PL8 - Team 21 Project Backlog
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Problem Statement

There exist many services which suggest recipes based on what you have in your pantry and refrigerator, and some will even suggest new ingredients for you to buy. However those with certain dietary restrictions, such as diabetes, have trouble finding recipes that meet their restrictions. Because these users can only allow some small quantities of sugar into their diet, PL8 will have a large focus in giving those with dietary restrictions a better solution to finding recipes and living a healthy, happy life.

Terminology

- A "fuzzy limit" is like diabetes: you can have sugar, but only in moderation.
- A "hard limit" is like a severe allergy: you cannot have any trace of a particular ingredient.

Background Information

There are numerous services that suggest recipes including MyRecipes, MyFridgeFood, and the most popular, Supercook. With these applications, a user can input items they may have in their kitchen and it will generate a list of recipes. Supercook also provides hints as to what ingredients could be used in other recipes but using a larger font size.

There are limitations to these other sites, however. None, as far as we are aware, have any sort of fuzzy limit. Also, most recipe sites neglect to include any nutritional information on the recipes. These sites have a general audience that may or may not be concerned with nutrition. However, unlike these other applications, PL8 has a special focus on healthy eating. By including nutritional information, people can be more aware of what they are eating and make better long-term decisions

Requirements

Functional
Core features
- As a person who cooks, I want to have new recipes suggested to me based on what I already have so that I can have a variety of foods
- As a person who has a dietary "fuzzy limit," I want to be suggested recipes which do not contain very much of a certain nutrient or ingredient
- As a person who has a dietary "hard limit," I want to be able to completely filter out all recipes containing any of a certain nutrient or ingredient

- As a user, I want to have shopping items suggested to me which allow me to make as many new dishes as possible
  - As an economic user, I want to save money and space by not buying unnecessary ingredients
- As a user, I want to see suggestions for other recipes when I view a recipe
  - Example: "Foods that go well with this one."
- As a user, I want an easy way to add and remove things from my pantry
- As a user, I want a way to condense all of these items into a shopping list
  - As a data conscious user, I want this list available offline
- As a user, I want an account to store personal preferences.
  - As a user with an account, I want to be able to store my foods, recipe filtering preferences, favorite recipes, etc.
  - As a user with an account, I want to be able to access it on my laptop/desktop and on my Android phone.
- As a user I want to export recipes and other data to an email or to a word document
- As a user I want to be able to post comments on recipes and suggest alternatives with different nutritional content
- As a user, I want to be able to see nutritional information about the recipes
- As a critical user, I want to see advice from users on recipes so that I can know what to expect when attempting a recipe
  - Example: User Emma suggested: "Do not substitute milk with heavy cream."
- As a user I want to be able to submit a recipe that I like
- As a user, I want to be able to visualize nutritional values compared to well-known food values
  - Example: "This meal has as much sugar as 4 sodas."
- As an owner I want my application to not be vandalized (report system for vandals posting not-recipes)
- As a user, I want to be able to sort by types of meals, i.e. dessert, snack, side dish, etc
- As a user, I want to know how long a certain recipe takes to prepare

Features to implement if time
- As a user, I want to be able to automatically scale recipes up or down depending on how many people I am cooking for
- As a user, I want to be able to see what recipes use in-season fruits and vegetables
- As a user, I want to know if a recipe fits a certain diet plan, i.e. paleo, gluten free, vegan, etc
- As a user, I want to be able to add food to my pantry by scanning the barcode
- As a user, I want to be able to access it on my Android phone
- As a user, I want to be able to share recipes on social media website
- As a user, I want to be able to specify a certain ingredient be used, in order to get rid of items that are about to go bad
- As a user, I want to be able to vote on recipes and see what others voted on
- As a user, I want to be able to sort by cuisine, ie Mexican, Italian, etc

- As a user, I want suggestions for full meals which include a main course, side dish, and possibly dessert

Non-Functional

- As a user I want my login credentials as well as my preferences and everything else to be secure
- As a user I want to be able to access saved recipes and my shopping list offline
- As a developer I want my recipe searching algorithms to be efficient
- As a developer I want my server code to be easy to maintain
- As a developer I want to reuse as much code as possible between the browser and mobile versions (assuming they both exist)
- As a developer, I want to differentiate my software from existing recipe services.
- As a user I want server downtime to be minimal or nonexistent
- As a user, I want the website to be visually appealing and usable on a wide range of screen sizes
- As a project owner, I want documentation to be clear and complete
- As a project owner, I want the cost of the project to be minimal
- As a user, I want the interface to be clear and easy to interact with
- As a user, I want the site to be responsive, and give error messages when things take longer than expected