

Mangoville

Food Delivery Mobile App

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UX DESIGN CASE STUDY

FEBRUARY 2022

Project Overview



The Product

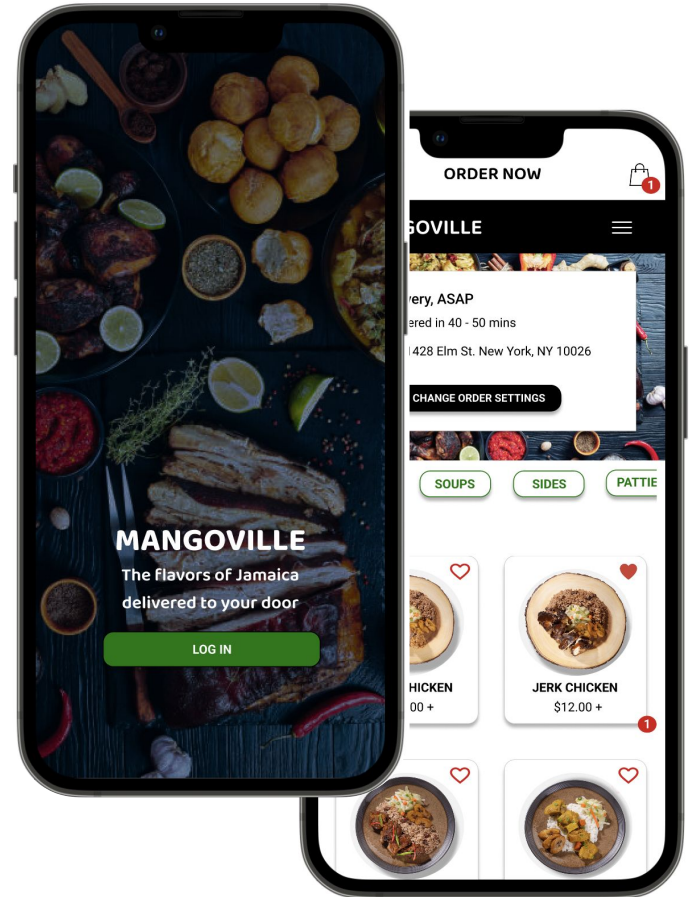
Mangoville is a Caribbean restaurant located in a major metropolitan area. Mangoville aims to **deliver** hearty meals, snacks, and drinks to make their customers happy.

Mangoville targets **busy adults** who lack the time or skill set to prepare authentic Caribbean fare.



Project Duration

October 2021 - February 2022

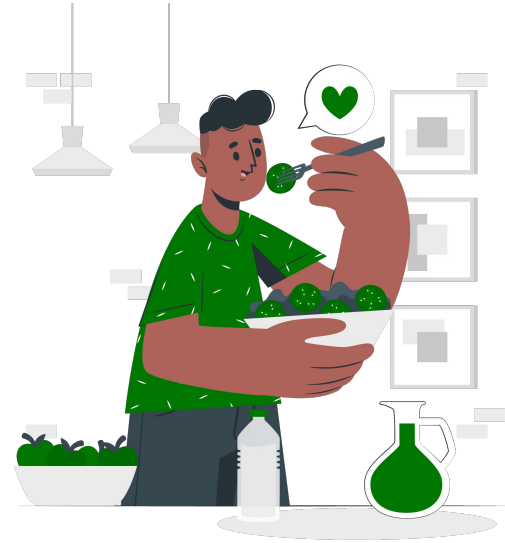


Project Overview



The Problem

Busy working professionals struggle to find the **time to cook or prepare** a meal.



The Goal

Design a **mobile app** that allows users to **order meals** from Mangoville restaurant **quickly** and **easily** at their own convenience.

Project Overview



My Role

User Experience Designer designing the Mangoville app from concept to delivery.



My Responsibilities

- User research & interviews
- Paper & digital wireframing
- Low & high-fidelity prototyping
- Conducting usability studies
- Incorporating inclusive design principles
- Design iteration

Understanding the user

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

User Research: Summary



I conducted **interviews** and created **empathy maps** to understand the **needs, behaviors, and motivations** of the users I'm designing for. A primary user group identified through research was working adults who don't have time to cook meals.

