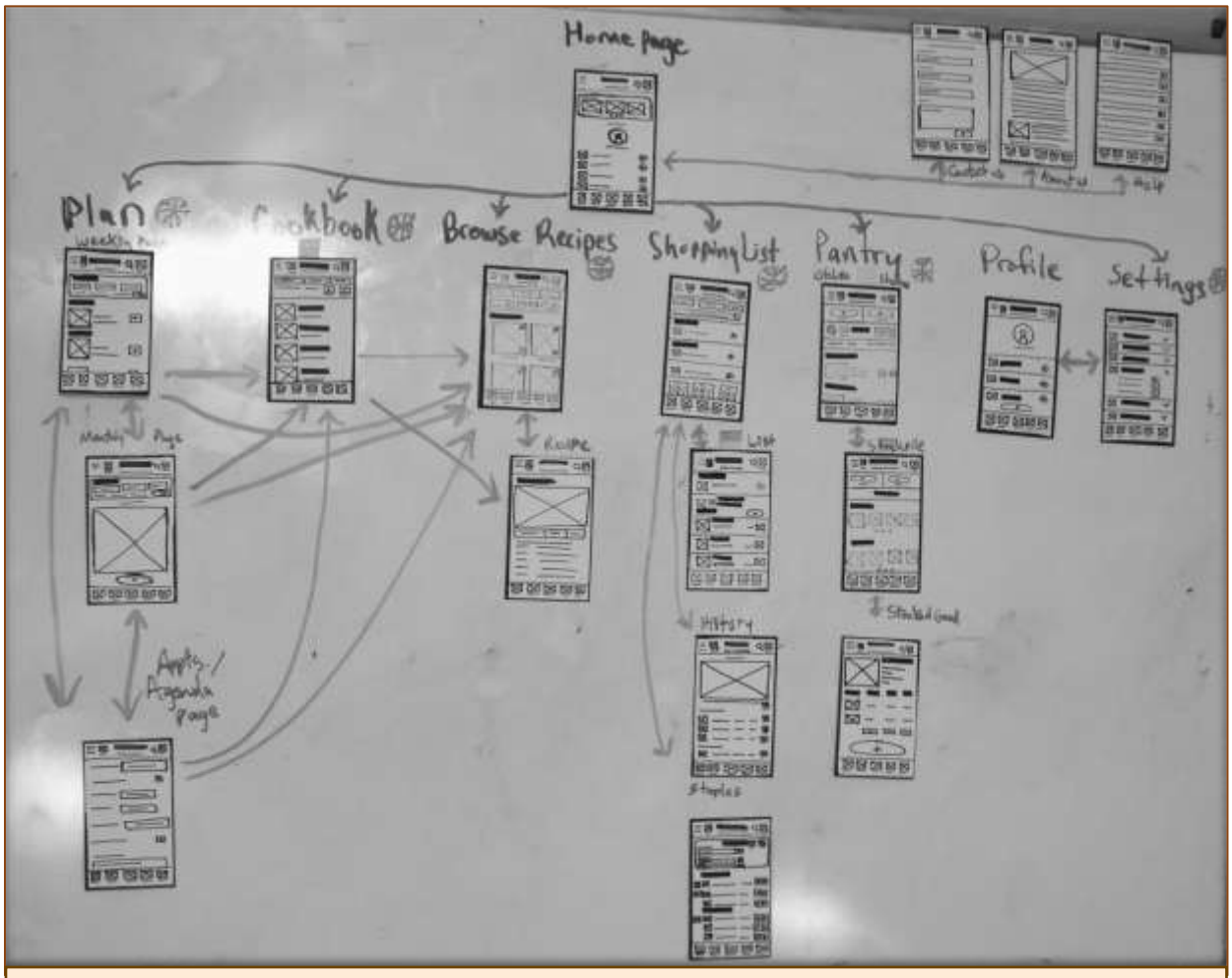
Meal Maven User Experience:

Usability Testing Research Plan



Abstract:

Meal Maven, a meal planning app, is transitioning to its testing phase after initial research and design. This study aims to evaluate the usability of key features and benchmark them against a competitor, Cook List. Key goals include assessing information architecture, ease of navigation, user satisfaction, and identifying areas of confusion or incomplete functionalities. Final tests include both moderated low-fidelity and unmoderated high-fidelity prototype assessments, followed by competitor comparisons. Identified errors and pain points will guide design refinements. If needed, A/B testing will be conducted to enhance user experience and satisfaction with Meal Maven.

Harris Anthropological Research

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Executive Summary

Introduction and Background

Meal Maven, a meal planning app, has moved to the testing phase after completing initial research and design. The aim is to evaluate the usability of key features (Planner, Cookbook, Recipe Browser, Shopping List, and Pantry) and compare Meal Maven's performance to its competitor, Cooklist.

Research Goals

- Assess information architecture and determine the need for card sorting.
- Evaluate ease of use for key tasks and compare with Cooklist.
- Identify success metrics for user persona problem statements and prioritize observations.
- Compare user satisfaction with Meal Maven and Cooklist.
- Discover areas of confusion or incomplete functionalities.

Research Framework

- Schedule and conduct moderated lo-fi prototype testing with five participants.
- Refine hi-fi design based on lo-fi testing findings.
- Conduct moderated hi-fi prototype testing and competitor usability testing.
- Propose redesigns and conduct A/B testing if necessary.

Limitations

- Unusual card sorting due to Google/Coursera course structure's placement of card sorting methods and budget constraints.
- $330 budget for limited used of Maze and Zoom Workplace.
- Participant scheduling conflicts may require inviting alternates.

Data Collection

- Remote moderated low fidelity and high fidelity prototype tests.
- Follow-up competitor test with moderated in-person sessions.

Results Analysis

- **Task Completion Time**: Use box plots to compare average completion times. Success is defined by a mean average lower or no greater than 20% greater time than Cooklist.
- **Pain Point Identification**: Qualitative and quantitative analysis of user error rates. Success is defined by a mean average lower or no greater than 20% greater than error rates than Cooklist.
- **Edge Cases and Unanticipated Task Flows**: Categorize errors by severity and frequency to prioritize redesigns.

