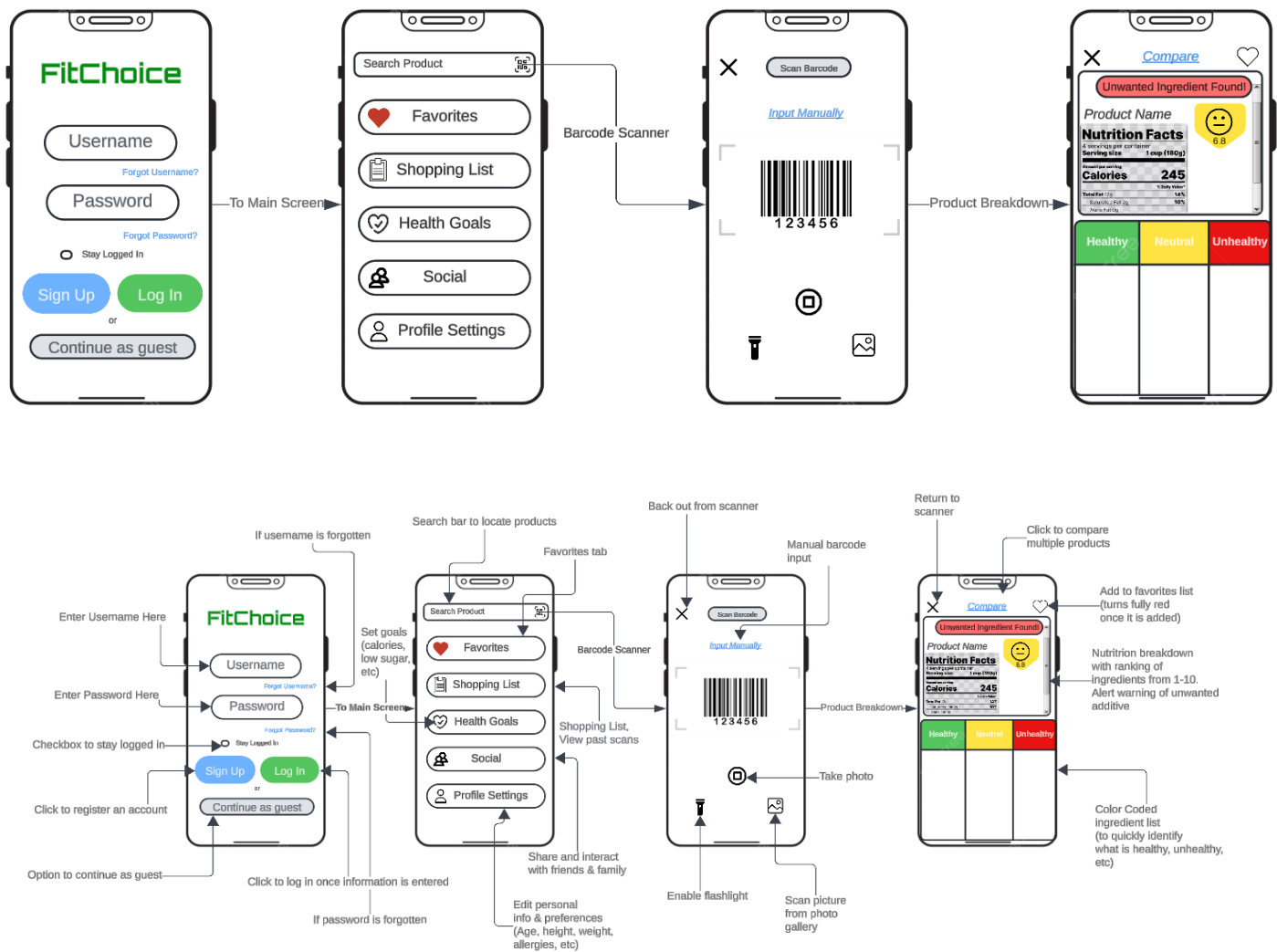Jordan Mitchell

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Professor Morsy

Project 1

Design Rationale

The wireframe consists of four key screens that address different functionalities of the app:

1. Login/Signup Screen

2. Main Menu (Post-login)

3. Barcode Scanner Screen

4. Product Breakdown Screen

Each screen was designed with simplicity and efficiency in mind to help users quickly navigate through tasks without friction. The app's focus is on the core tasks of scanning food products, setting health goals, maintaining a shopping list, and tracking personal data.

Login/Signup Screen

- Purpose: This screen introduces users to the app and offers three clear points: "Sign Up," "Log In," and a "Continue as Guest" option. This will allow users to create a new account to save their information or log in with an existing account. Additionally, users have the option to stay signed in with the available checkbox. If a user has forgotten their information, I have included options for both their username and password.

- User Feedback: During the second round of follow-up interviews, users requested a way to explore the app without immediately signing up. The "Continue as Guest" button was added beneath the login options to ensure seamless entry for hesitant or time-pressed users. This will allow new users to explore features without committing to making an account.