This user group confirmed initial assumptions about Mangoville customers, but research also revealed that time was not the only factor limiting users from cooking at home. Other user problems included **cooking skill/ability, lack of ingredients on hand**, or other challenges that **make it difficult to get groceries** for cooking or **go to restaurants in-person**.

User Research: Pain points

1

Time

Busy professional do not have the time to prepare meals

2

Features

Food ordering platforms include inefficient or do not support group order features

3

Accessibility

Platforms for ordering food are not equipped with assistive technologies

4

IA

Inadequate menu descriptions may make it difficult to make informed menu selections

Persona: Courtney

Problem statement:

Courtney is a **busy working mother** who needs **quick** and **easy access** to food ordering options because she has **no time to cook** dinner for her family.



Courtney

Age: 45
Education: College Graduate
Hometown: Brooklyn, NY
Family: Married, 3 children
Occupation: Customer Engagement Director

"I'm a working mom. Sometimes I need a break from cooking for my family."

Goals

- Fast delivery
- Conveniently feed a family of four
- Receive order between 9:30 and 10 pm
- Control spending cap & manage customisable group orders
- Leftovers for the next day

Frustrations

- Delays despite paying extra for expedited delivery
- Difficult checkout process
- Discrepancies with items and hours of operation
- Lack of control or inefficiencies with group ordering

Courtney lives with her husband and 2 of their 3 kids. She works from home until 6pm or later. When not delegated to her eldest daughter, she handles the cooking & doesn't always have the energy to cook after work. Sometimes, the family craves food she doesn't have ingredients on hand to cook, making ordering the more convenient option. She uses food delivery apps 1 or 2 times/week. Since she's placing an order for the entire family, group ordering with spending caps, personalization, and order editing are important to her. She also likes to order meals that will generate leftovers for the next day. Because the whole family is waiting for dinner, Courtney has low tolerance for late deliveries & is willing to pay extra to expedite delivery.

User Journey Map

Mapping Courtney's **user journey** revealed how helpful it would be for users to have access to a **dedicated Mangoville app** with a group ordering feature.

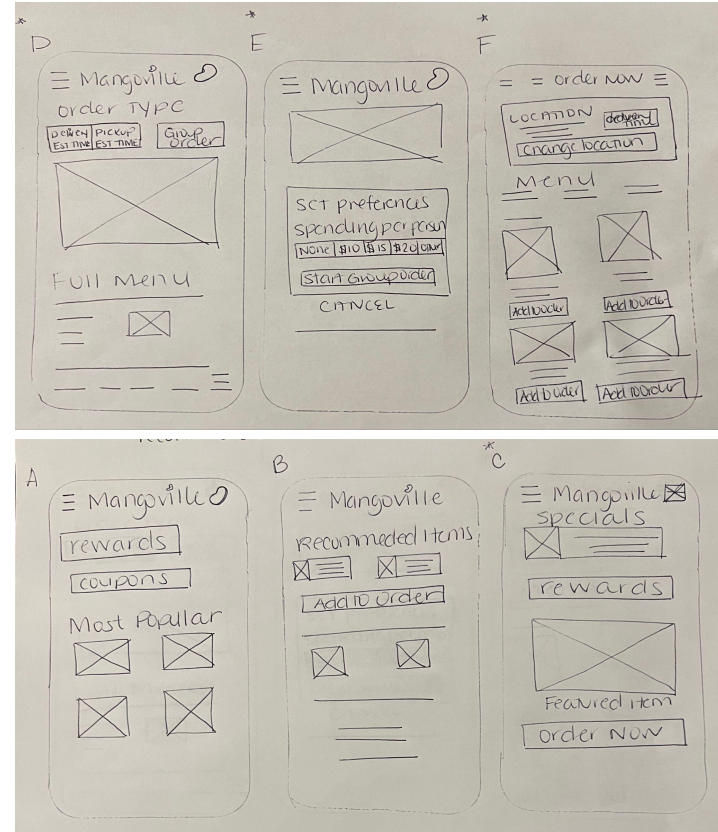
Persona: Courtney Goal: A quick and convenient way to place and receive a group order for her family					
ACTION	Open app	Collect orders	Submit order in app	Confirm order	Receive order
TASK LIST	Tasks A. Search restaurant choices B. Select a restaurant C. Review menu	Tasks A. Discuss menu with family B. Collect orders from family members C. Review order D. Calculate total	Tasks A. Add menu items to checkout cart B. Double check order for accuracy C. Begin checkout	Tasks A. Checks app to confirm restaurant received order B. Review order delivery estimate	Tasks A. Accept order from delivery person B. Confirm order is accuracy
FEELING ADJECTIVE	😋 Hungry! 😓 Overwhelmed by the volume of options	😞 Frustrated - it's difficult and time consuming to rangle everyone to create an order 😞 Worried - the order may go over budget	😟 Worried - some family members may want to change order last minute 😞 Frustrated - entering each order one at a time is time consuming	😊 Relieved - food is on the way! 😟 Worried - will the order get here at the expected time?	😊 Happy - food is here! 😊 Hopeful that the everyone's order is correct (and delicious)
IMPROVEMENT OPPORTUNITIES	Offer filter by cuisine/course option Support talk to type search bar and screen reader tech Create a dedicate app for Mangoville	Offer group ordering Offer order personalization Include maximum order value option	Allow group order editing	Include order status and delivery tracking features	Provide in-app tip option Allow post order tip updates

