

Milestone 3: Software Market Research Report

Team Blue

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Introduction

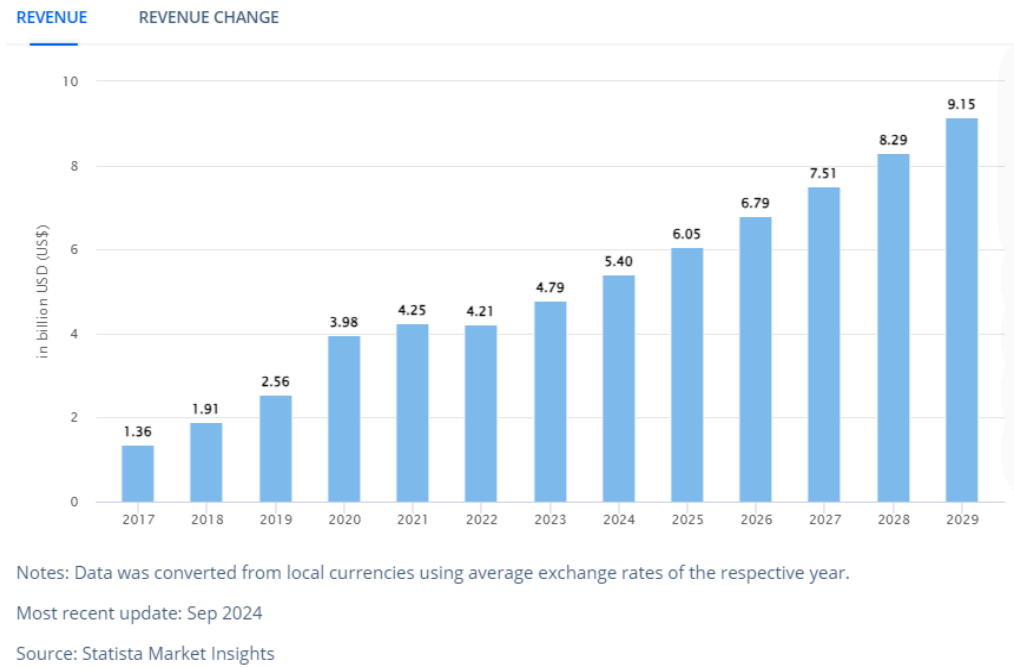
Our meal planning application began with a broad vision: to help users maintain a healthy diet by simplifying meal planning, and to encourage greater interaction with social meal coordination. We believed that a tool with which users could manage their own dietary needs while also interacting with others would be helpful. However, after analyzing the data from the interviews we conducted as well as aiming to maintain a manageable project scope, we have narrowed our development focus.

As we conducted more user-centered research in developing our meal planning application we gained valuable insights into how we should refine the app's direction. Previously, during the design process of our meal planning application, Team Blue focused on gaining user insight on the direction of our app and how we should improve its design. After analyzing our interviewee's feedback our team decided to pivot towards an app that creates more of a personalized experience for users rather than focusing on social aspects, such as a social feed or group-based suggestions. This shift allows us to address core user needs like convenience, dietary customization, and personalized plans so that we can offer user-focused solutions.

Following the refinement of our project direction, our next step of the design process was to continue research in the market landscape of meal planning apps and competitor apps. By conducting research in this phase we were able to identify gaps in current offerings, allowing us to pinpoint specific areas where our app can best meet user needs. If we can understand the strengths and weaknesses of competitors then we can position our app to fulfill unmet needs and stand out in a crowded market.

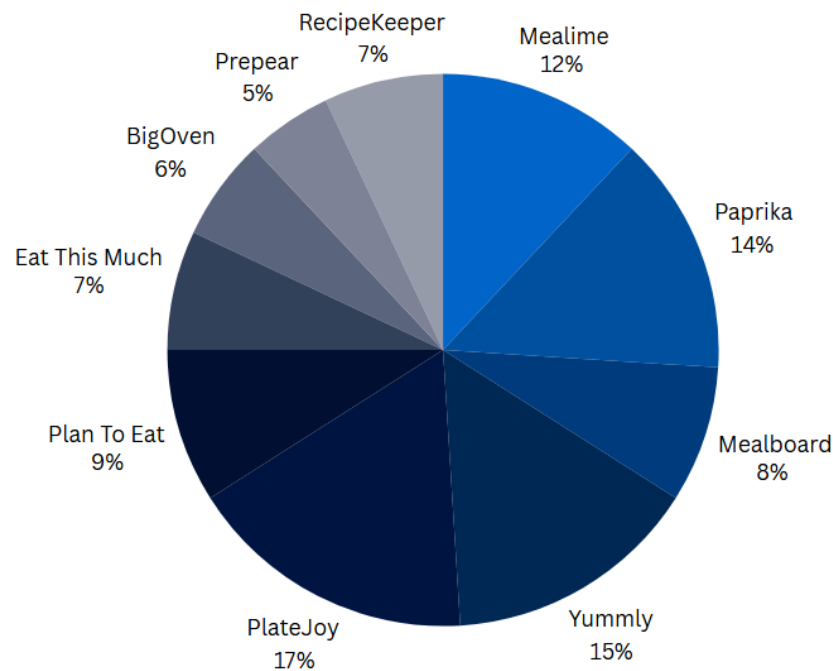
Market Overview

Market Size and Growth Trend



Revenue increased steadily from \$1.36 billion in 2017 to \$5.4 billion in 2024. Each year saw consistent growth, though the growth rate appears to slow slightly around 2021 to 2023. For instance, revenue rose from \$3.98 billion in 2020 to \$4.79 billion in 2023. Revenue is expected to continue increasing each year, reaching \$9.15 billion by 2029. The projected growth is more pronounced from 2026 onward, where annual increases exceed \$1 billion, with the highest growth projected between 2028 and 2029 (from \$8.29 billion to \$9.15 billion). In regards to trends, the market has seen a strong upward growth with no decreases or flat periods in revenue. Future projections suggest that this growth will continue, indicating a healthy and expanding market.

Major Players and Market Share



Each slice represents the approximate user base or app popularity based on user reviews, download counts, and brand presence in app stores.

Yummly and Paprika generally hold the largest market shares due to their strong feature sets, user-friendly interfaces, and significant brand recognition. These apps cater well to a broad audience, offering robust recipe discovery, meal planning, and organization features, which have contributed to their high adoption.

Mealime also captures a notable share by focusing on personalized meal planning, targeting users with dietary preferences and health goals. Its simplicity and flexibility appeal especially to health-conscious users, enhancing its presence in the market.

