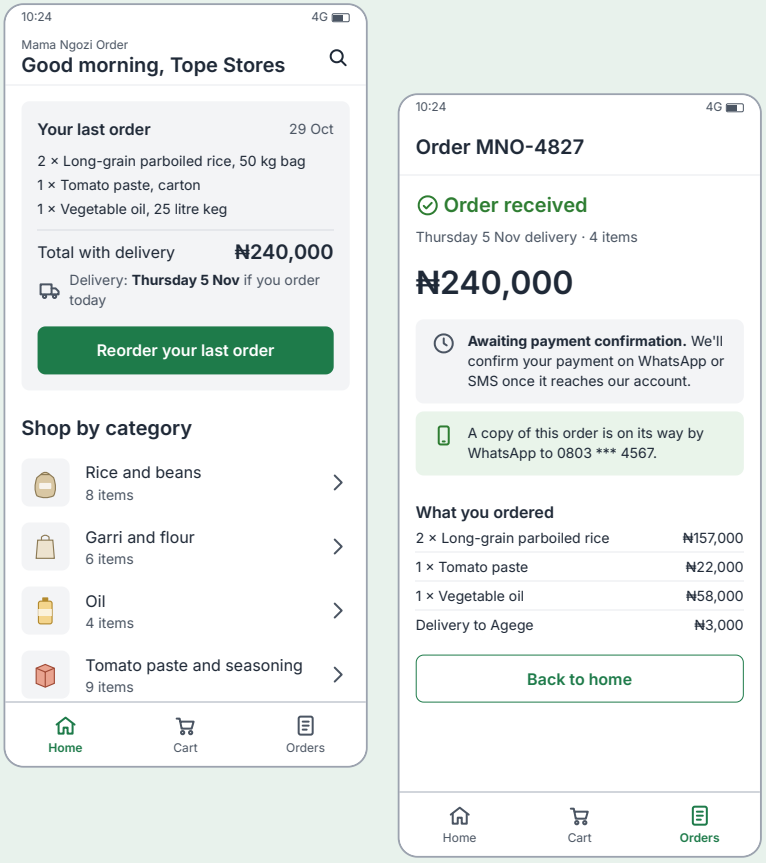
UX CASE STUDY · OCTOBER 2026

Reorder in three taps

Redesigning how shops, hotels and schools reorder food stock from Mama Ngozi Foods, a Lagos distributor, on low-cost Android phones and costly data.

Temi Balogun, UX/UI designer, working with Ngozi Eze (lead designer)
Client: Mrs Ngozi Okonkwo, Mama Ngozi Foods · Agege, Ikeja, Surulere
6 weeks · research, synthesis, flows, Figma prototype, usability test



A model case study made by Skillnaija for the UI/UX Design course. Mama Ngozi Foods, its staff, customers and every research participant are fictional, and the prices are made up. Study it; don't copy it.

OVERVIEW

The problem, my role and the result

Mama Ngozi Foods' customers order by WhatsApp and phone. Tobe, the salesperson, copies every order into a notebook. Orders get lost, prices surprise people, and customers phone two or three times to ask when the goods will come.

Mrs Okonkwo asked for "a simple app" and arrived with a feature list: big product photos, a chat button, loyalty points and a news feed. Before drawing anything, we asked her customers how they order today and what goes wrong.

THE PROBLEM WE FOUND

Busy shop owners who reorder the same stock every week need a fast, data-light way to reorder and know exactly what it will cost and when it will arrive, because WhatsApp and phone orders get lost and prices change without warning.

MY ROLE

I ran three of the five interviews and took notes in the other two, led the affinity mapping with Ngozi, drew the flows and wireframes, built the Figma components and prototype, moderated the usability tests and wrote this case study. Ngozi reviewed each stage.

THE PROJECT AT A GLANCE

5
interviews with real customers

7
findings from the affinity map

7
screens, plus offline, sending and out-of-stock states

5 + 3
usability tests, then a retest after the changes

WHAT CHANGED BECAUSE OF THE EVIDENCE

- "Reorder your last order" is the first thing on Home, because 4 of 5 customers reorder the same items.
- Price, delivery fee and delivery day show before anyone pays.
- Bank transfer and pay on delivery are two equal choices, after 4 of 5 testers could not find pay on delivery.
- Nothing typed is lost when the network drops.
- Mrs Okonkwo's news feed and loyalty points were dropped for now: no customer asked for them.