Starting the design

- Paper wireframes
- Digital wireframes
- Low-fidelity prototype
- Usability studies

Paper wireframes

Taking the time to draft iterations of each screen of the app using **paper wireframes** ensured that the elements that made it to **digital wireframes** would be well-suited to address user pain points. For the home screen, I prioritized a **quick and easy ordering process** to help users save time.

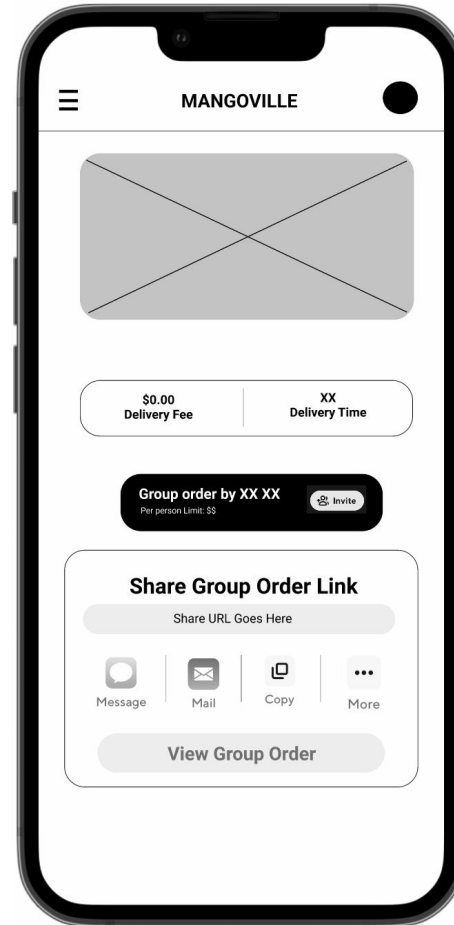


* Stars were used to mark the elements of each sketch that would be used in the initial digital wireframes

Digital wireframes

As the initial design phase continued, I ensured that I based screen designs on my finding and feedback from user research.

This button indicates a per per person spending limit on the **group order** set on a previous screen



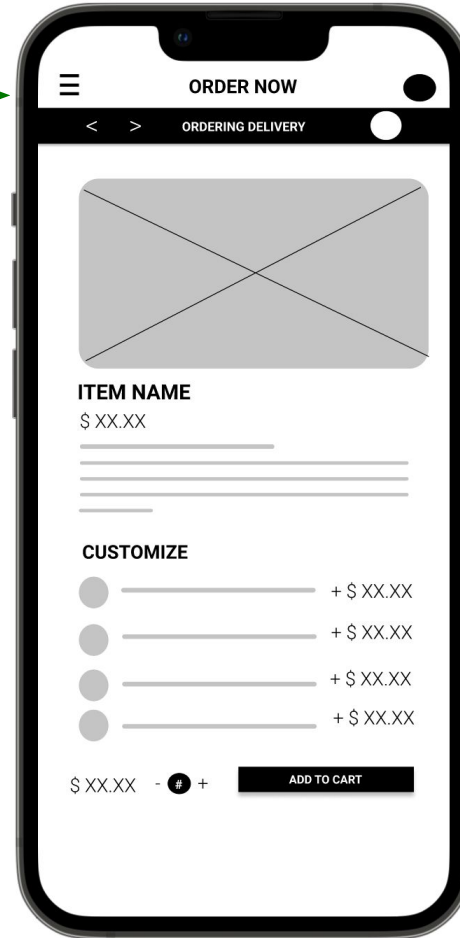
This feature allows the user to share a link to the **group order** so participants can easily **add & personalize** their own order items



