

Team 32 Project Backlog

Recipe Remix

Team Members:

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Problem Statement:

In the fast-paced world of today, many individuals, especially busy ones such as college students, find themselves trapped in a cycle of consuming unhealthy fast food or expensive takeout, primarily due to constraints of time and budget. Many desire to cook healthy meals at home, but the challenge of lacking certain ingredients or not knowing what to prepare with what's available becomes a deterrent. Our project offers a platform for users to receive customized recipe suggestions based on the ingredients they have and dietary limitations, with an added emphasis on customization and community contribution.

Background Information:

Audience

Our audience is college students, young professionals, single parents, and anyone else pressed for time. They often have unpredictable schedules and might not always have a well-stocked kitchen. Our project also targets diet-conscious individuals and those who have specific dietary restrictions, be it for health reasons, personal choices, or allergies. They are looking for a platform where they can input their constraints and get recipes that align with their dietary needs. Lastly, our project can be used by users who not only want recipes but also desire a sense of community where they can share their culinary experiments, rate others, and get feedback on theirs.

Similar Platforms & Their Limitations

Numerous recipe platforms, such as SuperCook, MyFridgeFood, and BigOven, have ventured into ingredient-based recipe recommendations. While they have this main feature integrated into their functionality, their feature restricts users to predefined ingredient selections, limiting the versatility and spontaneity that real-life cooking often demands. Dietary restrictions are also not accounted for in these applications. Moreover, these platforms lack a contemporary, user-friendly interface and the integration of a robust community feature.

We aim to create an application that stands out with an intuitive modern UI, expansive ingredient flexibility, engaging community features, customizable dietary preferences, and a commitment to cost-effective, time-efficient recipes tailored to today's diverse culinary needs.

Functional Requirements:

User Authentication & Profile

1. As a user, I want to register for an account on Recipe Remix using email.

2. As a user, I would like to be able to register for a Recipe Remix account using Facebook.
3. As a user, I would like to be able to register for a Recipe Remix account using Google.
4. As a user, I want to log into my Recipe Remix account.
5. As a user, I want to be sent a verification email when I log in for security purposes.
6. As a user, I want to be sent a link to verify my email after I register for an account
7. As a user, if I forget my password, I want to reset it.
8. As a user, I want to personalize my profile with a nickname and a biography description.
9. As a user, I would like to choose my profile picture from my gallery or take a profile picture from my camera.
10. As a user, I would like to edit or clear my profile information.
11. As a user, I would like to delete my account.
12. As a user, I want to toggle between light and dark mode.
13. As a user, I want to manage my dietary restrictions and preferences in my profile.
14. As a user, I want to manage my favorite cuisines in my profile.
15. As a user, I want to view my past ingredient searches.
16. As a user, I want to create customizable recipe collections that I can save to my profile with the option of making it private or public (if time allows).

Ingredient Input & Recipe Suggestions

17. As a user, I want to drag and drop ingredient icons into a virtual cauldron to perform the “recipe remix” (if time allows).
18. As a user, I would like to download a PDF of a recipe (if time allows).
19. As a user, I want to “remix all” ingredients in my pantry at once.
20. As a user, I want to select certain pantry items to remix.
21. As a user, I want recipe suggestions when I remix the inputted ingredients.
22. As a user, I want to view the full details of a recipe suggestion.
23. As a user, I want to adjust recipes based on my available ingredients.
24. As a user, I want to view which ingredients I am missing for certain recipes.
25. As a user, I want to tap on a missing ingredient and get more info about it (price, stores).
26. As a user, I want to delete my saved recipes.
27. As a user, I want to save my remixed recipes to my profile.
28. As a user, I want to be able to edit my saved recipes.
29. As a user, I would like to search for ingredients and add them to my pantry.
30. As a user, I want to filter my search results by diet, food group, allergies, dairy, gluten.
31. As a user, I want to see suggested ingredients auto-populate when I am searching.
32. As a user, I would like to be able to search for a recipe from the saved recipes.
33. As a user, I would like to be able to filter recipes by serving size and prep time

