SW Engineering CSC648/848

“FoodsOnly”

Section 01 Team 06

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Noah James Yamsuan (Scrum Master)

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Milestone 1

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Executive Summary:

FoodsOnly: the website that not only acts as a recipe blog, but also as a restaurant finder for locations near the user. Our website is modeled around a user-centric framework that takes into account how and why someone would be interested in FoodsOnly. Our platform allows users to create and modify their profiles by populating interests, food sensitivities, food preferences, and dietary needs. By implementing these different types of aspects, FoodsOnly becomes a personalized platform that is unique to each user. What if a user has a family recipe that is to die for? Then users can upload their own recipes for other users to try for themselves. What if a user does not want to cook anything? That's where the restaurant finder comes in. Our restaurant finder feature compares different restaurants in the area (given a user's location) and recommends the top picks given a search. From interviewing potential users, we have compiled our list of what makes a restaurant an "ideal pick." We take into account budget, menu, reviews, accessibility, and few others that deliver optimal results per search. We have also developed the concept of an incentive to keep our users coming back for more. Our trending feature recommends top recipes and restaurants to our users that have gained traction within a certain time period.

Our website is truly unique when compared to other services on the internet. Competitors may have extensive recipe databases, but FoodsOnly utilizes a comprehensive framework that filters and finds both recipes and restaurants for our fellow foodies.

Behind this great idea, we are a team of 6 college students with a common theme: *we* want what *we* want. We believe that to be an exceptional website, we give our users what they want *and* need as a baseline expectation. By employing this concept, we give users control of how they manage their diet, just as we would like to do. Together, we form a comprehensive team of collective ideas and shared experiences that inspire and drive our goal of delivering the best website for food only.

Personas and User Stories:

Persona 1:

Name: James Martin

Age: 30

Occupation: Dietitian

General Behaviors: Enjoys creating healthy meal plans for his clients, loves experimenting with recipes to make them healthier without sacrificing flavor.

Interests: healthy cooking, experimenting with global cuisines, gardening.

Skills: Creating balanced meal plans, cooking health-focused dishes, nutritional analysis.

Pain Points: Finding recipes that are both nutritious and appealing to a wide range of dietary preferences and restrictions.

User Stories:

ID: 1

Activity: Healthy Recipe Discovery

User Story: As James Martin, I want the app to offer a wide variety of healthy recipes that cater to different dietary needs (e.g., vegan, gluten-free, low-carb), so that I can easily find and recommend dishes to my clients and for my personal use.

Priority: High

ID: 2

Activity: Nutritional Information

User Story: As James Martin, I want each recipe to include detailed nutritional information, so that I can ensure the meals fit within the dietary guidelines and restrictions of my clients and myself.

Priority: High

ID: 3

Activity: Seasonal and Fresh Ingredients

User Story: As James Martin, I want the app to suggest recipes that utilize seasonal and fresh ingredients, possibly from my own garden, so that I can cook meals that are both healthy and environmentally friendly.

Priority: Medium

Persona 2:

Name: Ashim
Age: 26
Occupation: System Engineer
General Behaviors: Likes to cook at home, prefers making spicy chicken dishes.
Interests: Cooking, trying different beverages, especially alcoholic ones.
Skills: Cooking, especially chicken dishes.
Pain Points: Difficulty in selecting the right beverage to pair with his food.
User Stories:

ID: 1
Activity: Recipe Selection
User Story: As Ashim, I want to select a chicken recipe from the app, so that I can cook it at home.
Priority: Medium

ID: 2
Activity: Beverage Pairing
User Story: As Ashim, I want the app to recommend an alcoholic beverage that pairs well with the chicken dish I've selected, so that I can enhance my dining experience.
Priority: High

ID: 3
Activity: Recipe and Beverage Satisfaction

User Story: As Ashim, I want the app to consistently recommend good alcoholic beverages that pair well with my chicken dishes, so that I will continue to use the app for my cooking and dining needs.
Priority: High