Introduction and Background

Project Background

This project has completed it's exploratory research to understand basic questions about who this meal plan app's (Meal Maven) users are and what their needs and challenges are. The project also compared competitor's users, and assessed their strengths and weaknesses. The ideation phase of Meal Maven has proposed designs to address user needs, problems, and capabilities, and design prototypes of it. Now, Meal Maven has moved on to the testing phase. The aim of this research is to evaluate the effectiveness of and intelligibility of the designs of Meal Maven to users. The first round of testing will need to discover any major design challenges to fix prior to beginning the high-fidelity prototype.

Meal Maven's functionalities needing testing across select task journeys are:



- Planner
- Cookbook
- Recipe Browser
- Shopping List
- Pantry

The second round of usability testing will need to see how successful it is at behaving like a real app and meeting the needs of its users and compare its success in achieving user goals against primary competitor meal planning app, Cooklist, for comparison.

Research Goals

The research goal are:

- Ascertain if there are information architecture with the structuring the app/website with preliminary in-person card sort to test structure.
- Discover the degree of ease of use in navigating Meal Maven to accomplish golden path tasks in meal planning and compare against Cooklist
- Determine the success metrics for measuring success in addressing user persona problem statements and see if the designs meet most of the prioritized observations by user personas via the 2x2 Matrix
- Find how Meal Maven compares to Cooklist users at the same tasks and bring user satisfaction to the approximately the same if not higher rates.
- Discover any places of confusion or incomplete functionalities during testing.

After discovering uncertainties, broken functionalities, or unanticipated user paths, Meal Maven's designs will need to seek to meet fixing the situations. Card sorting used to discern if navigability is intuitive enough. User satisfaction and success metrics with the high-fidelity models will need to be equal to or greater than competitor Cooklist. A/B Testing may be needed

to find data-supported design choices to elevate the effectiveness and satisfaction with Meal Maven.

Research Questions

The following are the research questions:

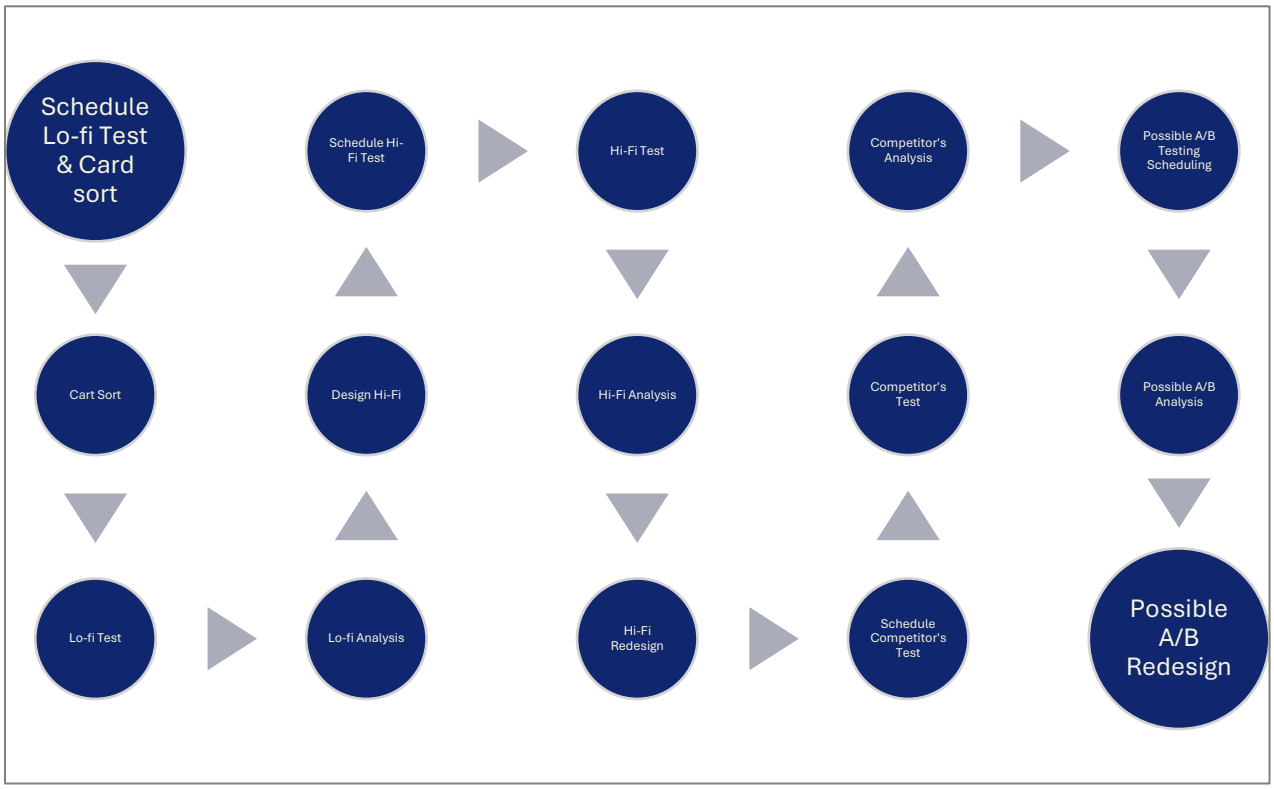
- How much time will the user take to complete each of the tasks?
- How much time will the user take to complete each of the tasks when compared to Cooklist?
- What unanticipated paint points will users discover during testing?
- What unanticipated user tasks journeys are there while completing the scenario tasks?
- How high are each of the functionalities rated by users after each usability test?
- How high are each of the functionalities rated by users of the competitor usability test?

Any major unanticipated structural, design, wording, and content friction encountered will need to be addressed prior to high fidelity prototyping. If the high fidelity prototype finds success metrics lower than competitor than A/B Testing may be warranted to refine design choices.

Research Framework

Steps Overview

Steps in conducting research and how the data is collected analyzed – inform stakeholders on what will happen.



