Mobile Payment App Design

Prince B. A.

Project overview

The product:

PayALL is a mobile payment app that allows users to conveniently pay from their local shop without the need of a physical cash. PayALL's target auidence are users on the go who don't usually deal with physical cash.

Project duration:

March 2021 to May 2021

Project overview

The problem:

On the go workers who usually purchase items from their local shop don't have physical cash most of their time.

The goal:

Design a payment app that allows users to conveniently pay for items at their local shop.

Project overview

My role:

UX Designer working on all the stages of the design process.

Responsibilities:

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

Understanding the user

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

User research: summary

I took a new approach to conduct research which was done through WhatsApp audio; where the recorded conversations were exported and transcribed. Through that I created an empathy map and a user journey map to understand the needs, pain points, goals and motivations of the users.

The primary user groups identified was the remote working adults who usually receives payment digitally.

The user group confirmed that indeed if they can be able to pay for items from their local shop through an app it would very useful, but the research also reveled that not only did they want to pay for items at the shop but also they want to be able to add multiple payments options and find shop that accepts their payment service within reach.

User research: pain points

1

Time

Working adults are too busy that they don't have time to withdraw cash to make payments.

2

Convienency

Working adults wants the convienency to be able to pay for items from their local shops.

3

Multiples apps

The market is saturated with mutiples apps with the same purpose from different payment service providers.

4

Bottlenecks

There too many bottlenecks in finding the right app for payment at a local shop.

Persona: Ida **Lynn**

Problem statement:

Lynn is a remote worker who needs to pay for items from their local shop because they don't have physical cash most of the time.

Lynn Ida

Age: 40
Education: Professional Certificate
Hometown: Adenta, GH
Family: Married
Occupation: Remote developer

"I haven't used any local mobile payment app in a very long time because of the difficulties: even paying money into my bank account is difficult, eventually I gave up."

Goals

- Payment app which is easier and convient to use.
- Pay from my local shop without physical cash.

Frustrations

- "...There are too many bottlenecks and roadblocks in finding the right app."
- "The local ones will tell you to go buy a voucher before you can pay online."
- "... even paying money into my bank account was difficult so eventually I gave up"

Lynn is a female developer who lives in Adenta, GH. Her daily work requires that she spends most of her time behind the computer. She usually gets off in between her time because she need to go get something from the local shop nearby her house that requires that she pays with physical cash even though she has payment apps on her phone. Lynn wants to be able to user a payment app to pay from the local shop.

User journey map

A user journey map reveling how useful it would be for Lynn to be able to pay for items at their local shop.