Persona 3:
Name: Shiv
Age: 26
Occupation: Software Engineer
General Behaviors: Likes to cook and eat a variety of cuisines, particularly enjoys pasta and Indian gravy dishes.
Interests: Cooking, exploring different cuisines, meal planning.
Skills: Cooking, especially Indian and Italian dishes.
Pain Points: Difficulty in planning and choosing meals for different days of the week.
User Stories:

ID: 1
Activity: Meal Planning
User Story: As Shiv, I want the app to provide me with meal options for different days of the week, so that I can have a variety of cuisines throughout the week.
Priority: High

ID: 2
Activity: Recipe Selection
User Story: As Shiv, I want to select recipes based on my profile or the assigned cuisine for the day, so that I can cook meals that I enjoy and fit the theme of the day.
Priority: Medium

ID: 3
Activity: Meal Satisfaction

User Story: As Shiv, I want the app to help me get the correct food for each day, so that I can stick to my meal plan and enjoy a variety of cuisines.
Priority: High

Data Definitions:

Recipe- A recipe is a collection of the title, ingredients ,nutrition info, and directions in order to make a recipe.
User- A user is a collection of the username, dietary restrictions, and search history of one person.
Account- An account is a collection of the username,password, email, userid, and profile associated with an account.
Profile- A profile is the public face of an account which contains their social media links, recipes, allergies, reviews, and personal preferences.
Post- A post is a recipe shared by the user along with the image, tags, comments associated with the recipe.
Restaurant - A restaurant contains the name of the restaurant, location, food type, price range, and restaurant contact info.
Tag- A tag is a descriptor connected to a post and it can refer to the location,food type,ingredient and other important aspects of a recipe for easy search.

Initial List of Functional Requirements:

Users accounts:

- Users shall be able to make accounts by entering their email and password.
- Accounts shall have an existing email, password, full name, birthdate, and username.
- Guests or Non-Users shall be required to make an account to make a post, make a comment on the posts, find profiles of other users, and access the restaurant finder.

User Login:

- Users shall be able to login using their email or username, and password.
- Users shall be able to reset their password by clicking on “Forgot Password.”
- An account shall only be created with one unique email.

Posting:

- A post can either have a recipe of a food or a recommended restaurant.

- Each recipe should include details such as ingredients, step-by-step instructions, nutritional information, and any special notes.
- Users shall be able to include images to their posts.
- Posts shall have tags to help with searching and filtering.

Profiles

- Profiles shall be able to show food or restaurant recommendations of the user.
- The profile page shall be able to display bookmarked posts. Only the user of the profile can view their bookmarks.
- Users shall have an option to display food preference, allergies or diet onto their profile page.
- Users shall be able make and customize meal plans with the posts they select.
- Users shall have an option to add recipe preference to their profile.

Filtering:

- Users shall be able to filter searches using categories/tags, nutritional details, or recipe preference.

Search:

- Users shall be able to assign categories/tags when making their posts. If the tag does not exist, users shall be able to make a new one.
- Users shall be able to interact with our AI, using ChatGPT API, to ask for a good food suggestion.

Nutrition

- Users shall be able to include their diets into their profiles.
- Posts shall display total calories of the food/recipe.

Alternatives

- Users shall have an option to search for posts with only healthy tags.
- The program shall have an AI where it can suggest recipe/food alternatives to the user.

Home Page:

- The body of the home page shall display 15 posts of other registered users per page.
- The home page shall have a section displaying the trending recipe of the week or month.

Cookies:

- The home page shall display posts that are relevant to the user’s search history.

List of Nonfunctional Requirements:

Compatibility:

- The website should be compatible with any browser such as Chrome, Mozilla, Edge, Opera, and Safari.

Security:

- User passwords shall be encrypted first before storing in the database.
- Only authorized users and employees can access the database.

Performance:

- The system shall have a maximum load time of 2 seconds, to ensure fast load time.
- Limit database pulling (ex. 15 recipes/restaurants per page)

Server Traffic:

- The server shall be able to handle at least 1000 users concurrently.

Storage:

- Data of accounts, profiles, and posts shall be backed up at a certain time everyday.