- Design Choices: I chose to make the buttons prominent (green for "Log In," blue for "Sign Up," and gray for "Continue as Guest") to ensure visibility and ease of selection. I've chosen green for the FitChoice logo to evoke a sense of health,

wellness, and vitality which are key concepts associated with healthy food choices. I also limited the login to a simple menu, where each color clearly indicates that each option performs a different function.

Main Menu Screen

- Purpose: This screen provides users access to key features like "Favorites," "Shopping List," "Health Goals," "Social," and "Profile Settings." This will be the central hub for users to access the various parts of FitChoice. Users will be presented with this menu after backing out of each page.

- User Feedback: Feedback from interviews revealed that multiple "Settings" options caused confusion, so I consolidated all settings into the "Profile Settings" tab. This eliminates any redundancy and ensures users have a clear, centralized place to manage their preferences and personal data. This also resulted in removal of the original hamburger menu, making it easier to view all essential functions in one place rather than searching through menus, increasing time-efficiency.

- Design Choices: Navigation is as simple as possible, with large, identifiable buttons and a search bar to locate products. I included icons that are relevant to each tab to give another layer of identifiability, increasing visibility and assuring users of the purpose each tab performs. My primary focus is on quick access, reducing clutter, and simplifying tasks like creating a shopping list or setting health goals.

Barcode Scanner Screen

- Purpose: This screen allows users to scan products either by using the camera or inputting a barcode manually. This will be the screen users see when they are attempting to scan new items. They can also scan images directly from their photo gallery.

- Design Choices: The simplicity of this screen ensures that even in a busy grocery store, users can quickly scan products without hassle. Clear options such as scanning via camera or manual barcode input. Ability to enable flashlight for accessibility in various lighting conditions and access to photo gallery to scan images taken before. The design encourages fast actions, essential for users shopping for multiple items quickly.

Product Breakdown Screen

- Purpose: This screen showcases a comprehensive breakdown of the product's nutritional information, visually identifying macro and micronutrients. To keep the experience easy to digest for more casual users, I included a color-coded system (green, yellow, red) to show what ingredients are healthy, neutral, or unhealthy. The design is meant to cater to both those who want detailed data and those who prefer a quick visual summary.

- User Feedback: I received feedback from users suggesting the ability to compare products side by side, in order to save time on switching back and forth between prior scans. They voiced the want to quickly view shared and unique ingredients

between products, allowing for rapid decision making when purchasing alternatives or deciding on new items.

- Design Choices: The color-coded breakdown is intuitive, simplifying the process for casual users who want a fast overview of how healthy a product is. In-depth details are still accessible, ensuring users looking for a detailed way to track nutrients can do so. The smiley face rating system (graded from 1-10) provides another quick healthiness indicator for users. Warning alerts appear for users to easily recognize harmful or undesired ingredients. Green indicates healthy (a motif for the uses of green), yellow for neutral, and shades of red for both unhealthy and the warning message. The "Compare" button allows users to view nutritional differences between products, and a heart button (turns red once added) enables users to save their favorite products for future reference.

Rationale

From the outset, my goal was to create an app that is intuitive for less tech-savvy users while still offering advanced features for those interested in detailed nutritional tracking. I wanted the design to strike a balance between simplicity and functionality, allowing for a smooth experience whether the user is casually scanning an item or comparing multiple products based on complex dietary restrictions. The primary aim of FitChoice is to create a seamless, user-friendly experience that can easily be integrated into your daily life. Each design decision was guided and improved upon by user feedback and best practices in UI/UX, creating a tried-and-true experience.

- **Login/Signup Screen**: Initially, I did not include this feature, but after my interviews learned that not all users would want to immediately create an account. The "Continue as Guest" feature allows them to explore the app without commitment. The inclusion of a "Stay Logged In" checkbox ensures users who frequently use the app can skip the login process, which saves time for regular users.

- **Main Menu**: With large, labeled buttons and familiar icons, this screen is designed to make navigation as simple as possible. I wanted to ensure that users could access the app's features without unnecessary scrolling and digging through menus. I initially included a hamburger menu that could lead to other areas but decided against it in favor of containing all the necessary information to one screen. In response to user feedback, I condensed the settings menu under "Profile Settings" to reduce confusion and make it easier to adjust personal preferences and app settings.

- **Barcode Scanner**: The simplicity of this feature is key. Users can scan barcodes, input them manually, or upload them directly from their gallery. I recognized that users might be in low light conditions, or may not have the item on hand, so I made sure to include these features clearly on the screen with icons. If the users do not want to scan an item, they can simply click the "x" to return to the main menu. I made sure the manual input was displayed in a bright color and underlined to eliminate any ambiguity.

- Product Breakdown Screen: Starting out, I knew that bombarding users with a large block of text would be intimidating and likely put them off from utilizing the app. I've reviewed competitors like MyFitnessPal and Cronometer and found that the information was presented in a way that casual users could find daunting. However, in their app reviews I was able to find a lot of good that they offered, prompting me to combine the best of both worlds. As a result, I strove to make this screen both detailed and approachable. For users who want to quickly determine if a product is healthy, the green, yellow, and red coding offers a view at a quick glance. For those who prefer more detailed analysis, all macro and micronutrients are clearly displayed, along with a smiley face score out of 10. I considered interview feedback and included the ability to compare products, cutting out the time it takes to scroll back and forth between multiple products, and instead placing them together. I wanted users to feel in control, whether they are moving quickly on the go or diving deeper into nutritional information for dietary planning.

