

Generative AI Report: Foodie Mobile App Usability Study

Design Process Summary

The design process for the **Foodie** mobile app was structured to create an efficient food ordering experience, focusing on group and multiple orders within a time-sensitive framework. The project aimed to simplify the process of finding restaurants, placing orders, and completing checkout seamlessly. Through a structured UX research study, usability testing was conducted to gather user feedback, highlighting strengths and areas for improvement to refine the application's interface and functionality.

Study Plan Summary

The **Foodie UX Research Study Plan** aimed to evaluate the efficiency of ordering food in both individual and group settings. Five participants were recruited, including users with diverse needs such as assistive technology users and non-native English speakers. The study was conducted remotely over two days, where participants performed tasks such as finding a restaurant, placing an order, adding/removing payment methods, and completing the checkout process. Key performance indicators included **time on task, user error rates, conversion rates, and the system usability scale (SUS)** to measure overall user experience.

Study Results Summary

Based on usability tests and affinity diagram analysis, key findings emerged regarding user interactions with navigation, profile management, cart functionality, and checkout.

Participant Feedback (A-E)

- **Positive Aspects:**

- **Navigation & Usability:** Most participants (A-E) found account navigation easy and straightforward. Login and profile setup were intuitive.
- **Checkout Process:** All participants found the checkout process simple, with Participant C stating it was "perfectly fine" and required no adjustments.
- **Payment Methods:** Participants (B, C, D, E) noted that adding new payment methods was easy and user-friendly.
- **Areas for Improvement:**
 - **Map Navigation & Restaurant Search:** Participants (B-E) struggled with the map feature, often unsure where to click. More guidance was needed.
 - **Cart Management:** Participants (A, D, E) wanted a clearer way to remove items from the cart, such as a dedicated remove button or icon.
 - **Checkout Button Visibility:** Participant A had difficulty locating the checkout button.
 - **Error Handling:** All participants had trouble figuring out how to remove items from the cart, suggesting a need for better visual cues.

Percentage-Based Evaluation Trends

1. **80% of participants (B, C, D, E) struggled with the map navigation feature**
 - The majority of participants found the **map feature confusing**, particularly in locating specific restaurants and understanding where to click. This suggests a strong need for **better visual guidance, markers, or a search function** to improve usability.
2. **100% of participants (A, B, C, D, E) had difficulty removing items from the cart**
 - All users encountered confusion when tasked with removing an item, indicating that the current **cart management system lacks clear affordances** (such as a dedicated remove button or icon). This is a **critical usability issue** that needs immediate attention.

Fraction-Based Evaluation Trends

1. **4/5 participants (B, C, D, E) found the checkout process simple and straightforward**
 - Despite other usability challenges, a **strong majority (4 out of 5)** reported that checkout was easy to navigate, indicating that the existing **order completion flow is well-designed** and does not require significant structural changes.
2. **3/5 participants (A, D, E) wanted a clearer remove button for cart management**
 - While all participants had trouble removing items, **3 explicitly mentioned the need for a more visible or dedicated remove feature**. This reinforces the need for a more **intuitive cart interface with clear iconography** to address user confusion.

Potential Design Paths & Implementation

Based on participant feedback, here are possible design updates for the **Foodie** app, along with their pros and cons:

1. Enhancing Map Navigation

- **Design Update:** Introduce tooltips, visual guides, or a search bar for users to find specific restaurants.
- **Implementation:** Use highlighted markers, filters, and interactive tutorials.
- **Pros:** Improves user guidance, reduces confusion.
- **Cons:** May increase cognitive load if too many features are added.

2. Improving Cart Management

- **Design Update:** Add a dedicated remove button with clear icons (e.g., trash can symbol) and an undo option.
- **Implementation:** Place remove icons next to each item and provide a "confirm removal" pop-up.
- **Pros:** Increases efficiency, reduces user frustration.

- **Cons:** Requires UI adjustments, potential increase in user clicks.

3. Refining Checkout Button Visibility

- **Design Update:** Make the checkout button more prominent with contrasting colors and fixed positioning.
- **Implementation:** Position the button consistently at the bottom of the screen.
- **Pros:** Reduces user confusion, improves completion rates.
- **Cons:** May interfere with other screen elements.

4. Enhancing Error Handling & User Guidance

- **Design Update:** Implement error messages and step-by-step guides for common issues (e.g., removing items from the cart).
- **Implementation:** Use inline hints, instructional pop-ups, and real-time validation.
- **Pros:** Minimizes user frustration, improves confidence in the app.
- **Cons:** Excessive pop-ups may disrupt user flow.

Conclusion

The **Foodie UX Research Study** provided valuable insights into user behavior and expectations. While the app demonstrated strengths in navigation, checkout, and payment handling, areas like map navigation, cart management, and visual cues for key actions need improvement. By implementing these design updates, the **Foodie** app can enhance its overall usability and provide a more seamless food ordering experience. Moving forward, iterative testing should be conducted to validate the effectiveness of these changes and further optimize user satisfaction.