Payment app for a street food vendor

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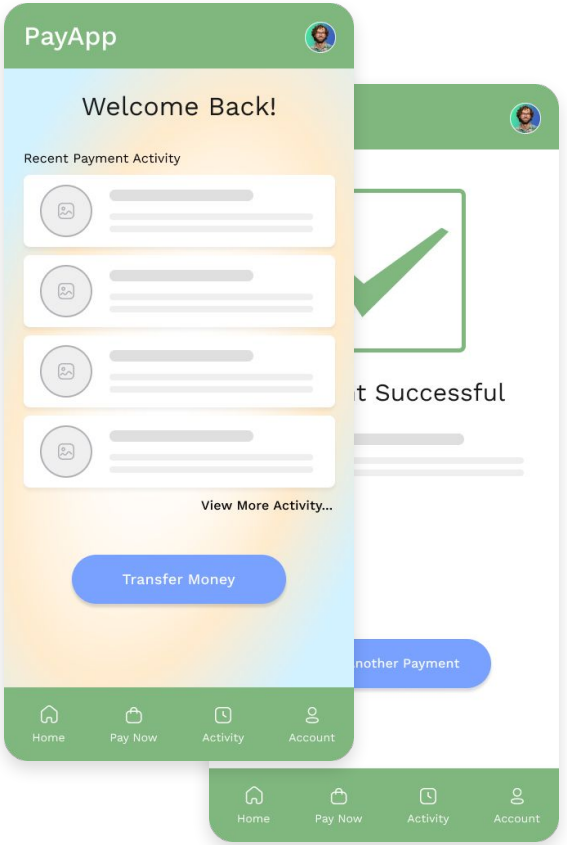
Project overview

The product:

The app focuses on making the user's payment process easier and faster. Geared towards the on-the-go professionals working in a city who wants to get in and get out with their order.

Project duration:

August 2022 to December 2022



Project overview

The problem:

Busy workers needs a way to pay or their food order as quickly as possible without using physical cash or the credit cards.

The goal:

Design an app that would allow user to use the mobile phone as their payment platform.

Project overview

My role:

UX designer, UX researcher, etc.

Responsibilities:

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

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Understanding the user

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

User research: summary

I conducted interviews and created empathy maps to understand the users I'm designing for and their needs. The primary user group was identified through research and observation base of a food truck's customers.

Some of the assumptions was that the busy workers that usually forgets their wallet in the office would greatly benefit but it turned out that anybody with the mobile phone was looking for a way to make paying for their order faster.

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User research: pain points

1

Time

Busy worker in the city are always looking to maximize their lunch break.

2

Payment Process

Most of the time customers need to wait in line to order and then pay or their food

3

Forgetfulness

On-the-go workers sometimes forget to bring their wallet of credit card when going out for lunch

Persona: **Name**

Problem statement:

Daniel is a newly grad worker who's busy learning new skills who needs a quick and easy way to pay for food ordered from a vendor because he wants to spend time during lunch watching web development videos to learn more skills.

Daniel West

Age: 24
Education: Bachelor's Degree
Hometown: Orlando, FL
Family: Lives with partner
Occupation: Jr. Web Developer

"I build things for the internets by day and a gamer by night"

Goals

- Get my order as fast as possible
- Learn on the job and gain more experience
- Complete tasks as efficiently and correctly as possible

Frustrations

- Paying for my order requires me to input my CC # correctly
- I have to take out my CC from my wallet
- Sometimes there's no other payment option

Daniel just graduated university and got his first job in a fast pace environment. In order to gain more skills he usually spend his lunch watching web development tutorials online. To get more out of his lunch break he tends to get lunch from places the can serve food quickly. He likes doing things efficiently and correctly.

User journey map

Mapping Daniel's user journey revealed a lot of insightful things about what feature were needed and how to improve upon existing features from competitors.

