

USABILITY STUDY FOR AN INGREDIENTS INVENTORING APP

Ava Bagyi

Project overview



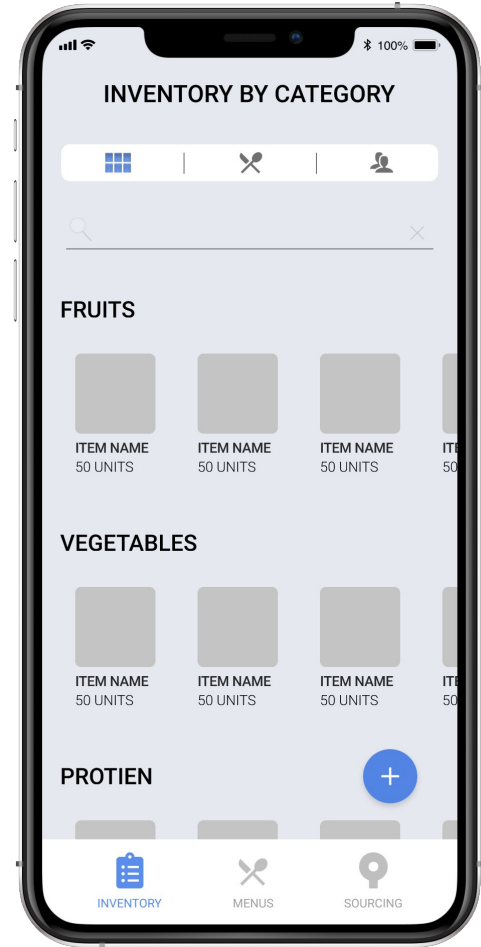
The product:

This is an app designed to be for use by food service industry members or users looking for a way to keep track of their ingredients



Project duration:

July 2021-January 2022



Project overview



The problem:

An issue I found that needed to be addressed for ingredient inventorying is that there is not a quick way to do this. Inventorying is usually a necessary but time consuming part of the food service process. The identification of the immediate benefits of proper inventorying is another issue I would like to address.



The goal:

I would like to built an app that immediately identifies the benefits of properly inventorying as well as making this process as quick as possible.

Project overview



My role:

Ux designer, ux researcher, product designer



Responsibilities:

User research, user testing, product design,
wireframing, prototyping

Understanding the user

- User research
- Personas
- Problem statements
- User journey maps

User research: summary



For this part of my research I am testing how intuitive the flow of adding ingredients, menus, and vendors is within the app. I have identified that there will be 3 main segments to the inventorying process that will interact with each other: **Inventory** | **Menus** | **Sourcing**

Based on research I have found that ingredients can be sourced from multiple different sources (reason for the sourcing section). As well as that menu creation and organization is a way that users organize their inventory, being able to see how the inventory directly correlates to menus and menu items within the app is a feature that will provide benefit to the user while using the app.(reason for the menus section) Lastly the inventory section is broken down into categories by type of ingredient(i.e fruit, vegetables, proteins, etc.) and there is a small navigation menu at the top of the inventory screen that allows the user to inventory based on: Category, Menu, or Vendor. This gives the user the flexibility to organize their inventory in a way that is most intuitive for their own needs.

I have interviewed multiple types of users some with more restaurant experience than others. I am looking to see how easily navigable the app is in its MVP stage and whether or not the information architecture will need to be re addressed before moving forward with building out functionality.

User research: pain points

1

Custom Inventorying

The ability for the user to create menus and categories that fit their unique needs

2

Smart inventorying

Smart inventorying- using data on dates and freshness timelines to allow George to keep up with ingredients that may need to be replaced soon

3

Ease of access

Inventory organized by grocery categories and most recently accessed or relating to recent menus items

4

Suggestive Inventorying

An indication on ingredients that exist or are repeated on existing menu items or may already be in inventory

Persona: **George Diaz**

Problem statement:

George Diaz is a Head chef/ Entrepreneur who needs To take inventory of his ingredients in a fast and efficient way because He needs to reduce time and resources wasted on inventorying or improperly inventorying.



George Diaz

Age: 34

Education: Culinary Arts

Hometown: Arlington

Family: Single

Occupation: Head Chef

"No matter what happens, attitude is a choice"

Goals

- Share authentic mexican food with his local community.
- Make a living cooking and having time to spend with family

Frustrations

- Obtaining the correct permits to serve food at different locations.
- Getting enough seasonal produce to meet demand

George is a head chef who has been impacted by the recent pandemic. As a result he has ventured out on a journey to share his favorite foods via food truck. He values family and friends. He attributes some of his successes to their support and help.