TESTED AS A PROTOTYPE, NOT LAUNCHED. NO SALES FIGURES ARE CLAIMED.

DISCOVER

Research: five customers, in their own words

RESEARCH GOAL

Understand how Mama Ngozi Foods customers order today, what goes wrong, and what would make them trust an app enough to switch. This decides what the first version must do.

HOW WE RECRUITED

From Mrs Okonkwo's customer list: a mix of customer types across the three branches. No friends, family or staff, because polite answers are not evidence. Invited by phone in plain words: who we are, why, 30 to 45 minutes, no wrong answers.

CONSENT AND PRIVACY

Each person agreed before we recorded, and again on the recording. One said no, so we took written notes instead. Recordings were moved off the phone, labelled C1 to C5 and deleted when the project ended. Everyone agreed we could quote their words without their name. In this study they appear only as codes and roles.

FIVE OF THE QUESTIONS

- Tell me about the last time you ordered stock from Mama Ngozi Foods.
- What happened after you sent that order?
- How did you find out what the order would cost?
- Tell me about a time the network failed while you were ordering or paying.
- How do you know an order has really gone through?

WHO WE SPOKE TO

CODE	WHO	BRANCH	PHONE	INTERVIEW	RECORDING
C1	Provisions shop owner, 50s	Agege	Low-cost Android, shared with her son	At her shop, 40 min	No: notes only
C2	Hotel storekeeper, 30s	Ikeja	Own Android	At the hotel store, 35 min	Audio, with consent
C3	School bursar, 40s	Surulere	Own Android	At the school office, 45 min	Audio, with consent
C4	Provisions shop owner, 40s	Ikeja	Low-cost Android	At his shop, 30 min	Audio, with consent
C5	Home buyer who buys in bulk, 30s	Surulere	Own Android	Phone call, 30 min	Audio, with consent

Fictional, for the course. These five participants were made up for this model. In your own project, your five must be real people who would really use the product, and you show them the same way: a code and a role, never a name, phone number, shop name or face.

WHAT WE WATCHED, NOT ONLY WHAT WE HEARD

C1 said ordering was "no problem", then called her son to open WhatsApp and held the phone at arm's length to read the price. We wrote that down word for word. Behaviour like that became evidence; her "no problem" did not.

DEFINE

Fifty notes, seven findings

Every observation went on its own note, coloured by participant, and was grouped in silence until themes appeared. We counted people, not notes: a theme from one person is a clue; a theme from most people is a finding.

1. They reorder the same items every week or two

4 of 5 participants

- **C2** “Every week it's the same list. I type it again and again.”
- **C1** “I buy the same rice, oil and tomato paste every week.”
- **C4** Scrolled back in WhatsApp to copy last week's order

2. Data is expensive: heavy pages get closed

3 of 5 participants

- **C1** “If a page is heavy with pictures, I close it.”
- **C5** Buys a small data bundle each week

3. They want the price and delivery day before they commit

4 of 5 participants

- **C3** Phoned Tobe to ask the price, then again to ask when
- **C4** “I don't send money until I know the day.”

4. A WhatsApp or SMS confirmation feels like proof

3 of 5 participants

- **C2** “If it's on my WhatsApp, I have proof.”
- **C3** Keeps confirmations to file with the school's receipts

5. Small text and English-only screens shut one customer out

1 of 5 participants, kept

- **C1** Held the phone at arm's length to read the price
- **C1** Son opens WhatsApp and reads English messages aloud

6. Most pay by transfer and need the details and a reference

4 of 5 participants

- **C1** “I transfer, then I send the screenshot to Tobe.”
- **C3** Needs a reference to match each payment to an order

7. The network drops mid-order and what they typed is lost

4 of 5 participants

- **C4** “The network went and my whole list disappeared.”
- **C5** Retyped an order twice in one evening

HOW TO READ IT

C1 C2 C3 C4 C5

One colour per participant. Finding 5 comes from one person, but it is about whether she can use the app at all, so it is kept and shapes the accessibility work.