Digital wireframes

Easy navigation and descriptive text were priorities to address in the designs in addition to equipping the app to work with assistive technologies.

Easy access to a screen reader friendly navigation menu



Detailed description of dish and allergy information to help users make informed decisions

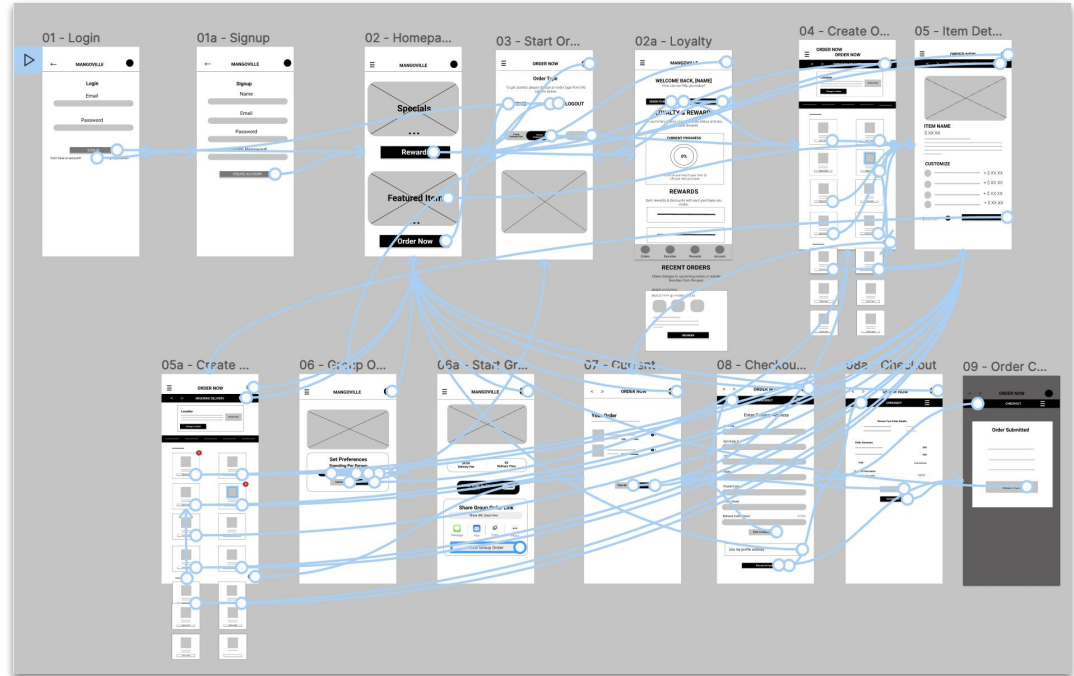


Low-Fidelity Prototype

Using the completed set of **digital wireframes**, I created a **low-fidelity prototype**.

Features:

- User flows to create individual or group orders
- Simple & consistent navigation to help users flow through the app seamlessly
- Accessible transitions



** View the Mangoville [low-fidelity prototype V2](#) **

Usability Study: Findings

I conducted two rounds of **usability studies**. Findings from first round helped guide the designs from **wireframes** to **mockups**. In the second round, I used a **high-fidelity prototype** and revealed what aspects of the mockups needed refining.