1. Reach out to previously screened research participants and **schedule** for the lo-fi prototype usability testing session. A total of five different participants are needed with a spread of representation from the three human personas participating in each test.
2. An in-person **card sorting** test will be conducted with three random previous research participants.
3. John Harris will conduct the study over Maze. The estimated time to complete each usability study is 1.5 hrs. The first test will be the **remote moderated lo-fi prototype usability test**. The second test will be the remote unmoderated hi-fi fidelity prototype usability test.
4. **Analyze** step 3's results
5. Address step 4 structural **redesigns**, then hi-fi design will be performed.
6. Reach out to previously screened research participants, but different participants than from the lo-fi usability study and **schedule** for the hi-fi prototype usability testing session.

7. John Harris will conduct the study over Maze. The estimated time to complete the **remote moderated hi-fi prototype usability test** is 1.5 hrs.
8. **Analyze** the results of step 7
9. **Redesign** based on step 8's results.
10. Reach out to previously screened research participants and **schedule** for the in-person moderated competitor's usability testing session.
11. Perform the **in-person moderated competitor's usability testing session** The estimated time to complete the moderated competitor's usability study is 1.5 hrs.
12. **Analyze** the results of step 11.
13. If the competitor's navigability proves to be more intuitive with less user errors and/or more efficient for the user to complete their tasks, then redesigns will be proposed and A/B testing will be warranted.
14. If A/B testing is warranted then it will be conducted and moderated over Maze.

Limitations

We need to do some remedial checking of the information architecture to make sure via Card Sorting if the structuring matches most of the expectations of the users' mental models. Card sorting at this stage is a bit unconventional, it's out-of-order structure is a consequence of the structure of the educational course that didn't allow for time to implement at a more ideal time, but better later (during lo-fi design) than never.

Budget limitations also limited the study on additional usability testing options available for use with Maze. In effort to reduce the practice effect bias (i.e. test-retest bias), different participants are used for each the lo-fi and hi-fi prototype usability testing. Using different unpaid volunteer participants increases coordination and scheduling difficulties with more people and led to some delays than would have been with paid immediately available participants. Zoom Workplace was also eventually used to allow for uninterrupted video calls and screensharing, and extra recording for backing up testing.

Certain functionalities of buttons and drop-down menus were not ready in the lo-fi, so this necessitated the moderator telling the participant "what happened" when they clicked on certain things. Because of this, Maze's automatic timing duration was off in cases without clear task completion triggers to end the timer. So, John Harris had to rewatch the participant videos and use his own timer manually during the study.

All of the research participants are of European ancestry, as a result of budget limitations and consequentially drawing on close and interested social circle members, which regrettably biases user group construction and subsequent results, but this whole project is of course just for educational purposes.

Some research participants may have scheduling conflicts and alternatives from the previous screening may need to be invited, after sorting them by associated persona for user representation. By representation, I mean at least one of the three personas must be involved in each of the tests. If a completely new participant is needed, then they will need to be appropriately screened and identified as to which personas is most like themselves. This could

be done through a simple poll as which characteristics does the participant most associate with, a 75% or greater match with a persona will suffice for participating.

Data Collection

The card sort is to be conducted according to an in-person, moderated, open sort method with three participants. A total of 26 Index cards were assigned names for the salient actions, pages, or functions of Meal Maven. Then participants are given 30 minutes each to take the pre-filled cards and group them into a cluster that makes sense to them as belonging together. Then they are to be asked to organize these groupings into a hierarchial order of both importance and what makes sense to be organized under something else. The moderator will take pictures of the card sorts before allowing another participant to begin. Subsequent participants are to be asked to rearrange the cards into any order they see fit. The moderator is to take notes about what the participants say as they speak aloud, especially recording cases where a card is difficult to sort. The moderator also will take notes about patterns in participant's approaches to organizing categories. Participants are to be told to leave no cards to a miscellaneous category. Participants were allowed to propose renamed cards or asterisk cards they felt could belong in more than one group. Afterwords they will be asked to propose names that made sense for each grouping. The advantage of this moderated in-person approach is clear up questions participants had about the shorthand meaning of content on cards and to ask clarifying questions of participants.

Two main sets of usability tests are planned. The first test is a low fidelity prototype test, which will use remote moderated usability test due to the greater potential for lo-fi prototypes to be incomplete or pose an extra layer of confusion to the tester. It is also essential to be able to obtain real-time feedback at this point to ensure higher quality insights into any necessary major revisions (such as to tasks in the user journey or information architecture) in a flexible way rather than a high-fidelity prototype needing more work in enacting major changes. This remote form of moderated testing through Figma will allow data metrics to be collected and ensure the testing can be scheduled rapidly. The second test is a remote moderated high fidelity prototype test, in order to minimize friendliness and social desirability biases. The follow up to the second test will be a moderated competitor test, which while not desirable it the only option available with very limited budget.

Participants chosen for this study will be though research participants previously screened and interviewed, and the first test will use participants which live non-locally from the investigator due to the meager budget for this educationally driven project.

The second test is high fidelity prototype test, which will use an moderated usability test to add the unguided real interaction with the prototype. This will also ensure more unvarnished unbiased feedback by the testers. Testing through Figma will allow data metrics to be collected and ensure the testing can be scheduled rapidly.

Notetaking

A table in John Harris' notes will include the column headers for:

- Task
- click path
- observations (behavior, attitudes, opinions, errors, and confusion)
- quotes
- time to complete task

These will then be entered into a spreadsheet at the end and repeated for lo-fi test, hi-fi test, and competitor test.

System Usability Scale (SUS) Rating

A short survey with Likert scale (strongly disagree to strongly agree) ratings on ease of use will be asked for the following:

- The task of adding to list
- The task of updating the planner
- The task of browsing recipes
- The task of assessing what is on-hand and ordering from list
- The task of following the recipe for cooking purposes

Results Analysis

Card Sort Analysis

Moderator notes and photos of card sorts will be analyzed for patterns in content frequently grouped together and noted by app screen/page before the quantitative step. During the quantitative step, a table of the index card contents was drawn on the left side of a page and header columns by hierarchical levels one through four, with hierarchy level 1 being the highest and weighted 4 points, and hierarchy level 2 being weighted 3 points, and so on. The number of times each card content was organized under a certain level of priority was tallied for each participant and then the sum of weight points by each card content (page, function) was written on the right hand side of the table, and then card contents to be arranged along line numbered one to ten with card contents' weighted points positioning them along it. This will show the importance of and need for visibility of certain functions and organization of actions, functions, or pages.