Quotes are short and anonymised. The photo of our paper wall stays in the project files.

DEFINE

Persona, problem statement and what to solve first

PERSONA: A PATTERN, NOT A PERSON

FIELD	MAMA TOPE, THE BUSY SHOP OWNER	FINDING
Who	40s, provisions shop in Agege	Interviews
How she orders	Reorders weekly by WhatsApp	1
Phone	Low-cost Android phone	2, 5
Payment	Pays by transfer	6
Goal	Restock fast without losing a day	1, 3
Frustrations	Lost orders, price surprises, wasted data	7, 3, 2

No invented hobbies, no stock photo, no quote nobody said. Every line traces to the notes.

JOB TO BE DONE

"When my shelves are running low, I want to restock the usual items quickly, so I don't lose a day of sales."

PROBLEM STATEMENT

Busy shop owners who reorder the same stock every week need a fast, data-light way to reorder and know exactly what it will cost and when it will arrive, because WhatsApp and phone orders get lost and prices change without warning.

HOW MIGHT WE...

- ...let Mama Tope reorder last week's stock in a few taps?
- ...show the full price and delivery day before she commits?
- ...keep her order safe when the network drops?

IMPACT AND EFFORT

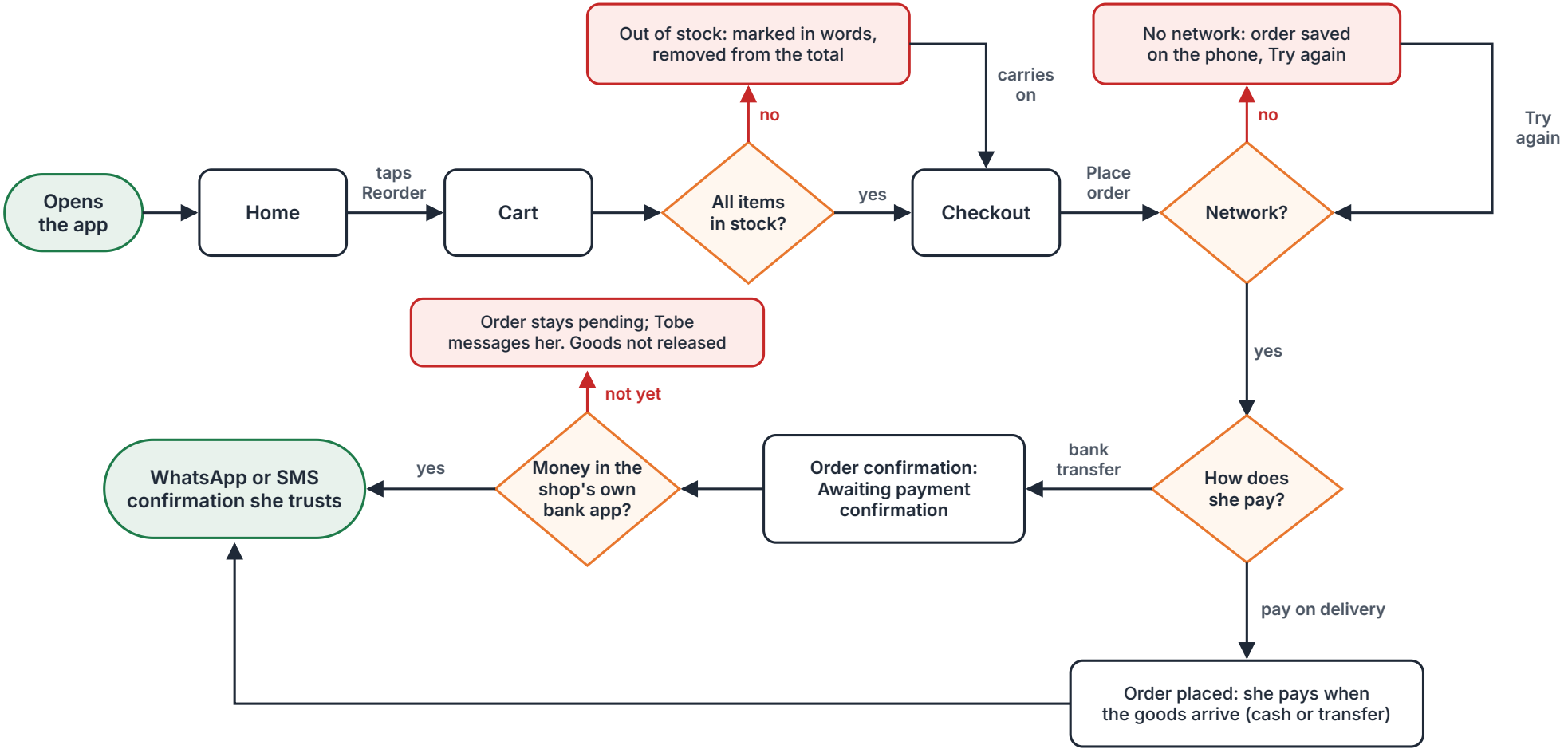
BOX	IDEAS	WHY
Do first high impact, low effort	Reorder last order; price and delivery day up front; small images; clear transfer details	Findings 1, 2, 3, 6
Plan carefully high impact, high effort	Keep a half-typed order safe offline, in version 1	Finding 7; developer work
Drop for now	News feed, loyalty points, big photos	No customer asked; photos cost data