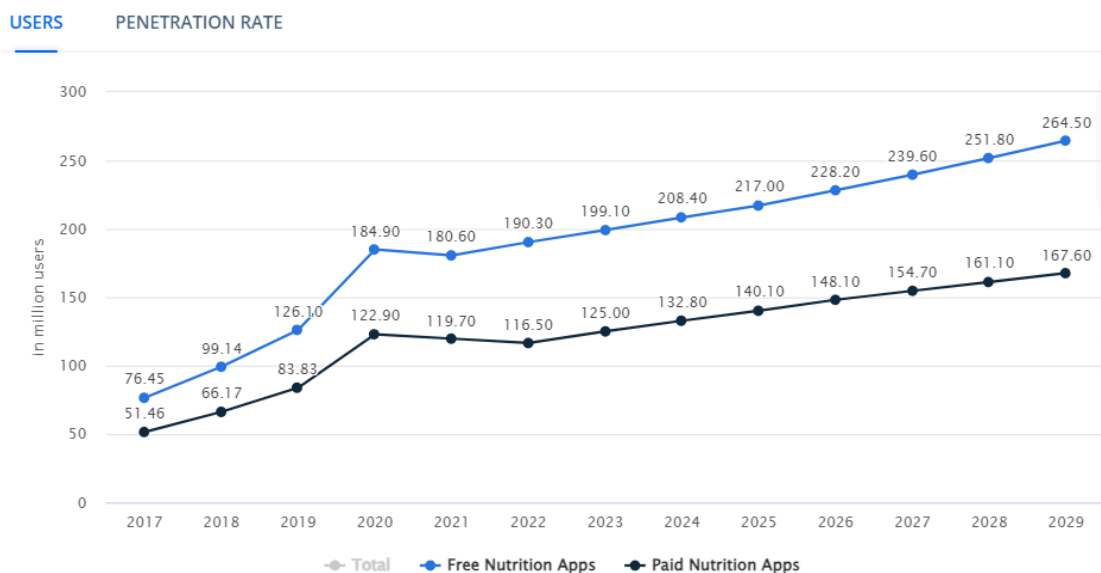
PlateJoy and Plan To Eat are smaller players, though they cater to niche audiences with custom meal plans and long-term dietary tracking. PlateJoy's personalized questionnaire feature

and Plan To Eat's emphasis on recipe organization make them popular among users with specific dietary and organizational needs.

Recipe Keeper, MealBoard, and BigOven hold moderate shares due to their strong recipe organization and meal planning tools, though they may lack the extensive customization features of other apps. Recipe Keeper, for example, is appreciated for its one-time purchase model, catering to users who prefer simplicity without a subscription.

Prepear and Eat This Much represent smaller but growing shares. Prepear's integration with Walmart and Eat This Much's focus on portion control and budgeting attract budget-focused users, albeit in smaller numbers compared to the leaders.

General Observations About Potential Shifts or Trends in The Market

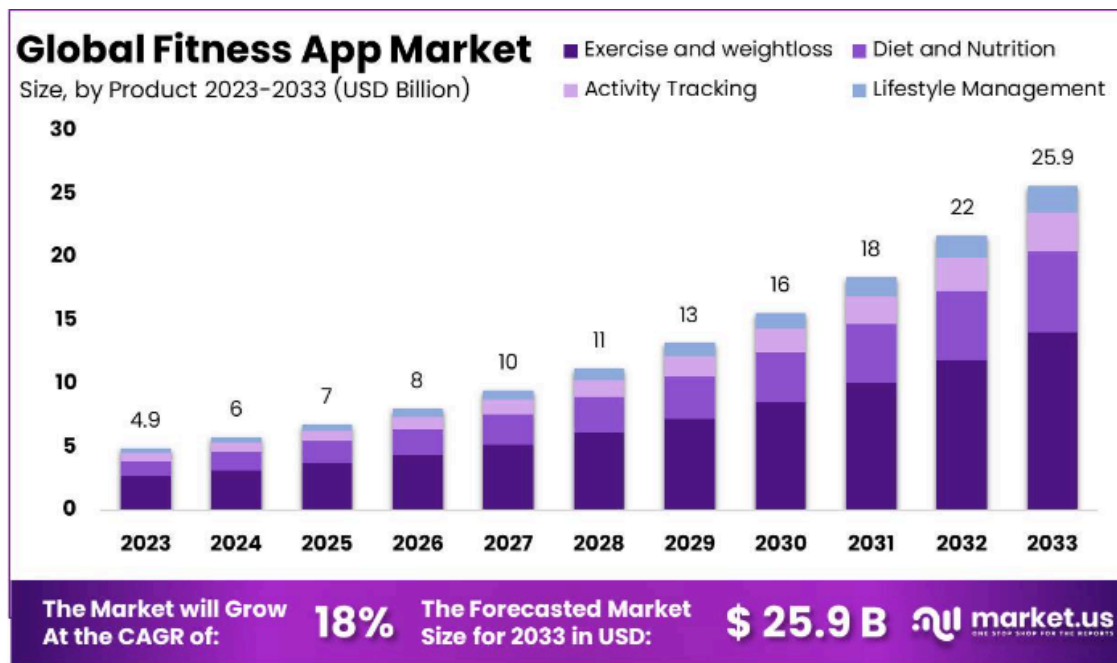


Most recent update: Sep 2024

Source: Statista Market Insights

In the graph above, it shows the relationship between the number of users for free nutrition apps and paid nutrition apps. In 2017 to 2019, the two trends steadily increase and show a sharper increase from 2019 to 2020 – this may indicate that around the time of the pandemic, more people had become interested in their nutrition and diet and looked to improve their needs.

There is a slight decrease between 2020 to 2021 for free apps and 2020 to 2022 for paid apps and both trends increase from 2022 to the future.



The global fitness app market is expecting significant growth over this coming decade. With a compound annual growth rate (CAGR) of 18% from 2023-2033. There is increasing consumer interest in health and wellness, with applications such as ours being able to meet these user demands. The market is expected to reach \$25.9 billion by 2033, up from \$4.9 billion in 2023.

This trend shows that there is a large market opportunity for our meal planning app, which focuses on personalized dietary planning to meet the growing demand for fitness by aligning with user's health goals, dietary restrictions, and budgetary constraints.

Competitor Analysis

Mealime

Overview	Mealime offers healthy meal plans with customizable recipes and easy ways to shop for families and busy people.
Features & Offerings	<p>Tabulated comparison of features among competitors</p> <ul style="list-style-type: none"> ● Personalized meal planning <ul style="list-style-type: none"> ○ Intro survey asking about dislikes, allergies, meal size, and meal plans such as Keto or low carb foods ○ Offers pictures of meals to add and a brief description ○ Can schedule dates like linking a dish to a specific day of the week (but not time) ○ Gives a number rating of how much food waste the dish would cause to make ● Grocery List <ul style="list-style-type: none"> ○ Organized ingredient list, and how much you need ○ Offers different grocery stores and links them to the store page (or something) <ul style="list-style-type: none"> ■ Have to sign in/up to the grocery market to order online there ○ Can mark stuff you already have ● Recipes <ul style="list-style-type: none"> ○ Tells us what tools/cookware we need for the dish ○ Ingredients with measurement ○ Instruction (text only no picture)
Hands-on Evaluation	<p>First impressions</p> <ul style="list-style-type: none"> ● Simple and fast to start the meal plan <p>Usability and user experience insights</p> <ul style="list-style-type: none"> ● Easy to use <p>Standout features or notable gaps</p> <ul style="list-style-type: none"> ● Grocery list and able to buy from local grocery stores ● Can add recipes outside of Mealime and include them in your plan
Pricing	<p>Pro features - 2.99/month</p> <ul style="list-style-type: none"> ● Exclusive recipes ● Nutritional information ● Add your own recipes ● Advanced search and filters ● Meal plan history
User Reviews & Ratings	<p>4.6 / 5 stars 25k reviews (Play Store, Android)</p> <ul style="list-style-type: none"> ● 800+ -> Great, quick and easy to make ● 700+ -> Love the grocery list feature

