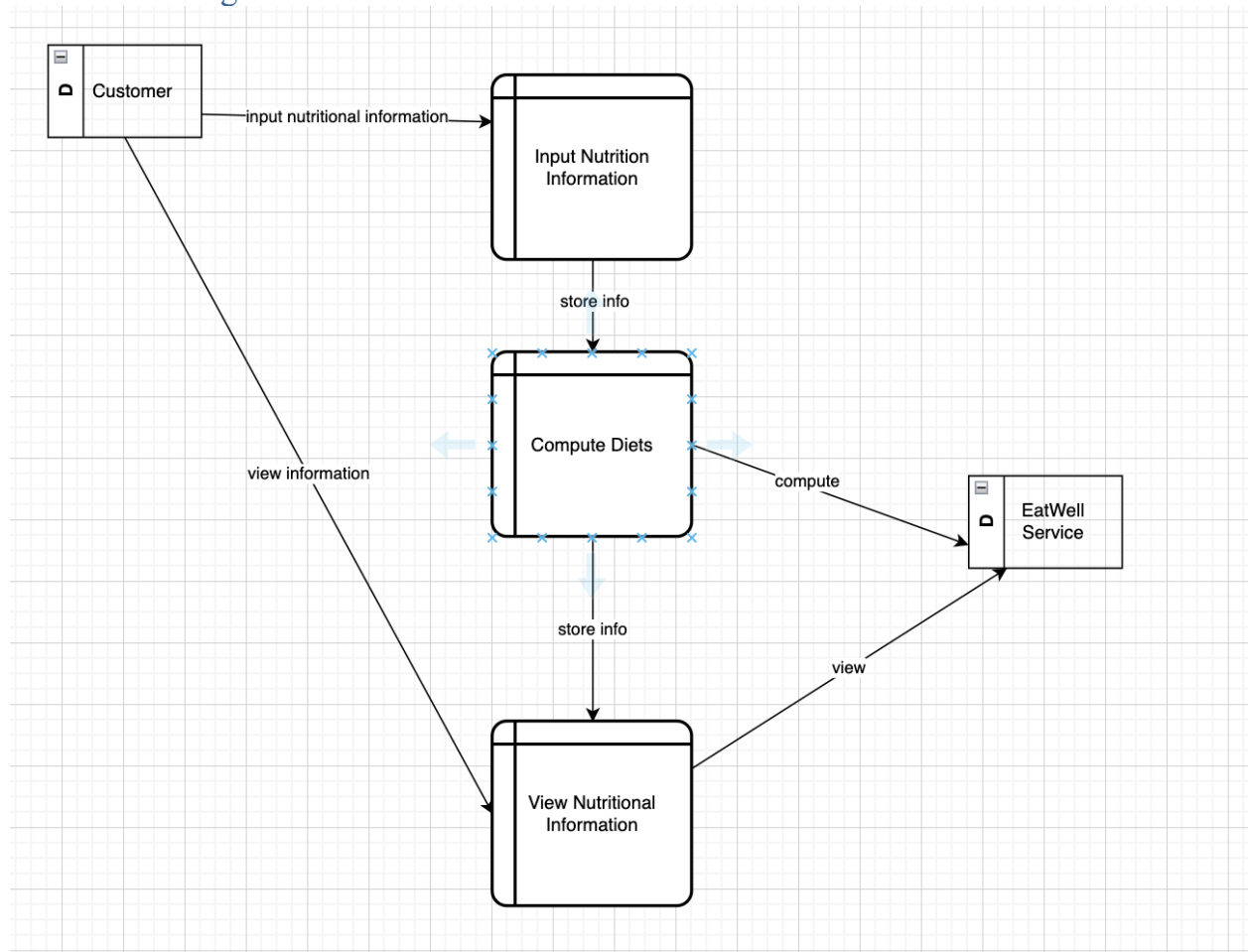
Task	People
Look at Github Project Board before 4/18 class	Everyone
Complete their assigned tasks	Everyone