User journey map

The features of the Ingredients inventorying app include:

The ability to sort and organize inventory by category.

The ability to create and store ingredient lists that correspond to menu items.

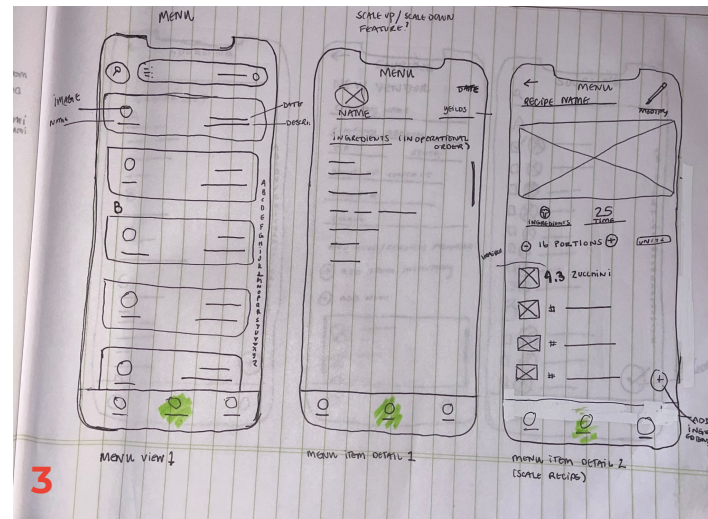
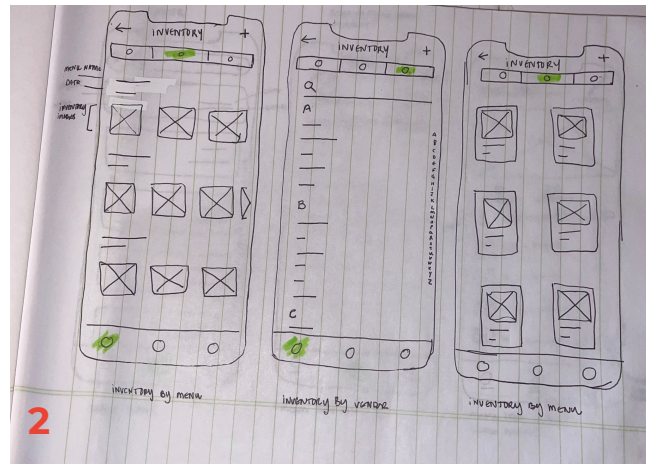
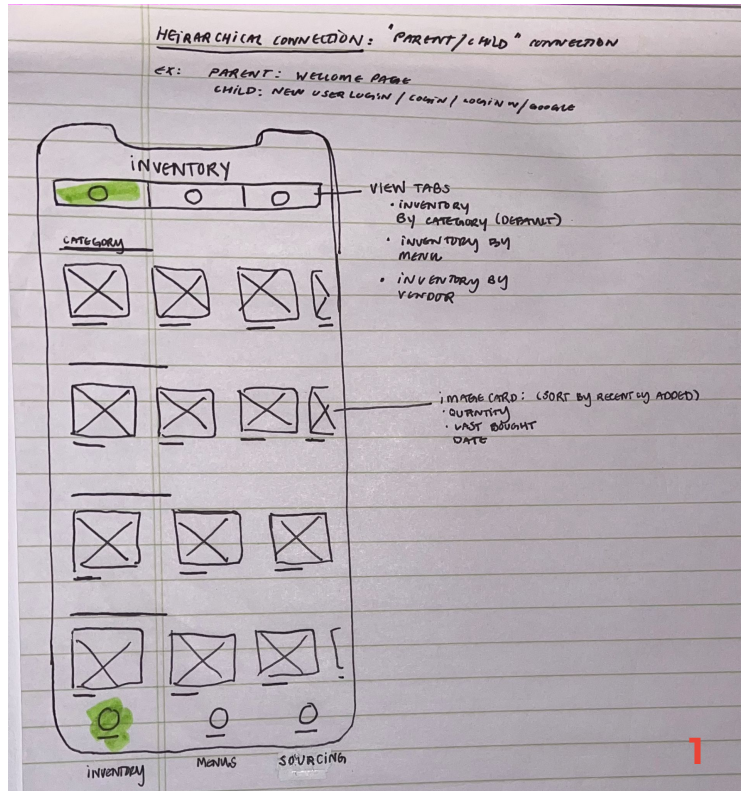
The ability to cross-reference menus and their ingredients will help chefs quickly identify ingredients that need to be bought in larger quantities.