	<ul style="list-style-type: none"> ● 700+ -> Healthy and delicious recipes ● Most poor reviews are about <ul style="list-style-type: none"> ○ The subscription where the user ended up canceling but still gets charged ○ All "good recipes" are in for the pro-feature subscription
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Paprika

Overview	Paprika is a simple recipe management app that helps users organize recipes, create grocery lists, and plan meals.
Features & Offerings	<p>Tabulated comparison of features among competitors</p> <ul style="list-style-type: none"> ● Recipes - Download recipes from websites, or add your own ● Grocery Lists - Create smart grocery lists that automatically combine ingredients and sort them by aisle ● Pantry - Use the pantry to keep track track of which ingredients you have and when they expire ● Meal Planner - Plan your meals using our daily, weekly, or monthly calendars ● Menus - Save meal plans as reusable menus ● Sync - Keep your recipes grocery lists, and meal plans
Hands-on Evaluation	<p>First impressions</p> <ul style="list-style-type: none"> ● It's like a make it your own, the app itself is barebone <p>Usability and user experience insights</p> <ul style="list-style-type: none"> ● Easy and simple to use ● It requires the user to implement all the meals themselves <p>Standout features or notable gaps</p> <ul style="list-style-type: none"> ● Very high customization features and the ability to add your own recipes
Pricing	<p>One-time purchase - \$4.99</p> <ul style="list-style-type: none"> ● Unlimited recipes ● Paprika Cloud Sync
User Reviews & Ratings	<p>4.9 / 5 stars 13k review (Play Store, Android)</p> <ul style="list-style-type: none"> ● 800+ -> Stores recipes with a picture ● 200+ -> Love the grocery list feature ● 200+ -> Easy scaling recipes ● Most poor reviews are about <ul style="list-style-type: none"> ○ When advertise to sync with multiple devices you have to pay for them ○ Can't sync with other accounts, ex. their family members

Eat This Much

Overview	Eat This Much utilizes automatic meal generation to create meal plans and grocery lists tailored for users' goals, preferences, budget, and schedule.
Features & Offerings	<p>Tabulated comparison of features among competitors</p> <ul style="list-style-type: none"> • Customizable Meal Plans - Generate daily meal plans • Grocery List -Schedule recurring foods • Meal Customization - Create custom foods and recipes • Tracking & Adjustments - Track what you eat
Hands-on Evaluation	<p>First impressions</p> <ul style="list-style-type: none"> • Easy-to-navigate options for setting dietary preferences. • Offers a sense of control over meal planning, making it ideal for users with specific dietary goals. <p>Usability and user experience insights</p> <ul style="list-style-type: none"> • Simple meal customization allows for easy substitutions, making it user-friendly for picky eaters or dietary restrictions. • Generates grocery lists and meal plans in minutes, reducing the need for meal prep or recipe research. <p>Standout features or notable gaps</p> <ul style="list-style-type: none"> • Extensive diet options with customizable nutrition and calorie goals. • Automatically generated grocery lists for easy shopping.
Pricing	<p>Subscription- \$19.99/Month or \$59.99/Year</p> <ul style="list-style-type: none"> • Plan a week of meals at a time • Automatic grocery lists • Grocery delivery integration • Automatic leftovers • Customize every day of the week • Save and load your favorite weeks of plans • Create and share PDFs of your meal plans <p>Can start a 14 day free trial.</p>
User Reviews & Ratings	<p>4.7 / 5 stars 21k reviews (Play Store)</p> <ul style="list-style-type: none"> • Life-Changing Meal Planning - The ability to set specific nutrition and calorie goals, combined with simple recipes, has made a huge difference. I can eat healthier without the stress of complex cooking. • Time-Saving & Effective - This app has simplified meal planning entirely, from choosing meals to generating a grocery list. • Customizable, Variety-Rich Options - The variety and freedom to swap or edit meals based on my tastes and budget.

	<ul style="list-style-type: none"> ● Most poor reviews are about <ul style="list-style-type: none"> ○ Many users wish the app allowed for easier syncing between multiple devices and accounts in the free version. ○ Several users have mentioned occasional bugs like freezing, loading issues, and difficulties logging in, especially with limited internet access. ○ A few users on specialized diets, such as vegan, note that while there are many recipe options, the generated plans sometimes repeat meals multiple times per week, and users would appreciate more variety in the weekly menu.
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BigOven

Overview	BigOven is perfect for planning meals, discovering new recipes, managing grocery lists, and reducing food waste. The app also has a social element that allows users to share recipes.
Features & Offerings	<p>Tabulated comparison of features among competitors</p> <ul style="list-style-type: none"> ● Reduce Food Waste - The “Use Up Leftovers” tool suggests recipes based on ingredients users already have, cutting down on waste and grocery expenses. ● Community Engagement -allows users to interact with other home cooks, sharing recipes, reviews, and kitchen tips. ● Grocery List Management - Create, organize, and share grocery lists, sorted by department or recipe, making shopping efficient and stress-free. ● All Recipes in One Place - Can store all their recipes, whether clipped online or uploaded from photos, in a single organized location, categorized for easy retrieval. ● Meal Planning- The Meal Planner tool simplifies meal organization by allowing users to schedule meals weekly, daily, or monthly and sync with their grocery lists.
Hands-on Evaluation	<p>First impressions</p> <ul style="list-style-type: none"> ● Interfaces may feel cluttered with many options displayed at once, making navigation confusing. ● Requires sign-up before full feature access, which might deter users seeking a quick preview. ● BigOven feels feature-rich, offering tools for recipe browsing, meal planning, grocery lists, and food waste reduction. <p>Usability and user experience insights</p> <ul style="list-style-type: none"> ● The app has a lot of helpful features, but this can make it feel crowded and overwhelming, especially for new users. ● It becomes easier to use over time, though a simpler

	<p>introduction or tutorial would help users get started faster.</p> <p>Standout features or notable gaps</p> <ul style="list-style-type: none"> • Users can categorize recipes, and the grocery list organizes items by departments, making shopping efficient. • in-app community lets users follow others and discover new recipes, adding a social element to cooking. • Pro members get tailored recipe recommendations based on dietary preferences
Pricing	<p>Subscription- \$2.99/month or \$24.99/Year</p> <ul style="list-style-type: none"> • No advertisements(ad-free experience) • Add More than 200 recipes • Plan your meal for the week • Get organized with Folders • Search by dietary preferences • Add notes on any recipe • Get Nutrition insights • See pro collections <p>Can start a 30 day free trial.</p>
User Reviews & Ratings	<p>4.7 / 5 stars 12.7k reviews (Play Store)</p> <ul style="list-style-type: none"> • Recipe Flexibility & Nutrition Control - Can control the nutritional info precisely and even modify recipes to fit my needs. This level of control is amazing for tracking my diet and staying on target. • Ultimate Meal Planning Tool - From generating grocery lists to organizing meal plans, this app has simplified cooking and grocery shopping. Having my favorite recipes and new ideas in one place is a lifesaver. • Great for Diet Planning - App shows daily recommended low-carb recipes, which makes planning easy. Pro features let me organize and control recipes to match my diet perfectly. • Most poor reviews are about. <ul style="list-style-type: none"> ○ Importing recipes from popular blogging platforms like WordPress doesn't work smoothly, with imported content not displaying correctly. ○ Free version users mention difficulties syncing recipes across devices, which can make planning challenging. ○ Occasional bugs like app freezing, recipe organization issues, and shopping list glitches have been noted, with some users feeling support could be more responsive to these issues.

