MealTime

Team 10 - Project Backlog

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Problem Statement

Planning out healthy meals on a tight budget or busy schedule can be challenging, especially for those with unpredictable schedules. MealTime takes the user's nutritional goals, budget, and on-hand ingredients into account to help plan meals throughout the week, both for at home recipes and eating out. The app differs from other health and fitness applications by taking into account budget and acting as a fully fledged tool for planning meals well in advance.

Background Info

Targeted Users

For many living on their own, it is difficult to balance eating out with making meals at home. Due to this, our targeted users include a wide range of people with different backgrounds. One targeted user groups consists of those who want an easy budgeting solution that can help manage their finances for food. Another section of targeted users may consist of those who want a more health eating experience, and are willing to use technology to help them achieve their nutritional goals.

Similar Applications & Limitations

There are many applications available for both mobile and web markets that have some overlap with our application. MyFitnessPal, one of the most popular options, is a calorie tracking application that allows the user to track what foods they're eating, but it's function basically ends there. Our application, to contrast, seeks to allow for the tracking of caloric and nutritional information while also providing unique recipes, combinations, and price tracking. Mealime, a meal prepping mobile app caters to busy users by recommending recipes and healthy options, but it does not take into account budget, a problem which our application seeks to eliminate.

Functional Requirements

User Stories

1. As a mobile user, I want MealTime's layout to reflect the desktop environment in an intuitive way.
2. As a healthy person, I would like to be able to count my daily calorie intake, and then have a weekly total.
3. As someone with dietary restrictions, I need to be able to access recipes that will fit within my caloric intake as well as the restrictions specified.

4. As a person with caloric restrictions, I would like the ability to track my caloric intake throughout the day.
5. As a person who likes to know what I'm putting in my body, I would like the ability to track my macros and other nutritional information.
6. As a culturally diverse person, I would like to be able to find culturally diverse restaurants, and not just have a bunch of fast food within my budget.
7. As a person who likes to cheat on their diet, I would like to have a cheat day/meal button/setting that allowed me to go past my calorie budget.
8. As someone who doesn't cook much, I would like to have an easy-to-access hub of recipes and food options.
9. As someone who strives to be healthier, I would like to easily find recipes that would allow me to eat healthier.
10. As a food enthusiast, I would like to go to new places with high reviews and that are well liked.
11. As a person with a strict budget, I would like to find new places that are well within my budget.
12. As someone with a gluten restriction, I would like to find restaurants that have gluten free things on their menu.
13. As someone with a sweet tooth, I would like to find a place with good desserts.
14. As someone in a rush, I would like to quickly find any restaurant around me that is within my budget.
15. As someone who uses low budget ingredients, I would like to find a recipe that I can replace the more expensive ingredients with lower budget ones.
16. As someone who is trying to bulk up, I would like to find recipes and restaurants that allow me to eat large amounts of calories.
17. As a college student, I would like to find recipes with preparation times that I can support in my schedule.
18. As a person without a car, I would like to find new places to eat at within my budget that are nearby (If time allows us to use location services)
19. As someone who likes to cook, I would like to upload and share my recipes. (if time allows)
20. As someone who likes to eat at restaurants occasionally, I would like to be recommended restaurants based on recipes that I have cooked (if time allows).
21. As someone who is generally fit, I would like to find workouts that allow me to continue bettering myself. (if time allows)

Non-Functional Requirements

Architecture

Our team plans to build the application as a responsive web application for use with modern web browsers. The front end will be built using a responsive and easy to use ReactJS frontend, a popular frontside Javascript framework that allows for the production of responsive and

beautiful web interfaces. Our overall goal is that we'd like our web app to be useable on both web browsers and mobile devices.

The backend will be powered by Ruby on Rails, a very popular backend web framework. We will also use a SQL style database to store user data such as login information, caloric goals, budgetary information, favorite spots to eat, location data, health information.

Security

As an application meant for the purposes of health and fitness, security of our user's sensitive information is a primary concern. In order to ensure that user's data is secure, we will have strict permissions built into the app so that users can determine what data is shared with others, and what isn't.

Usability

The overall UI should be simple and straightforward. The goal for the UI is to make it simple enough that users will be able to intuitively understand how to work the app without much effort. While using the application, the user will experience a reactive, and dynamic interface that logically separates unrelated functionality as to prevent the user being overwhelmed with information.

Performance

For an application that is supposed to make user's lives easier, the application should have optimal performance that won't interfere with the user's goals. No page changes in the application should take more than 1000 milliseconds to complete, and all communication to and from the database should be prompt.

Links:

Sample:

http://courses.cs.purdue.edu/_media/cs30700:fall18:sample_docs:spring16_productbacklog_mango.pdf

Rubric:

http://courses.cs.purdue.edu/_media/cs30700:fall18:rubrics:productbacklogrubric.pdf