Redesign Rationale (Vertical)

After meeting with our TA, we decided to put more of an effort into improving user experience and optimize functionality. We've started a redesign process that centers on vertical prototyping. With this method, depth is prioritized above width and whole vertical slices of functionality are built. Below is a summary of the main improvements we've made and the reasoning for our redesign,

The addition of a strong filtration mechanism to the recipes page is one of the main improvements of our overhaul. We want to offer a more customized and individualized browsing experience in recognition of the wide range of tastes and dietary requirements that our customers had. We enable customers to easily locate recipes that suit their unique requirements and preferences by incorporating filters based on several factors, including cuisine style, dietary preferences, cooking time, and item availability. By making recipe discovery more efficient, this improvement not only increases user pleasure but also shows our dedication to provide a flexible and user-friendly platform. We hope to increase user engagement and retention by giving consumers the option to filter recipes according to their own interests, which will strengthen our relationship with our user base.

The addition of a tool that lets customers add missing components from recipes straight to their shopping list is another change in the design of our app. We made an effort to simplify the management of shopping lists and ingredient procurement. With just one click, customers will be able to add missing products to their shopping list and easily identify them while looking through recipes thanks to this new feature. This guarantees that consumers have all the ingredients on hand for meal preparation in addition to saving time and effort.

We have shifted away from a complete meal planning strategy and toward a more targeted recipe selection methodology in response to user feedback and changing tastes. Although some people find meal planning useful, we understood that some could prefer a more adaptable yet methodical approach to cooking. Our goal in switching to a recipe-focused paradigm is to accommodate more diverse user demands and tastes. Our platform now acts as a dynamic recipe decider, letting the customer know what they can make. If they cannot make the recipe, then we will suggest what ingredients they make and they can add it to their shopping list.

In conclusion, the strategic approach we have taken to prioritize functionality depth and completeness is reflected in our use of vertical prototyping. Through the implementation of specific improvements like a shopping list integration, filtration system, and recipe-focused approach, our goals are to improve customer happiness, optimize the user experience, and accommodate a wide range of user preferences and demands.

Redesign Rationale (Horizontal)

When we got our critiques, we saw that we needed a lot of work in order to make sure that our app would be acceptable for the standards of this class. Our TA has been extremely important for our group in shaping how we needed to design the app. They emphasized the importance of simplicity and feature implementation. We ended up taking their feedback and making several adjustments to our Phase 1 design.

In our redesign process, we've got rid of extra elements such as login screens in favor of enhancing core functionalities, aiming to make sure that the app works before adding extra elements. We also chose to remove the macro information component from our inventory management system and recipe library as part of our new strategy. Traditionally, recipe programs have a tendency to overwhelm users with too much data, such exact inventory quantities and nutritional macros. But we realized that this strategy would overload users and take attention away from the main goal of our program, which is to make meal planning and monitoring more effective.This shift allows us to make sure the foundational features of our application, such as inventory management and recipe browsing, thus making their utility and accessibility is fully functional. By investing in these core functionalities, we're able to deliver a more robust and compelling user experience, free from unnecessary distractions or barriers to entry, ultimately ensuring that our application remains intuitive, efficient, and accessible to users of all backgrounds.We also made sure users can now access recipe recommendations based on their inventory, while the family screen has been enhanced to identify and manage family members effectively.

A major aspect of our overhaul is the removal of items connected to the budget. Although budget monitoring may be a useful feature of meal planning apps, we found that it was taking users' focus away from the main goal of our software, which is effective meal tracking. Through the prioritization of basic features like recipe checking and inventory management, users will be able to access needed information with ease. By making this choice, we are able to focus our efforts on creating a solid application base, on which we may progressively add tools for tracking spending in later versions.

We have given particular focus to the application's visual components during our redesign, with the goal of improving both usability and aesthetic appeal. Redesigning the navigation bar is one important component of this update. We have chosen to use easily identifiable icons from an icon folder set, which we have carefully chosen to guarantee that they are understood by a wide range of user demographics. We enable users to navigate our application with ease, regardless of their level of experience with digital interfaces, by utilizing recognizable visual cues. This design decision improves the application's overall coherence and visual appeal while also increasing user engagement. Our goal is to improve the entire user experience and provide a comfortable and familiar navigation experience for our users by giving priority to clarity and intuitiveness.

In conclusion, the implementation of horizontal prototyping is an approach aimed at giving priority to essential features, streamlining user interfaces, and honing the application's visual components. We want to provide our users with a straightforward and delightful user experience that sets the foundation for ongoing progress by removing superfluous features and concentrating on what matters most.

State of Design

With the app, we took the feedback and design changes from Phase 1 and decided to make several improvements to our app's design. While there are certain functions that the app needs to improve on, this report will focus on the positive changes in how the app interacts with its own components and how it can be improved.