Plan to Eat

Overview	Plan to Eat is a meal planning app designed for individuals and families, emphasizing simplicity and efficiency in meal preparation. It allows users to import recipes from any website, create personalized meal plans, and generate grocery lists automatically.
Features & Offerings	<ul style="list-style-type: none"> ● Recipe Importing: <ul style="list-style-type: none"> ○ Allows users to import recipes from any website by pasting the URL. ○ Automatically populates essential details like ingredients and instructions. ○ Users can add notes or modifications to the imported recipes. ● Meal Planning: <ul style="list-style-type: none"> ○ Drag-and-drop interface for organizing meals on a weekly calendar. Users can assign specific recipes to days and easily adjust plans by dragging. ○ Allows users to plan multiple weeks in advance. ● Grocery List Management: <ul style="list-style-type: none"> ○ Automatically generates grocery lists based on selected recipes. ○ Groups items by category (e.g., produce, dairy, pantry) for easier shopping. ○ Users can check off items as they shop and modify quantities. ● Shared Meal Planning: <ul style="list-style-type: none"> ○ Users can share their meal plans and grocery lists with family members or friends. ○ Allows for collaborative meal planning and recipe sharing. ○ Each user can customize their view while contributing to the shared plan. ● Mobile Application: <ul style="list-style-type: none"> ○ Available on both iOS and Android platforms. ○ Mobile app syncs with the web version, allowing users to access their plans on-the-go. ○ Offers offline access to meal plans and grocery lists.
Hands-on Evaluation	<ul style="list-style-type: none"> ● First impressions <ul style="list-style-type: none"> ○ The interface is clean and straightforward, emphasizing functionality. ○ The drag-and-drop feature for meal planning is intuitive and user-friendly. ○ Users can quickly get started without extensive setup. ○ Importing recipes is seamless, which enhances the

	<p>initial experience.</p> <ul style="list-style-type: none"> ● Usability and user experience insights <ul style="list-style-type: none"> ○ Generally straightforward, with most users finding it easy to navigate. ○ Some users reported syncing issues when accessing the platform across multiple devices, which can be frustrating. ○ The recipe import feature works well but may require some manual adjustments for complex recipes. ○ The family sharing function is a valuable addition for those cooking for multiple people. ● Standout features or notable gaps <ul style="list-style-type: none"> ○ The ability to import recipes from any website is a significant advantage for users who rely on diverse sources for meal inspiration. ○ Detailed grocery lists that are categorized help streamline the shopping process. ○ The focus on family meal planning and collaboration is a unique offering. ○ Lacks a built-in social component for sharing recipes or engaging with other users.
Pricing	<ul style="list-style-type: none"> ● Subscription Model: <ul style="list-style-type: none"> ○ Monthly Subscription: \$4.95/month ○ Annual Subscription: \$39/year (saves about 2 months of cost compared to monthly) ● Free Trial: <ul style="list-style-type: none"> ○ 30-day free trial available for new users, allowing full access to features during the trial period.
User Reviews & Ratings	<ul style="list-style-type: none"> ● Ratings: 4.8 / 5 stars on multiple platforms (Play Store, iOS App Store). ● Positive Feedback: <ul style="list-style-type: none"> ○ Users appreciate the ability to easily import recipes and create shopping lists. ○ Family sharing and collaboration features are frequently highlighted as helpful for meal planning. ○ Many reviews mention how it simplifies meal planning for busy individuals and families. ● Negative Feedback: <ul style="list-style-type: none"> ○ Some users report issues with syncing across devices, which can lead to frustration. ○ A few users found the initial setup process to be slightly cumbersome.

Yummly

Overview	Yummly is a robust recipe discovery and meal planning app that offers personalized recommendations based on users' dietary preferences and cooking habits. It aims to help users discover new recipes, streamline meal planning, and simplify grocery shopping through a smart list feature that categorizes ingredients.
Features & Offerings	<p>Tabulated comparison of features among competitors</p> <ul style="list-style-type: none"> ● Recipe Recommendations: <ul style="list-style-type: none"> ○ Yummly uses algorithms to analyze user preferences, dietary restrictions, and past interactions. ○ Provides a personalized homepage with suggested recipes based on taste profiles. ○ Includes dietary options such as gluten-free, vegan, keto, and more. ● Smart Shopping List: <ul style="list-style-type: none"> ○ Automatically organizes ingredients into categories based on the grocery store layout. ○ Users can manually adjust quantities and check off items as they shop. ○ Allows for saving favorite grocery lists for future use. ● Meal Planning Calendar: <ul style="list-style-type: none"> ○ Users can schedule meals on a daily, weekly, or monthly basis. ○ Offers visual meal tracking and the ability to view past meal plans. ○ Easy drag-and-drop feature to rearrange meals. ● Cooking Tools and Features: <ul style="list-style-type: none"> ○ Integrated timers and temperature guides for different recipes. ○ Step-by-step cooking instructions, some of which include video tutorials. ○ Users can save their favorite recipes and categorize them for easy access. ● Mobile Application: <ul style="list-style-type: none"> ○ The app is available on iOS and Android. ○ Syncs with the web version, allowing access to saved recipes and grocery lists. ○ Features a user-friendly interface designed for easy navigation.
Hands-on Evaluation	<ul style="list-style-type: none"> ● First impressions <ul style="list-style-type: none"> ○ Visually appealing and modern design with high-quality recipe images. ○ Engaging onboarding process that highlights personalized recommendations.