The ability to reference dates of purchase or "best-by" dates for expired or expiring ingredients. The value of this product is in the time saved to the chef by streamlining the inventorying process and the personalized ingredient reference he/she has created.

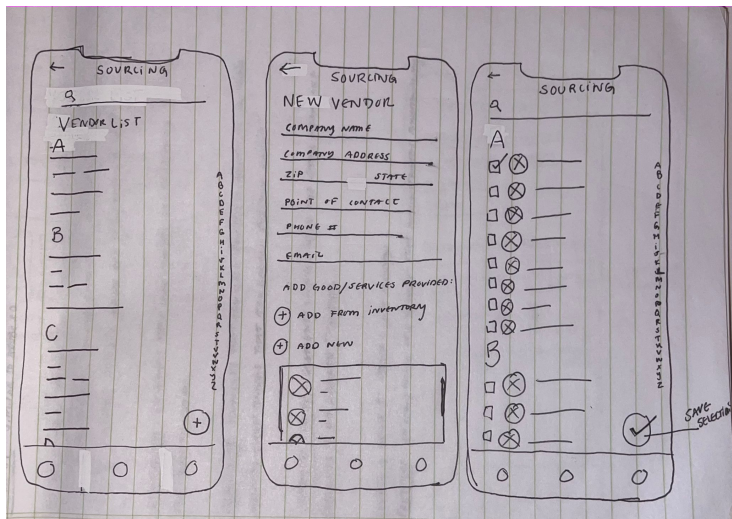
The chefs will benefit by having a tool that allows them to potentially reduce the waste of ingredients and categorize their ingredients in a way that is specific to their menus.

ACTION	Look at upcoming menu for the week	Look at existing inventory	Look at inventory needs for upcoming menu	Cross reference existing and still fresh with ingredients in need	Identify and store new inventory list in a way that makes sense
TASK LIST	Tasks A. identify ingredients maybe some local/fresh B. determine freshness timeline C. determine amount needed	Tasks A. identify if any existing ingredients can be used B. identify any ingredients that have expired C. identify if any ingredients can be used in place of others	Tasks A. categorize ingredients by type (i.e. produce, dairy, protein) B. identify which existing ingredients can be/ will be used C. determine how much of existing or new ingredients will be needed for upcoming menu	Tasks A. know purchase dates/good by dates for existing ingredients B. know amount of each ingredient available C. know amounts of each ingredient in need of	Tasks A. make a list of ingredients for upcoming menu B. identify if the upcoming menu overlaps with any previous menu items C. identify which ingredients are needed
FEELING ADJECTIVE	User emotions Excited about a new menu nervous about how much ingredients will be needed	User emotions Overwhelmed about how many ingredients overlap Excited to potentially spend less on ingredients	User emotions Frustrated- I wish there was a better way to see everything I have and compare it with what I need	User emotions Overwhelmed- I wish I had an easy reference to the fresh dates of the ingredients I need	User emotions Happy about completing a new menu Tried from the amount of time it took to complete inventory
IMPROVEMENT OPPORTUNITIES	Area to improve Menu creation and ingredient saving option?	Area to improve Inventory organized by grocery categories and most recently accessed or relating to recent menu items	Area to improve Smart inventorying- using data on dates and freshness timelines to allow George to keep up with ingredients that may need to be replaced soon	Area to improve An indication on ingredients that exist or are repeated on existing menu items or may already be in inventory	Area to improve An app that keeps up with George and his inventorying needs to reduce the amount of time he spends inventorying current ingredients.

