

Group 8 Project Proposal: Recipe and Meal Planning App

Proposed Group Members

- Zhe Hou
- David Yoon
- Brian Kim

Project Summary

We propose to develop a Recipe and Meal Planning App that will assist users in organizing their meal plans, finding recipes that suit their dietary needs, and generating grocery lists. This app aims to simplify meal planning and make cooking more accessible for users of all skill levels.

Features

- **Recipe Search and Filters:** Users can search for recipes based on ingredients, dietary preferences such as vegan, gluten-free, and cuisine types.
- **Meal Planning:** Users can create weekly meal plans by selecting recipes and assigning them to specific days.
- **Grocery Lists:** Automatically generate grocery lists based on the selected recipes and meal plans.
- **Favorite Recipes:** Save favorite recipes for quick access in the future.
- **User Accounts:** Allow users to create accounts to save their preferences, meal plans, and favorite recipes.

GitHub Repository Link

[Recipe-Meal-Planning-App](#)

Proposed Wireframe Layouts

- **Home Screen:** Displays featured recipes and navigation options.

- **Search Screen:** Allows users to search for recipes using filters.
- **Recipe Detail Screen:** Shows detailed information about a selected recipe.
- **Meal Plan Screen:** Users can view and edit their weekly meal plans.
- **Grocery List Screen:** Displays the generated grocery list.
- **User Profile Screen:** Allows users to view and edit their account information.

Functionality and Use Cases

- **Home Screen to Search Screen:** Users navigate to the Search Screen to find recipes.
- **Search Screen to Recipe Detail Screen:** Users select a recipe to view more details.
- **Recipe Detail Screen to Meal Plan Screen:** Users add a recipe to their meal plan.
- **Meal Plan Screen to Grocery List Screen:** Users generate a grocery list from their meal plan.
- **User Profile Screen:** Users can log in, view, and update their account details.

User Experience

- **Home Screen:** Intuitive navigation with featured recipes and easy access to main functions.
- **Search Screen:** User-friendly filters for efficient recipe searches.
- **Recipe Detail Screen:** Clear and detailed recipe instructions with images.
- **Meal Plan Screen:** Simple drag-and-drop interface for planning meals.
- **Grocery List Screen:** Organized and editable grocery lists.
- **User Profile Screen:** Secure and easy-to-use account management.

Iterative Design

We will follow an iterative design process, including:

- **Initial Prototype:** Develop a basic prototype based on the wireframe.

- **User Testing:** Conduct user testing to gather feedback on the prototype.
- **Improvements:** Make improvements based on user feedback.
- **Further Testing:** Conduct additional rounds of testing and refinement.

Timeline and Team Division

Phase	Duration	Dates	Milestones
Proposal Submission	1 day	June 21	Submit project proposal
Planning & Design	2 days	June 22 – June 23	Finalize requirements, create wireframes and UI design
Development	4 days	June 24 – June 27	Implement core features: recipe management, meal planning, and shopping list
Integration	1 day	June 28	Integrate external APIs and enhance backend functionalities
Testing	1 day	June 29	Perform extensive testing and bug fixing
Finalization & Submission	1 day	June 30	Finalize documentation, prepare for app launch, and submit the project

Resources

- **External Resources:** Potential integration with recipe APIs like Spoonacular or Edamam for an extensive recipe database.
- **Development Environment:** The app will be developed using Flutter and Dart, with Firebase for backend services. Tools like Android Studio or Visual Studio Code will be used for development.

Expected Deliverables

- A fully functional Recipe and Meal Planning App.
- Comprehensive documentation, including user manuals and developer guides.
- Source code repository with proper version control.

- A final project report detailing the development process, challenges, and solutions.

Commitment Statement

We, the undersigned members of the group, acknowledge that we understand the conditions set forth in this proposal. We are committed to actively participating in the implementation of the group project from start to finish. We understand that individual grades may vary based on our contributions and performance, and we agree to present an important phase of the work collectively.

Signatures

Name: FN_____Brian_____ LN _____Kim_____ []

Name: FN_____David_____ LN _____Yoon _____ []

Name: FN_____Zhe_____ LN _____Hou_____ []

Conclusion

This proposal outlines our strategy for developing a Recipe and Meal Planning App using Flutter. We are confident that our project will provide significant value to users by simplifying meal planning and enhancing their cooking experience. We look forward to bringing this project to life and showcasing our work.