Usability Testing & Iteration: Refining Kitchen Kart for Real Users

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PROJECT NAME: KITCHEN KART (RECIPE APP)

PROJECT LINK:

https://www.figma.com/design/lCeO3SAjxqmFhBEAAL7YlY/Food-recipe-app?node-id=0-1&t=oLThOKSBi9wVpfyS-1

1. Usability Testing Methods Applied

To ensure Kitchen Kart offers a smooth and enjoyable experience for users exploring and following recipes, we employed a variety of usability testing techniques:

- **Moderated Remote Usability Testing**
    - **Method**: Participants were guided through tasks such as searching for a specific cuisine, applying dietary filters, saving a recipe, and following the step-by-step cooking instructions. A moderator observed via video calls and asked follow-up questions.
    - **Why**: Enabled deeper understanding of user thought processes, confusion points, and emotional reactions, especially when using

features like step navigation or customization filters.

- **Unmoderated Remote Usability Testing**
  - **Method**: Test flows like recipe discovery, saving to favorites, and cooking timers were evaluated independently by users using tools like Maze and PlaybookUX.
  - **Why**: Gathered large-scale, unbiased behavioral data across a diverse range of users, helping us identify broad usability trends and pain points.

- **First-Click Testing**
  - **Method**: Participants were shown key screens (like the Home or Recipe Detail page) and asked where they'd first tap to "Start cooking" or "Save a recipe."
  - **Why**: Helped evaluate the clarity of primary actions and the intuitiveness of the navigation design.

- **Five-Second Test**
  - **Method**: Users were briefly shown a screen, then asked what the app was about or what they remembered most.
  - **Why**: Tested the visual hierarchy and initial impact of key UI screens such as Home and Featured Recipes.

2. Participant Recruitment for Usability Testing

Finding the right participants was essential to align the testing with Kitchen Kart's user base. Our recruitment strategy included:

- **Targeted Demographics**

  - **Home Cooks**: Adults aged 25–50 with interest in daily meal preparation.
  - **Students**: Aged 18–25, seeking quick, budget-friendly recipe ideas.
  - **Beginner Cooks**: New to cooking, looking for guided help with steps and visuals.
  - **Food Hobbyists**: Users who enjoy exploring international cuisines and experimenting with ingredients.

- **Recruitment Channels**

  - Recruited users via social media cooking communities, student networks, and user research platforms (e.g., Maze, TryMyUI).
  - In early stages, we also involved family/friends to test low-fidelity prototypes quickly.

- **Screening Criteria**

  - Participants were screened for smartphone usage, familiarity with recipe apps, dietary preferences (e.g., vegetarian), and interest in cooking.
  - Ensured a mix of casual and experienced users to capture diverse insights.

- **Incentivization**
    - Participants were offered gift cards or exclusive early access to premium features of Kitchen Kart as tokens of appreciation.

3. Most Common Usability Issues Found

Our testing uncovered several recurring usability concerns that affected the overall cooking experience:

- **Step Navigation Confusion**
    - **Issue**: Some users didn’t realize they could swipe or tap "Next Step" while cooking.
    - **Example**: Missed crucial cooking instructions or jumped steps unintentionally.

- **Overloaded Home Screen**
    - **Issue**: First-time users felt overwhelmed by too many sections (e.g., cuisines, trending, new uploads) on the landing screen.
    - **Example**: Couldn’t decide where to begin or missed the search bar entirely.

- **Insufficient Feedback on Save Action**
    - **Issue**: Users weren’t sure if tapping the “heart” icon successfully saved the recipe.
    - **Example**: No visual confirmation or animation led to double taps or uncertainty.

● **Ambiguity in Dietary Filters**

- **Issue**: Filters like "Vegetarian" or "Gluten-Free" weren't clearly labeled or easily discoverable.
- **Example**: Users applied filters but weren't sure they worked due to lack of visual cues or updated results.

● **Ingredient Measurement Clarity**

- **Issue**: Some users struggled to understand ingredient measurements or serving sizes.
- **Example**: Confusion over "1 cup cooked rice" vs. "1 cup uncooked rice."

4. How User Feedback Influenced Design Changes

We incorporated direct user feedback into iterative UI improvements to enhance clarity, engagement, and functionality:

● **Improved Step Navigation Flow**

- **Feedback**: "I missed some instructions," "I didn't know I could swipe."
- **Change**: Added prominent "Next/Previous" buttons, included visual progress indicators, and introduced optional voice-guided instructions for hands-free use.

● **Decluttered Home Screen**

- **Feedback**: "Too much going on," "I don't know where to click first."
- **Change**: Reorganized the layout to emphasize search, recommended recipes, and filters first. Secondary content (e.g.,

blogs, tips) moved to a separate section.

- **Clearer Save Confirmation**

  - **Feedback**: “Did I save this?”
  - **Change**: Added a short animation and a toast message saying “Saved to Favorites!” along with a heart icon animation.

- **Revamped Filtering Interface**

  - **Feedback**: “Filters don’t stand out,” “I want to combine filters easily.”
  - **Change**: Introduced chip-style filters at the top of the screen for quick toggling, and real-time search result updates based on selected tags.

- **Enhanced Ingredient Display**

  - **Feedback**: “The measurements are confusing.”
  - **Change**: Standardized units (metric/imperial toggle), added serving-size adjustment slider, and grouped ingredients by preparation step for better clarity.

5. Changes Implemented Based on A/B Testing Results

We used A/B testing to validate specific UX hypotheses and optimize user engagement:

- **"Start Cooking" Button Design**

  - **Hypothesis**: A large, central "Start Cooking" button with an icon would attract more interaction than a smaller, text-only version.

- **Result**: Variant B (larger button with cooking icon) had 27% more clicks.
- **Change**: Made this the default across all recipe screens.

● **Recipe Card Layout**

- **Hypothesis**: Adding cooking time and difficulty badges to the card preview would help users decide faster.
- **Result**: Cards with badges received 18% more clicks.
- **Change**: All recipe cards now show prep time, cook time, and difficulty level visibly.

● **Tooltip Onboarding**

- **Hypothesis**: New users who receive brief onboarding tooltips would explore more features.
- **Result**: Tooltip version users explored 33% more features in their first session.
- **Change**: Integrated short onboarding tooltips (e.g., “Swipe for next step”) for first-time users.

6. Measuring the Effectiveness of UI Improvements

We continuously tracked both quantitative and qualitative metrics to assess the impact of our design iterations:

● **Quantitative Metrics**

- **Task Success Rate**: Users completing key tasks like finding and saving a recipe rose from 72% to 91%.
- **Time to Complete Recipe Search**: Dropped by 30% due to improved search and filtering.

- **Bounce Rate**: Reduced by 22% on the home screen after layout simplification.
- **Favorites Engagement**: “Save to Favorites” interactions increased by 41%.
- **Returning Users (7-Day Retention)**: Improved from 38% to 52%.

- **Qualitative Metrics**
  - **CSAT (Customer Satisfaction Score)**: Collected through in-app feedback; rose from 3.7 to 4.5 (out of 5).
  - **SUS (System Usability Scale)**: Increased from 68 to 84 after major UI updates.
  - **App Store Feedback**: Positive reviews highlighted ease of use and recipe clarity post-changes.