Milestone 4: Justification Report

Team Blue

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Introduction

The success of any software application depends on its ability to address the needs and preferences of its target audience effectively. In developing a meal planning application, our approach has been guided by our user-centered research and analysis of the competitive landscape. These efforts revealed significant insights into the expectations and pain points of prospective users, allowing us to refine the application's scope and prioritize features that would deliver maximum value. This report provides a detailed justification for the inclusion of selected features, emphasizing their alignment with user feedback, usability considerations, and prevailing market trends. By focusing on personalized and practical functionalities, our application aims to distinguish itself as an indispensable tool for individuals seeking to streamline meal preparation, maintain dietary goals, and reduce food waste.

Feature Explanation

Home Page

Brian's wireframe was chosen as the foundation for the home page design because it encapsulates the primary features users expect to see upon opening a meal planning app. The inclusion of a welcome message creates a friendly and engaging first impression, reinforcing the app’s commitment to personalization and user-centricity. Additionally, recipe and meal suggestions with corresponding pictures align perfectly with the 80% of users from Milestone 2 who emphasized the importance of variety and visually appealing content. By showing the name of the recipe and a brief description (e.g., "burrito"), the wireframe ensures that users can quickly evaluate whether a meal fits their preferences without feeling overwhelmed. The integration of a daily meal plan provides immediate utility, streamlining the decision-making process for users who want quick answers to "What’s for dinner?" This approach reflects

feedback from Milestone 2, where 67% of users sought structure and predictability in their meal planning.

Furthermore, including an advertisement section can contribute to monetization while maintaining a clean and non-intrusive layout, ensuring that free-tier users still enjoy a seamless experience. Competitor insights from Milestone 3, such as Yummly's success with personalized homepages, validate the decision to create a hub that prioritizes meal suggestions tailored to user preferences(Milestone Three Report …). Brian's wireframe effectively balances functional elements and user engagement, ensuring the home page serves as both a welcoming entry point and a practical tool for navigating meal planning. By incorporating these design choices, the app aligns with both user expectations and industry best practices, creating a cohesive and impactful first impression.

Calendar Page

Valerie's wireframe was selected for its integration of a calendar grid and intuitive interactions that align with users' expectations and preferences for meal planning. The calendar grid design provides users with a structured way to view and manage their meal plans for the week, catering to the 67% of users from Milestone 2 who sought tools to reduce the stress of daily meal decisions. The ability to press on an individual day and see specific meals is a user-friendly approach that aligns with familiar interactions found in popular calendar apps, ensuring that users feel comfortable navigating the feature. This approach simplifies the user experience by leveraging existing mental models of how calendar-based interfaces work, reducing the learning curve for new users.

The decision to enhance the interaction by making a meal "pop out" instead of displaying a static list adds a dynamic element that improves usability and engagement. Users can quickly access the details of a meal for a specific day without unnecessary scrolling, supporting their

need for quick and easy information retrieval. This feature also addresses the 22.2% of users from Milestone 2 who emphasized the importance of accessing recipes efficiently and finding tools that simplify meal planning. Insights from Milestone 3, such as the robust planning capabilities of apps like Mealime, further validate this decision, as these apps also emphasize simplicity and flexibility in planning tools. By incorporating Valerie's wireframe design, the app ensures a seamless, intuitive, and visually engaging user experience that aligns with user needs and competitor best practices.

Search Recipe

We decided to use Valerie's wireframe for the search recipes feature because it combines essential functionality with a user-centric design approach, addressing key insights from Milestone 2 and 3. The incorporation of ingredient-based filters aligns with the preferences of 22.2% of users from Milestone 2, who emphasized the importance of tools to discover new recipes and reduce food waste. By allowing users to filter recipes based on ingredients they already have, this feature not only maximizes the utility of pantry items but also supports sustainable practices by minimizing unnecessary purchases. Additionally, the inclusion of a search bar in the design enhances usability by enabling users to find specific recipes or keywords efficiently, meeting the needs of those who value speed and precision in their meal planning.

The design also includes visual representations of recipes with description further supports user preferences identified in Milestone2, where participants expressed a strong interest in visually appealing and easily digestible content. Displaying key details, such as recipe names and food types, allows users to quickly evaluate whether a recipe suits their preferences without requiring an in-depth review. Competitor analysis from Milestone 3 reinforced the importance of these elements as well with the success of Mealime app with the integration of intuitive filters and engaging recipe previews to elevate user experience. In conclusion, this design effectively

incorporates key elements, creating a search functionality that is both practical and engaging. This combination ensures users can discover recipes that meet their specific needs and preferences, enhancing overall satisfaction with the app.