Mrs Okonkwo agreed after we walked her through the wall, finding by finding, in her customers' own words.

DEVELOP

The reorder flow, unhappy paths included

Mama Tope wants to reorder last week's stock. Rectangles are screens, diamonds are decisions, red boxes are the unhappy paths the research told us to design: no network, out of stock, and a transfer the shop has not yet seen in its own bank app (fake transfer alerts exist).



DEVELOP

From crazy 8s to a greybox

SKETCH MANY, THEN CHOOSE

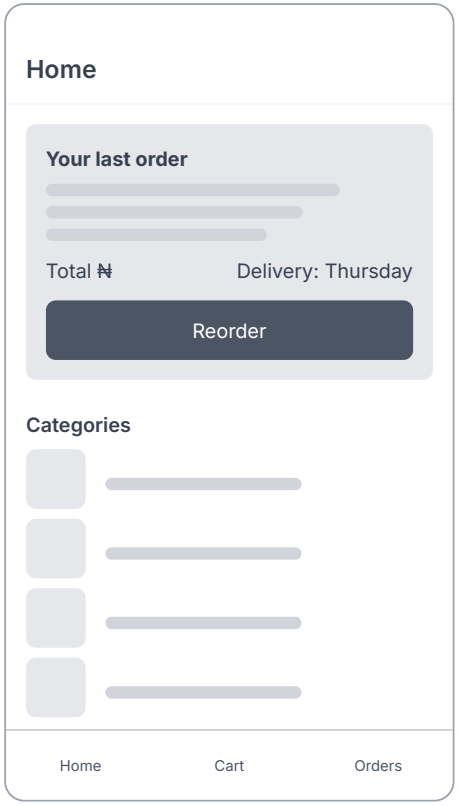
For Home, I folded a sheet into eight panels and sketched eight ideas in eight minutes. My first three looked like shopping apps I already use: banners and photos. Panel six opened on one card, "Your last order", with the total, the next delivery day and one big Reorder button. It answered findings 1, 2 and 3 at once.

THE SITEMAP: SEVEN SCREENS

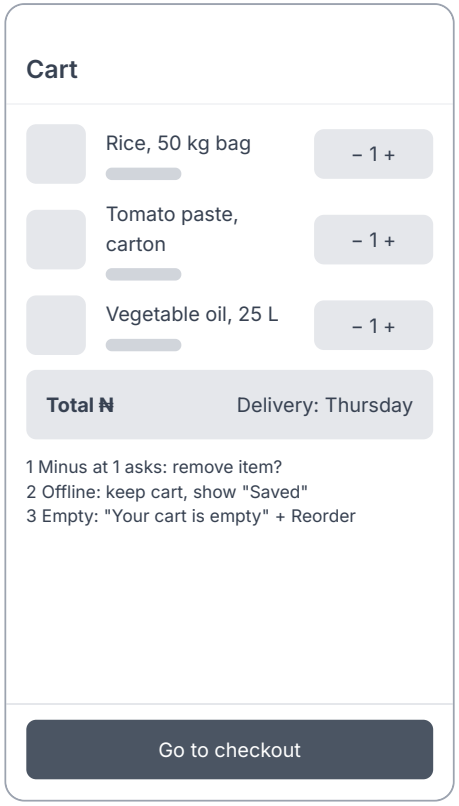
Home · Product list · Product detail · Cart · Checkout · Order confirmation · Order history. A closed card sort with five customers put receipts inside each past order (4 of 5), so there is no separate Documents menu.