Round 1 Findings

- 1 Users expect images and buttons to direct them to pages with detailed information
- 2 Users want cues and feedback that they've completed the 'Add to Order' task
- 3 Users need a more intuitive way to complete a group order

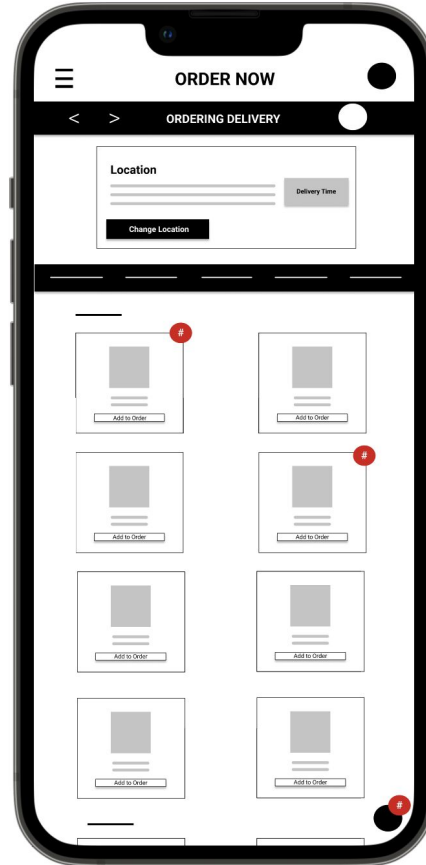
Round 2 Findings

- 1 Users want to place their order quickly without signing in
- 2 Overutilization of uppercase typeface makes it difficult to navigate the UI

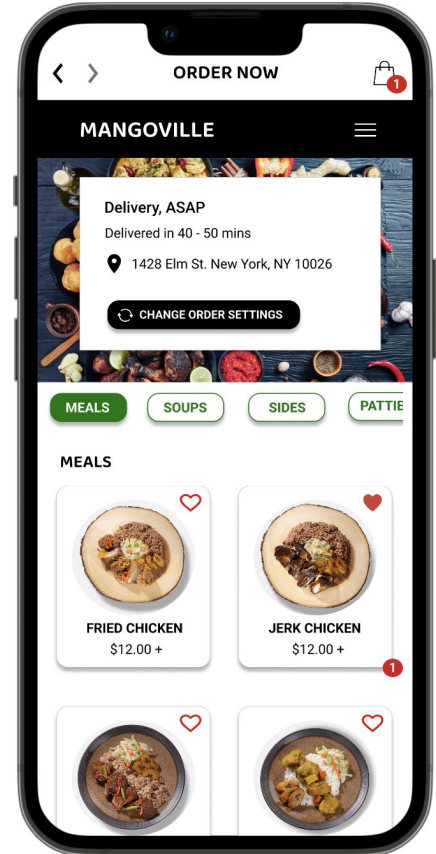
Mockups

Early designs **lacked clarity** once users added menu items to their carts. After **usability studies**, I added additional cues to **indicate completion** of the 'add to order' task.