	<ul style="list-style-type: none"> ○ Initial exploration feels rewarding with various recipe suggestions. ○ The app provides a sense of excitement for new users with its interactive features ● Usability and user experience insights <ul style="list-style-type: none"> ○ While the initial layout is engaging, some users may find the variety of features overwhelming at first. ○ Personalized cooking tools improve the experience, but users need time to explore them fully. ○ The app may feel cluttered if too many recommendations are presented at once, leading to potential decision fatigue. ○ Some features, such as nutritional insights, may be hidden behind a paywall, leading to user frustration. ● Standout features or notable gaps <ul style="list-style-type: none"> ○ Highly personalized recipe suggestions tailored to individual tastes and dietary needs ○ The smart shopping list feature is a major convenience for users. ○ Cooking tools and instructional videos provide added value, making cooking easier for beginners. ○ Some features require a premium subscription, limiting access for users on the free plan.
Pricing	<ul style="list-style-type: none"> ● Subscription Model: <ul style="list-style-type: none"> ○ Free Version: ○ Basic access to recipes and meal planning features. ○ Premium Version: \$4.99/month or \$39.99/year. ● Premium Features: <ul style="list-style-type: none"> ○ Ad-free experience. ○ Access to exclusive recipes, nutritional information, advanced search filters, and more. ● Free Trial: <ul style="list-style-type: none"> ○ Offers a free trial for premium features for first-time users.
User Reviews & Ratings	<ul style="list-style-type: none"> ● Ratings: 4.5 / 5 stars on multiple platforms (Play Store, iOS App Store). ● Positive Feedback: <ul style="list-style-type: none"> ○ Users love the personalized recipe suggestions and variety of dietary options. ○ The smart shopping list feature is praised for its convenience and ease of use. ○ Many users appreciate the integration of cooking tools and instructional videos. ● Negative Feedback:

	<ul style="list-style-type: none"> ○ Some users have expressed frustration about the limitations of the free version and hidden features behind a paywall. ○ Occasional reports of glitches in the app, particularly with recipe loading times and syncing issues.
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Mealboard

Overview	Meal planning app that does recipe management, meal planning, help with a grocery list, and pantry management.
Features & Offerings	<ul style="list-style-type: none"> ● Store recipes <ul style="list-style-type: none"> ○ Add your own recipes or import recipes from the web ○ Scan recipes from cookbooks and recipe magazines ● Plan meals <ul style="list-style-type: none"> ○ Using a calendar interface, you can plan out meals for the month ○ Can rearrange planned meals, add meal notes, and adjust the number of servings ○ Set prep reminders ● Create grocery list <ul style="list-style-type: none"> ○ Grocery items can be sorted by aisle ○ You can view list by store if using multiple stores ○ Can set up grocery prices to see the total cost and budget ● Track pantry inventory <ul style="list-style-type: none"> ○ Helps users know how much of an ingredient is left in their inventory ○ Can move items from grocery shopping list pantry ○ Can adjust number of items left in stock ● Sync data between devices (premium)
Hands-on Evaluation	<p>First impressions</p> <ul style="list-style-type: none"> ● Interface looks very simple (may be hard to navigate) ● First screen is your meal plan with main menu of “Shopping”, “Pantry”, “Recipes”, “Template”, “Settings” options ● Sample recipes are straightforward and give most necessary details (link to recipe, servings, category of recipe, prep and cooking time, list of ingredients, instructions, and nutritional info) <p>Usability and user experience insights</p> <ul style="list-style-type: none"> ● Able to easily switch between “Shopping” and “Pantry” interface without having to go to main menu screen

	<ul style="list-style-type: none"> • When adding a recipe, able to scan the name of the recipe, description, ingredients, directions, etc. • Include FAQ, tutorials, support in settings <p>Standout features or notable gaps</p> <ul style="list-style-type: none"> • No database, so everything is manual: you have to add in your own recipes, ingredients, shopping list, etc. • Setting up an account isn't a priority in the app, but it can be a downside when someone forgets to set up an account and loses all their data (plus it's a premium feature) <ul style="list-style-type: none"> ◦ Most of the information about syncing data is in the FAQ
Pricing	<p>Free</p> <ul style="list-style-type: none"> • No ads <p>Full version upgrade = \$12.99 (one time purchase)</p> <ul style="list-style-type: none"> • Unlimited number of recipes • Cloud backup of all your data • Sync data across multiple devices • Access MealBoard's web interface • Print recipes, meal plans, shopping lists • Priority customer support • Full version upgrade is family-shared
User Reviews & Ratings	<p>App Store (Apple) - 4.6 stars out 5</p> <ul style="list-style-type: none"> • 2.1k ratings • Most ratings are good reviews • The critical reviews note on the crashes/bugs of the app, the frustration of syncing data on the app,

PlateJoy

Overview	Meal planning app that helps users make custom meal plans, manage grocery lists, and provide grocery delivery.
Features & Offerings	<p>Custom meal plan making</p> <ul style="list-style-type: none"> • Asks the user questions to personalize their preferences • Provides a sample custom meal plan <p>Grocery list (Premium)</p> <p>Optional grocery delivery (Premium)</p>
Hands-on Evaluation	<p>First impressions</p> <ul style="list-style-type: none"> • You can create an account or start a free trial • You fill out a questionnaire that will help you personalize your meal plan, asking questions about user preferences and cooking appliances

	<ul style="list-style-type: none"> • After completing questionnaire, you're told to sign up to create a new menu to be offered new recipes • You also get a sample of recipe suggestions <p>Usability and user experience insights</p> <ul style="list-style-type: none"> • UI is frustrating on iPhone: stuck when viewing recipe details and no "Back" option was available unless you scrolled around a bit in the main menu • There is an option to edit your meal preferences <p>Standout features or notable gaps</p> <ul style="list-style-type: none"> • UI is terrible on iPhone but better on website • Offers nutritional info for recipes • Option to customize ingredients and add more preferences (like type of milk, budgeting, type of bread, rice, pasta)
Pricing	<p>Apple</p> <p>Free trial</p> <p>Subscription model</p> <ul style="list-style-type: none"> • 10 days free use • 6 months = \$70 • 12 months = \$100 <p>Website</p> <p>Free trial</p> <p>Subscription model</p> <ul style="list-style-type: none"> • \$12.99 monthly • \$69 every 6 months • \$99 every 12 months
User Reviews & Ratings	<p>App Store (Apple) - 4.7 out of 5 stars</p> <ul style="list-style-type: none"> • 1.9k ratings

Prepear

Overview	Prepear is a meal planning app that helps users make meal plans. It also assists with grocery shopping and recipe organization.
Features & Offerings	<p>Meal Planning:</p> <ul style="list-style-type: none"> • There is a weekly meal planner where you can easily add and remove meals. <p>Grocery lists:</p> <ul style="list-style-type: none"> • creates grocery lists based on the meals chosen. This integrates with Walmart. <p>Recipe saving:</p> <ul style="list-style-type: none"> • Can save recipes for the future.

Hands-on Evaluation	<p>First impressions:</p> <ul style="list-style-type: none"> • The app has a good user interface. • The UI is easy to navigate and is segmented well. <p>Usability and user experience insights:</p> <ul style="list-style-type: none"> • The way that this has Discover, Planner, and Shopping list. With a main section that focuses on recipes and the weekly menu. <p>Standout features or notable gaps.:</p> <ul style="list-style-type: none"> • The way that users can save their recipe and add it to their grocery list. Which then integrates with Walmart is really great. This makes meal planning easier.
Pricing	<p>\$119.99/year</p> <p>Features:</p> <ul style="list-style-type: none"> • Cooking without ads • Unlimited cook mode • Premium meal plans • Premium cookbooks • Detailed recipes <p>The free version has ads along with restricted features.</p>
User Reviews & Ratings	<p>App store rating: 4.5/5</p> <p>Positive feedback:</p> <ul style="list-style-type: none"> • The recipe making is intuitive grocery list, and meal planning integrations, which make managing weekly meals easier and more engaging. <p>Negative Feedback:</p> <ul style="list-style-type: none"> • Some users report that the subscription is a bit high for the features offered, and a few find the social feed unnecessary or distracting if they're primarily interested in planning meals independently.