Persona: Lynn Ida

Goal: Home mama pays through an app from the local shop nearby

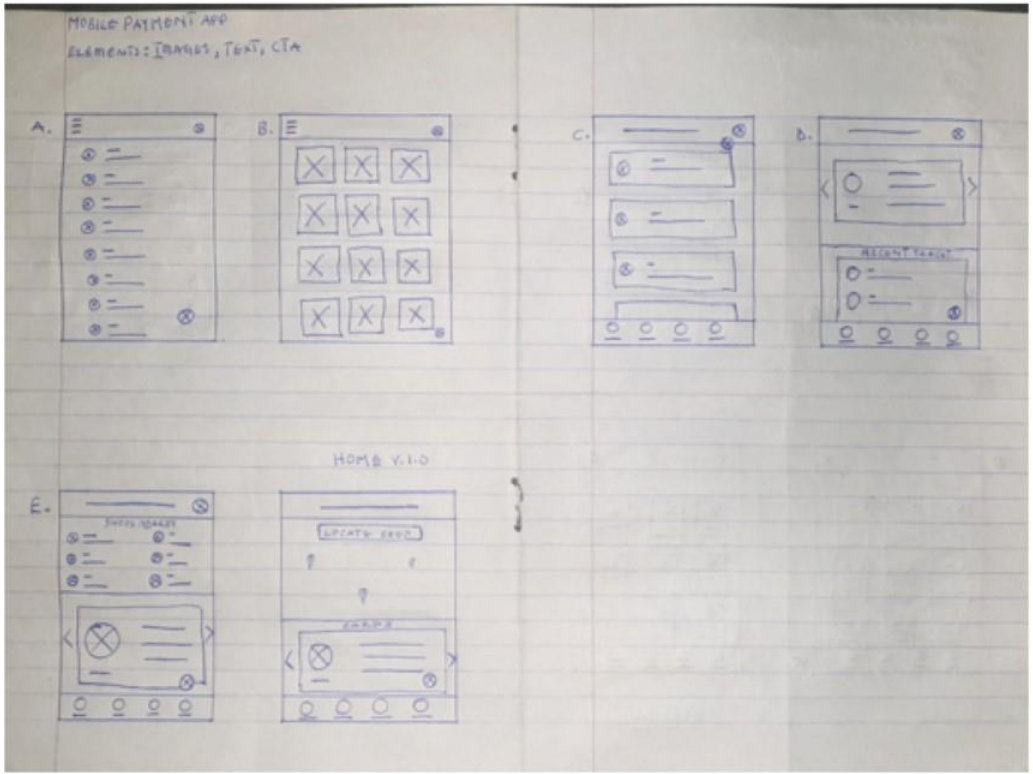
ACTION	Find the app	Goes to shop	Find an item	Check for price	Pay for the item
TASK LIST	Tasks A. Search for the app B. Download App C. Setup up account	Tasks A. Search for local shop B. Use map to locate the shop C. Commute to shop	Tasks A. Search for items B. Find favorite item C. Put favorite item to basket	Tasks A. Goes to counter B. Request for prices of selected items C. Place items on counter for payment	Tasks A. Ask for the kind of payment service that's accepted B. Select that payment service C. Pay
FEELING ADJECTIVE	Excited to find an app that supports her local shop. Bored because not all local shops / card services supports it.	Surprised to find few local shops. Worried about commuting to shop.	Bored in searching for an item	Frustrated; Going back and fourth checking for prices of items.	Excited paying through app Disturbed if payment service is not accepted in that shop.
IMPROVEMENT OPPORTUNITIES	Support for more local shops and card services	Explicitly show shops that is supported by the app & card services.	Options to find / search for items. The shop could have signages across to guide routes & first time visitors	Options to view prices of items. Options to scan and read out prices of items.	Multiples payment services to pay through shop. Show which payment services that are supported.

Starting the design

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

Paper wireframes

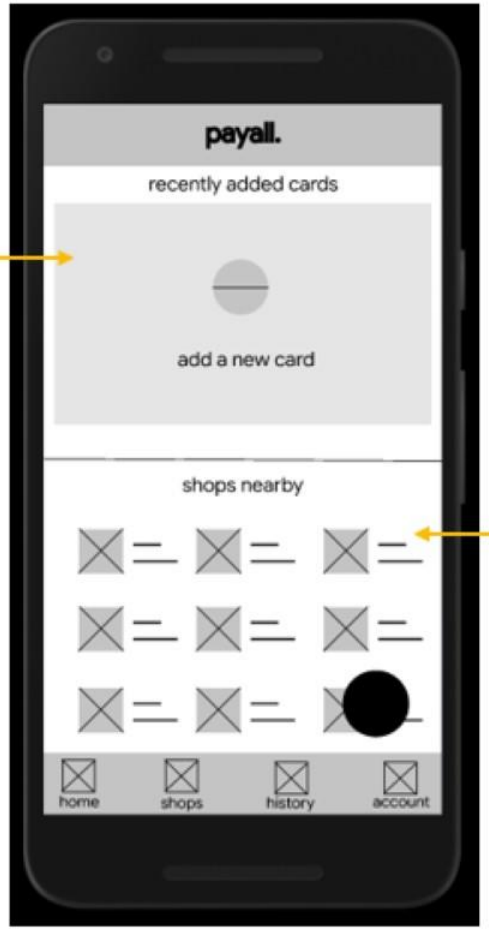
An interative process of finding the right homepage that focuses on the core functionality of the app yet still addressing the other functionalities based on the users pain points discovered from the research insights.



Digital wireframes

As I transform to ditial wireframes, I made sure to keep apps core functionality based on the research insights without loosing focus.

Having a clear view for users to add a card from different payment providers.



Highlighting shops nearby where users can pay for items.

Digital wireframes

Convieniency was one of the key reasons of the app from the reasearch. So I made sure it translates in the design where users can easily navigate to and fro from the app.

Navigating is very easy and quick to follow.

Low-fidelity prototype

The low-fidelity prototype connected the primary user flow of the app which is the ability to add a card and able to navigate around at a glance with little or no supervision for the usability studies with users.