Before usability studies



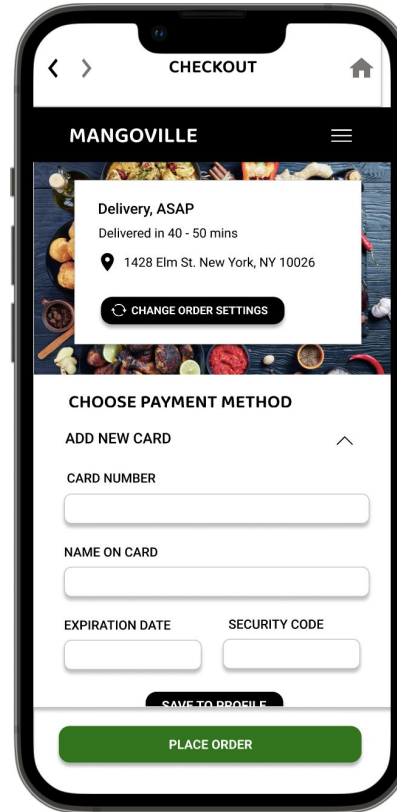
After usability studies



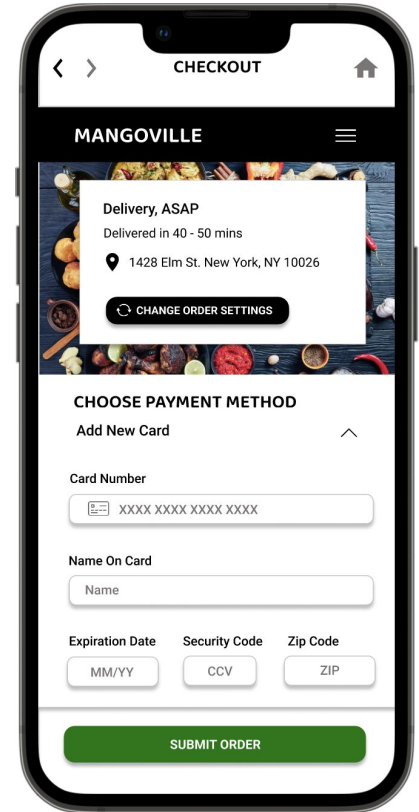
Mockups

During the **second usability study**, users expressed **challenges navigating the UI** because of the heavy utilization of the uppercase typeface. I **updated to title case** in the sticker sheet and throughout the app.

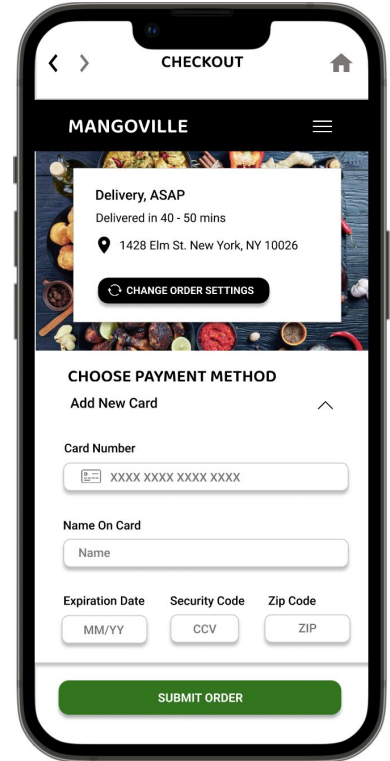
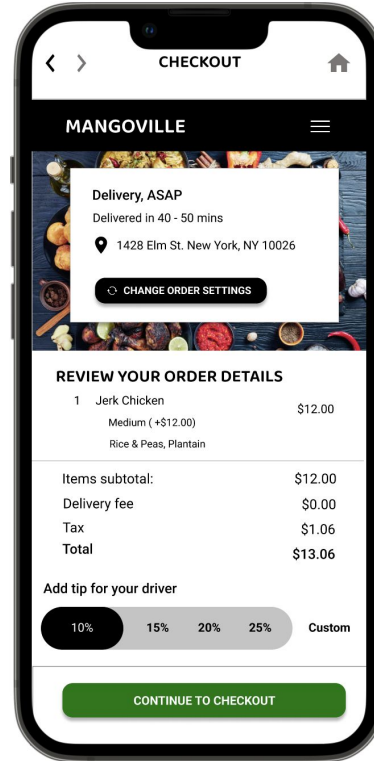
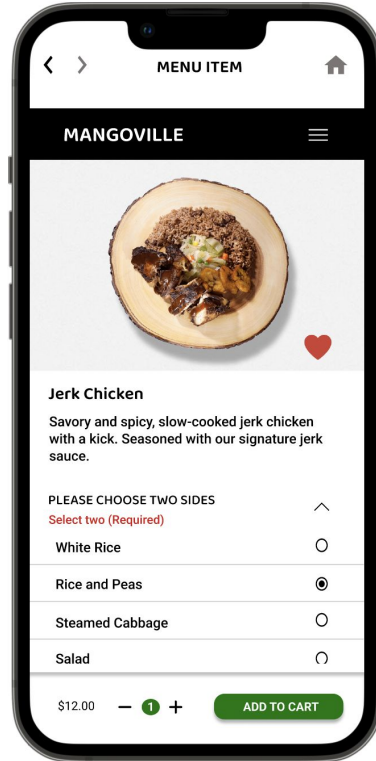
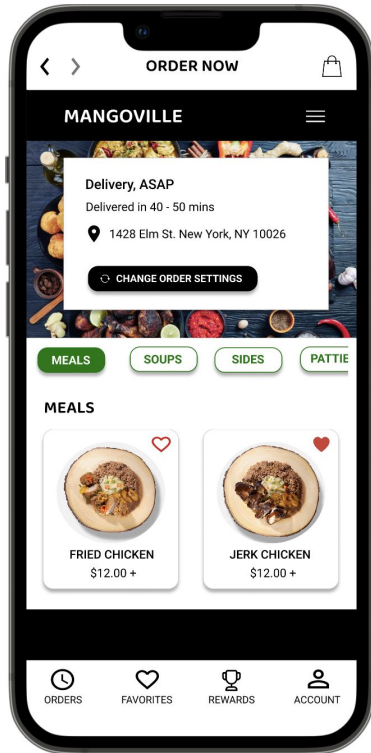
Before usability study 2