Recipe Keeper

Overview	<p>Recipe Keeper is a great app for recipe organization and meal planning. This app is focused more so on the closer aspects of meal planning rather on social aspects. Each recipe has detailed options for ingredients, instructions, and personal</p>
Features & Offerings	<p>Recipe Organization: Users can add recipes from other sources. This includes from web sources as well. The app supports customizable categories, allowing users to create their own organization system, making it ideal for those with large recipe collections.</p> <p>Recipe Keeper: Includes a simple, streamlined meal planner that lets</p>

	<p>users schedule meals on a calendar view. This feature is easy to use, with drag-and-drop functionality to add recipes directly from saved collections into the weekly plan, making it ideal for users who want quick meal planning without complex customization.</p> <p>Grocery List: With just a few taps, users can generate grocery lists from selected recipes. Recipe Keeper organizes the grocery list by aisle, which simplifies shopping.</p> <p>Cross-Device support: This application works across multiple apps. Including phones, tablets, and desktop. The app is synced.</p>
Hands-on Evaluation	<p>First impressions: Recipe Keeper has a straightforward design that appeals to users looking for simplicity. The emphasis on organization over social features makes it perfect for those who prefer a solo experience without community-based distractions.</p> <p>Usability and user experience insights: The interface is clean and minimalistic, it helps to keep users focused on their recipes and plans rather than unnecessary things.</p> <p>Standout features or notable gaps: The standout feature is its powerful categorization system for recipes, which gives users control over their collections. However, the app lacks nutritional information and tracking.</p>
Pricing	<p>\$19.99 one time payment:</p> <ul style="list-style-type: none"> • Add unlimited recipes. • Sync recipes, shopping plans and meal planner across all phones. • Backup recipes to the cloud. • Use with amazon alexa.
User Reviews & Ratings	<p>App store rating: 4.8/5</p> <p>Positive ratings: Users love the easy recipe import feature and the flexibility of organizing their recipes in customized ways. Many appreciate the one-time purchase option, which they find more affordable than subscription-based apps.</p> <p>Negative ratings: Users don't like the lack of nutrition information and the inability to share recipes within a community, they miss social interaction and dietary tracking.</p>

Opportunity Assessment

Strength	<p><u>Personalization:</u></p> <ul style="list-style-type: none"> • Strong focus on personalized meal planning that caters to individual health goals, dietary restrictions, and budget preferences. • Ability to adjust meal plans according to dietary needs (allergies, vegetarian, low-carb) <p><u>User-Centric Design:</u></p> <ul style="list-style-type: none"> • Prioritized user feedback we found in milestone 2 to refine features, avoiding less desirable social aspects • Simple and intuitive user experience, with easy-to-navigate interfaces <p><u>Comprehensive Features:</u></p> <ul style="list-style-type: none"> • Detailed recipes explained easily, integrated customized grocery list • Focus on reducing food waste through smart ingredient usage and meal planning and taking into consideration what users already have <p><u>Health-Focused:</u></p> <ul style="list-style-type: none"> • Emphasis on healthy meal plans and supporting users in achieving their fitness and nutritional goals through graphs or visuals
Weakness	<p><u>Limited Social Features:</u></p> <ul style="list-style-type: none"> • Decided to pivot away from social engagement, which might be a drawback for users who value community-driven suggestions. <p><u>User Onboarding Complexity:</u></p> <ul style="list-style-type: none"> • Ensuring that users quickly understand all app functionalities without feeling overwhelmed. <p><u>Competition:</u></p> <ul style="list-style-type: none"> • Strong competitors with established user bases, like Mealime, Paprika, and BigOven, which already have similar features. <p><u>Dependence on User Input:</u></p> <ul style="list-style-type: none"> • Reliance on users providing detailed dietary information could deter those looking for quick setup and minimal interaction.
Opportunities	<p><u>Market Demand for Free Apps:</u></p> <ul style="list-style-type: none"> • Leverage the higher performance of free apps by offering a free tier or ad-supported version with optional premium features. • Differentiate with a robust free version, capitalizing on the trend of free apps performing better than paid ones.

	<p><u>Growing Health Consciousness:</u></p> <ul style="list-style-type: none"> • Rising interest in personalized health and fitness apps presents an opportunity to target a health-conscious audience. • Expand market reach by focusing on popular diets and nutritional goals (e.g., Keto, gluten-free). <p><u>Feature Enhancement:</u></p> <ul style="list-style-type: none"> • Opportunity to incorporate advanced grocery list integration with local stores for convenient shopping experiences • Develop features like in-app meal suggestions based on food already in the pantry to help with food waste <p><u>Cross-Platform Consistency:</u></p> <ul style="list-style-type: none"> • Focus on delivering a seamless experience for both iOS and Android users, given the nearly equal split between platforms
Threats	<p><u>High Competition:</u></p> <ul style="list-style-type: none"> • Many existing apps with established user bases and similar features may make it hard to stand out. • Competitors like BigOven and Mealime already offer advanced grocery integration and recipe storage. <p><u>Market Saturation:</u></p> <ul style="list-style-type: none"> • The meal planning app market is saturated, making differentiation challenging without innovative features. <p><u>User Retention:</u></p> <ul style="list-style-type: none"> • Users may switch to other apps if your app lacks features they desire or if competitors introduce innovative updates. <p><u>Technical Challenges:</u></p> <ul style="list-style-type: none"> • Potential bugs and app crashes, particularly if syncing across devices is not smooth, could lead to negative user reviews. • Ensuring the app maintains up-to-date nutritional data and meal information can be resource-intensive. • Lack of knowledge on how to add some features...

Strategic Positioning

Our meal planning app aims to create a comprehensive and user-friendly platform that fills the gaps left by competitors. It's designed not only to plan meals but to educate, engage, and

adapt to individual users' needs, making it easy for them to meet their dietary goals without feeling constrained by a paywall or confusing interfaces. By focusing on robust support for dietary restrictions such as allergies, intolerances, and dietary preferences we can focus on an existing problem that many consumers contend with that is not being addressed by most competitors. Furthermore, existing apps are tailored to meet the needs of certain groups. This means that some apps are tailored to beginners and offer low customization but great simplicity like Plan to Eat, while other apps like Recipe Keeper are more geared to allowing users to make and tune every part of their meal plans. We will offer differing levels of interaction to cater to different user preferences: low interaction for quick, easy meal suggestions, medium interaction for users who want some customization, and high interaction for those seeking in-depth control over their meal choices. This will allow us to access a broad range of users, ranging from the busy to those deeply invested in their dietary planning.

Another distinctive feature that helps to set us apart from competitors is our focus in reducing food waste. Our app will help encourage sustainable practices while also helping users save money by allowing them to make use of the ingredients they already have on hand. This will be done by suggesting recipes based on items that users already have that might otherwise go unused. We were inspired by a question about this food wastage problem that was asked during our presentation and so, as part of our research, we delved into how competitors handled food wastage and learned that most competitors lack features which address this need.

With a focus on advanced customization, food waste reduction, dietary restrictions, seamless multi-user support, and a balance of free and premium offerings, our app can stand out in a crowded market.

