1. Introduction

Description (paragraph describing the system): The system will let a user choose to track their budget and their health goals. For the budget section, a user can input their overall budget over a certain period (week/month). For the health goals, a user can input which goal they want to pursue, whether that is fat loss, weight gain, or maintenance. The system will recognize the input from the user, and then the system will update the different respective counters such as calories and macronutrients. As users add their foods and their respective prices, the system will automatically update the budget and even keep track of the meals that the users create. Value proposition: "Keep track of your finances and health without worrying about your college classes."

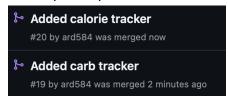
MVP(main features of the MVP): Budget calculator, meal tracker, health goals (eg. weight, calories, macronutrients, exercise)

Repository link: https://github.com/loganb7869/CS386-Project-Repo.git

2. Implemented Requirements

2.1 Logan Bankert

Github pull request link for:



- 1. Requirement(User story from Repo): As a student athlete, I want to keep track of my carb intake so that I can carb-load more effectively.
- 2. Issue: https://github.com/loganb7869/CS386-Project-Repo/issues/3
- 3. Pull request: https://github.com/loganb7869/CS386-Project-Repo/pull/19
- 4. Implemented by: Logan Bankert
- 5. Approved by: Logan Bankert
- 6. Automated Tests: https://github.com/loganb7869/CS386-Project-Repo/blob/main/Unittest 2.1.A
- 7. Visual evidence:



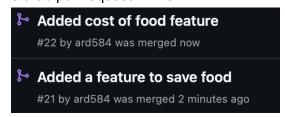
Requirement 2

- 1. Requirement(User story from Repo): As a busy student, I want to keep track of my calorie intake so that I eat enough to not be tired during class.
- 2. Issue: https://github.com/loganb7869/CS386-Project-Repo/issues/4
- 3. Pull request: https://github.com/loganb7869/CS386-Project-Repo/pull/20
- 4. Implemented by: Logan Bankert
- 5. Approved by: Logan Bankert
- 6. Automated Tests:
 - https://github.com/loganb7869/CS386-Project-Repo/blob/ard584-unittests/Unittest 2.1.B
- 7. Visual evidence:



2.2 Rita Bolanos

Github pull request link for:



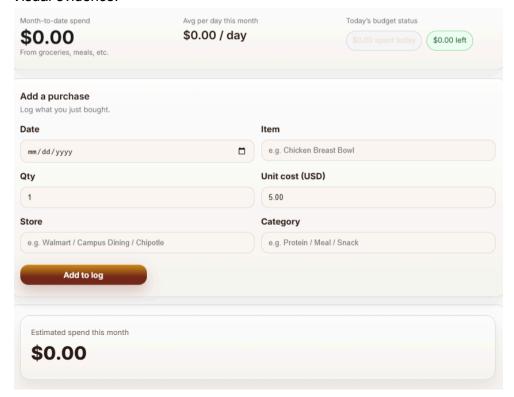
- 1. Requirement(User story from Repo): As a student, I want to save frequently eaten foods so that I can easily access them.
- 2. Issue: https://github.com/loganb7869/CS386-Project-Repo/issues/5
- 3. Pull request: https://github.com/loganb7869/CS386-Project-Repo/pull/21
- 4. Implemented by: Rita Bolanos
- 5. Approved by: Logan Bankert
- 6. Automated Tests:
 - https://github.com/loganb7869/CS386-Project-Repo/blob/ard584-unittests/Unittest 2.2.A



Requirement 2

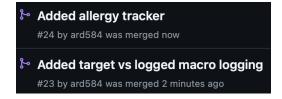
- 1. Requirement(User story from Repo): As a budget conscious student, I want to see the cost per food item so that I can stay within my budget.
- 2. Issue: https://github.com/loganb7869/CS386-Project-Repo/issues/6
- 3. Pull request: https://github.com/loganb7869/CS386-Project-Repo/pull/22
- 4. Implemented by: Rita Bolanos
- 5. Approved by: Logan Bankert
- 6. Automated Tests:

https://github.com/loganb7869/CS386-Project-Repo/blob/ard584-unittests/Unittest 2.2.B



2.3 Annaliese Dedmore

Github pull request link for:

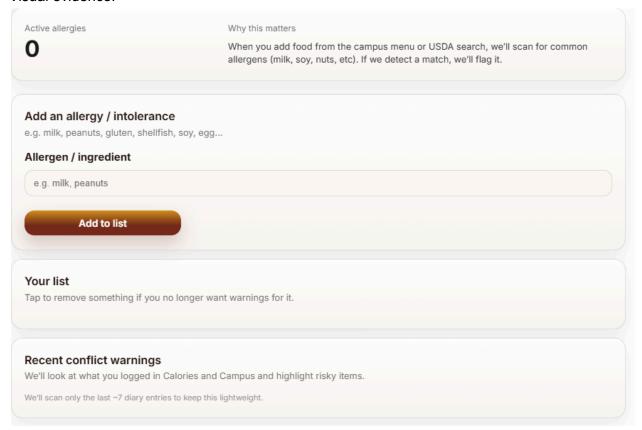


- 1. Requirement(User story from Repo): As a lazy student, I want to be able to track my total targeted macros vs. logged macros.
- 2. Issue: https://github.com/loganb7869/CS386-Project-Repo/issues/7
- 3. Pull request: https://github.com/loganb7869/CS386-Project-Repo/pull/23
- 4. Implemented by: Annaliese Dedmore
- 5. Approved by: Logan Bankert
- Automated Tests: https://github.com/loganb7869/CS386-Project-Repo/blob/main/tests/Unittest 2.3.A

Daily Targets	Calories: — kcal
Find your daily macro and calorie intake	Protein: — g
	Carbs: — g
	Fat: — g

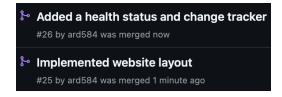
Requirement 2

- 1. Requirement(User story from Repo): As a health conscious student, I want to be able to track all my allergies to make sure I remember what to avoid.
- 2. Issue: https://github.com/loganb7869/CS386-Project-Repo/issues/8
- 3. Pull request: https://github.com/loganb7869/CS386-Project-Repo/pull/24
- 4. Implemented by: Annaliese Dedmore
- 5. Approved by: Logan Bankert
- 6. Automated Tests: https://github.com/loganb7869/CS386-Project-Repo/blob/ard584-unittests/Unittest_2.3.B
- 7. Visual evidence:



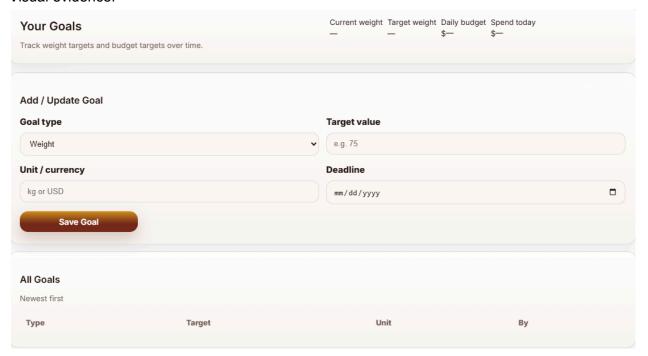
2.4 Isidro Marquez

Github pull request link for:

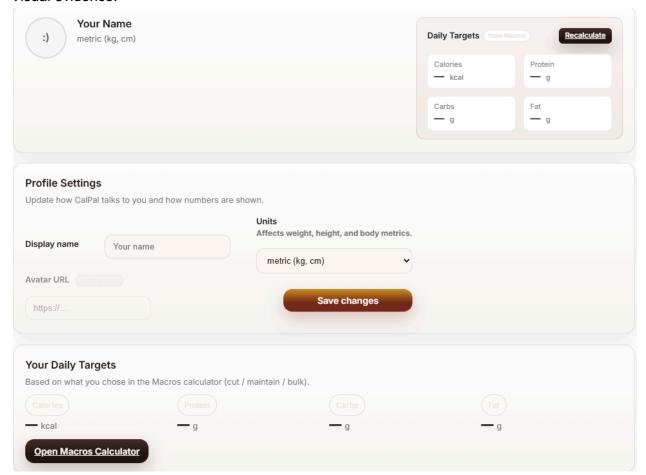


Requirement 1

- 1. Requirement(User story from Repo): As a student committed to improving my personal health, I want to be able to view all of my health details and goals all in one place.
- 2. Issue: https://github.com/loganb7869/CS386-Project-Repo/issues/9
- 3. Pull request: https://github.com/loganb7869/CS386-Project-Repo/pull/25
- Implemented by: Isidro Marquez
 Approved by: Logan Bankert
- 6. Automated Tests: N/A
- 7. Visual evidence:



- 1. Requirement(User story from Repo): As a newly-independent student, I want to be able to track all of my health changes as I adapt to college life.
- 2. Issue: https://github.com/loganb7869/CS386-Project-Repo/issues/10
- 3. Pull request: https://github.com/loganb7869/CS386-Project-Repo/pull/26
- 4. Implemented by: Isidro Marquez
- 5. Approved by: Logan Bankert
- 6. Automated Tests: https://github.com/loganb7869/CS386-Project-Repo/blob/ard584-unittests/Unittest_2.4.B



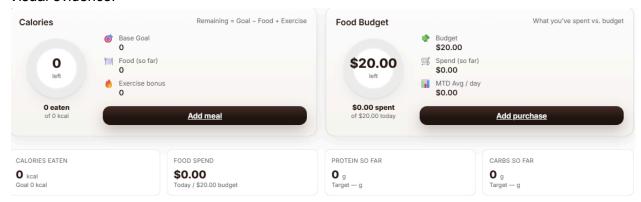
2.5 Nile Ham

Github pull request link for:

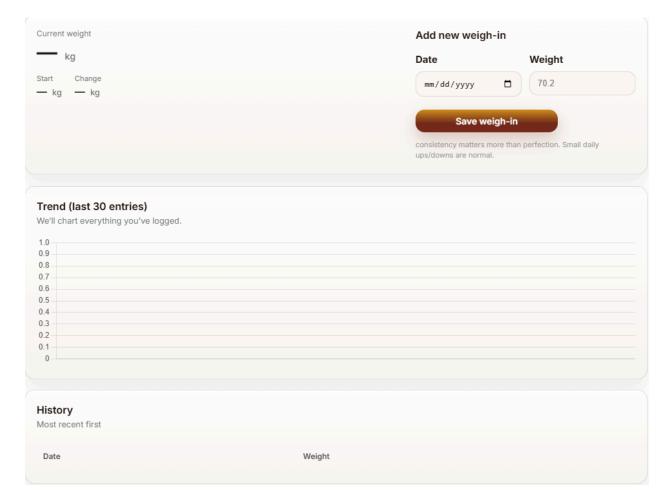


- 1. Requirement(User story from Repo): As someone who enjoys eating healthy and saving money, I want to be able to track what I eat and spend at the same time.
- 2. Issue: https://github.com/loganb7869/CS386-Project-Repo/issues/11
- 3. Pull request: https://github.com/loganb7869/CS386-Project-Repo/pull/27
- 4. Implemented by: Nile Ham

 5. Approved by: Legan Banks
- 5. Approved by: Logan Bankert
- 6. Automated Tests: N/A

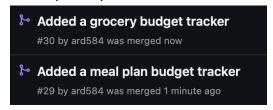


- 1. Requirement(User story from Repo): As someone who frequently does intense workouts, I want to be able to track what I eat throughout the year depending on what my goals are.
- 2. Issue: https://github.com/loganb7869/CS386-Project-Repo/issues/12
- 3. Pull request: https://github.com/loganb7869/CS386-Project-Repo/pull/28
- 4. Implemented by: Nile Ham
- 5. Approved by: Logan Bankert
- Automated Tests: https://github.com/loganb7869/CS386-Project-Repo/blob/ard584-unittests/Unittest 2.5.B
- 7. Visual evidence:



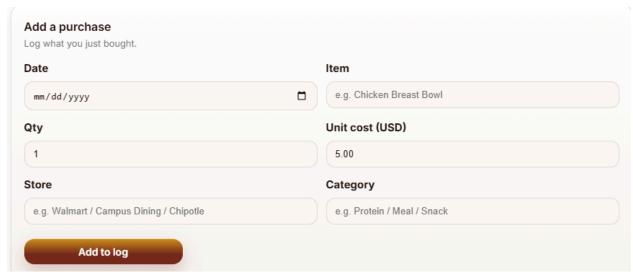
2.6 Luke Flaker

Github pull request link for:



Requirement 1

- 1. Requirement(User story from Repo): As a freshman college student with a limited dining plan, I want to be able to juggle my spending on other meals alongside using my dining plan to ensure I have enough until the semester ends.
- 2. Issue: https://github.com/loganb7869/CS386-Project-Repo/issues/13
- 3. Pull request: https://github.com/loganb7869/CS386-Project-Repo/pull/29
- 4. Implemented by: Luke Flaker
- 5. Approved by: Logan Bankert
- Automated Tests: https://github.com/loganb7869/CS386-Project-Repo/blob/ard584-unittests/Unittest 2.6.A
- 7. Visual evidence:

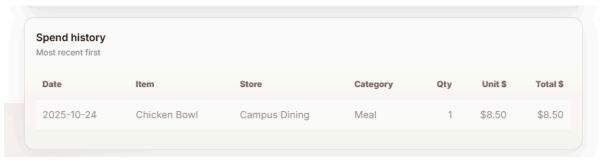


- 1. Requirement(User story from Repo): As a busy college student, I want to be able to keep track of what I spend at the grocery so as to not go over my weekly budget.
- 2. Issue: https://github.com/loganb7869/CS386-Project-Repo/issues/14
- 3. Pull request: https://github.com/loganb7869/CS386-Project-Repo/pull/30

- 4. Implemented by: Luke Flaker
- 5. Approved by: Logan Bankert
- 6. Automated Tests:

https://github.com/loganb7869/CS386-Project-Repo/blob/ard584-unittests/Unittest 2.6.B

7. Visual evidence:



3. Automated Testing

- 1. Testing Framework: Python unittest
- 2. Test Location: https://github.com/loganb7869/CS386-Project-Repo/tree/main/tests
- 3. Test Example:
 - a. https://github.com/loganb7869/CS386-Project-Repo/blob/main/tests/Unittest_2.3.
 A
 - b. https://github.com/loganb7869/CS386-Project-Repo/blob/main/tests/2.3.A Sourc e
 - c. The test validates that the macro values from the user's input are added correctly and the remaining macros properly reflect the changes made against the user's goal.
- 4. Test Results:

4. Technology Stack

HTML

Description: The standard language for most websites that gives the basic structure for content on a web page.

We used HTML because many of our team members are either already experienced with HTML or are currently learning it. HTML is also simply the easiest to use language for website design since it is the most widely used.

CSS

Description: The standard styling language for most websites that gives more in depth structuring and stylization to a website.

We used CSS because many of our team members are either already experienced with CSS or are currently learning it. CSS is also generally the standard for website styling which makes it the most compatible with our website.

JavaScript

Description: The standard functionality implementation language for most websites that gives a website its core coded functions.

We used JavaScript because many of our team members are either already experienced with JavaScript or are currently learning it. JavaScript is also generally the standard for website functionality implementation which made it the natural choice for our website.

5. Learning Strategy

Prior to the project all of our team members have taken a variety of coding courses that covered C-programming, Python, HTML, CSS and Java. Additionally some of the team members have experience in digital design and illustration which enabled them to create unique digital assets for our project. On top of our current knowledge base, team members have invested time into learning languages and development strategies both in and out of the classroom such as unit testing, creating technical documentation and diagrams, etc.

6. Deployment

Live System Link: https://calpalwebsite.z1.web.core.windows.net/calpal/index.html
Deployment Method: Microsoft Azure's Static website option offered the possibility to host our website. After providing the necessary files for the website and linking everything together, Azure provided the team with a static website link that can be accessed by anyone that has the link.

Platform Justification: The team has previously used Microsoft Azure to deploy our own personal websites before. After looking at other sites for hosting, we decided to use Microsoft Azure as it provides a free service to deploy our website and manage the files as they are updated.

7. Licensing

The license we chose for our project was the unlicense

We chose this license because as a team we feel that contributing to the public domain is important. Especially since this project is supposed to be a simple learning tool for CS 386 and not a fully fledged commercial product, allowing others to use the code to build their own experimental projects is a benefit in our eyes.

8. Repository Documentation

Prepare your repository for future contributors.

Required Files:

- **README.md** (primary focus)
 - Project description and setup instructions
 - Current version number following Semantic VersioningLinks to an external site
 - Installation and usage instructions
 - Contribution guidelines
 - Git tag matching the version number

Link:

https://github.com/loganb7869/CS386-Project-Repo/blob/main/README.md

LICENSE

Link:

https://github.com/loganb7869/CS386-Project-Repo/blob/main/CalPal%20License.md

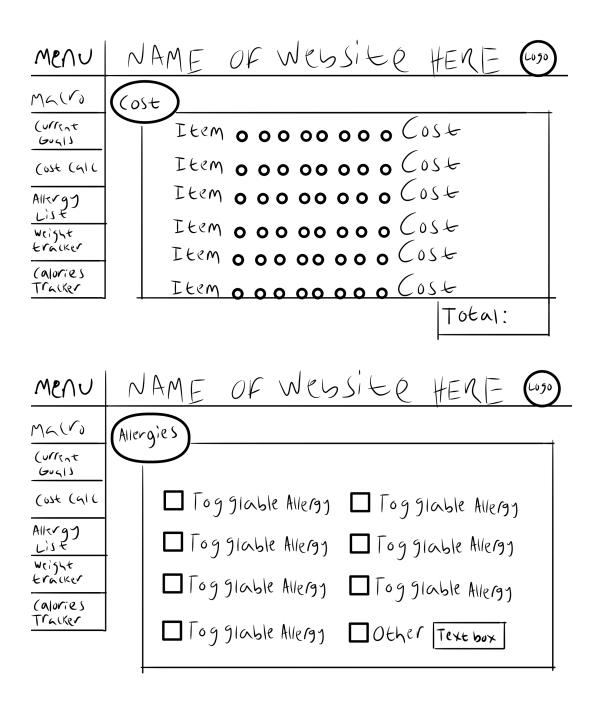
9. User Interface Design

When it came to designing the UI the first step we did after discussing the basic functionality of the website was to draw several mockups of screens that could be present in the final website. These mockups were done live in a meeting to allow for immediate feedback from other team members and were added to the repo to serve as a guide for designing the final website. After the mockup phase HTML and CSS code were written to mimic the mockups and then creative liberties were taken to make the UI look cleaner and be easier to implement.

Visual Examples: (Images created by Rita Bolanos)

Menu	NAME OF Websi	Le HERE	(650)
MG(10	Macro	·	
GUL13	(Wrbs Protein	Fiber Fat	- (
Cost (916 Alltray	CUTT LEVELIN CUTT LEVELIN CUTT SEATCHIN	OV level: ny. Sat 10 Trans	SNEL:U
weight tracker	GOALIN GOALIN	Goal: N Goal:	.^
(alories Tracker	Recconnended Recconnended	Recconnended Recconners:	-inded

Menu	NAME OF WESSILE HERE (650)
Ma(10	Goals
(Ullent	
(ost (911	☐ Fogglable Goal ☐ Fogglable Goal
Allergy List	☐ Togglable Goal ☐ Togglable Goal
Weight Eracker	□ Fogglable Goal □ Fogglable Goal
(alories Tracker	☐ Togglable Goal ☐ Togglable Goal



Menu	NAME OF WESSI	Le HERE (LOGO)
MG(10 (UMEnt (GU41)	Weight Tracker	
Cost (a) C Allergy List Weight Eracker	Summary Weight up/down Veeking goals hit A Last recorded: Height	r Height
Menu Menu	activity level update	Le HERE (LOSO)
Ma(r) (urrant Guals	Calories	
(ost (916	Summary	Recomendations
Allergy List Weight Eracker (alories Tracker	Total: n Breakdown: Total Fat:n Cholesterol: Total Carbs: Protein: Goal amat: n Goal amat: n Cholesterol: Total Carbs: Info Here	FOOD I TEM WORKOUT N HIS
	other:	Food item Workout n hrs

Usability Considerations: For the website, we wanted the user to be able to switch seamlessly between the different headers which leads them to the pages that hold each unique program/function. Each section of the website contains prompts that the user can input depending on their goals/budget/meals. Once the user actually inputs this information into the website, these values will then be displayed back to the user through the user of appealing

graphics, and the data would then be stored so that when the user comes back to the website later, they are able to view the information that they added. Also, the user can change their goals and edit their budget whenever they want to provide a more interactive user experience. The user interface is still under development as the project reaches the halfway point but a general MVP has been created for the anticipated final design.

10. Retrospective Analysis

Key Learnings: The team developed a more improved methodology to performing weekly meetings by assigning alternating roles to members every week, increased production efficiency thanks to our collective understandings of software development, and even improved our understandings of how teams operate under pressure in the real world to meet deadlines on time. Alongside this, the team has become more comfortable with using a code-hosting tool such as GitHub to make constant changes to our program by proposing changes to be made, which have to be approved by one or more other group members.

Challenges Overcome: During the course of the drafting process of the project, the group had little to no experience with working in a team environment. However, as time went on the team became more comfortable with working with each other and even understood how to operate effectively when under a future deadline. Some other notable problems that the team encountered include struggling with automated tests and the implementation of more accurate functions inside the website itself.

Future Improvements: In the future, the team will further our understanding of how to improve the functionality of our website by ultimately improving the accuracy of our functions which calculate key information about the user and contribute more to the repository of our code to highlight any noticeable changes needing to be made for the final product.

11. System Demonstration

Video Link(2-5 min):

https://drive.google.com/file/d/1YPH7AKvaiKY7_wToBbHCh0hx8-glehMm/view?usp=sharing