Waste To Taste

Development Plan

Version 1.0

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Revision History

Date	Description	Author	Comments
01/24/24	Version 1.0	- Delbert Li - Lucas Prifti - Saadman Choudhury	First Draft of Development Plan

Document Approval

The following Development Plan has been accepted and approved by the following:

Signature	Printed Name	Title	Date
DL	Delbert Li	• Team Lead • Presentation Lead • Assistant Documentation Lead • UI/Frontend Lead	4/10
LP	Lucas Prifti	• Database/Backend Lead • Presentation Lead • Note-Taker • QA Lead	4/10
SC	Saadman Choudhury	• Documentation Lead • UI/Frontend Lead, Assistant Database/Backend Lead	4/10
	Dr. Seyed Ziae Mousavi Mojab	• Professor	

Table of Content

1. Project Overview

Research shows that the average American household will waste 250 pounds of food per year, with that cost equating to $1500 or ⅓ of their yearly food purchases. This is a detriment to your wallet as over 50% of families in 2023 can't cover a $1000 emergency expense, and imagine how much you could save if that wasn't wasted every year. All of that wasted food will also contribute to the accumulation of greenhouse gasses.

Waste to taste will teach you how to utilize every tool in your kitchen that'll save you time, food, health, and money. It will teach you how to spend smarter at the grocery store and how to properly store food to prolong its lifespan. It will include amazing recipes for you to learn how to cook, including mini-recipes to cook loose ingredients such as garlic, green onions, and ginger to repurpose them for new recipes. There will also be a function to allow you to make your recipes with pictures, videos, and detailed instructions if you happen to think of something or see a recipe somewhere else you would like to try. We hope to achieve for the user a reduction of food waste, cost savings, useful skills gained, healthy eating habits, and a cultural appreciation through cuisines.

2. Project purpose, scope, objectives

The purpose of the project is to create a web application that will teach any and everyone how to cook, and in doing so will save them money by preventing waste and saving time. We want this application to be as accessible as possible which is why we decided on a free web application as all devices from phones to computers will be able to access and utilize this app effectively.
The scope of this project is to build a working web application with 3 main components: Recipes, culinary techniques, and strategic savings and storing. Recipes will include:

- “View all recipes” which will allow you to view all of the recipes that you have saved and or created in one place. Each recipe will be labeled and if you want to choose a recipe to cook you would just need to click on the picture of the recipe you have in mind.
- “Creating a new recipe” will open an interface and allow you to create your own recipe. You can add tags, allergen, videos, and a detailed description of how to cook. There will be a list format to list ingredients and instructions that you can check off.

- “Foodlist” will contain libraries of food that you want to group together similar to a music playlist. For instance, if you want to separate your guilty meals from your health-conscious foods you can create a food list for both labeled “Guilty meals” and “Healthy Meals”
- “Explore new creations” will allow you to search the database of the web app for meals that either we as the developers added in or other individuals have made. You can add them to your repository of recipes to utilize later and you can share your creations here where other people can look at too!

Culinary Techniques will mostly function as a media square where techniques are taught through embedded videos made by the development team. It will include:

- Utilizing utensils, pots, and pans, and proper procedures
- Utilizing Utensils will teach you how to utilize every handheld tool in the kitchen, with proper handling and safety
- Pots and pans will teach the user how to use pots and pans to their fullest extent including cooking techniques such as boiling and sauteing
- Proper procedures will teach how to keep the kitchen clean and how to set up while cooking.

Strategic savings and storing will also mostly have media where videos, photos, and text will teach the user how to spend smarter and save more.
The objective is to create a smooth, optimized, and useful application that will help solve the problem of wasted food while teaching new cooks how to be proficient in cooking so that not only do they save food and money, but they can improve the health of themselves and those around them.

3. Team organization

3.1 Roles and Responsibilities

Delbert Li

- Team Leader: Delbert is responsible for managing meetings, overall project coordination, and decision-making.
- Presentation Lead: Manages the creation of presentation materials and ensures quality and clarity.
- Assistant Documentation Lead: Supports Saadman in maintaining project documentation.
- UI/Frontend Lead: Oversees the design and functionality of the user interface and frontend.

Saadman Choudhury

- Documentation Lead: Saadman is in charge of creating and updating all project documents, ensuring they are clear and up-to-date.

- Assistant UI/Frontend Lead: Assisting Delbert in developing a user-friendly, visually appealing, and responsive interface.
- Assistant Database/Backend Lead: Assists Lucas in the development and maintenance of the database and backend systems.

Lucas Prifti

- Database/Backend Lead: Manages the development and maintenance of the database and backend systems, ensuring data efficiency and performance.
- Presentation Lead: Assists Delbert in preparing presentations, focusing on content organization and design.
- Note-Taking: Responsible for recording detailed notes during meetings and discussions.
- QA Lead: In charge of testing all aspects of the application, including unit testing and user experience testing.

3.2 Presentation Strategy

- Content: Focus on essential information, using bullet points and colons for clarity.
- Design: Ensure the slides are visually pleasing without causing eye strain, using straightforward and appealing designs.
- Organization: Number slides for easy referencing and maintain a clear, non-confusing layout.

3.3 General Approach

- Each team member has distinct roles to prevent overlap and confusion.
- Regular team meetings and communication are key to ensuring that all roles are effectively managed, especially for those handling multiple responsibilities.

