CS307 Project Charter for " FOO MY FOOD"

Team 29

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Problem Statement

In modern society, people living alone often face significant challenges when it comes to meal planning. These challenges include not knowing what to eat, how to cook, what has been purchased, and how to make use of it. While existing applications have addressed many of these issues, there remains a notable gap when it comes to tracking and reminding users of the freshness and expiration dates of food they already own. Our team aims to fill this gap by developing an application specifically recording the ingredients with dates being purchased, notifying the user about the expiration date of the purchased food and recommending recipes based on the selected food as well as record nutritional data.

Project Objectives

- Provide expiration alerts to remind users about the expiration dates of their food items.
- Generate recipe suggestions based on the ingredients users have available.
- Offer detailed nutritional data for the food items stored in the app.
- Develop a user-defined shelf life module that allows users to customize the expiration alerts based on their specific needs.
- Enhance user engagement through personalized recommendations and interactive features.

Stakeholders

- **Users:** international students with poor cooking skills, and people who need to increase the efficiency of meal planning.
- **Developers:** Xiuwen "Charlie" Fang, Xinyi Guan, Songyu "Hathaway" He, Xinyi Wu
- **Project Coordinator:** Matthew Wind
- **Project Owners:** Xiuwen "Charlie" Fang, Xinyi Guan, Songyu "Hathaway" He, Xinyi Wu

Project Deliverables

- Applications are developed using the Flutter SDK to ensure compatibility with multiple platforms such as iOS and web platforms, providing a smooth and consistent user experience.
- Basic user authentication (signup, login, logout) functions are implemented to ensure that each user has secure access to their personalized data.
- Users are allowed to post, upload, collect, and share content such as recipes or food tips, with metadata managed securely in a SQLite database for efficient storage and easy content categorization and syncing.

- User-uploaded ingredients are automatically categorized, with related data such as ingredient categories, user-defined shelf life, nutritional information, and purchase history stored in a SQLite database to ensure efficient and reliable data management.
- The expiration reminder function is implemented using Flutter plugins, with reminders sent when food is about to expire and an option to sync with Google or Apple calendars.
- Combination of recipes based on ingredients nearing expiration is displayed, according to users' records through in-app notification.
- Nutritional data for each food, dish, or product is provided and stored based on users' records.
- Both self-defined food life and defaulted automatic-matched food life records are offered, possibly through a photo capturing or other user-friendly input method.
- Figma is utilized to design a smooth, intuitive interface, with clear and efficient icons representing various food categories.