View the MobilePaymentApp

MobilePaymentApp-User-Flow

Usability study: parameters

Study type:

Unmoderated Usability Study

Location:

Ghana, Accra; Remote

Participants:

5 participants

Length:

10 – 15 minutes

Usability study: findings

1

Efficiency

People want to pay for items at a local shop quickly

2

Conveniency

People want to pay for items at any local shop nearby

3

Less Hustle

People want one app to serve them all

Refining the design

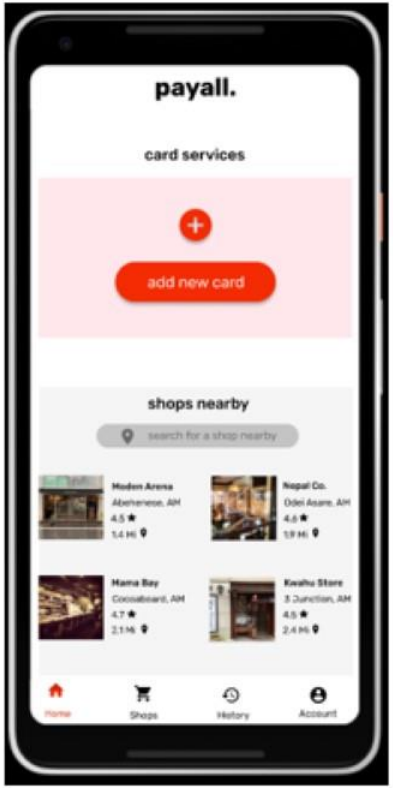
- Mockups
- High-fidelity prototype
- Accessibility

Mockups

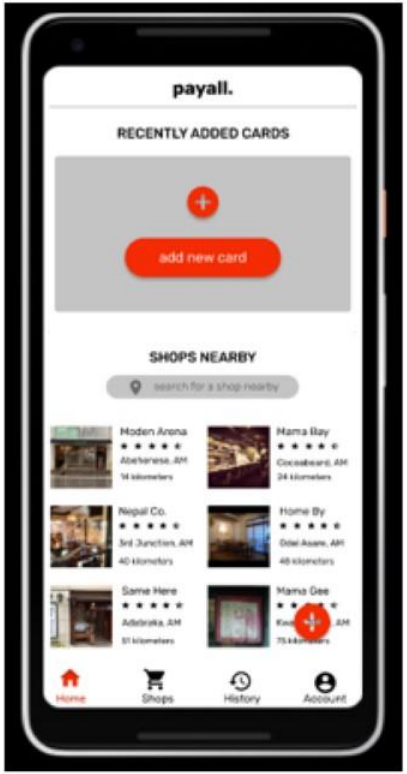
Here are some of the few notable changes that came up from the usability studies.

- users have to go to account to add another card after the first experience.
- The FAB was introduce after the usability studies.