Persona: Daniel West

Goal: A quick and easy way to pay for my food

ACTION	Select vendor to pay	Find the bill to pay	Select payment method	Add tip	Pay the bill
TASK LIST	A. Open payment app B. Find food vendor from list of vendors C. Decide if selected vendor is the right vendor	A. Find the bill to pay B. Make sure that the bill amount is correct	A. Select payment method from saved payment options B. Check if payment type still have funds	A. Select how to pay tip B. If percentage, decide on how many percent C. If custom amount, decide on how much	A. Select that everything is in order B. Click the pay button C. Confirm that bill was paid
EMOTIONS	Overwhelmed by the list of vendors	Confused by the bill	Unsure if there's still fund on the selected payment option Annoyed by the need to type out the credit card number	Angry that the order was not made properly Annoyed that there's no "no tip" option	Happy that there was still fund on the selected payment option
IMPROVEMENT OPPORTUNITIES	Maybe use of QR code to scan and select the vendor	QR code can also contain information about the bill	Highlight last or prefered payment method with visible available funds	Add "no tip" option	Promo code for next purchase

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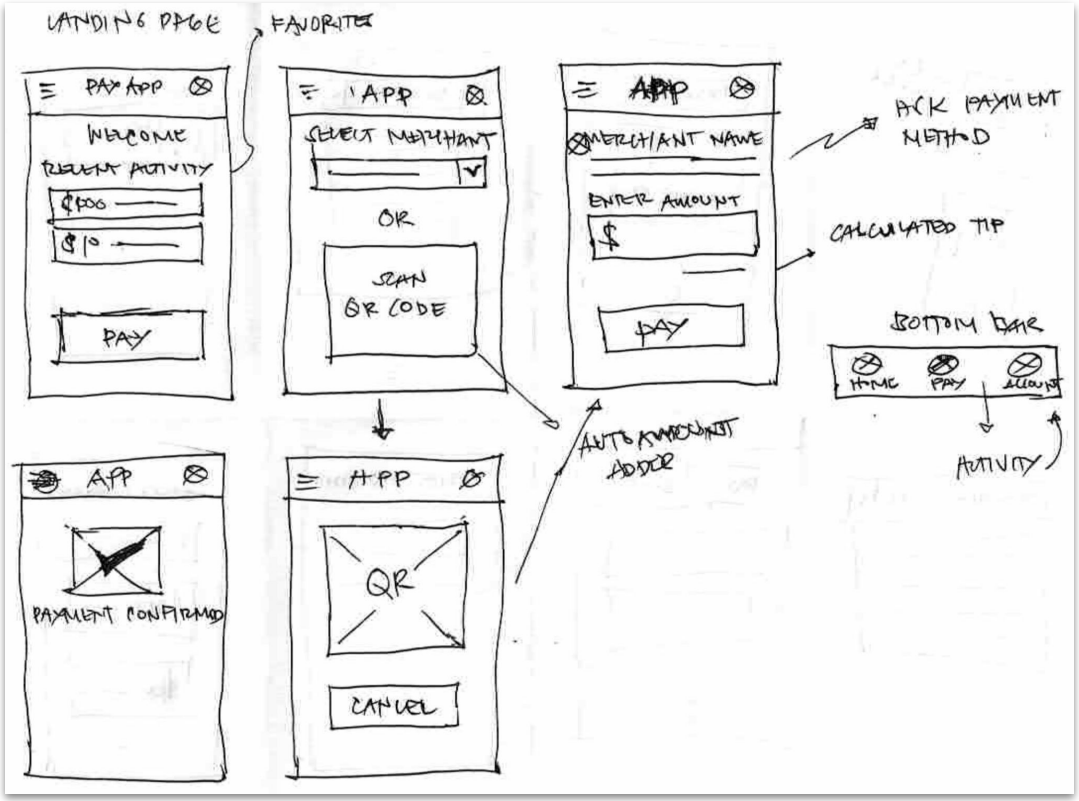
Starting the design

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

Paper wireframes

Fo the paper wireframes, I focused on the very basic user flow. Adding all the basic elements that I believed the app will need to address the user pain points.