Task Completion Time

The tasks' time completion will be analyzed by a box plots of the participants' times completing tasks with lo-fi, hi-fi, and competitor tests. The lo-fi results will be examined for prioritizing design fixes. A hi-fi test's lower than mean average time or greater than 20% mean average time for Meal Maven than Cooklist will be considered a success.

Pain Point Identification

Pain points will be qualitatively identified during the tests through noted attitudes, quotes, behaviors, and opinions, for clarity on the nature of the problem and visually depicted through word clouds and a function-by-function affinity map for comparisons of sentiments. Some paint points will be revealed through use errors, but others will be discussed by a

participant without actually making a use error. While the pain points will also be quantified through user error rates compared between the tests. Errors would be defined as incorrect inputs, navigation mistakes, click errors, or failure to complete tasks. The user error rate equals the number of errors divided total “opportunities” for errors along the task flow for a given task. The number of errors divided by total opportunities multiplied by 100 equals the user error rate. The user error rates will be compared in box plots, using the mean average user error rate. A hi-fi test’s lower than or equal mean average error rate for Meal Maven than Cooklist will be considered a success.

Recognizing Edge Cases and Unanticipated Task Flows

Errors experienced during the task flow will be considered areas of note for potential redesign the following ways. These will be grouped at the task and prompt levels for comparisons in clustered bar charts grouped by Task number and by severity and enumerated by total number of errors. Frequency, based on number of participants rather than sheer number of errors, will require after the fact creation of a table of specific errors to count how many times a participant experienced the same exact error. If the need to prioritize redesigns, they will be ranked along Erika Hall’s (2019:115) tiers by severity and frequency:

Severity:

- High: an issue that prevents the user from completing the task at all.
- Moderate: an issues that causes some difficulty, but doesn’t prevent the user from completing the task but more frustrating than a minor quibble.
- Low: a minor problem that doesn’t affect the user’s ability to complete the task.

Frequency:

- High: 60% or more participants experienced the problem/error
- Moderate: 31-59% of participants experienced the problem/error
- Low: 30% or less of the participants experienced the problem/error

These problems, identified in the table generated to quantify frequency, will then be prioritized in tiers:

- Tier 1: high-impact problems that often prevent a user from completing a task. If you don’t resolve these problems, you have a high risk to the success of your product. If something ranks as high in severity or frequency, it will rank here.
- Tier 2: either moderate severe problems with low frequence or low problems with moderate frequency.
- Tier 3: low-impact problems that affect a small number of users. There is a low risk to not resolving these problems. Problems both ranking low for severity and frequency.

Some pain points will also make their way on the table ranking pain points with associated error frequency and severity, but other pain points will be added to the table with does not coincide with an error, but reflected a valuable design challenge all the same. All the pain points from the testing sessions and card sorting will be written down on sticky notes and arranged by screens and then data entered and used in redesigning the hi-fi prototype. The Hi-Fi testing and competitor testing will likewise collect pain points associated with use errors frequency and severity for final comparison.

Functionality Intuitiveness

A SUS rating (1-5) will rate each of the functionalities during each of the tests and be compared with box plot charts. These graphs during the Lo-Fi test results analysis will help underscore redesign efforts for the Hi-Fi prototype design. A higher than or equal rating for Meal Maven's Hi-Fi prototype than Cooklist will be considered a success.

Success Metrics (KPIs)

The key performance indicators (critical measures of progress toward an end goal/ measure of effectiveness

- Meal Maven's lower than or equal mean average **task completion times** than Cooklist will be considered a success as it is equated with saving time- a key goal of users.
- Pain points will also be quantified through **user error rates** compared between the tests. Meal Maven lower than or equal mean average time for than Cooklist will be considered a success.
- Meal Maven's higher than or equal mean average **system usability scale** rating for most functionalities than Cooklist will be considered a success.

Operation Plan

Both tests will be conducted in environments which the tester would participate in meal planning activities. Tests, due to budget constraints, will be remotely moderated. Any card sorting and competitor testing will be moderated in-person. Any A/B testing will be remotely moderated. There is a limited budget and no timeline for this educational course this study is initiated by.

Participant Profile

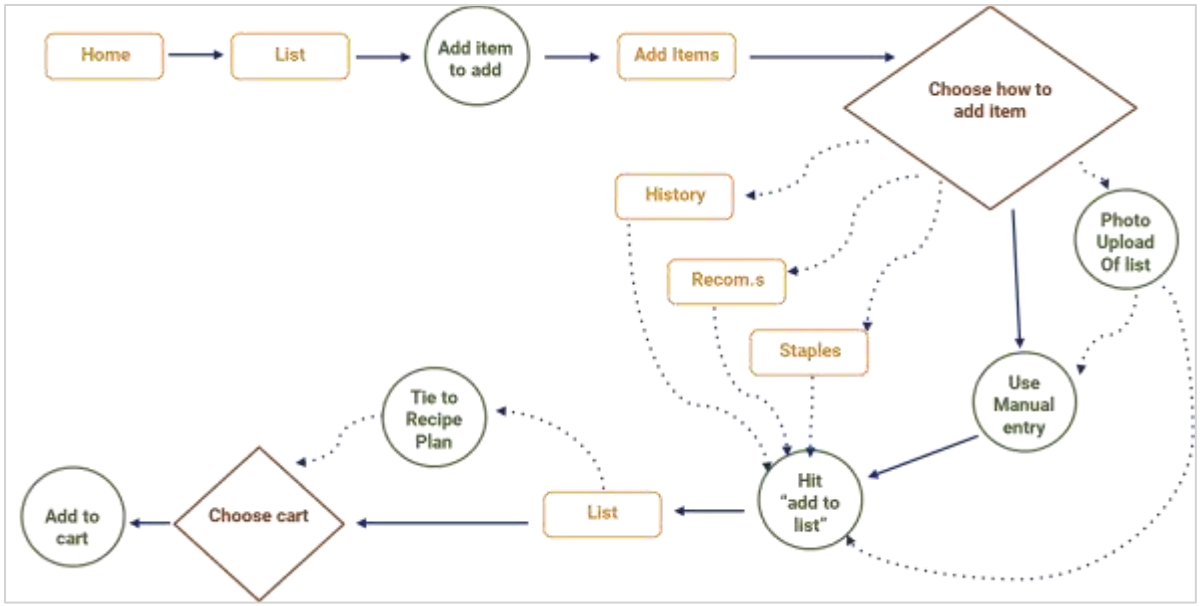
10 different total research participants are needed, with at least one for each of the three personas (Jessica, Lisa, and Robert) for each prototype test. Additional participants are desired to come from the primary user persona: Jessica. Research participants were screened via a screening questionnaire from the interview study. They were recruited from John Harris' personal social circle and offered no financial incentives. These participants include diverse perspectives ranging from their 30s to their 80s, and include individuals with different abilities, such as diminished vision, genders, careers, geography, individuals with different meal planning strategies, less digitally experienced individuals, and neurodiverse individuals.