Before usability study



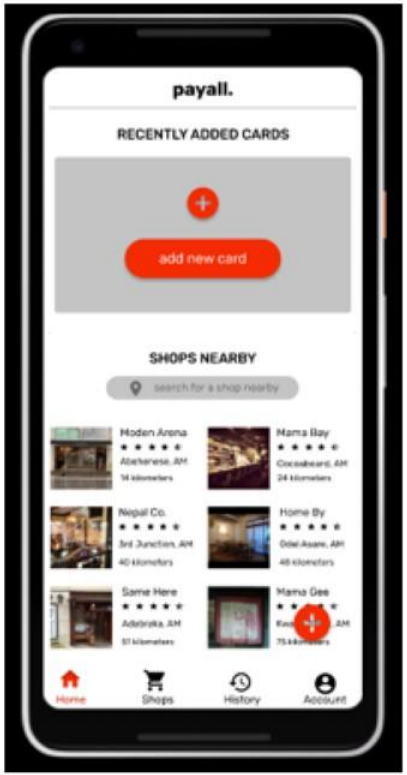
After usability study



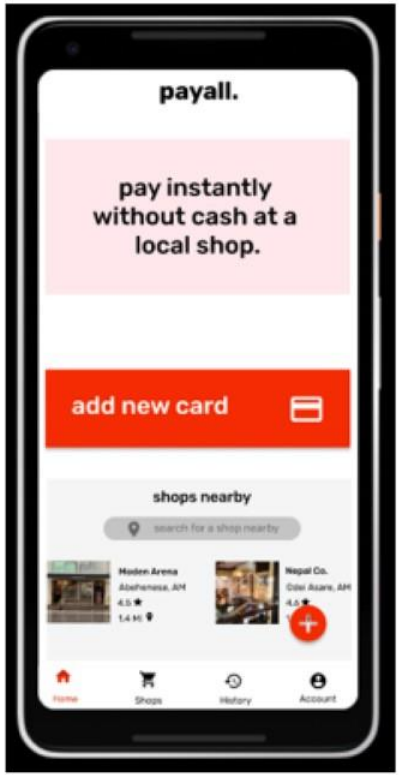
Mockups

After, the FAB was introduced, another usability study revealed that users had difficulties finding the FAB after the first experience (not knowing that the FAB is used to add an a new card).
The next iteration made good use of descriptive text which gave users information on buttons and what it does.

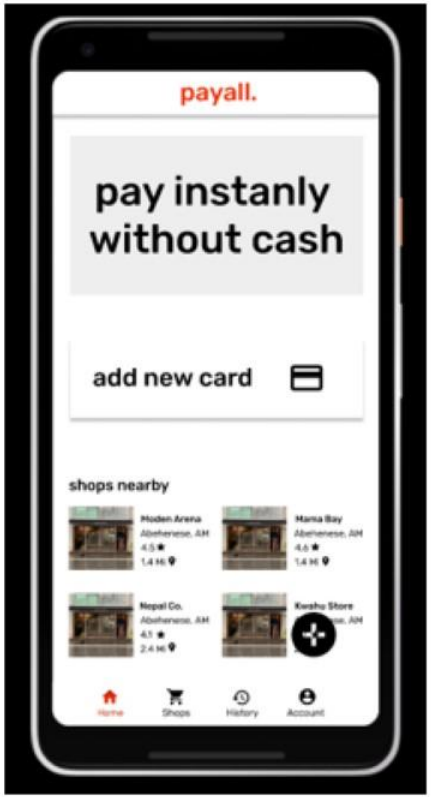
Before usability study

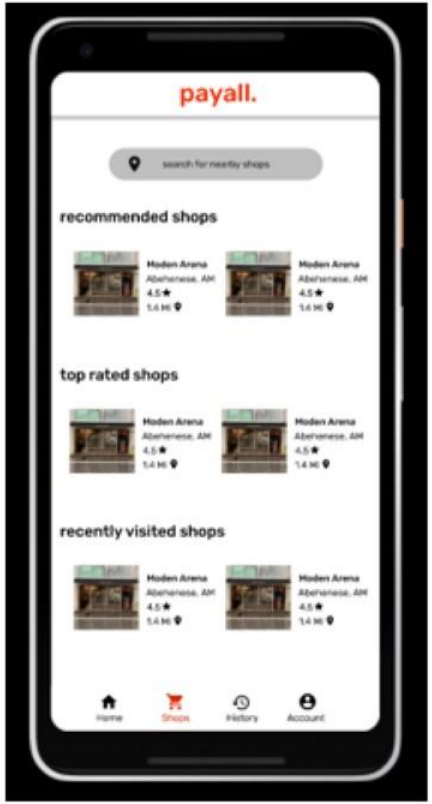


After usability study



Mockups


payall.
pay instanly without cash
add new card
shops nearby
Home
Shops
History
Account


payall.
search for nearby shops
recommended shops
top rated shops
recently visited shops
Home
Shops
History
Account