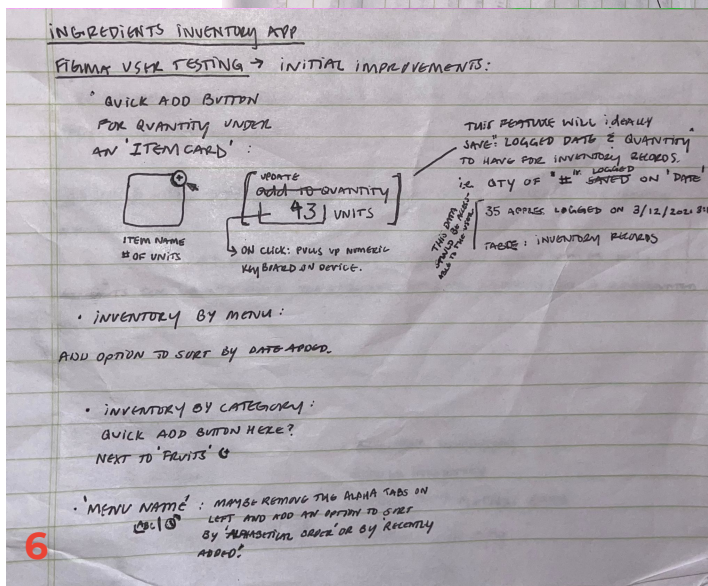
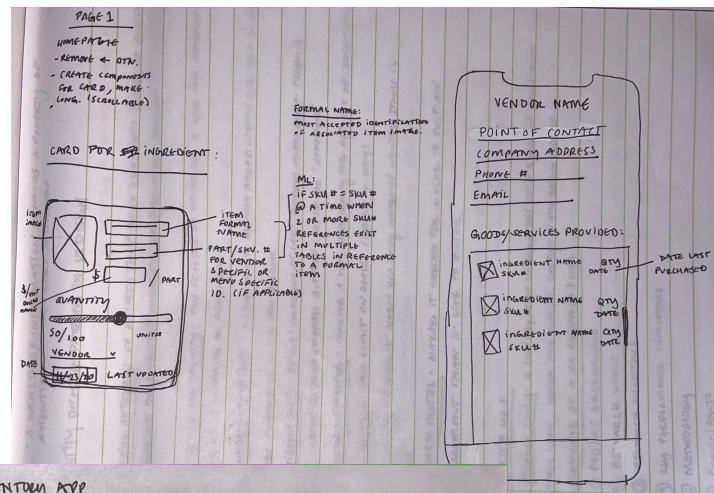
Paper wireframes



Paper wireframes



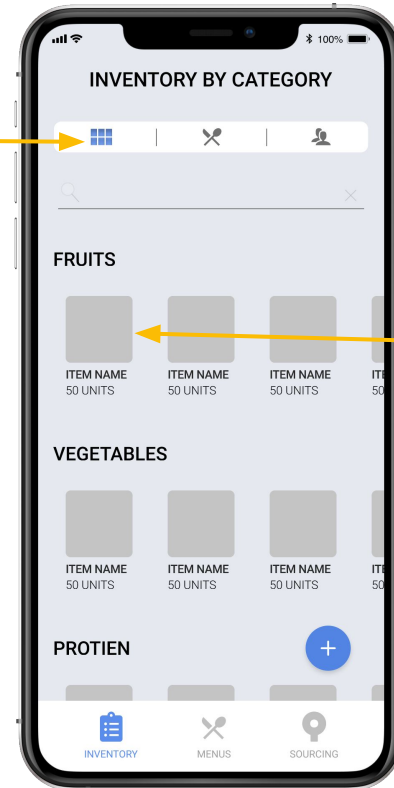
5



Digital wireframes

This is the home screen for the users. Inventorying is the primary functionality of the app and when the app opens up, the inventorying screen is the first thing the users have access to.

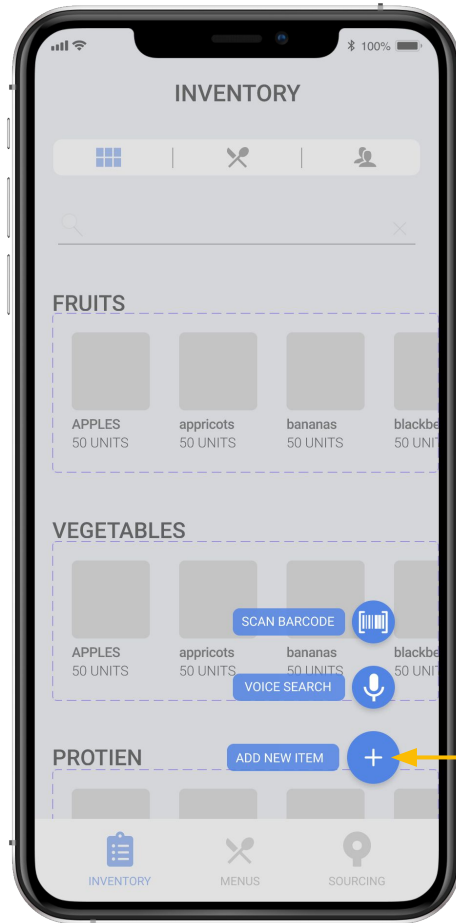
A small navigation menu at the top of the inventory screen will allow the user to inventory based on: Category, Menu, or Vendor. This gives the user the flexibility to organize their inventory in a way that is most intuitive for their own needs.