Testing Scripts

Task Flow Maps

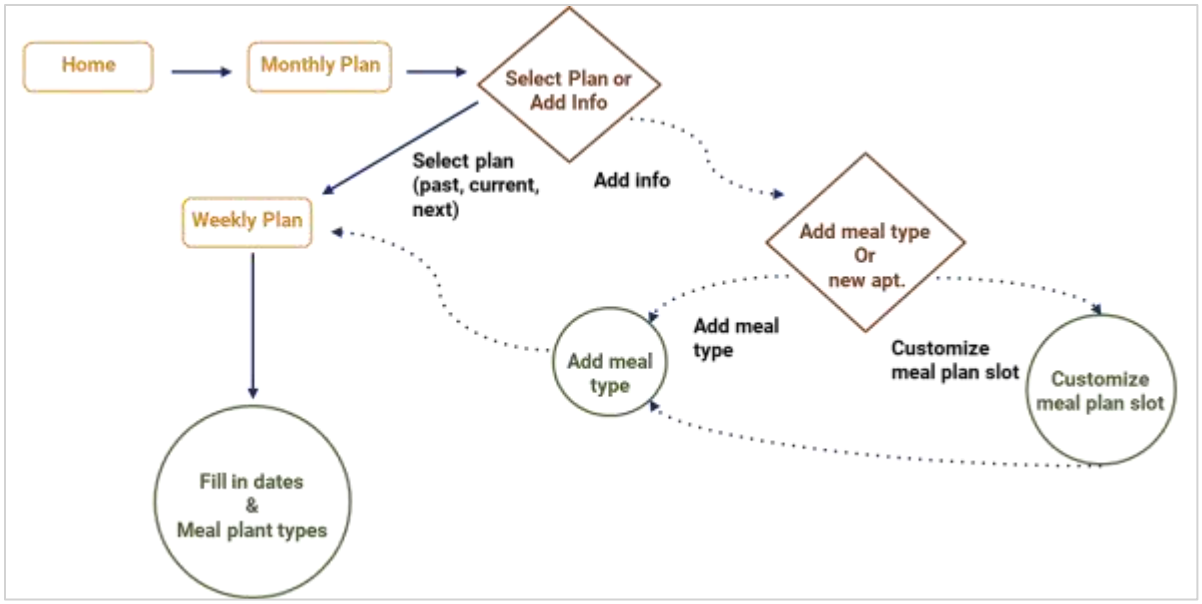
The tasks flows are the cumulative result of the interview research participants' feedback, with special emphasis on the holistic sets of tasks during the main user persona Jessica's user journey in weekly meal planning. What follows are the diagrams of task flow charts guiding the scripts' questions and tasks to be tested in both lo-fi and hi-fi prototype usability tests. These flow diagrams essentially represent preconceived notions of the golden path and by which errors may be recognized or by which unanticipated mental models in users' minds might be compared.

Task 1: Adding to (Shopping) List



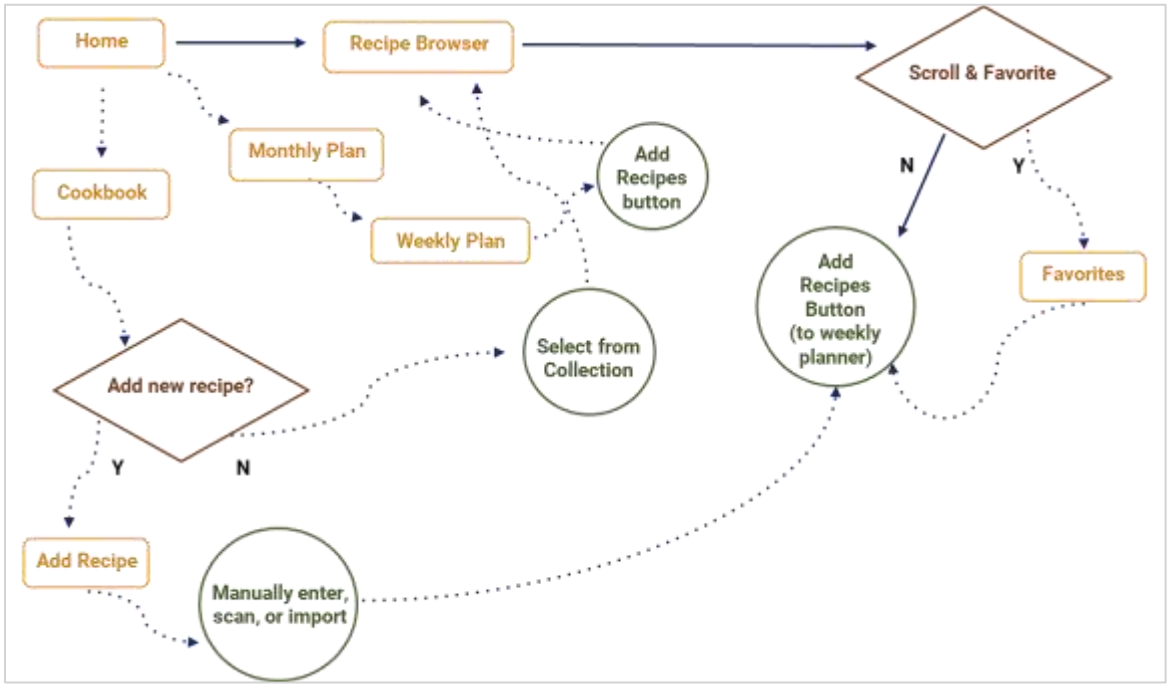
Eight “opportunities” for errors are counted for Task 1.

