Assignment 6: User Testing Session 1

Usability Testing Script and Pilot Study:

Prototype link:

https://www.figma.com/proto/m6U1Jt4QffUTFUCJyBjENS/Mid-Fidelity-Prototype?page-id=0%3A1&node-id=1-2&p=f&viewport=-851%2C135%2C1.13&t=OZyJag6qXEj3kdKD-1&scaling=scale-down&content-scaling=fixed&starting-point-node-id=1%3A2

- Demographics
  - Please provide your current job title (or major, if student) and age
  - What previous experience do you have with grocery or food delivery apps? What apps do you use?
- Getting started documentation (only applicable to prototype)
  - The software you're going to be using to test our prototype is Figma. This is not a functional app, and only some of the functionalities work. If you try to click on a section of the app that doesn't have functionality, the screen will flash with blue "hot zones" that are clickable. To proceed, you can click one of those blue zones.
  - If you need to restart for any reason, click R on your keyboard or refresh the page
- Using the app - tasks to complete
  - Save the recipe fluffy banana pancakes to your cookbook
  - Rate and review the fluffy banana pancake recipe
  - Browse through popular recipes
    - Find the recipe for pasta with chicken and save recipe ingredients
    - Confirm the ingredients were saved to your grocery list
  - Assume you went shopping and bought the 50g chocolate that was in your grocery list. Report the purchase in your pantry.
  - Add new item (4 sticks of butter) to your inventory list
  - Using your inventory, find recipes that will use the items you already own
  - Spend a few moments browsing the functions you haven't yet used in the prototype. Please talk through your thought process as you go.
- Follow-up usability survey
  - Thanks for participating! Please now take a few minutes to fill out a quick questionnaire
  - https://docs.google.com/forms/d/e/1FAIpQLSc8FNO414fWkqjWTdXYqMwdH8Qa9oOvXITuU8Wos3GNGDRk2w/viewform?usp=sharing

Pilot Testing Feedback and Alterations:
- Because of the automatic flow we had in the prototype, the question was phrased as "Find the recipe for pasta with chicken and save the first four ingredients," but the button added all ingredients. We rephrased the question to say "Save recipe ingredients."
- There was some confusion on the phrasing "Assume you bought 50g chocolate on your grocery list. Log that to your system." We changed the task to say "Assume you went

shopping and bought the 50g chocolate that was in your grocery list. Report the purchase in your pantry."
● We determined that the flow [Add all ingredients to grocery list] → [select all] → [save] was worse than [Add all ingredients to grocery list] → [deselect any that don't apply] → [save] and changed it in our prototype

Usability Testing & Observation Summary:

Demographics
● 2 female, 3 male
● 3 college students majoring in:
  ○ Computer Science
  ○ Economics (Master's)
  ○ Environmental Engineering
● 1 software engineer
● 1 environmental economist
● All users were familiar with social media apps, but only 2 users reported high experience with food delivery apps
● *Note that all users were young people experienced with technology*

Common Issues Across Users

● Many users attempted to rate a recipe by clicking on the star rating under the title, rather than using the intended "I Cooked It" button.
● Some users struggled to distinguish between the pantry and grocery list, expecting one to contain the other.
● The "Pasta with Chicken" recipe lacked directions and ingredients, leading to confusion.
● Some users expected ingredient selection to be automatic when adding to grocery lists or searching recipes.
● Several users found certain buttons (back button, ingredient edit button) too small or unclear in function.
● Several users discussed issues with finding the "rate" button, thinking it might be on the first page for the recipe.

Positive Feedback

● Users generally found the app intuitive, with clear navigation and a smooth task flow.
● Visuals and graphics were appreciated.
● Saving recipes and ingredients was straightforward.
● The grocery list feature was highlighted as especially useful.
● Users who explored the cookbook and friend activity features found them interesting.

Survey Summary:

- All respondents rated Ease of Use, Speed of Process, and Overall Impression as a 5/5 (with 5 being the best rating).
- Clarity of Information received an average rating of 4.75, with 1 respondent rating it as a 4 and all others rating it as a 5.
- Only 3 respondents reported making an error, of whom 2 rated Error Recovery as a 5/5 and 1 rated it as a 4/5.
- User responses to questions such as issues, challenges, or particularly easy functions echoed observation testing notes. For example, two respondents mentioned slight confusion rating and adding ingredients to the grocery list.
- From this survey, we can conclude that the prototype is very good from a usability standpoint, with need for limited small improvements to increase consistency, clarity, and intuitiveness.

For access to the full results of the survey, please visit this spreadsheet:
https://docs.google.com/spreadsheets/d/1o6Cf3Q0t6GagFaap99TYfmgJOlqUU13VrfKUZSwWauU/edit?usp=sharing

Individual Usability Testing Notes:

User 1:
- **Demographics:** Female, senior college student majoring in Computer Science. She is an avid user of social media platforms and food ordering apps, so she's familiar with the concept of interactive feeds. She has never used a cooking specific app before.
- **Observation Notes**:
  - She found the tasks easy to follow and enjoyed the graphics.
  - One confusion she had was when she was asked to rate the "Fluffy Banana Pancake" recipe. Instead of scrolling through the page and finding the "I cooked it" button, she tried to click on the stars right under the title of the recipe, which actually indicates the overall rating the recipe received.
  - She pointed out that the recipe detail pages were not consistent for "Fluffy Banana Pancake" and "Pasta with Chicken". "Pasta with Chicken" did not include directions or a list of ingredients.