Moderation

- The program shall be moderated to keep users' safety in mind.

Logs:

- The program shall log any modification and/or activities, such as sign ins, profile, modifications, post uploads, edits, and comments, to help with moderation

Location:

- The program shall prompt all users to use their location for precise search of the restaurant locator.

Content:

- Users should be able to easily search for and find relevant content within the program using efficient search algorithms and filters.

Legal:

- The program shall comply with relevant data protection and privacy regulations. Including local drinking age restrictions.

Competitive Analysis(~1pg):

FoodsOnly	**Competitor**
Create a Recipe Library	Saving Recipes
Restaurant Finder	Nutrition Information
Recipe and ingredient Search Bar	Recipe Search Bar
Recipe Reviews	Recipe Ratings
Ability to view other users profiles containing their recipes	Food News Section
AI food recommendations	None

The reason that FoodsOnly shall have a competitive advantage over other recipe blog websites is our emphasis on the user experience. Whereas other recipe websites mostly focus on having their recipe pages look good they do not have a core focus on keeping the user engaged on their product. A user will usually Google a recipe and click on the top result that fits what they want, maybe save the recipe, but when they look for the next recipe, they will not default to going back to that website. With Foods Only, the social aspect of recipes coming from blog posts means that users will continually be engaged with the website even if they do not have a specific website in mind. Whereas only one of the key competitive advantages of the competition pertain to the user experience. By offering more features (like our restaurant search) and allowing for more user interaction, we intend to make a much more engaging product than the competition. Additionally the previously mentioned restaurant search feature will allow FoodsOnly to be more of a full service offering for hungry people rather than just being a website that people visit when they want to cook.

High Level System Requirements:

- **Server Host:** AWS EC2 Instance us-west-1
- **Operating System:** Ubuntu 22.04 Server
- **Database:** MongoDB Atlas

- **Web Server:** Nginx
- **Front-end Framework:** React
- **Server-Side Language:** Javascript (Node.js)
- **Web Application Framework:** Express
- **Additional Technologies:**
    - ChatGPT API
    - Google Places API
- **IDE:** Visual Studio

Team:

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- Terrell Enoru (Back End Lead)
- Kayla Young (GitHub Master)
- Karl Xavier Layco

Detailed study plan:

AWS

- Who: All
- Expected goal by next 1 weeks:
  Become familiar with the AWS EC2 console and learn how to correctly SSH into the instance for development testing. Kayla will specifically manage Github to ensure the server is updated accordingly.

Ubuntu

- Who: Issac
- Expected goal by next 1 weeks:
  Share previous and new knowledge about Ubuntu that will enhance our usability for development.

MongoDB

- Who: Terrell/Karl
- Expected goal by next 2 weeks:

Develop schema and correctly develop the framework for sending and receiving data from the database.

Nginx

- Who: Issac/Anshav
- Expected goal by next 2 weeks:
  Configure domain and learn necessary syntax for ensuring that routes and secure connections are stable.

JS

- Who: Terrell/Issac
- Expected goal by next 2 week:
  Dynamically alter our JS to support our app changes and new features

React

- Who: All
- Expected goal by next 2 week:
  Decide on a theme for the website and introduce new features that will support and enhance this theme.

Checklist:

- Team found a time slot to meet outside of the class **DONE**
- Scrum Master shares meeting minutes with everyone after each meeting. **DONE**
- Github master chosen **DONE**
- Everyone sets up their local development environment from the team's git repo. **DONE**
- Team decided and agreed together on using the listed SW tools and deployment server **DONE**
- Team ready and able to use the chosen back/front-end frameworks. **ON TRACK**

- For each technology (front/back-end/DB/cloud), team decides who will lead the study of each technology and what will be the specific goal of the study within one month from the M1 announcement. **ON TRACK**
    - Ex : implement DB scheme for main data items by next 2 weeks.
- If you list a detailed study plan for this, earn extra point! **DONE**

· Team lead ensured that all team members read the final M1 and agree/understand it before submission **DONE**