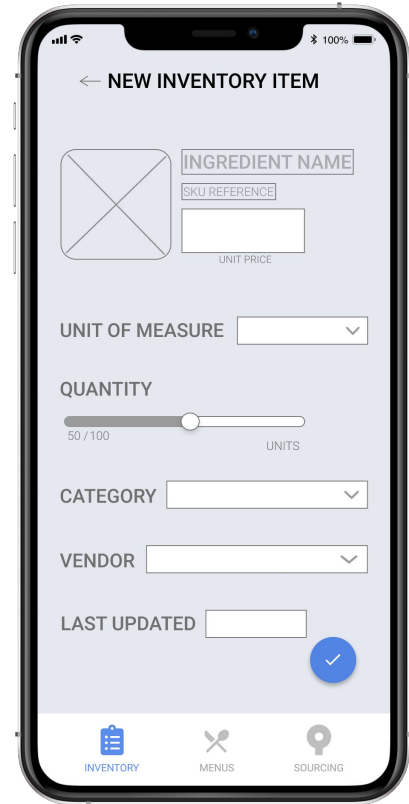
This is a card component that shows the image of the ingredient (can be uploaded by the user or selected from an existing library of applicable images)

Digital wireframes

The ability to quickly add or update a product was the first goal of this app and having a “quick add” button in the bottom right hand corner was a way to give users access to that option easily.

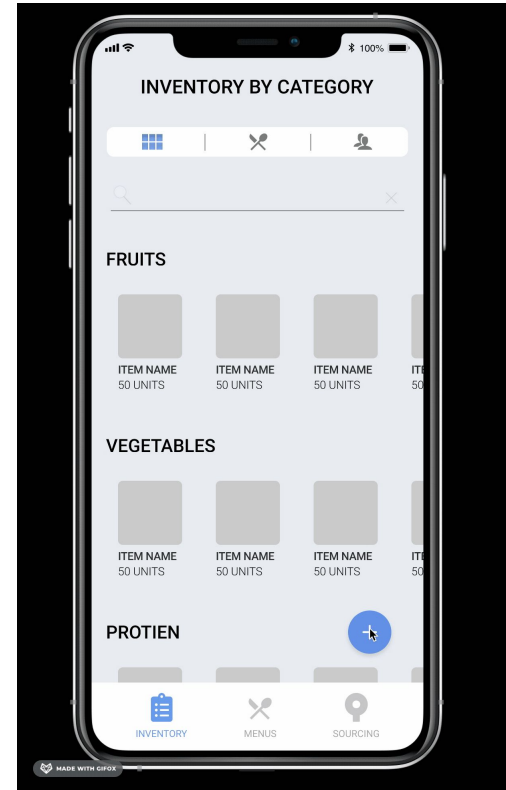


A quick add button located at the bottom right hand side of the screen for the user to have fast access to creating a new inventory item, allowing them to scan a barcode, or speak the name of the ingredient to quickly add. If that is not a feasible option the add new item will bring the user to the new item inventory page that they can quickly fill out.



Low-fidelity prototype

<https://www.figma.com/proto/zp4GQiQzhHFsRaeqTMCfDb/INGREDIENTS-INVENTORY-APP?node-id=407%3A592&scaling=scale-down&page-id=73%3A612&starting-point-node-id=407%3A592&show-prot-sidebar=1>



Usability study: findings

After user interviews, there are some flow and information architecture updates that need to be made before moving onto a higher fidelity prototype.

Round 1 findings

1

Based on the theme that: the amount of “add icons” on the home screen is confusing to the users.
an insight is: the quick add option is potentially hurting more than helping and needs to be revised.

2

Based on the theme that: The Multiple Menus screens are not visually different enough to identify their function
an insight is: These screens could either be joined or revised to be more different

3

Based on the theme that: multiple users did not see the “modify icon” in the top right hand corner of the dish selected page.
an insight is: The icon may not be contrasting enough to the background or may not stand out enough.

Recommendations

- For additional research I would like to continue to test the updates I have made to the product design with potential users and gain their feedback on the features of the product that work and the feature that still create issue within the user flow.
- More research within the food industry and the way the users are used to viewing inventory information would also be beneficial to improving the adaptability of this app for the target market.
- Designing A/B testing of different components within the app to determine usability comparatively is another area of additional research I would like to explore.

Thank you!