I adhered to the best UX/UI practices by focusing on clean design, consistency, and a user-friendly interface. Throughout the app, the fonts, button shapes, and layouts are consistent. This is to ensure that individuals, even those unfamiliar with tech, can predict how each screen will behave. I made sure the fonts were clear and legible, with enough space between elements to prevent accidental taps. The color-coding for health ratings and ingredient breakdown is designed to help users quickly comprehend healthy and unhealthy ingredients, allowing for both functionality and ease of use. Recognizing that

some users like myself may be colorblind, I plan to include a "colorblind mode" option in the settings. This feature will help those who cannot easily differentiate between the regular red, yellow, and green to still get an accessible breakdown of ingredients, using symbols instead of colors. This is another reason why I made sure to include so many visual indicators like the smiley face ranking system and included the labels "healthy, neutral, and unhealthy" on the analysis.

Adaptation for a Digital Watch

Adapting the FitChoice app for a digital watch requires me to shift my focus, prioritizing core functionalities that can be simplified due to the smaller screen size.

- Core Features: The barcode scanner and nutritional summary are the key features that would carry over to the wearable version of the app. The user could quickly scan a product, receive a basic healthiness rating (e.g., green, yellow, red), and set simple goals like caloric limits. The barcode scanner may be difficult to use as smart watch cameras are not ergonomically positioned to take pictures of what is in front of you, so I should include the ability to scan codes directly from the photo gallery.
- Glanceable Information: The nutritional breakdown would be minimized, possibly showing only the product's health score and color-coded rating. For the watch interface, tap-friendly buttons and glanceable features are crucial. A swipe-based

system could be used to switch between quick product comparisons. In depth analysis may prove difficult as the screen size is not viable for reading large amounts of text.

- Best Practices: Wearables require fast, glanceable usability, so the design would focus on a single key action per screen, such as scanning a product or viewing its health score. This will reduce complexity while maintaining core functionality. Colors can still be utilized to convey information.

Adaptation for Touch-Based Kiosk

For a larger touch-based kiosk, the app's design can be expanded to take advantage of the bigger screen and interactive environment.

- Core Features: The barcode scanner and product breakdown screens would be scaled up, allowing users to see detailed nutrition facts on a larger screen akin to McDonald's kiosks. More screen space means more information can fit into one place. The comparison feature would allow multiple products to be viewed side by side, making it ideal if a shopper has two or more items in hand. The downside is lack of portability and ability to scan on the go.
- Interactive Design: Large buttons, easy-to-read text, and color-coded nutritional ratings would ensure a smooth experience. Users could scan an item and immediately see a breakdown of ingredients across multiple products, making it

easier to compare while shopping. As the kiosk is most likely to be located in-store, customers would also be able to see and compare prices.

- Best Practices: A larger screen allows for more information to be displayed at once, but maintaining simplicity remains vital. The focus would be on creating an intuitive process where users can scan, compare, and save items to their shopping lists with minimal steps. I still want to avoid overloading users with too many options and information. Perhaps the layout can be altered to avoid making the buttons too large but still maintain its simplicity.

Conclusion

In conclusion, the design of FitChoice balances simplicity with functionality, providing users with a seamless experience while catering to both casual and health-focused users. My design approach was driven by the desire to avoid overwhelming users with too much information while still offering enough depth for those who want detailed insights. The incorporation of user feedback was crucial in shaping features like the "Continue as Guest" option, which allows curious users to explore the app, and the product comparison feature, which saves time by allowing them to assess multiple items at once. These additions ensure that the app caters to a variety of needs, from the health-conscious shopper to someone with a specific diet. The color-coded health indicators and smooth navigation makes it easy for users to understand complex data without feeling swamped. By combining these elements with simple yet informative product breakdowns, FitChoice helps users make quick decisions about the food they purchase. FitChoice's

adaptability across various platforms, such as wearables and kiosks, can extend its

usability, offering an efficient and practical experience in any environment, whether in-

store or on the go. Scaling up for a kiosk would allow users to view more information on a

larger screen, enhancing their ability to compare products side by side, which is

particularly useful in a store. Simplicity and efficiency remain at the heart of its design,

enabling users to seamlessly integrate the app into their daily routines. Whether they are

scanning products at a store or tracking their health goals at home, FitChoice is a flexible

tool for building healthier habits. Additionally, the user interface's attention to

accessibility, including measures taken for colorblind users, ensures that the app is

inclusive and usable by everyone. Ultimately, FitChoice is designed to be a helpful

companion that is always with you, guiding you toward healthier habits without creating

unnecessary resistance or confusion. By emphasizing intuitive design and considering user

feedback, the app delivers an experience that is both practical and user-friendly, helping

build better habits one scan at a time.