Community Features

34. As a user, I want to share my recipes with the community.
35. As a user, I want to rate other users' recipes with stars

- 36. As a user, I want to be able to comment with predetermined comments, gifs, and emojis
- 37. As a user, I want to search for recipes based on popularity, ratings, and recentness.
- 38. As a user, I want to be able to share my recipes to other social media platforms.
- 39. As a user, I want to be able to follow other users.
- 40. As a user, I want to be able to view, edit, and block other users from my following list
- 41. As a user, I want to be able to rate my remixed recipe.
- 42. As a user, I want to specify the privacy level of my pantry and recipes.
- 43. As a user, I would like to upload a video or pictures of the recipe I made
- 44. As a user, I would like to be able to view recipes by [hash]tags
- 45. As a user, I would like to have animated reactions to posts, like “Boiler Up!”, (if time allows).
- 46. As a user, I would like to add a story feature and highlights feature (15 second clips or pictures if time allows)

Shopping Integration

- 47. As a user, I want to generate a shopping list based on a selected recipe.
- 48. As a user, I want to edit or delete my shopping list
- 49. As a user, I want to categorize the items on my list by department.
- 50. As a user, I want to be able to share my location within the platform
- 51. As a user, I want to set the duration for which my location will be shared.
- 52. As a user, I want to receive location-sharing requests and approve or decline them.
- 53. As a user, I want to see a list of local grocery stores based on my location using maps
- 54. As a user, I want suggestions of where to buy certain items on my list
- 55. As a user, I want to be able to specify local grocery stores I want to order from in ‘My Stores’
- 56. As a user, I want to view a map showing nearby grocery stores based on my current location.
- 57. As a user, I want to filter grocery stores by criteria such as ratings, distance, and store type.
- 58. As a user, I want to get detailed information about a selected grocery store (e.g., address, hours, contact info).
- 59. As a user, I want to get directions to a selected grocery store.
- 60. As a user, I want the platform to provide external links to the websites of selected grocery stores for online ordering.
- 61. As a user, I want to track the status of my online orders, including delivery or pickup information.
- 62. As a user, I want to receive personalized recommendations and deals from my preferred stores (if time allows).
- 63. As a user, I want to set a default store for quick access.

Miscellaneous

64. As a user, I want to set reminders for when I would like to eat throughout the day
65. As a user, I want to be able to report bugs.

Non-Functional Requirements:

Architecture and Performance:

We will be using the MERN stack for our project. Our frontend will be written in React.js. The backend will be hosted on a MongoDB NoSQL server and will use Node.JS and Express to mediate between the frontend and backend. We will access authentication APIs for login from Facebook and Google using Firebase Authentication. We will access Recipe database APIs in order to retrieve search results for users who want to search for recipes and ingredients.

Security:

To ensure secure profiles, users will be required to meet password requirements. It must be a length with at least 12 characters, one special character, and one number. The username must meet a length of at least 8 characters and must be unique for every user in the database. We will also be storing the recipes of each user using Cloud Firestore in order to keep each user's recipes secure and separate. Users will only be allowed access to the recipes of other users which have been made public, so permissions will have to be specified. Chefly will not facilitate direct communication between users, thus eliminating the hassle of message encryption.

Usability:

This platform is intended to be user friendly and used by a variety of people: parents, college students, ect. The app is supposed to be user friendly, support exciting graphics with the recipe remixing, allowing for dragging and dropping of pantry items, and easily accessible filters to customize recipes.

Hosting/Deployment:

Recipe Remix will utilize Firebase for hosting, including its Cloud Firestore database. The complimentary "Spark" Plan from Firebase offers up to 10,000 phone authentication verifications monthly and grants 1 GiB of storage each month. Given the course's scope, these provisions appear ample. For future scalability considerations, Firebase facilitates a seamless upgrade from the "Spark" Plan to the flexible "Blaze" plan, which operates on a pay-as-you-go basis.