4 System Design

4.1 Use Case Diagram



4.2 DFD diagram



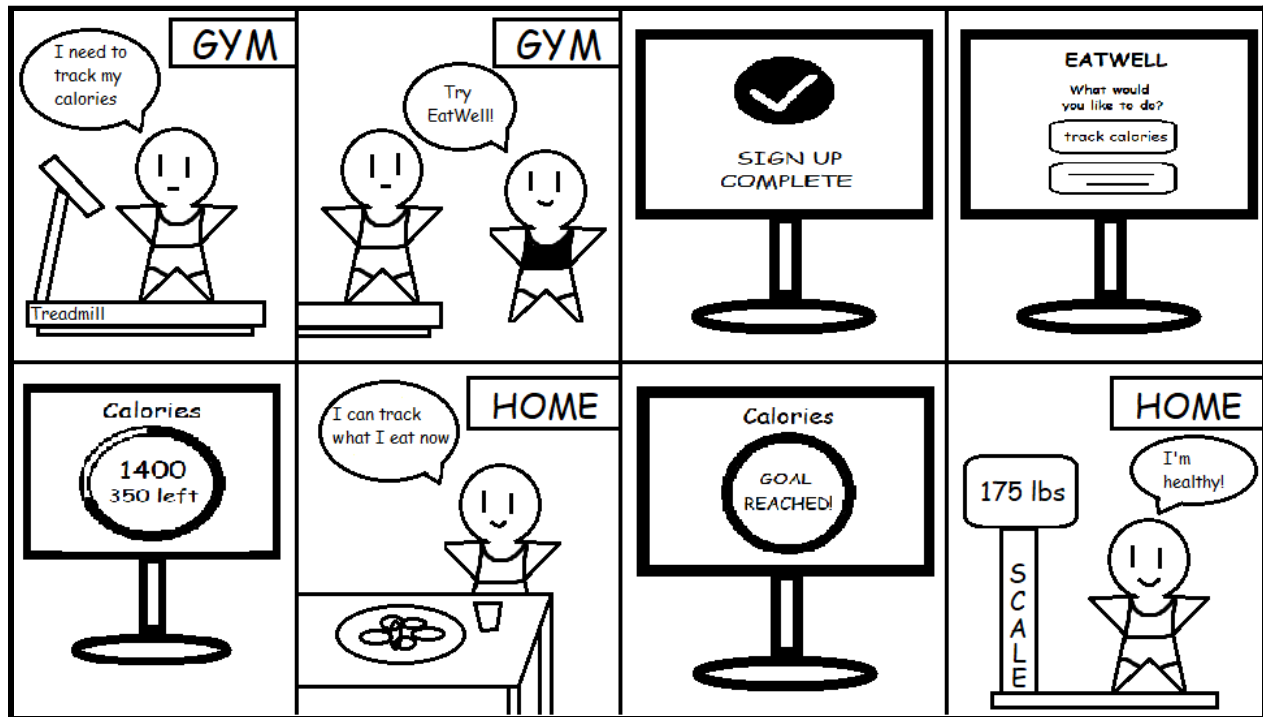
4.3 User Stories

- Ethan is a college student who wants to be more healthy this year, Ethan wants to document his nutrients taken and see what is missing.
- John is a user that wants to calculate the amount of calories and nutrients that he is consuming.
- Sarah is an athlete that wants to maintain their healthy body so she wants to keep her diet consistent by knowing what she is taking in everyday
- Nick wants to be a future soccer player so he wants to learn how to gain healthy weight and muscle through this application
- Bella is a student who wants to lose some weight so she wants to learn which nutrients she needs to take less of and what she needs more of to help balance everything.

4.4 Feature List

- Add and Remove various food (nutrient) items
- Graph calorie intake and percent of daily intake each food item comprises
- Get general information regarding the calorie and energy consumption from foods

4.5 Storyboard



5 User Tests

5.1 Test procedure

We did a simple test procedure and showed a demo of our application to our partner group. After the demo we asked the group their opinions of our application.

5.2 User Test and Results

- They found it convenient that they don't need to refresh the web page in order to start a new food log
- All charts and graphs display accurate and precise results
- Web page was nice, simple, and all in one place
- They disliked that the food items are case-sensitive and need to be entered exactly like they're spelled.

5.3 Conclusion

Overall, our partner group liked our web application for EatWell. They found nothing wrong with the data displayed on the charts and found the web page layout to be simple enough to fit a diet tracking application. The only thing they were concerned about is the text box as it was case sensitive.

6 Lessons Learned

Some major challenges that we faced were using Python to implement graphs and charts into an HTML webpage as well as deciding what graphs we should use that fits with our purpose of tracking health and diet. The most important lesson we learned is that there are many factors when it comes to eating healthy.

7 Future work

- Program the textbox so that it's not case-sensitive anymore and users can enter a food item however they want
- Add more charts for other nutritional information
- Add more calculations
- Add a fitness/exercise feature

8 Appendices

8.1 Team Charter

Chosen Group Name: Group 2!

Group Members: Zack Clements, An-te Ku, Makayla Smith, Minh Anh Nguyen, Timothy Pelphrey

Communication Channel: Discord

Trello Board/Github Project Boards:

<https://github.com/ZackClements/3155FinalProject/projects/1>

Github Repo:

<https://github.com/ZackClements/3155FinalProject>

Our agreed time-management strategy will be to:

- Our group will be working ahead of the deadlines. We will meet on zoom during our regular zoom meetings to work together on this project. If needed, we will also set up group meetings outside of class to also work on it as well.

Describe how you will handle your team leadership. i.e. - will you have a leader and if so, who? Will you rotate this responsibility and if so, how do you plan to do so? Will each person take a turn or will it be rotated among only a few people?

- Zack will be our team leader. Each member will be responsible for each assignment and attending our group meetings. We will all work together and complete each assignment together. Zack will be the main organizer to keep everything on track and smoothly.

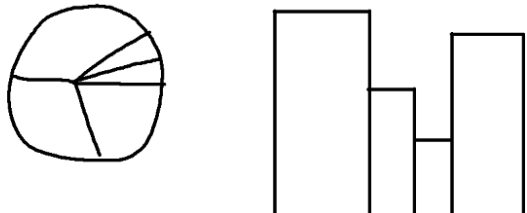
How do you plan to handle the situation if someone does not meet expectations? Has everyone agreed to this strategy?

- In the event that someone does not meet expectations, we will further discuss the issue with that particular person and if further action is necessary we will bring our issues to our assigned TA's/professors attention to discuss further action.

List your project roles:

- Makayla: Note taker
- Zack: Team Leader
- An-Te: Progress Check
- Minh: Document Organization
- Timothy: Time Keeper

8.2 Sketches

EATWELL		LOGIN SIGN UP			
(date)	(goal) (gain/lose)	Nutrients (Intake)			
List of Items to add / subtract					
<table border="1"><tr><td>x</td></tr><tr><td>x</td></tr><tr><td>✓</td></tr><tr><td> </td></tr></table>			x	x	✓
x					
x					
✓					
		Total			
		Calories:			
		Average:			
		Progress			

8.3 Software Repository

Link [here](#)

8.4 WBS Tool

Our [Gantt Chart](#)