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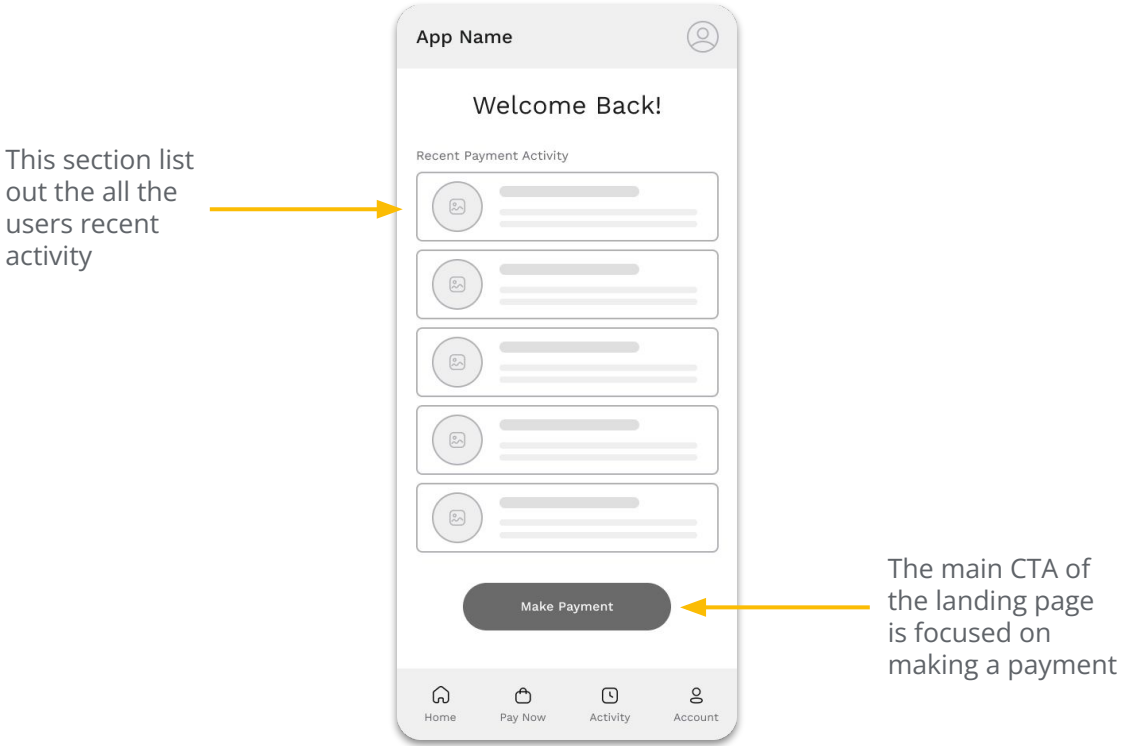
Digital wireframes

Digital wireframe were created based on the feedback received from the paper wireframe.



Digital wireframes

During the research we identified the need to have a few ways to select the merchant a user will be paying.

Easy way to find the merchant a user needs to pay

Another way to find the merchant a user needs to pay is to scan the merchants QR code

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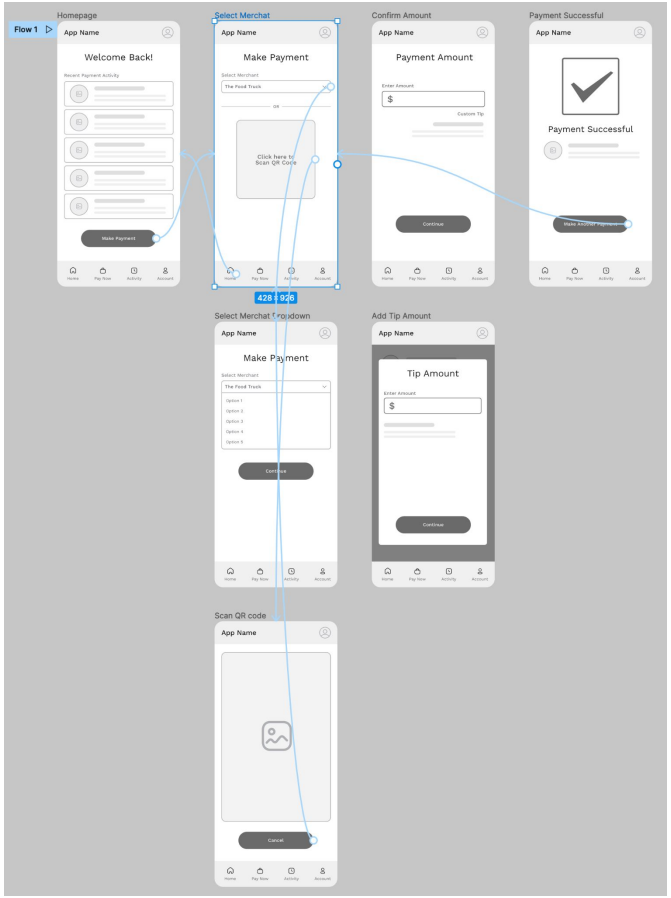
Low-fidelity prototype

Using the completed set of digital wireframes, I created a simple low-fidelity prototype. The primary user flow I used is the same basic flow from the paper wireframes, so the prototype could be used in a usability study.