User 2:
- **Demographics:** A 23-year-old Chinese male pursuing a master's degree in economics at Tufts University. He is an avid user of social media platforms. Although he has been cooking for himself for about 3–4 years, he has never used a cooking app before.
- **Observation Notes**:
  - Overall, he completed all of the tasks fairly quickly.
  - He paused for a moment to think about how to rate the pancake but soon realized that the star icons on the recipe page represented overall ratings, as indicated by the "2.5k" label next to them. He then figured out that he needed to go to his "own page" (cookbook) to rate and review the recipe.

- ○ Similarly, he hesitated briefly when trying to add a new item to the inventory list but then realized he had to go to the pantry section.
- ○ Aside from these moments, the flow was smooth, and he found the interface clear. He mentioned that he liked the visuals.

User 3:
- ● **Demographics:**
  - ○ 23 years old female
  - ○ Software Engineer
  - ○ Stop & Shop Peapod & Uber Eats
    - ■ Used Peapod when she didn't have a car for all her groceries
- ● **Observation Notes**:
  - ○ Had trouble finding the rate and review from the main page just because it doesn't say that
    - ■ "Maybe I have to cook it first"
  - ○ Was excited by the "save ingredients to grocery list"
  - ○ Had trouble with "include selected items in search" for recipes with inventory ingredients
    - ■ Should be pre-checked for all of them?
    - ■ "I thought everything was auto-selected which is why I automatically searched for it"
  - ○ "Is there a favorite button on the page of the recipe?"
  - ○ The button for editing ingredients in a recipe (circled in red below) is not intuitive - "I understand the icon but I don't know what it does because it's just over here. I wanted to click it to find out. I don't know if it would give me suggestions."
    - ■
    - ■ Suggestion: Remove the icon and just keep filters for dietary restrictions - or have substitutions for ingredients listed at the bottom of every recipe
  - ○ Would expect "add friends" to be an option in the bottom bar if socializing is a primary aspect of the app
  - ○ The grocery list is the most useful part of it in her opinion

User 4:
- ● **Demographics:**
  - ○ 22 year old male
  - ○ Environmental economist
  - ○ Does not have a lot of experience with food delivery
  - ○ Uses instagram a little bit
  - ○ Loves Youtube Shorts
  - ○ Loves to cook, and watch Youtube Shorts about cooking
- ● **Observation Notes**:
  - ○ Was able to save fluffy banana pancakes easily

- At first tried to click the stars to review it, then scrolled to the bottom and found the I cooked it button, but was not sure if this button was to write a review
- Thinks it could just be a review button
- First scrolled horizontally on the popular recipes, then clicked the popular recipes button
- Was able to save the ingredients for the pasta easily
- Was not able to find the grocery list easily, thought pantry was something else
- Easily clicked the chocolate
- Easily added the butter to the grocery list
- Easily found the recipes he could cook
- Thinks the back button is too small, wants bigger buttons
- Wants an add all button for the search for recipes using my ingredients
- Wants a full page for friend activity does not want the popular recipes sticky at the top (popular recipes could be like instagram stories at the top of the page)
- Wants to change the geographic area of popular recipe, see what people are cooking near him, or search "whats the 23 year old boy cooking"), wants cool data and exploration about what people are cooking
- Wants an auto on feature so he does not have to turn the page back on while cooking
- Prefers having the ingredients and directions all listed out instead of having the add ingredients button show the ingredients
- Wants a scale button for if you are cooking half or double

User 5:
- **Demographics:**
  - 20 y/o male
  - Environmental Engineering major, junior at Tufts
  - Has experience driving for Doordash, used as a customer a few times
  - Mainly uses social media apps: Instagram, tiktok (also the weather app)
  - Enjoys cooking but doesn't use any apps associated with cooking
- **Observation Notes**:
  - Quickly opened to app
  - Clicked correct flow for saving fluffy banana pancakes in under five seconds
  - When asked to review, scrolled down to review, scrolled back up and clicked on the average community rating (error)
  - Then he scrolled down and marked as cooked and reviewed easily
  - To browse popular recipe, easily navigated back to Browse page and clicked heading and scrolled appropriately
  - Clicked chicken and pasta recipe, clicked save ingredients, tried clicking the individual ingredients, then realized they were already selected, then saved to list
  - To confirm they were added, instead of clicking the pantry icon he redid the add ingredients flow, then went to the grocery list at the end instead of returning to recipe

- ○ To log chocolate as "owned" or "purchased", he quickly selects checkbox, navigates to inventory to confirm
- ○ Added butter quickly
- ○ Viewed recipes with owned ingredients by clicking checkboxes and correctly opening recipe feed
- ○ Said he hadn't thought about cookbook at all, went there, then realized he had "been there" when he saved the first recipe (maybe he meant he was aware of it at that moment but hadn't navigated to the page until now)
- ○ Navigated to profile, saw you can connect with friends, that there are shopping preferences you can store, back to Browse, checked out what friends have made by going to friend activity, said that's seemingly it