After usability study 2



Key Mockups

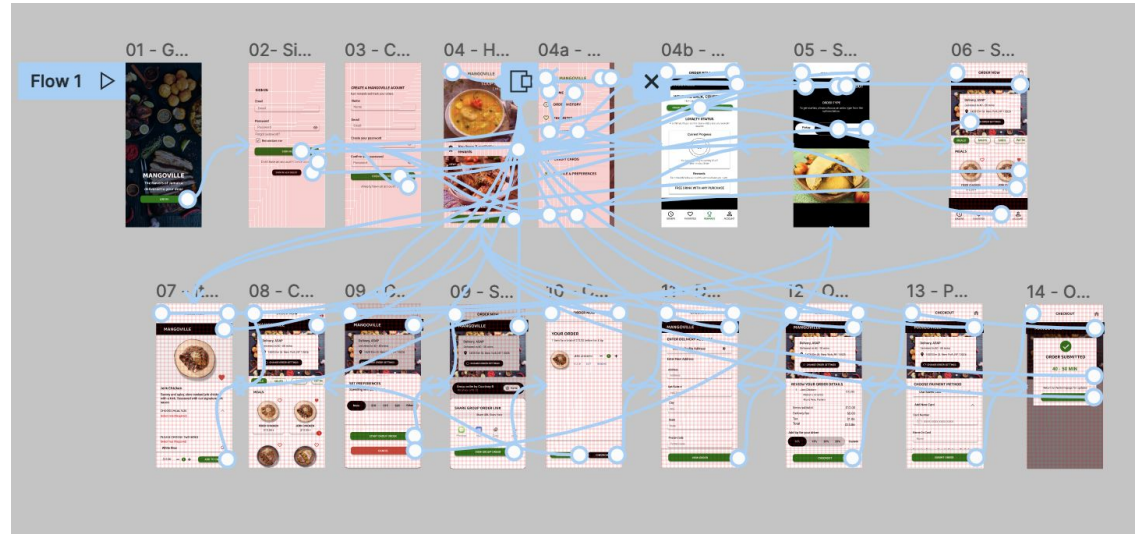


High-Fidelity Prototype

The final high-fidelity prototype addresses the main user pain points by providing an **easy to use** design that is **inclusive** and **accessible**.

Features:

- Simple & consistent UI to aid user navigation
- Descriptive menu text helps users make informed menu selections
- Meets user needs for customizable group orders



** View the Mangoville [high-fidelity prototype](#) **

Accessibility Considerations

1

High contrast ratio

Used high contrast ratio to ensure that the app's content can be read by **everyone**

2

Assistive Technology

Included images with descriptive text, appropriate hierarchy & emphasis to aid users with screen readers

3

Recognizable icons

Used recognizable icons across the design to help make navigation easier

Going forward

- Takeaways
- Next steps

Takeaways



Impact

The app makes users feel like the process of ordering their meals online can be easy and enjoyable.

"I love this! This app makes the process of ordering meals online so easy!"

- Research participant



What I learned

I am not my user. Usability studies and feedback exposed flaws in my initial assumptions about users of the app. These process are essential to enhance and improve each iteration of the app designs.

Next Steps

Since this was a project for a certificate program, there were many design constraints. If given the opportunity to work on a similar project, I would:

1

Conduct another round of usability studies to determine whether the current design effectively addresses the users' pain points

2

Test the design with a screen reader to ensure an optimal user experience for users with screen readers

3

Conduct additional user research to determine new areas of need or enhancement

Let's Connect!



Thank you for taking time to review my work on the Mangoville app!
If you would like to get in touch, you can reach me via:

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