View the low-fidelity prototype



Usability study: findings

There were two rounds of usability studies. Findings from the first study helped guide the designs from wireframes to mockups. The second study used a high-fidelity prototype and revealed what aspects of the mockups needed refining.

Round 1 findings

1. Users having a hard time looking for merchant to pay
2. User wish that the tip amount to be pre-populated
3. Users complained about the lack of confirmation screen

Round 2 findings

1. Adding merchant search improved usability
2. User wish there's a way to see more recent activity

Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

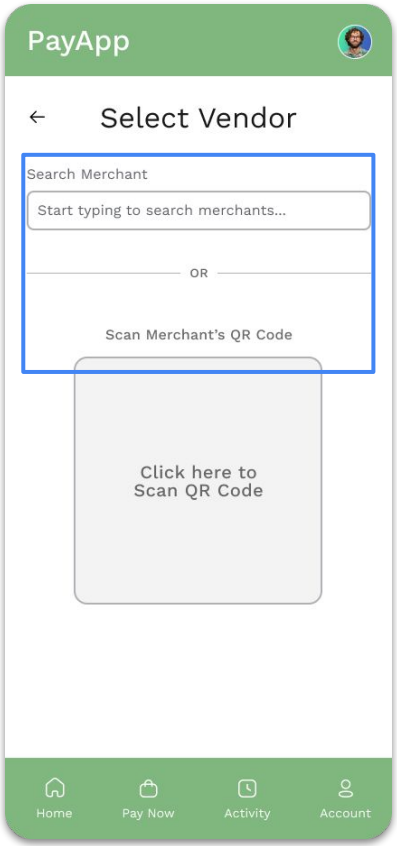
Mockups

Users had a hard time finding the vendor/merchant

- We incorporated an search/autofill functionality
- User only have to type the first letters of the vendor name then a list of options will appear
- Aside from the autofill/search functionality, we added more copy to explaining the QR code scanner

Before usability study

After usability study



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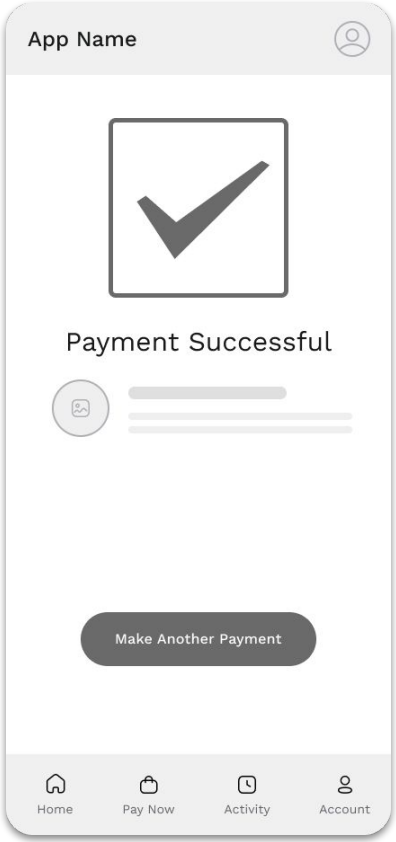
Mockups

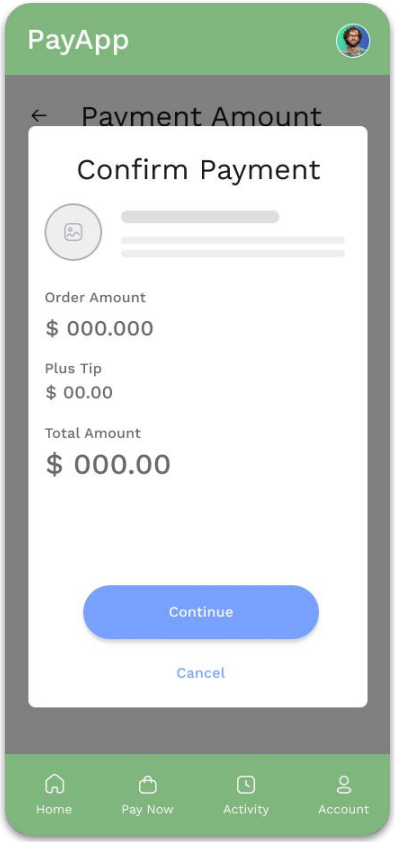
Users complained that there's no confirmation screen before completing the payment