payall.
transaction history
Payments
Cards
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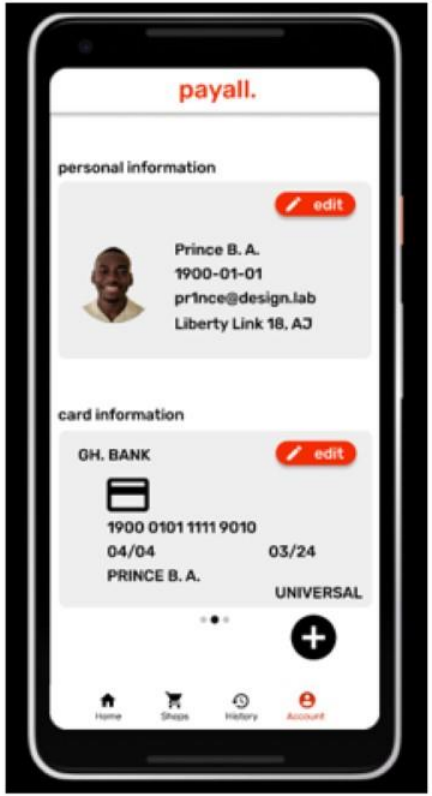
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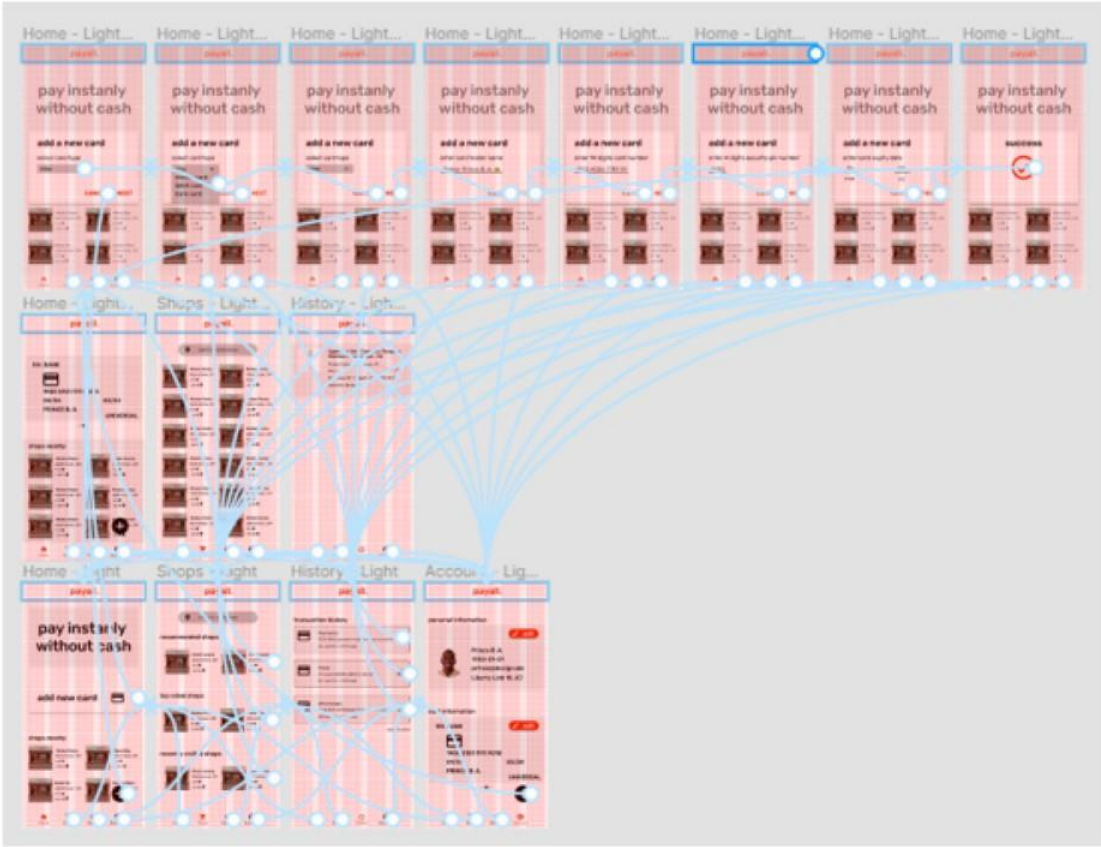
03/24
PRINCE B. A.
UNIVERSAL
Home
Shops
History
Account

High-fidelity prototype

High-fidelity prototype of the MobilePaymentApp following the flow from the low-fidelity prototype after another usability study.

View the MobilePaymentApp

[MobilePaymentApp.High-Fidelity]



Accessibility considerations

1

Provided access to users who are vision impaired through adding alt text to images for screen readers.

2

Used icons and descriptive texts to help make navigation easier.

3

Used detailed imagery for shops and debit cards to help all users better understand the designs.

Going forward

- Takeaways
- Next steps

Takeaways

Impact:

The MobilePaymentApp makes people feel relaxed and secured.

Quote from a user.

"The app makes me feel relaxed, I don't have to think about having my wallet or not, once I have my phone am covered."

What I learned:

During the research and designing of the MobilePaymentApp; I have learned that every decision I have made is backed by data from the usability studies, which solidifies the statement *"you put the users front and center"* in everything.

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

Keep iterating... Design is a breathing document.

Let’s connect!

I appreciate the time you took to review my work on the MobilePaymentApp journey.

Hope you are inspired.

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LinkedIn: Prince Boateng Asare
Twitter: InnoCentGee

Thank you!