Discovery Recipe

The chosen design for discovery recipe was the one that stands out as the best choice because it blends functionality with an engaging and intuitive user experience, directly addressing insights from previous milestones. The movie poster-style layout is visually compelling and aligns with user's preference for aesthetically appealing formats that allow quick and effortless scanning of content. The way the design present recipes in such a visually rich and engaging manner draws users into the exploration process, making it enjoyable and less overwhelming. This approach caters to users' s interest in discovering new recipes, ensuring the feature is not only functional but also engaging.

The design also includes user-uploaded and saved recipes further enhances the personalization and interactivity of the discovery feature. This design also aligns with our competitor analysis from milestone 3, which highlighted the success of apps that offer robust recipe organization and discovery tools. Additionally, the ability to view recipes in a list format of the design ensures efficiency by displaying more recipes at once, catering to users who may already know what they're looking for or prefer a more structured overview.

By combining a visually striking interface with practical functionality, this wireframe optimally balances user engagement and efficiency. The design also supports users with varying levels of familiarity with the app—those browsing casually can enjoy the immersive movie poster view, while users with specific recipes in mind can leverage the list format for quick access. This dual approach not only meets diverse user needs but also differentiates the app by creating a discovery experience that is both practical and uniquely enjoyable. This thoughtful design

ensures that recipe exploration is a standout feature of the app, fostering both satisfaction and long-term engagement.

Grocery list

The decision of wireframe for the grocery list feature is the optimal design choice because it effectively combines simplicity, functionality, and flexibility to meet user needs. The inclusion of a list of ingredients with names and quantities directly addresses the 93% of users in Milestone 2 who aimed to reduce food waste and save money. By clearly displaying the necessary ingredients and their required amounts, users can ensure they purchase only what is needed for their planned meals, minimizing overbuying and avoiding unnecessary expenses. Additionally, the ability to add ingredients and transfer items to the pantry provides users with a seamless workflow for managing their inventory, ensuring a smooth transition from grocery shopping to meal preparation.

This feature's emphasis on organization aligns with the findings from Milestone 3, by mirroring some of the proven strategies, this wireframe ensures that the app provides an intuitive and user-friendly shopping experience. Moreover, the decision to remove the total cost simplifies the interface, reducing cognitive load for users who may prefer to focus on meal planning and ingredient management rather than financial details. This choice also keeps the feature flexible for diverse use cases, as users can independently manage budgeting without feeling constrained by preset cost calculations.

Overall, this wireframe supports the goals of usability, efficiency, and sustainability, ensuring that the grocery list feature aligns seamlessly with the app's broader mission of simplifying meal planning and reducing waste, providing a well-structured, user-friendly tool.

Settings Page

The settings page that we selected is similar to those seen in many types of apps. It was chosen due to its simplicity and useability. This layout will make it easy for users to understand how to navigate the page as there will be a minimal learning curve. The page focuses on intuitive navigation as it lists the options available for change to the user in a clear and organized manner. We focused on human-centered design as we have clear categorization in which settings are grouped into logical categories, like “dietary preferences” or changing the user’s level of interaction with meal planning.

We reviewed settings pages in competitor apps and they also rely on simple layouts. Some common features were toggling switches, like for notifications, or editing user profiles. These features are standard not just amongst competitors but across the industry. These features reflect the needs and preferences of our target audience. Our user interviews showed that about ¾ of our stakeholders consider themselves to be frequently busy. So the simplified interface that we have chosen allows for quick understanding and adjustment to what the user desires to change.

Pantry

The pantry feature was based off of Brian’s wireframe. This pantry feature we selected is designed to provide users with a practical way to manage the current ingredients that they have on hand. The pantry page helps to keep track of what users currently have on hand. From our interviews with our potential users we learned that 80% of them prefer to reduce their food waste. These ingredients then can also be used with another feature of the pantry which is the “Suggest Recipes” button. This uses the listen ingredient to help generate tailored recipes. When the user presses this button a curated list of possible recipes is shown.

Conclusion

The design of each feature in our meal planning app was carefully chosen to align with the needs and preferences of our target audience, based on insights from user research and competitor analysis. By focusing on user-centered design principles, we prioritized intuitive interfaces and functionality that addressed common pain points, such as reducing food waste, saving time, and simplifying meal planning. Each design emphasizes usability, ensuring minimal learning curves and efficient workflows while remaining visually appealing and engaging. Our decisions were guided by a balance between practicality and personalization, enabling users to tailor the app to their specific needs. By integrating best practices from the industry with feedback from potential users, we created features that seamlessly blend functionality with a user-friendly experience, ensuring the app effectively supports the goals of its audience.