Areas of Strength:

The visual style of the app is fundamental to its overall design and greatly influences how the user interacts with it. The visual components, which have been carefully considered, are not just decorative features; rather, they are essential aspects that improve use and engagement. In addition to being aesthetically pleasing, the calming combination of pink, green, and salmon is purposefully chosen to inspire a sense of balance and harmony, resulting in a warm and inviting space for people to enjoy. This harmonious style goes beyond simple color schemes; it penetrates the whole application, from the iconography to the typography, guaranteeing a coherent and consistent visual language. Furthermore, the design's simplicity was purposefully chosen to encourage accessibility and ease of use.The standardized icons also help to improve the usability and navigability of the software. The symbols, which are based on well recognized visual standards, give users clear indications and make navigating various activities simple. Whether navigating through the recipe, inventory, or family screens, users can depend on well-known symbols to aid in rapidly recognizing and gaining access to the features they require.

One essential component of our app's design philosophy is the usage of standardized screens, which are painstakingly created to guarantee a fluid and understandable user experience. Users are given a sense of comfort and confidence by the app's consistent and familiar design, which makes it easier for them to navigate the interface. This strategy encourages more engagement and trust while streamlining the user's experience. Furthermore, the application of comprehensible icons augments usability by offering unambiguous visual signals that direct users through the many features of the application. Whether navigating to the recipe, inventory, family, or home screens, users are met with a consistent design language that reduces cognitive burden and increases productivity. By reducing user uncertainty and disorientation, this well-thought-out strategy makes meal planning more fun and fast. We have created a basis for long-term user pleasure and loyalty by giving standard displays and clear iconography first priority. This enables users to confidently and easily use the app and accomplish their meal planning objectives.

Additionally, the interaction between different pages within the app shows good design. The integration of functionalities such as the inventory and shopping pages allows for dynamic information sharing, enabling users to seamlessly transition between tasks and make informed decisions. For example, when users add items to their shopping list, the inventory page automatically updates to reflect the changes, ensuring that users have an understanding of what

they can currently make and an overview of their pantry supplies at all times. Similarly, the recipe screen's ability to interact with the inventory screen enhances user convenience by informing them whether they have the necessary ingredients to prepare a particular recipe. This proactive approach not only saves time but also reduces food waste, as users can plan their meals more efficiently based on available inventory. In essence, these interconnected features epitomize the app's user-centric design philosophy, prioritizing functionality and convenience to empower users in their meal planning endeavors.

Areas for Improvement:

Although the app's family page helps families coordinate, there is still much space for development in terms of both usefulness and depth. Improvements like allowing meal planning collaboration, integrating shared shopping lists, and syncing calendars will greatly increase the family page's usefulness and significance in the larger app ecosystem. We want to increase user participation and coordination by giving priority to the development of these cooperative tools and features, which will enable smooth communication and collaboration within families. But before we can fully maximize the user experience and unleash the family page's potential, we must look at other areas where innovation and improvement may be made.

The app's reliance on local storage, which was used for the Phase 2.1 version, is one major cause for concern. Although local storage is easy to use and convenient, there are significant issues with data security, scalability, and efficiency. First of all, user data cannot be safely stored on local storage due to a lack of strong security measures that prevent unwanted access or security breaches. Furthermore, the app's intrinsic restrictions could prevent it from scaling, which would make it harder to efficiently handle expanding data sets and user interactions. Furthermore, local storage solutions frequently lack the efficiency needed to improve data access and retrieval methods, which can result in possible performance problems and poor user experiences.

In conclusion, our app has seen a great deal of design changes in response to Phase 1 input, which has greatly enhanced both functionality and user experience. In this report, while we identify areas that want improvement in this prototype, we also want to identify the improvements and changes in the way the app communicates with itself and how the moving parts of the app work together. The cohesive and simple visual design is supported by well chosen elements that improve usability and engagement. Long-term user pleasure is established by accessibility and convenience of use, which are ensured by simple design and standardized iconography. Additionally, user-centric design can be seen by the smooth transitions between activities and the information exchange made possible by effective interaction across pages. But improvements are required, especially in the family page's functionality, where having it be cohesive and interact with the rest of the app would be better for the user experience. In addition, the app's dependency on default local storage creates security, scalability, and efficiency issues.

Overall this application prototype for Phas 2.1 has seen many benefits that can only be improved upon with the upcoming Phase 3.

First we focused on the app itself. Initially they product was more of a website design than a mobile app. However, we realized that we needed an app due to the nature of how the product would be used, which was on the go or somewhere that required imminent access. This access is typically seen more in smartphones so we pivoted over to create a mobile app. By transitioning away from a web-centric layout, the application makes more sense from a design perspective.

Next, we recognized the necessity to incorporate more vertical tasks into our application's Phase 2.1 development, our team came together in order to establish that we where on the same page when it came to what we wanted from this app. We figured that out and understood what our goals and priorities where for this app. We assigned tasksto team members, making sure to prioritize the creation of vertical tasks essential for Phase 2.1. By collectively mapping out the roadmap for development and assigning responsibilities accordingly, we laid a solid foundation for catching up and making sure we all have enough work to do.

After that, we focused on standardizing the different design elements across the application. We were told the app looked “funky” and were told not to go too overboard with the design elements, which was the case for us in Phase 1. We went a little overboard with the figma model and were told that making something like that without prioritizing the core functionality was not the proper way to go about this. Recognizing the importance of consistency and simplicity in user interface design, we've implemented a standardized framework to ensure coherence and familiarity. This new standardization we came up with extends across all sections of the application, from navigation menus to color schemes and typography. By establishing a cohesive visual identity, we aim to enhance user comprehension and reduce cognitive load.