4. Problem resolution policies

<u>How are disputes/problems going to be handled within your team?</u>

- If any issues are not with the team lead, contact the team lead. If it is with the team lead, non team lead members will talk about it if worse contact the GTA.
- We are adults and will talk it out with each other as reasonable people and make sure that all perspectives are shared and that we can reach a mutual understanding.
- If it’s bad enough of a situation we will contact the GTA.
- If it's the worst case we will contact the professor.

<u>What if there is a dispute over technology choices?</u>

- Everyone unanimously agreed on the current decisions. Even so later on if such an issue occurs, we will talk it out and utilize the easiest and the most efficient choice.

What if a team member does not show up?

- Team members will need to notify the team if they are not available for a meeting. For any work that they did not complete, the rest of the team will work together to divide up the work.

What if a team member fails to deliver their piece of code?

- Team members must be transparent about their progress, if they are in any way struggling with a particular part of the code, notify other team members immediately so they can help out ASAP to save time and the project. Worst case team members are expected to ask for help at least 3 days beforehand from a team member.

5. Project plan

5.1 Meeting Schedule

- GTA Meeting Fridays: 9:00pm-10:00pm
- Fridays: 10:00 PM for 1 hour
- Wednesdays: 4:00 PM for 1 hour
- Sundays: 12:00 PM for 1.5 hours

In addition to our fixed meeting schedule, we will maintain continuous communication to update each other on work and progress. This approach ensures that all team members are aligned and can address any issues promptly. Our meetings with the Graduate Teaching Assistant (GTA) will be integrated into our schedule, likely leading to adjustments every other week. The project will follow an iterative approach, with each phase being reviewed and planned during these regular meetings. And in the event that we would require extra meetings, we would add more meetings and document it in our WIR's.

5.2 Client Meetings

How often will you meet with your client?

- As Delbert is the "Client" for the project that would be 3 times a week when we meet.

5.3 Iterations, Project Schedule

Our first focus is to set up the essentials for the project, which includes setting up GitHub, MongoDB, React, and Node.js.

5.3.1 Requirements Gathering

Monday, 1/22/2024.

After that, we will start developing the foundation of the web application, by developing the homepage and recipe page with most of the recipe functions (viewing, and adding).

5.3.2 Prototype 1

Monday, 2/5/2024.

- MongoDB database established and functional.

- Have all website pages for the application designed.
- Main Web App page setup, only the Recipes button will be functional.
- Have recipe format designed, function to add new recipes and view the recipe.

After having that setup, we will focus on building on the recipe feature and focusing on the database to enhance the user's personal experience.

5.3.3 Prototype 2

Monday, 3/4/2024.

- Have Recipe creation fully functional.
- Users can create their own recipes, associated with their account.
- User sign-in is fully functional and integrated with the application.

We would continuously improve the UI design for functionality and aesthetics alongside every prototype as new features are added. Finally, we will finish secondary features such as the Culinary techniques and storage and saving.

5.3.4 Prototype 3

Monday, 3/25/2024.

- Culinary Techniques, videos and texts embedded.
- Storage and Savings will be finished, videos and texts embedded.

5.3.5 Final Prototype

Monday, 4/10/2024.(Days before final presentation for bugs)

- Have User Recipe Sharing fully functional.
- User-made recipes saved in the database in "Explore new creations".
- Web application is fully functional.

5.4 Deliverables

5.4.1 Functional Web Application

A fully operational version of the "Waste To Taste" web-app, with user authentication, recipe management, and learning modules.

5.4.2 User Interface (UI) Design

Completed and implemented designs for all screens/pages of the application.

5.4.3 Database System

A robust backend database to store and manage user data, their saved recipes, and any other potentially important info.

5.4.4 Content Creation

A collection of initial recipes, cooking tutorials, and grocery shopping guides.

5.4.5 Testing

Documentation of testing procedures and results, including bug reports.

6. Configuration management plan

6.1 Project Management

Team members are assigned with specific roles to lead and are expected to make sure their area of work is up-to-date. All members will be working with a collaborative approach, and are expected to check each other and update the leads on any changes/configurations.

6.2 Source Control

We'll use GitHub as our primary source control tool, ensuring efficient management and tracking of code changes.

6.3 Branch/Merge

6.3.1 Per person

Each team member works on their own branch, suitable for individual tasks or learning, merged as per progress or completion.

7. Technologies

7.1 React (Frontend)

React lets us build a really responsive and dynamic user interface. It's all about giving users a smooth experience.

7.2 Node.js & Express.js (Server-Side)

Node.js is fast and lightweight, perfect for our server needs. Express.js on top of it makes web app development a breeze with its handy features.

7.3 Visual Studio Code

It's super user-friendly and has tons of plugins. It makes coding together easier and more fun.

7.4 MongoDB

We're using MongoDB for its flexibility with data. It can handle the diverse data we expect with user profiles and recipes without a sweat.

7.5 Collaboration

7.5.1 GitHub

It's our go-to for keeping our code organized and working together without stepping on each other's toes.

7.5.2 When2meet.com

Finding time to meet is a breeze with this. It shows when we're all free without the back-and-forth.

7.5.3 Discord

Perfect for quick chats and updates. It's like our virtual meeting room. We can jump into premade rooms without needing to set up meetings, and we can share content and screens with each other relatively easily.

We chose each of these because they make our work efficient, keep us organized, and, most importantly, they're proven to work well for projects like ours.