Task 2: Updating Planner



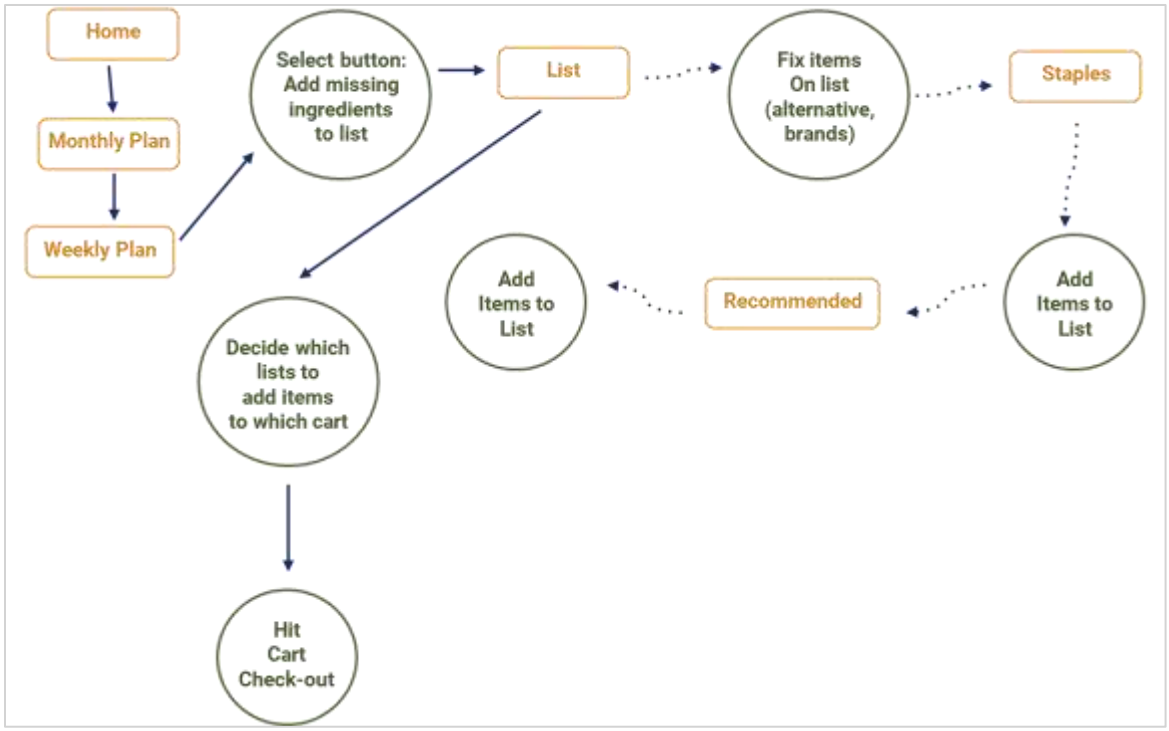
Four “opportunities” for errors are counted for Task 2.

Task 3: Browsing Recipes



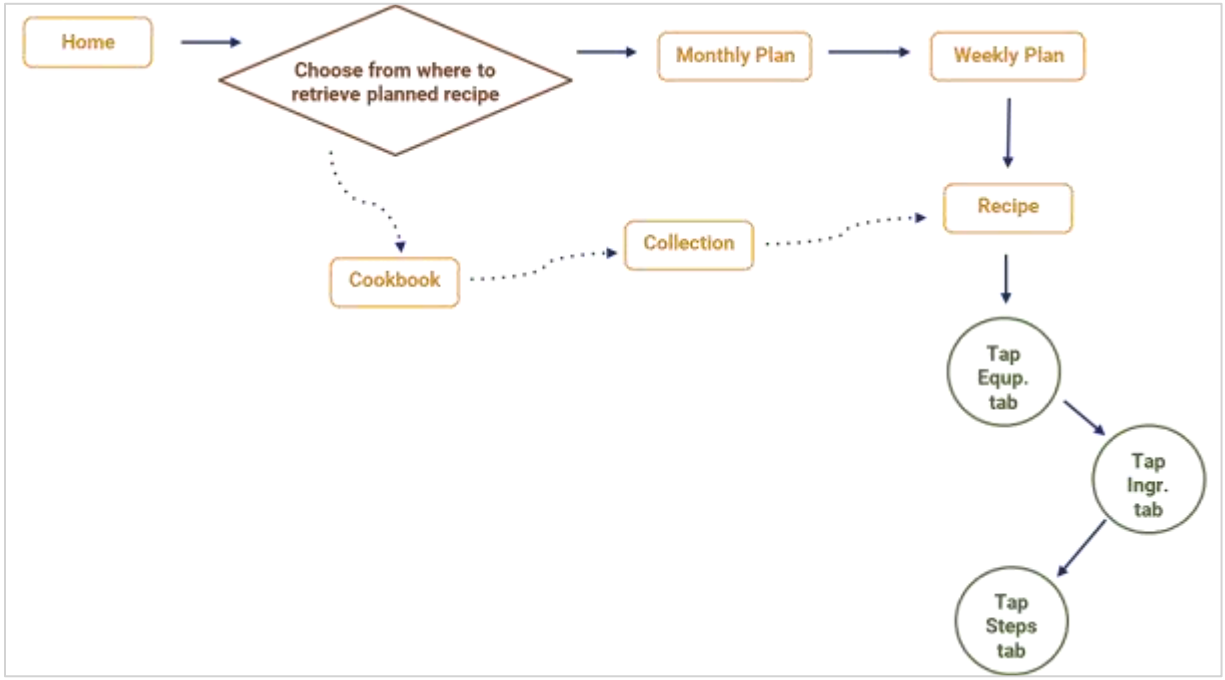
Three “opportunities” for errors are counted for Task 3.