Differentiation Matrix

App name	Affordability	Functionality
Our meal planning app	Free Version: Basic features accessible without commitment. Premium Model: offering full access to advanced features. Attracts a diverse audience, including budget-conscious users. Allows for trial usage, increasing conversion rates.	Offers essential features such as recipe management, grocery list generation, and dietary customization, with plans to enhance grocery store integrations and food waste reduction.
Mealime	Free Version: Basic meal planning and recipe access. Pro Version: \$2.99/month or \$29.99/year. Low cost makes it accessible, with high likelihood of upgrades due to trial usage of the free version.	Includes extensive recipe collections, personalized meal plans based on dietary preferences, and a comprehensive grocery list feature.
Paprika	One-Time Purchase: \$4.99, providing long-term access without ongoing fees. Appeals to users who prefer avoiding subscriptions but may limit updates.	Offers robust features such as pantry tracking, advanced meal planning tools, and offline access, making it comprehensive for serious cooks.
BigOven	Free Version: Basic access with ads. Subscription: \$29.99/year for premium features. Flexible options allow users to choose based on their needs, with straightforward pricing structure.	Provides a strong feature set including recipe management, meal planning, and grocery list creation, appealing to a wide audience.
Yummly	Free Basic Version: Recipe discovery and smart shopping list features available. Yummly Pro: \$4.99/month or \$39.99/year. Slightly higher cost for the pro version may deter budget-conscious users.	Focuses on recipe discovery and smart shopping lists but lacks in-depth meal planning capabilities.
Prepear	Free Version: Limited meal planning features. Subscription: \$4.99/month. Low subscription fee appeals to users, but limitations of the free version may deter potential users.	Offers basic meal planning and grocery list features but falls short on personalization and customization.
RecipeKeeper	One-Time Purchase: \$4.99 for full access. Similar to Paprika, this attracts users avoiding subscriptions but may limit the app's updates and feature enhancements.	Features recipe management and grocery list capabilities but lacks advanced features for meal planning.

PlateJoy	Subscription-Based: Starting at \$69/year, considered expensive. Justified by personalized meal plans and grocery delivery, but may deter budget-conscious users.	Strong in creating tailored meal plans based on dietary preferences and integrating grocery shopping options.
Eat This Much	Free Version: Basic features available. Premium Model: \$5/month or \$30/year for advanced meal generation features. Competitive pricing attracts users looking for affordable meal planning.	Focuses on automatic meal generation but may lack depth in recipe management and grocery list features.
Mealboard	Subscription: \$4.99/month, offering meal planning and grocery list features. Provides good value for users focused on organization, though competition is strong.	Provides features for meal planning, recipe management, and grocery list generation, supporting diverse dietary needs.
Plan To Eat	Subscription-Based: \$39/year or \$19.95 for six months. Slightly higher than average; appeals to dedicated meal planners. Offers extensive features justifying the price, but may deter casual users.	Features meal planning, grocery list creation, and shared family access, making it effective for busy households.

Potential Challenges and Strategies to Address

Challenge	Strategies
User Retention & Engagement Potential Issue: Many apps struggle to keep users engaged long-term. The novelty of meal planning can wear off, leading to app abandonment after a few weeks or months.	<ul style="list-style-type: none"> ● Gamification: Introduce badges, rewards, and streaks for meeting meal-planning goals, trying new recipes, or reducing food waste. ● Push Notifications: Send gentle reminders for meal planning, grocery shopping, or recipe suggestions based on user activity and preferences.
Diverse Dietary Requirements Potential Issue: Catering to a wide range of dietary restrictions and preferences can be complex, especially when accommodating	<ul style="list-style-type: none"> ● Dynamic Recipe Filtering: Implement recipe filtering and meal customization. Allow users to filter meals with multiple criteria and save their dietary profiles for easy future use. ● User Feedback Loop: Encourage users to submit

multiple restrictions simultaneously	feedback on recipes, highlighting any difficulties they faced regarding dietary restrictions. Use this feedback to improve and refine the recipe database.
<p>Accurate Nutritional Information</p> <p>Potential Issue: Ensuring accurate and reliable nutritional information can be challenging, especially with user-submitted recipes or varying ingredient brands.</p>	<ul style="list-style-type: none">● Reliable Databases: Use reputable food databases like USDA or Open Food Facts for verified nutritional data● User Verification: Allow users to submit recipes but implement a verification process or crowd-sourced corrections where experienced users can validate or correct nutritional info● AI-Assisted Analysis: Use AI tools to estimate nutritional information for new recipes based on ingredient lists, accounting for variations in brands or portion sizes.
<p>Encouraging Habit Formation</p> <p>Potential Issue: Users may struggle to make meal planning a consistent habit, especially if they find it time-consuming or overwhelming</p>	<ul style="list-style-type: none">● Quick-Start Guides & Templates: Provide quick-start guides, default meal plans, and templates to make the initial experience easy and rewarding.● Habit-Building Reminders: Implement reminders for weekly meal planning, grocery shopping, and meal prep. Offer a “weekly summary” feature that recaps users' progress and encourages consistency.● Small Wins: Celebrate small milestones like completing a week’s meal plan or successfully cooking a new dish to motivate users.

Conclusion

To further improve the design of our application, we researched through the meal planning application market and competitor apps. After looking into the market, we discovered that the revenue reflected a continuous upward trend and that more users prefer free apps over paid apps. Through this, we're looking to implement a free application that provides users a seamless experience. After analyzing and evaluating our competitor apps, we made a SWOT table to define our application's strengths, weaknesses, opportunities, and threats to see where we could focus on in order to differentiate our apps from our competitor apps.

In short, the analysis and research our team did helped us refine and understand what features we must emphasize in our application and how to implement it so our application will stand out in the meal planning app market. With this information, we'll continue with the design process and move into developing our low-fidelity designs for our application. By knowing what features we will implement, we'll create digital wireframes that reflect how those features will be displayed to users.