- We added a confirmation screen with the payment summary
- The confirmation screen includes the merchant name, the order amount, the tip amount and the total amount to be paid

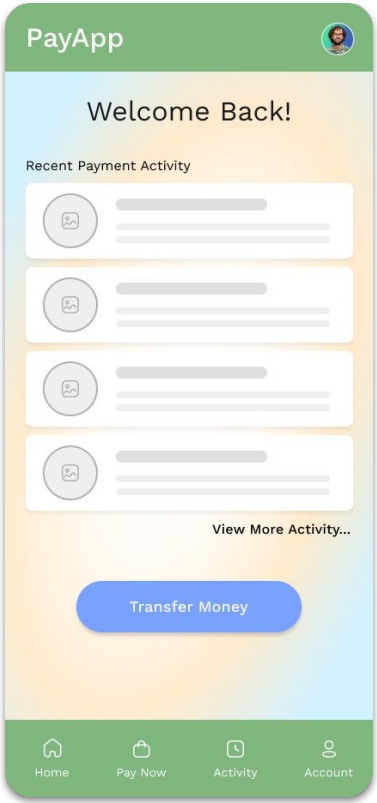
Before usability study

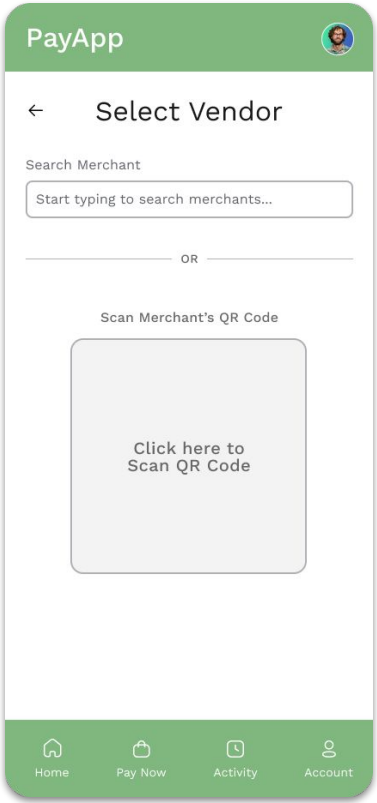


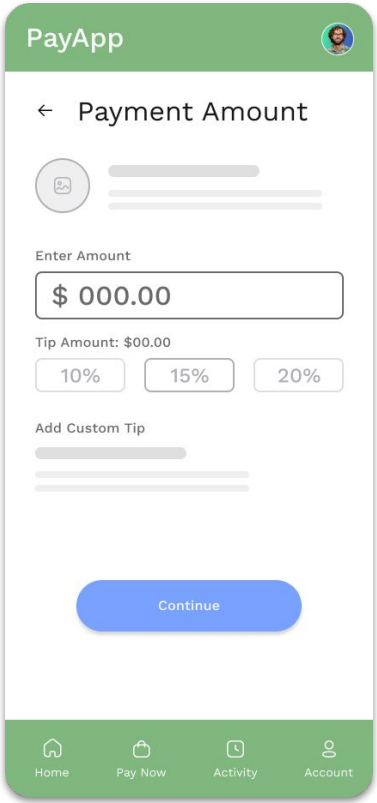
After usability study

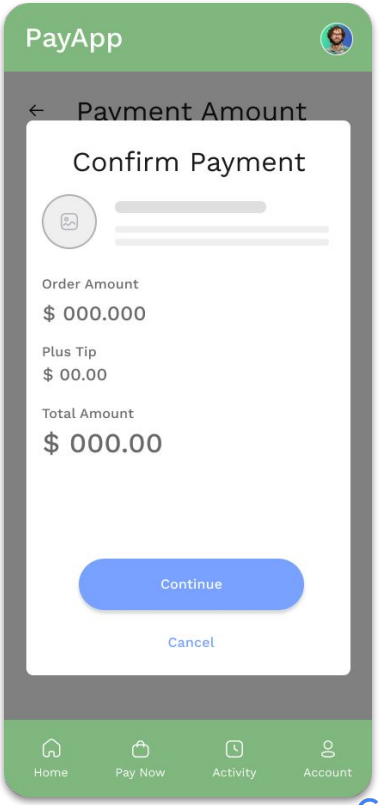


Mockups









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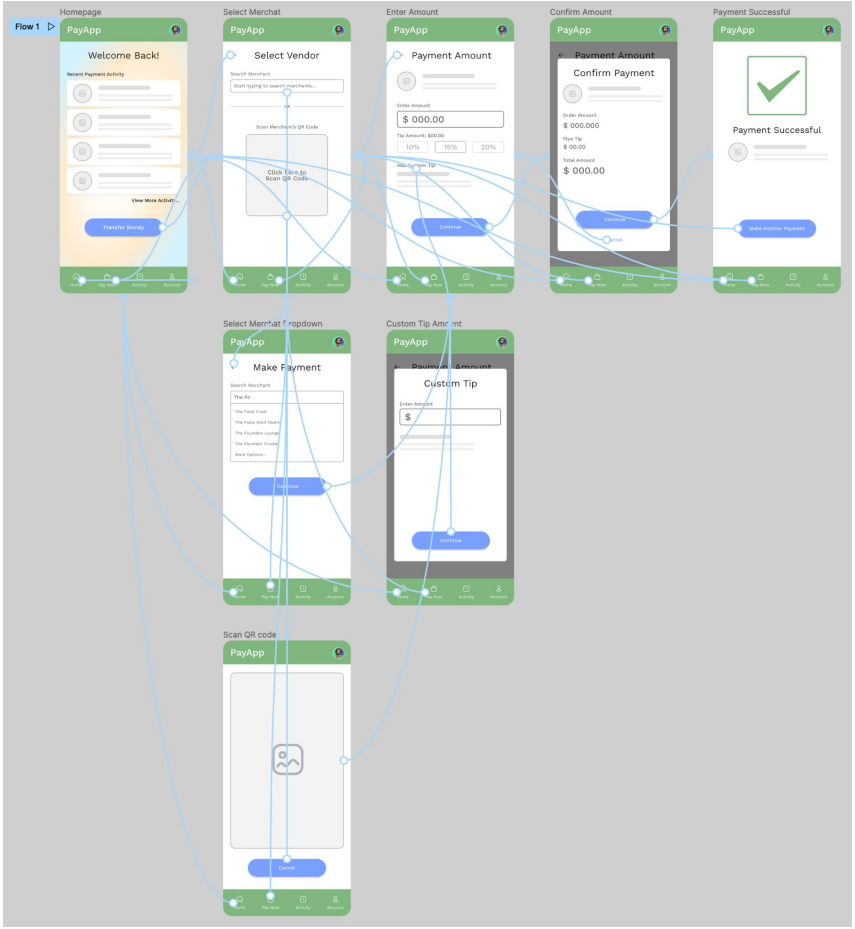
High-fidelity prototype

The final high-fidelity prototype presented cleaner user flows for building the payment app.

View the [high-fidelity prototype]



Accessibility considerations

1

Adding icons that communicate the actions the user is taking to make navigation easier.

2

Bigger font sizes for users that are visually impaired

3

Avoided colors that are hard to distinguish from each other

Going forward

- Takeaways
- Next steps

Takeaways

Impact:

Users feels that the app will help make their lives a little bit easier by having a faster way to pay for their lunch.

One quote from peer feedback:

“I would use this app if its real, I sometimes forget my wallet in the but always have my phone with me.”

What I learned:

Whe design the app I learned that the design is an iterative process, your first solution will not always be the best solutions. You need to get feedback from your users and peers.

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Next steps

1

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

2

Conduct more user research to determine any new areas of need.

3

Do another round of design critique session

Let’s connect!

Thank you for reviewing my case study! If you want to get in touch or just want to connect you can reach me at:

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