Task 4: Assessing What is On-hand and Ordering From List



Six “opportunities” for errors are counted for Task 4.

Task 5: Cooking



7 “opportunities” for errors are counted for Task 5

Low Fidelity Prototype Testing Script

Welcome

Thank you for agreeing to conducting this usability study with me. I appreciate both the opportunity to practice doing these studies and the insights you afford me to improve the proposed designs I developed from our previous interview and questionnaire work.

During this study, I am going to show you an early conceptual prototype where I will ask you to perform some tasks and ask some follow-up questions. I'll also be taking some notes too, but don't let me distract you with it. I will try to remain an observer and interrupt with questions as little as possible for clarification, but feel free to ask a question if you feel truly stuck. Just so you know, there are no right or wrong answers; despite calling this a usability test, it's a reflection of the intuitiveness design and not the user. Everything at this stage is very flexible and your input will help me easily fix things before it becomes more challenging down the road. So please answer as honestly as possible, I really seek your candid input. Also keep in mind that as a conceptual prototype, it is not yet designed to look detailed or real, it's just a crude framework at this point without must aesthetic considerations built in yet. Most important at this juncture is just understanding the placement of things and understanding how sensible the connections between things have been thought out.

When performing tasks that I request, I'll invite you to think aloud about what you are thinking while making certain choices. It's helpful to know why you are choosing to do an action a certain way, and feel free to express what you are feeling along the way too. As before, I cannot offer incentives for participation, and I am planning to auditorily and visually record the study with your permission. Also as before, the recording will not be shared externally and is only for my analysis purposes. Preserving research participants' personal identifying information is essential to doing ethical research, and I'll never disclosure personally identifying features, recordings, or images of participants. The resulting data could one day be shared but will already be scrubbed for identifying information and results of designs and deliverables will be made available online on my professional website's project portfolio. There you can see the important outcomes from all our efforts. Do you consent to participating and recording?

Task 1: Adding to (Shopping) List

Prompt 1: [On Homepage] "You've noticed you ran out of an item. You open Meal Maven to add this item to your shopping list so you remember it later. Navigate to the shopping list."

- Follow-up Question: "What made you choose that pathway?"

Prompt 2: [on Shopping List] "Add an item to your list"

- Follow-up Question: "What made you choose that approach?"

Prompt 3: [sub-screen/option in Shopping List] "Choose a cart to add the item to a certain cart"

- Follow-up Question: "What made you choose that pathway?"

Prompt 4: On a scale of 1-5, 1 being strongly disagree and 5 being strongly agree, how would you rate the ease of use of Meal Maven for adding something to the list?

Task 2: Updating Planner

Prompt 1: [On Homepage] “An event planned next week comes to mind about how it will affect the types of meals you’ll have to plan around. Navigate to next week’s plan.

- Follow-up Question: “What made you choose that pathway?”
- Follow-up Question: Which order of finding a week’s plan makes the most sense?

Prompt 2: [On Weekly Plan] Make an entry of the type and date of the event in your planner.

- Follow-up Question: “What made you choose that pathway?”

Prompt 3: On a scale of 1-5, 1 being strongly disagree and 5 being strongly agree, how would you rate the ease of use of Meal Maven for updating the planner?

Task 3: Browsing Recipes

Prompt 1: [On Homepage] “You have some time to choose recipes for next week, based around the activities planned next week. Choose a way to browse for recipes.

- Follow-up Question: “What made you choose that pathway?”

Prompt 2: [On Recipe Browser/Cookbook/Planner] “Search and add a recipe to your weekly plan”

- Follow-up Question: “What made you choose that pathway?”

Prompt 3: On a scale of 1-5, 1 being strongly disagree and 5 being strongly agree, how would you rate the ease of use of Meal Maven for browsing recipes?

Task 4: Assessing What is On-hand and Ordering From List

Prompt 1: [On Homepage] “Previously, you’ve inventoried your pantry with the app, and now you want to shop for missing ingredients for a recipe on your plan for next week. How do you automatically add missing ingredients not already in-stock for next week’s plan?

- Follow-up Question: “What made you choose that pathway?”

Prompt 2: [On Weekly Plan] “You realize that some of the automatically added items to your list are not the right brands. You also know you will need ingredient substitutions and still know there are some staples you want to add to the list. Navigate to your List.

- Follow-up Question: “What made you choose that pathway?”

Prompt 3. [On List] Adjust items on your list, including things you may have forgotten or may be interested in adding.

- Follow-up Question: “What made you choose that pathway?”

Prompt 4. [On List] You’re feeling ready to check out. Add items to particular carts.

- Follow-up Question: “What made you choose that pathway?”

Prompt 5. [On List] Check out.

- Follow-up Question: “What made you choose that pathway?”

Prompt 6: On a scale of 1-5, 1 being strongly disagree and 5 being strongly agree, how would you rate the ease of use of Meal Maven for assessing what's on-hand and ordering from the list?

Task 5: Cooking

Prompt 1: [On Homepage] You've picked up your groceries and are ready to cook one of the recipes. Navigate to your planned recipe.

- Follow-up Question: "What made you choose that pathway?"

Prompt 2: [On Recipe] Where do you go to find out where the kitchen equipment needed?

- Follow-up Question: "What made you choose that pathway?"

Prompt 3: [On Recipe] Where do you go to find where the needed ingredients are?

Prompt 4: [On Recipe] Where do you go to find where the cooking steps are?

Prompt 5: On a scale of 1-5, 1 being strongly disagree and 5 being strongly agree, how would you rate the ease of use of Meal Maven for cooking?

High Fidelity Prototype Testing Script

This testing script will also double for the Competitor testing script as well, modifying only the grey parts as necessary with the bracketed information.

Welcome

Thank you for agreeing to conducting this usability study with me. I appreciate both the opportunity to practice doing these studies and the insights you afford me to improve the proposed designs I developed from our previous interview and questionnaire work.

During this study, I am going to show you a prototype [meal planning app] where I will ask you to perform some tasks and ask some follow-up questions. Just so you know, there are no right or wrong answers; despite calling this a usability test, it's a reflection of the intuitiveness design and not the user. So please answer as honestly as possible, I really seek your candid input.

When performing tasks that I request, I'll invite you to think aloud about what you are thinking while making certain choices. It's helpful to know why you are choosing to do an action a certain way, and feel free to express what you are feeling along the way too. As before, I cannot offer incentives for participation, and I am planning to auditorily and visually record the study with your permission. Also as before, the recording will not be shared externally and is only for my analysis purposes. Preserving research participants' personal identifying information is essential to doing ethical research, and I'll never disclosure personally identifying features, recordings, or images of participants. The resulting data could one day be shared, but will already be scrubbed for identifying information and results of designs and deliverables will be made available online on my professional website's project portfolio. There you can see the important outcomes from all our efforts. By continuing you consent to participating and recording.

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Prompt 2: [on Shopping List] "Add this item to your list"

Prompt 3: [sub-screen/option in Shopping List] "Choose a cart to add the item to a certain cart"

Prompt 4: On a scale of 1-5, 1 being strongly disagree and 5 being strongly agree, how would you rate the ease of use of Meal Maven for adding something to the list

Task 2: Updating Planner

Prompt 1: [On Homepage] "An event planned next week comes to mind about how it will affect the types of meals you'll have to plan around. Navigate to next week's plan.

Prompt 2: [On Weekly Plan] Make an entry of the type and date of the event in your planner.

Prompt 3: On a scale of 1-5, 1 being strongly disagree and 5 being strongly agree, how would you rate the ease of use of Meal Maven for updating the planner?

Task 3: Browsing Recipes

Prompt 1: [On Homepage] “You have some time to choose recipes for next week, based around the activities planned next week. Choose a way to browse for recipes.

Prompt 2: [On Recipe Browser/Cookbook/Planner] “Search and add a recipe to your weekly plan”

Prompt 3: On a scale of 1-5, 1 being strongly disagree and 5 being strongly agree, how would you rate the ease of use of Meal Maven for browsing recipes?

Task 4: Assessing What is On-hand and Ordering From List

Prompt 1: [On Homepage] “Previously, you’ve inventoried your pantry with the app, and now you want to shop for missing ingredients for a recipe on your plan for next week. How do you automatically add missing ingredients not already in-stock for next week’s plan?

Prompt 2: [On Weekly Plan] “You realize that some of the automatically added items to your list are not the right brands. You also know you will need ingredient substitutions and still know there are some staples you want to add to the list. Navigate to your List.

Prompt 3. [On List] Adjust items on your list, including things you may have forgotten or may be interested in adding.

Prompt 4. [On List] You’re feeling ready to check out. Add items to particular carts.

Prompt 5. [On List] Check out.

Prompt 6: On a scale of 1-5, 1 being strongly disagree and 5 being strongly agree, how would you rate the ease of use of Meal Maven for assessing what’s on-hand and ordering from the list?

Task 5: Cooking

Prompt 1: [On Homepage] You’ve picked up your groceries and are ready to cook one of the recipes. Navigate to your planned recipe.

Prompt 2: [On Recipe] Where do you go to find out where the kitchen equipment needed?

Prompt 3: [On Recipe] Where do you go to find where the needed ingredients are?

Prompt 4: [On Recipe] Where do you go to find where the cooking steps are?

Prompt 5: On a scale of 1-5, 1 being strongly disagree and 5 being strongly agree, how would you rate the ease of use of Meal Maven for cooking?

Ethical and Reporting Considerations

Ethical Considerations

1. **Informed Consent**: Before participating in the research, all participants will be provided with an informed consent form. This form will outline the purpose of the research, the procedures involved, the potential risks and benefits, and the participant's rights. Participants will be required to read and sign this form to indicate their voluntary participation.

2. **Confidentiality**: All personal information collected during the research will be kept confidential. Participants' names and contact information will be de-identified from the data to provide extra protection from any hacking and to protect their privacy. Harris Anthropological Research LLC will retain control over the data and will retain it for at least 7 years only in an abbreviated form on paper copies at Harris Anthropological Research's office.
3. **Data Usage**: The non-identifying information collected during the research will be used for educational and professional purposes. No names or contact information will be shared publicly. The data will be scrubbed from the spreadsheets within 90 days completion of the study and replaced with participant numbers. Notifications will be sent to each of the participants notifying them of the digital records being sanitized of identifying information to provide additional defense against hacking. The spreadsheets will also not be publicly disseminated.
4. **Withdrawal Rights**: Participants have the right to withdraw from the research at any time without any penalty. They can choose not to answer any questions that make them uncomfortable.
5. **Recording Permissions**: Permissions for digital recording and rights release will be secured ahead of the recording sessions. Participants will be informed about the use of their provided information and the purpose of the recordings.
6. **Data Security**: All data will be stored securely, and access will be limited to authorized personnel only. Measures will be taken to ensure the data is protected from unauthorized access or breaches through storing data on secure systems.
7. **Ethical Considerations**: Conducting ethical research is essential to Harris Anthropological Research LLC. We ensure we obtain permission from the research participants to use their provided information; obtain permission to collect unreleased video and photography (just for analysis purposes) and will not be public, unless they consent to releasing a still photo of themselves during an interview or test session; explain that they can withdraw from participation at any time and that there is no financial incentive to participate.

Deliverables

The two resulting deliverables will be three data analysis reports, one final report, and a slide deck of results for the portfolio. Each of the reports will detail analyses on task completion time; pain points identified; recognized edge cases and unanticipated task flows; any necessary card sorting findings; functionality intuitiveness (SUS); success metrics performance findings; and recommendations.

- Lo-fi Usability Data Analysis Report (with Carding Sorting findings)
- Hi-fi Usability Data Analysis Report
- Competitor Usability Data Analysis Report
- A/B Testing Report (if necessary)
- Additions to Slide Deck of Evaluating Testing (for portfolio case study purposes)

References

Hall, Erika

2019 *Just Enough Research*. Second Edition. A Book Apart, New York City.