Appendices

Appendix A - Competitor features list comparison

Competitor	Recipe Management	Grocery List Generation	Meal Planning	Dietary Customization	Mobile App Access	User Engagement	Health Focus	Pricing Model
Our App	Yes, with customization options	Yes, integrated with recipes	Yes, with pantry suggestions	Yes, for allergies and preferences	Yes, iOS and Android	Minimal, no social features	Yes, focuses on healthy options	Free model with limited features; premium for full access
Mealime	Yes, extensive recipe collections	Yes, comprehensive grocery list	Yes, personalized meal plans	Yes, extensive customization	Yes, iOS and Android	Strong social features	Yes, healthy meal recommendations	Free basic version; Pro for \$4.99/month or \$39.99/year
Paprika	Yes, manual entry and customization	Yes, basic grocery list	Yes, advanced meal planning tools	Limited, primarily manual	Yes, iOS and Android	Moderate, primarily personal	Limited health focus	One-time purchase for \$29.99
BigOven	Yes, community-driven recipes	Yes, integrates with recipes	Yes, meal planning capabilities	Yes, user-generated options	Yes, iOS and Android	Strong community aspect	Limited health features	Free basic version; Pro for \$29.99/year
Yummly	Yes, focuses on discovery	Yes, smart shopping list	Yes, limited depth	Yes, personalized recommendations	Yes, iOS and Android	Moderate, recipe sharing options	Yes, focuses on nutrition	Free basic version; Pro for \$39.99/year
Prepear	Yes, community-driven recipes	Yes, basic grocery list	Yes, basic meal planning	Basic customization options	Yes, iOS and Android	Moderate, community-driven	Limited health features	Free basic version; Pro for \$4.99/month
RecipeKeeper	Yes, basic recipe storage	Yes, basic grocery list	No, lacks advanced features	Limited dietary options	Yes, iOS and Android	Limited social features	No explicit health focus	Free basic version; Pro for \$4.99/month
PlateJoy	Yes, tailored meal plans	Yes, integrated grocery shopping	Yes, automated meal generation	Yes, based on dietary preferences	Yes, iOS and Android	Basic engagement options	Yes, health-focused plans	Subscription-based; varies
Eat This Much	Yes, automated meal generation	Yes, basic grocery list	Yes, basic meal planning	Basic dietary customization	Yes, iOS and Android	Basic engagement features	Yes, includes nutritional goals	Free version available
Mealboard	Yes, easy import from websites	Yes, automatically generated	Yes, weekly meal planning	Yes, user preferences supported	Yes, iOS and Android	Moderate, allows family sharing	Yes, focuses on nutrition	\$39/year with 30-day free trial

Appendix B - User review and feedback for competitors

App	User review	Feedback
Mealime	<ul style="list-style-type: none"> • Users praise Mealime for its quick meal options. • The extensive recipe library caters to various dietary preferences. • A highly regarded meal planning feature allows easy customization of weekly menus. 	<ul style="list-style-type: none"> • The shopping list feature automatically organizes ingredients by category, simplifying shopping. • Users appreciate Mealime's focus on efficiency and healthy eating. • Many express satisfaction with the variety of recipes available.
Paprika	<ul style="list-style-type: none"> • High praise for robust recipe management features. • Users appreciate easy import and organization of recipes. • Offline access is beneficial for cooking without the internet. 	<ul style="list-style-type: none"> • Customization options for tailored meal plans and grocery lists are highly valued. • Users find the pantry tracking feature effective in reducing food waste. • Many enjoy the intuitive user interface.
BigOven	<ul style="list-style-type: none"> • Enjoyable community-driven aspect, highlighting the variety of user-generated recipes. • The app is praised for detailed meal planning features. • Users appreciate the ability to save and share favorite recipes. 	<ul style="list-style-type: none"> • Grocery list functionality helps users stay organized while shopping. • Users enjoy the cooking timer feature for precise meal prep. • Community recipes foster engagement and inspire new meal ideas.
Yummly	<ul style="list-style-type: none"> • Highlighted for its smart shopping list feature that categorizes ingredients. • Users appreciate personalized recipe recommendations. • The visual appeal of the interface is a strong point. 	<ul style="list-style-type: none"> • Users find the variety of recipes enjoyable and engaging. • Many like the ease of discovering new recipes based on preferences. • Feedback suggests a desire for more in-depth meal planning capabilities.
Prepear	<ul style="list-style-type: none"> • Users enjoy the community-driven meal planning aspect. • Noted for ease of collaboration with family and friends. • The interface is described as user-friendly and intuitive. 	<ul style="list-style-type: none"> • Many appreciate browsing and saving recipes from various sources. • Users enjoy the social element added by community recipes. • Feedback suggests a desire for enhanced customization options.
RecipeKeeper	<ul style="list-style-type: none"> • Users value its simplicity in recipe storage and management. • Categorization and quick search functionality are praised. • Clean design enhances user experience. 	<ul style="list-style-type: none"> • The straightforward interface facilitates ease of use. • Many consider it a no-frills solution for recipe management. • Users would like to see more advanced

		features for meal planning.
PlateJoy	<ul style="list-style-type: none"> ● Highly valued for personalized meal plans and grocery delivery integration. ● A tailored approach based on dietary preferences is praised. ● Users enjoy the visual appeal of the app. 	<ul style="list-style-type: none"> ● Many note the convenience of grocery delivery options. ● Users appreciate the focus on health and nutrition. ● Feedback indicates a desire for broader dietary options.
Eat This Much	<ul style="list-style-type: none"> ● Users appreciate automation in meal planning based on dietary needs. ● Simplifies meal planning for specific health goals. ● Engaging and user-friendly interface is well-received. 	<ul style="list-style-type: none"> ● Many value the unique meal generation approach. ● Users express satisfaction with the ability to adjust meal plans easily. ● Feedback suggests a desire for more recipes to choose from.
Mealboard	<ul style="list-style-type: none"> ● Users appreciate the visual planning interface, making meal planning engaging. ● Ease of creating grocery lists is frequently highlighted. ● Integration of pantry tracking is beneficial. 	<ul style="list-style-type: none"> ● Many find the app effective for minimizing food waste. ● Users enjoy tracking ingredients on hand to plan meals. ● Feedback suggests a desire for more recipe options.
Plan To Eat	<ul style="list-style-type: none"> ● Users enjoy the drag-and-drop meal planning feature. ● Simplifies organization of meals for the week. ● Intuitive grocery list generation is frequently praised. 	<ul style="list-style-type: none"> ● Many find it helpful for family meal planning with shared access. ● Users appreciate the straightforward approach to meal prep. ● Feedback indicates a desire for improved mobile app functionality.

Reference

“Meal Planning App Market Share[2024-2032], Forecast Research.” *Business Research Insight*,

www.businessresearchinsights.com/market-reports/meal-planning-app-market-113013.

“Meal Planning App Market Size | Growth | Trends| Analysis Report 2031.” *Data Wisdom Network*, 22 June 2024,

www.linkedin.com/pulse/meal-planning-app-market-size-growth-trends-analysis-cz6qf/

“Meal Planning App Market Size, Growth, Trends and Forecast.” *Verified Market Research*, 8 Aug. 2024,

www.verifiedmarketresearch.com/product/meal-planning-app-market/.

Faizullabhoy, Mariam, and Gauri Wani. “Diet and Nutrition Apps Market Size – Trends Report, 2032.” *Global Market Insights Inc.*, Mar. 2024,

www.gminsights.com/industry-analysis/diet-and-nutrition-apps-market.

Reports, Precision Innovations. “Meal Planner Market Size and Growth Analysis 2024-2030.” *LinkedIn*, 3 July 2024,

www.linkedin.com/pulse/meal-planner-market-size-growth-analysis-567ef/.

Centoni, Danielle. “The 8 Best Meal-Planning Apps of 2024.” *The Spruce Eats*, The Spruce Eats, 10 May 2024,

www.thespruceeats.com/best-meal-planning-apps-4766812.

Deb, Trishita. “Diet and Nutrition Apps Statistics 2024 by Tracking, Health.” *Market.Us Media*, 18 July 2024,

media.market.us/diet-and-nutrition-apps-statistics/.

“Nutrition Apps - Worldwide: Statista Market Forecast.” *Statista*,

www.statista.com/outlook/hmo/digital-health/digital-fitness-well-being/health-wellness-coaching/nutrition-apps/worldwide#revenue. Accessed 30 Oct. 2024.