Computer Engineering and Computer Science
491A Senior Project Product Proposal

Academic Term: Fall 2023

Team Name: The Decision Tree

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Team Leader: Aiden Hock

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Product Name: Kitchen Efficiency

Glossary

Product Outline:

Product's Value/Purpose:

Kitchen Efficiency is an all-encompassing application to help users manage their kitchen. This product's main value is in keeping food affordable and allowing users to enjoy the foods they like most.

Vision:

Users will first select the ingredients they currently have in their kitchen which the application will track and manage. The application will then use this data to suggest recipes the user can make with what they have and also recipes that only require a few more ingredients. For recipes that still require ingredients, the application gives the user suggestions on where those ingredients can be purchased based on price and proximity. This will help users to spend less money on food and also keep food from being wasted.

Features:

Member Name: Nathan Wolski

Medium to High Complexity Feature (Phase 1):

- **Recipe Suggester:** Provides the users with recipes they can make with what they have or only need a few more ingredients.

Low to Medium Complexity Feature (Phase 1):

- **Ingredient affordability:** For recipes that still require ingredients, the application will web scrape and find the best locations to buy the ingredients they need based on price and proximity.
- **Kitchen Inventory Manager:** Application keeps track of the users ingredients. After a recipe is made, user is prompted whether or not they fully used their ingredients. If an ingredient was fully used, the application removes it from the inventory of ingredients in the kitchen.

Feature for Next Release (Phase 2):

- **Food Preferences:** The application will keep track of recipes the user has chosen to make in the past and uses that data to suggest dishes that the user would enjoy.

User Types:

- **Root Admin (Super Admin):**
  - **Responsibilities**: Configuration of system settings, user account management, and access to advanced analytics.
- **Admin Delegates (Admin):**
  - **Responsibilities**: Assisting the root admin in user management tasks and overseeing community engagement and challenges.
- **Normal Users:**
  - **Responsibilities**: Selecting their currently owned ingredients and allowing the application to track their location for ingredient sourcing.

Target Audience:

Kitchen Efficiency is designed mainly for people that would like to save money on food. Food is essential so it's one of the main things people spend their money on. Kitchen Efficiency would also cater to those users that want to be more environment conscious since this product focuses on using what you have.

Scope:

The scope of Kitchen Efficiency involves the development of a web and mobile application to track ingredients, get the most use out of them, and detailing where to procure new ingredients.

Minimum Viable Product:

- User registration and profile creation
- Location Tracking
- Database of ingredients the user currently owns
- Web scraping for ingredient sourcing

Business terms:

- **Inventory-** a complete list of items such as property or goods in stock

Technical terms:

- **Web Scraping-** The process of using bots to extract content and data from a website

Resources: