

# MOBILE FOOD ORDER APP

MAJOR SPORTS STADIUM

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- // MOBILE APP
- // FOOD DELIVERY
- // SPORTS

# // PROJECT OVERVIEW

## 01 THE PRODUCT

ICA is a fictional mobile app for a fictional stadium, Indiana Central Arena, that allows stadium-goers to order food & drink for pick-up or delivery to their seats so they don't have to miss a second of the game.

## 02 PROJECT DURATION

November 2022 - January 2023

# // PROJECT OVERVIEW

## 03 MY ROLE

Lead UX designer designing an app for a major sports stadium from conception to delivery.

## 04 RESPONSIBILITIES

Conducting a competitive audit and interviews, paper and digital wireframing, low and high-fidelity prototyping, conducting usability studies, accounting for accessibility, and iterating on designs.

# // THE PROBLEM

Many users miss crucial parts of an important event walking around crowded stadiums and waiting in long lines for food & drinks.



// INTRODUCTION

# // THE GOAL

Create an app that eliminates these issues for users so they can enjoy food and drinks without missing out on the event.



// OUR CENTER



01

# UNDERSTANDING THE USER

Competitive audit  
User research  
Personas  
Problem statements  
User journey maps



// USER RESEARCH

# // COMPETITIVE AUDIT

## PAIN POINTS

1

Most major sports stadiums do not currently have mobile order apps.



2

Difficult navigation, linking to websites outside of the app to order, overcrowded screens, font size, and screens which are not visually appealing.



# USER RESEARCH: SUMMARY

The user research for this project started with creating user personas, user stories, and user journey maps. This research brought to life the reality of what the user needs while at a game:

a simple app that allows users to order food & drink quickly to their seats with the option to pick-up their order to save on delivery fees.



# USER RESEARCH: SUMMARY

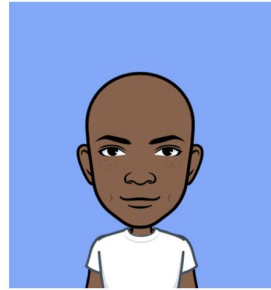
The key user groups for this app are:

- Sports fans, who attend many games each year and are willing to pay more to stay in their seats
- users who may have difficulty navigating the stadium due to mobility issues, anxiety in crowds, or unfamiliarity with the stadium.

# // GEORGE

## Problem statement:

George is a major sports fan who needs a way to order to his seat because he doesn't want to miss out on watching the game.



**George**

**Age:** 57

**Education:** MBA from NYU

**Location:** Boston, Massachusetts

**Family:** Married, 3 children in or out of college

**Occupation:** Senior Analyst at financial institution

*"Work hard, play hard!"*

### Goals

- Provide for his family
- Continue climbing the career ladder
- Continue staying active and social as he gets older
- Continue sharing his love for sports with his friends & family

### Frustrations

- Poorly organized systems
- Waiting in traffic
- Missing the game waiting in lines for food/drinks for his family
- Starting to struggle with nearsightedness, reading small fonts, especially on screens

David has been a sports fan since he was a little kid. He loves spending a Saturday after watching the game at home, a friends house, a bar, or especially live at the stadium! He is secure in his job and sports are his main form of entertainment. He spends a lot of time and money on his favorite teams and loves sharing his passion for sports with his family.



// PERSONA

// JULIA

## Problem statement:

Julia is a young single woman who needs a way to limit time in crowds because she gets anxious and she often gets lost in large stadiums.



Julia

**Age:** 24

**Education:** BA at SDSU

**Location:** Buffalo, NY

**Family:** Single, lives with roommates

**Occupation:** High School Teacher

## “Carpe Diem”

### Goals

- Have a positive influence on the world
- Enjoy life everyday, not just on holidays or weekends
- Experience all that life has to offer
- Spend time with friends and family
- Make weekdays count

### Frustrations

- Crowds at Stadiums
- Overpriced tickets, food, & drinks at stadiums
- Long lines for the bathroom
- Wandering the stadium looking for the food she wants

Julia was born in Mexico and immigrated to California as a kid. She now works as a high school teacher and recently moved to Buffalo, NY for her girlfriend. She doesn't have plans to start a family soon and enjoys going out with friends on weekdays and weeknights. She attends sports games a couple times a year to get outside and have a good time with friends who are sports fans. She enjoys the food and being with friends at games, but gets anxious in big crowds.



# // USER JOURNEY MAPS

When considering George's journey, I considered that users like him are more willing to pay a little bit more money for convenience.

## Persona: George

Goal: A smooth experience attending games and getting food & drinks so he can watch as much of the game as possible.

ACTION	Enter Stadium	Find Food	Find drinks	Get back to seats and enjoy game	Leave stadium
TASK LIST	A. Find parking B. Access Tickets C. Head to seats	A. Enjoy the game from seats B. Decide what he wants to eat C. Wait in line for food D. Check out	A. Keep walking to find drinks B. Wait in another line C. Check out	A. Walk back through crowds to seats B. Enjoy food & drinks C. Enjoy the game	A. Get up from seats B. Walk through stadium C. Exit Stadium D. walk through parking lot & find car E. Wait in car line in parking lot
EMOTIONS	- Excited - Annoyed by lines of cars in parking lot	- anxious to get to food & order quickly so doesn't have to miss too much of game	- anxious to get to drinks & order quickly so doesn't have to miss too much of game	- annoyed at crowds while walking back - happy to be back at seats & enjoying refreshments	- Happy/sad/angry depending on outcome of the game - Happy to have enjoyed a game - annoyed navigating crowds - annoyed waiting in line to get out of parking lot
IMPROVEMENT OPPORTUNITIES	- App with map and navigation to seats from where user parks - App which tells user where to park before entering stadium so they can park closest to their seats	- App which shows food & drink stands & allows user to order & pay from phone - App allows for pick-up or delivery for a small fee so users who don't want to miss game at all don't need to - App shows estimated wait times - App allows users to collect points and earn rewards	- App allows user not to stress about ordering more food/drinks since they don't have to miss the game	- App with navigation improves user experience by shortening user's distance between seat and car and marking parked location so user doesn't need to look all over parking lot for car	

# // USER JOURNEY MAPS

When considering users like Julia, it stood out that they are often not as familiar with the stadium and how crowds are a major pain point.

## Persona: Julia

Goal: Help navigating the stadium smoothly

ACTION	Enter Stadium	Get to seats & meet friends	Find food & drinks	Get back to seats & hang w/ friends	Leave stadium and find car
TASK LIST	A. Find parking B. Figure out what entrance to use C. Access tickets virtually or paper to enter	A. Look for a map or signage to figure out where to walk B. Navigate crowds and try to stick with group	A. Wander stadium looking for and deciding what to eat B. Wait in line for food C. Wander stadium again looking for drinks D. Wait in line again for drinks	A. Navigate crowds B. Stick with friends and walk past people to get back into seats C. Enjoy the game with refreshments	A. Navigate crowds B. Figure out where you parked and most efficient way to get to car C. Sit in car in line in parking lot
EMOTIONS	- Overwhelmed by amount of people and confusing stadium - Frustrated about parking - Excited for game	- Lost - Overwhelmed by crowds	- Anxious about wasting too much time and losing friends in crowds - Frustrated by long lines	- Happy to watch game and enjoy refreshments	- Lost - Annoyed at the crowds
IMPROVEMENT OPPORTUNITIES	- Easy access to map which shows where to enter from the outside - Parking lot which shows how many spaces left in given zone	- Easy to access map which shows seat sections and paths	- Map that shows available food and estimated wait times - app that allows you to order from your phone to pick up or for delivery	- Map in app allows you to quickly navigate stadium - App allows users to play games or send in messages to get featured on big screen	- App saves where you parked your car - Map in app allows you to quickly navigate stadium

# // USER RESEARCH:

## PAIN POINTS

### LONG LINES

Most game attendees get frustrated waiting in long lines for food and drinks causing them to miss out on watching the game.

### LARGE STADIUMS

Many game attendees get overwhelmed by the large crowds and large stadiums. Users who go to games once in a while aren't familiar with the stadiums, thus waste more time wandering around.

### LACK OF APP

Most stadiums don't have apps that house tickets, food ordering, maps, etc. So game attendees have to waste time at the game finding their tickets to get in, go order food, etc.

# STARTING THE DESIGN



## PAPER WIREFRAMES

Testing out layout ideas.

## DIGITAL WIREFRAMES

Refining ideas for user flow.

## LOW-FIDELITY PROTOTYPE

Creating initial user flow.

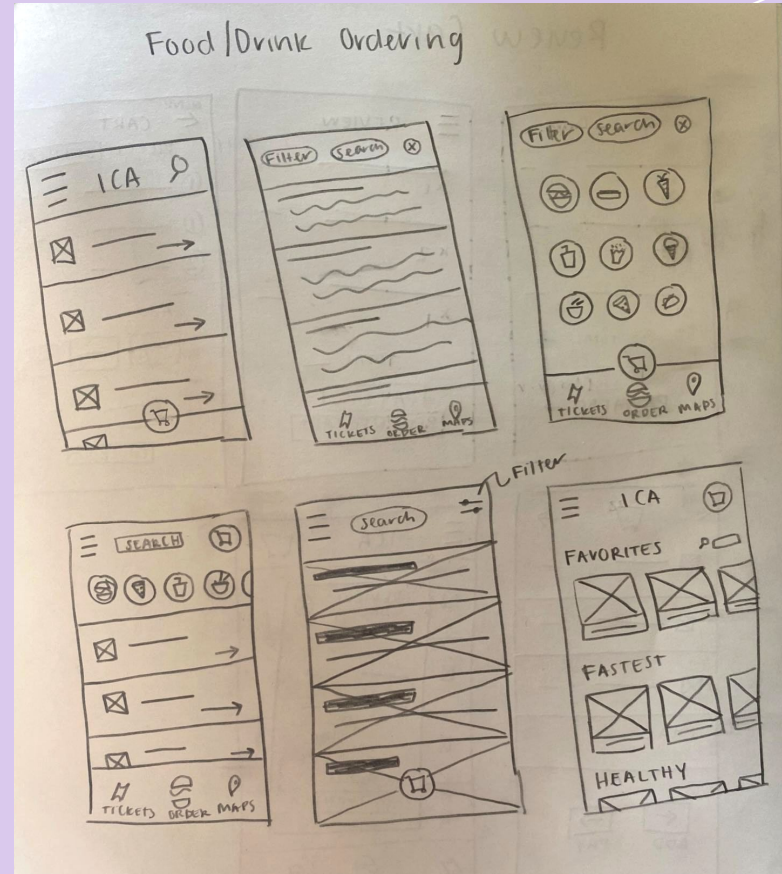
## USABILITY STUDIES

Testing out basic user flow, looking for pain points.

# PAPER WIREFRAMES

Experimenting with layouts on paper allowed me to quickly explore ideas and get feedback before moving to digital formatting.

For each page, I prioritized simplicity and accessibility for ease of use while at a busy game.

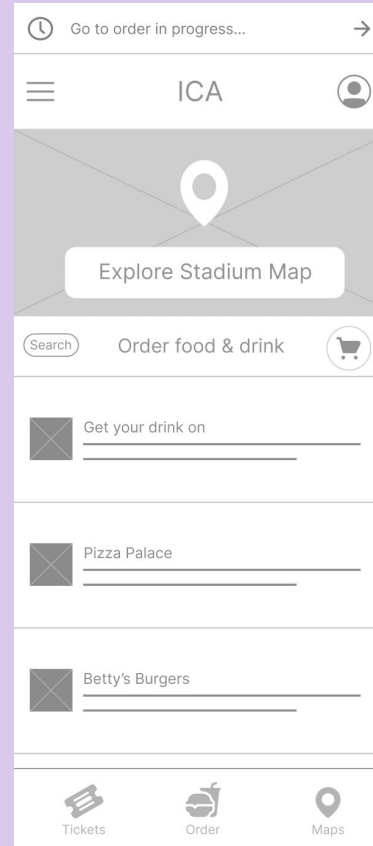




# DIGITAL WIREFRAMES

With digital wireframes, I was able to refine the layouts and add more details to the UX, such as menus, search bars, and get a better idea of the best size for each item.

Progress bar so that users can explore the app after ordering, but still check their order with ease.

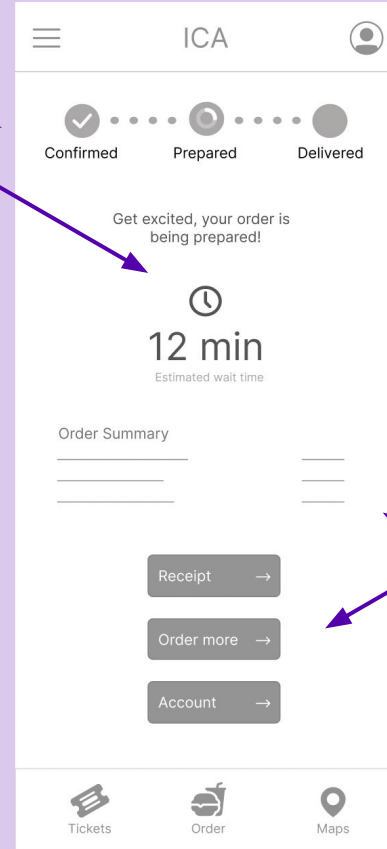


Vendors shown on homepage so that users can quickly and easily order food & drinks during the game.

# DIGITAL WIREFRAMES

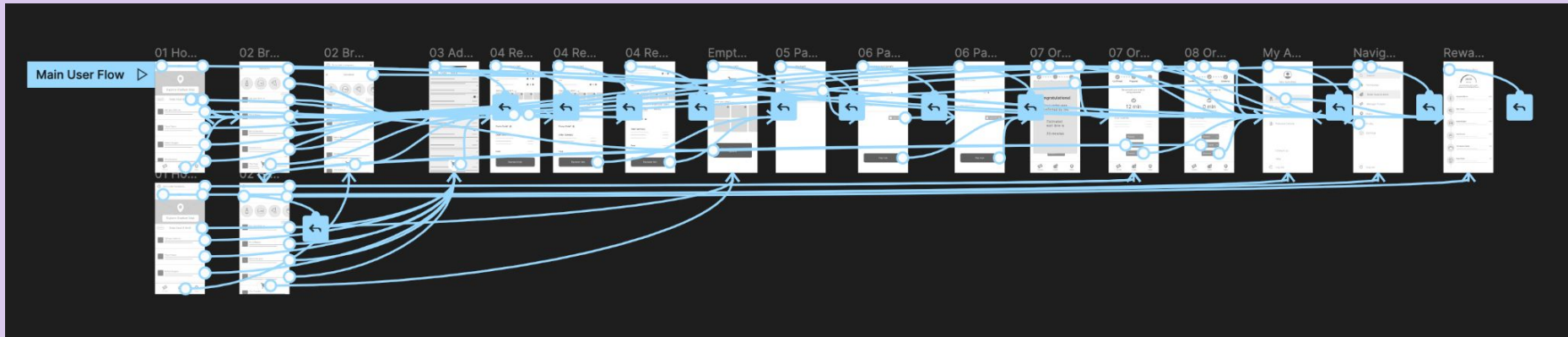
Easy for users to quickly and immediately see where their order is in the delivery process.

Conducting a competitive audit helped me determine which features were key for a mobile order app, such as updating progress on orders and immediately having a review order screen after completing purchase.



Easy for users to access next steps they might want to take -- such as reviewing their order or ordering more.

# //LOW-FIDELITY PROTOTYPE



The main user flow allows users to choose a vendor, add items to cart, review cart, complete payment process, view order progress, view rewards page, account page, and navigation menu. Check it out in [Figma](#).

# // USABILITY STUDY FINDINGS

## Round 1 Findings

- 01 Many users found it unclear what the stadium icon represented before clicking on it.
- 02 Many users usually order at least drinks at games, but not all usually order food.
- 03 The section to choose pick up or delivery did not stand out enough to all users.
- 04 Some users disliked certain parts of the check out process.

## Round 2 Findings

- 01 Search and add to cart buttons should be bigger.
- 02 All users found the error messages successful, but one reported it might be helpful if they stood out more.
- 03 Some users found the font too small for the body text on the menu & receipt screens.
- 04 Users wanted to see photos and to be able to customize their order.

# REFINING THE DESIGN



## MOCKUPS

Deciding on typography, colors, icons, graphics, etc.

## ACCESSIBILITY

Ensuring the app is accessible for users a different abilities.

## HIGH-FIDELITY PROTOTYPE

Connecting high-fidelity mockups to make a prototype that looks and works like the real thing.

# MOCKUPS

The second usability study revealed that there needed to be a quick option to add a tip and that the visibility of the error message needed to be improved.

Before 2nd usability study

**YOUR CART**

Nunc rutrum \$8.50 1

Consectetur in \$2.50 2

Aliquam diam \$8.50 1

**Subtotal** \$22.00

How would you like to receive your order?

Pick Up **Delivery**

Section Seat

Must fill in section and seat number before continuing to payment.

Delivery Fee \$2.00

Tip \$4.00

**TOTAL** \$29.00

PAYMENT INFO

After 2nd usability study

**YOUR CART**

Whole pie - veggie \$22.50 1

Soda \$2.50 2

**Subtotal** \$27.50

How would you like to receive your order?

Pick Up **Delivery**

Section Seat

Please fill in section, then seat number.

Tip \$4.50 (15%) **\$6.00 (20%)** Other

**Order Summary**

Subtotal \$27.50

Tax \$3.00

Delivery Fee \$2.00

Tip ----

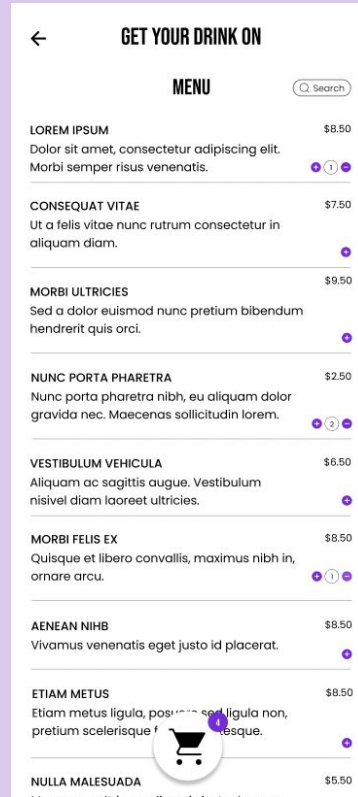
**TOTAL** \$32.50

PAYMENT INFO

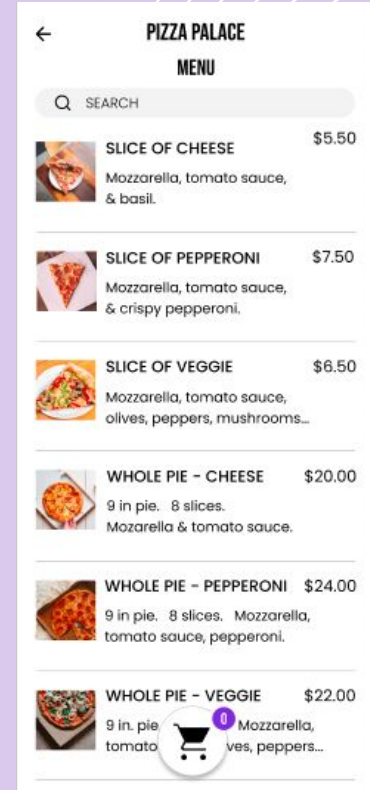
# MOCKUPS

The user testing also revealed that font size of titles and body text as well as certain buttons should be increased and photos of menu items should be included.

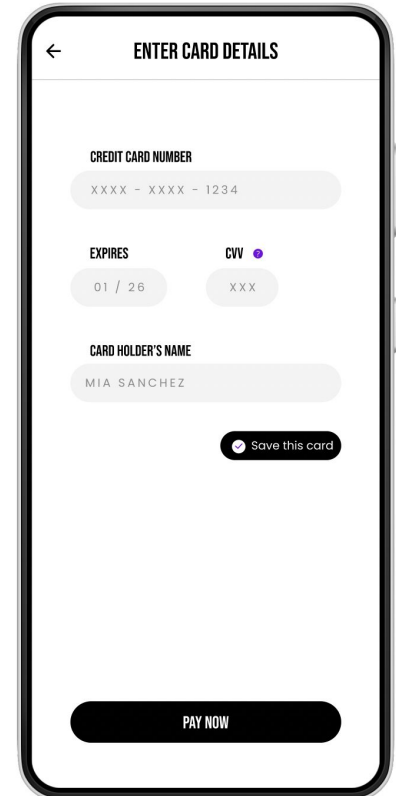
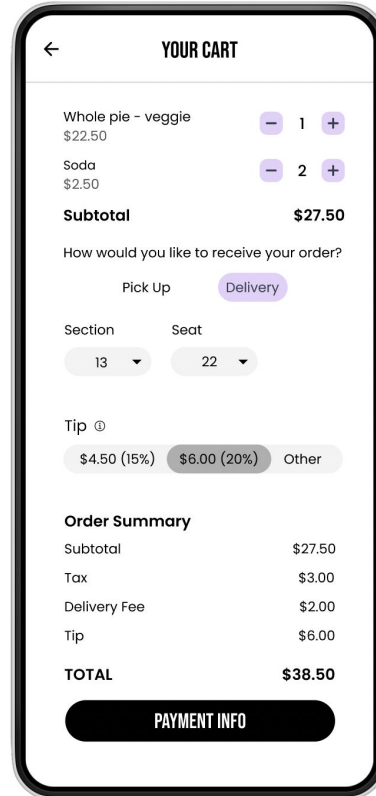
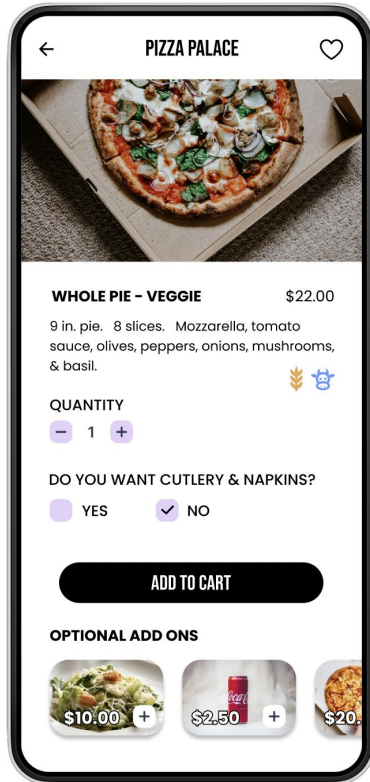
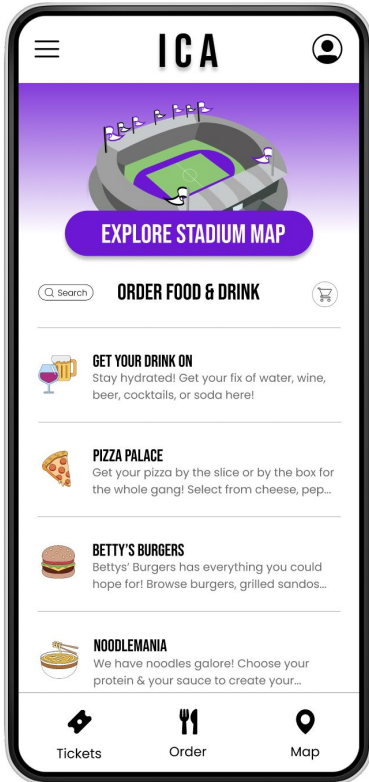
Before 2nd usability study



After 2nd usability study



# // MOCKUPS







# // ACCESSIBILITY CONSIDERATIONS

## MOBILITY

To support these users, I built in the delivery option so users don't need to leave their seats.

If I were to bring this app to market, the map would be fully functional and include accessibility routes.

## IMPAIRED VISION

The app utilizes black text on a white background to improve reading efficiency especially in bright light.

If I were to bring this app to market, I would also enable text-to-speech functions as well as alt-text on all key images.

## COGNITIVE IMPAIRMENTS OR NON-NATIVE ENGLISH SPEAKERS

Photos and icons were included to support persons who struggle to read.

Cannot continue on to next page, without including all required info.

Tip is automatically calculated.

# GOING FORWARD



## 01 TAKEAWAYS

## 02 NEXT STEPS

# // TAKEAWAYS

## IMPACT

Users were excited with the ease of the ordering process and reported they were looking forward to using an app like this at a real game!

### *User Test Participant feedback:*

“I thought it was super easy, especially with the pictures... I just wish this actually existed at [local stadium] so I could order beer and pizza without getting up!”

## WHAT I LEARNED

- Do not make assumptions about what users want. Do multiple and diverse usability studies when possible.
- Not all users have the same preferences.
- Do wide competitive research early in the process.

# // NEXT STEPS

1

Continue building out the different menus and functions within the high-fidelity prototype to be a fully-functioning app.

2

Conduct another competitive audit to determine whether there are any key features which should be added or modified to improve the efficiency and accessibility of the design.

3

Conduct another round of usability testing to confirm whether the pain points users experienced have been effectively addressed.

# // LET'S CONNECT!



Thank you for your time reviewing my work on the ICA Mobile Order app!

If you'd like to see more or get in touch, my contact information is provided below.



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LinkedIn

[Alison Waller](#)