GREYBOX RULES I KEPT

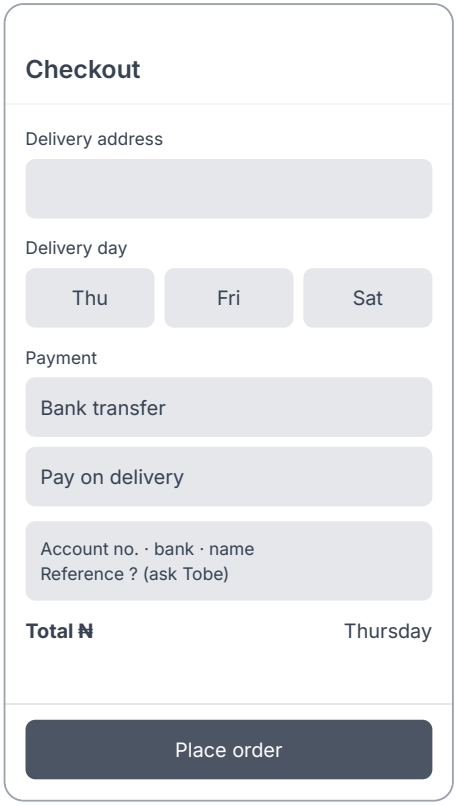
- Greys only, real words, real naira totals.
- 360 dp wide, the main action in the bottom thumb zone, 48 dp tall.
- Annotations for behaviour: offline, empty cart, remove item.
- Question marks for anything unsure, to test, not to guess.



Home
The last-order card from crazy 8s panel six



Cart
Numbered notes for behaviour and states



Checkout
A question for Tobe, marked as one

DELIVER

A small design system, checked for contrast

COLOUR, EACH WITH ONE JOB

#1E7B4A
Ngozi green · buttons, links

#E8772E
Palm orange · highlights only, never errors

#1F2937
Text

#4B5563
Secondary text

#F3F4F6
Surface · cards, inputs

#C62828
Error

#2E7D32
Success, always with a tick and words

CONTRAST, MEASURED

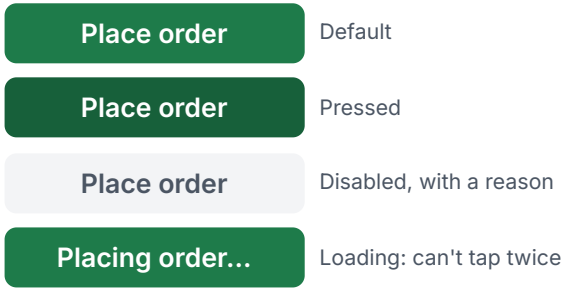
PAIR	RATIO	WCAG AA
Text #1F2937 on white	14.7:1	Pass
White on Ngozi green (buttons)	5.3:1	Pass
Secondary #4B5563 on white	7.6:1	Pass
Secondary #4B5563 on surface	6.9:1	Pass
Error red on white	5.6:1	Pass
White on palm orange	3.0:1	**Fail**: use dark text
Dark text on palm orange	5.0:1	Pass

Checked with a free contrast checker; AA asks 4.5:1 for normal text, 3:1 for large text and meaningful interface parts.

TYPE AND SPACING

Inter (free, SIL Open Font License). Sizes 12, 14, **16 body**, 20, 24, 32; body line height 24. Nothing a customer must read to decide is below 16. Spacing 4, 8, 16, 24, 32; radius 8; 16 side margins.

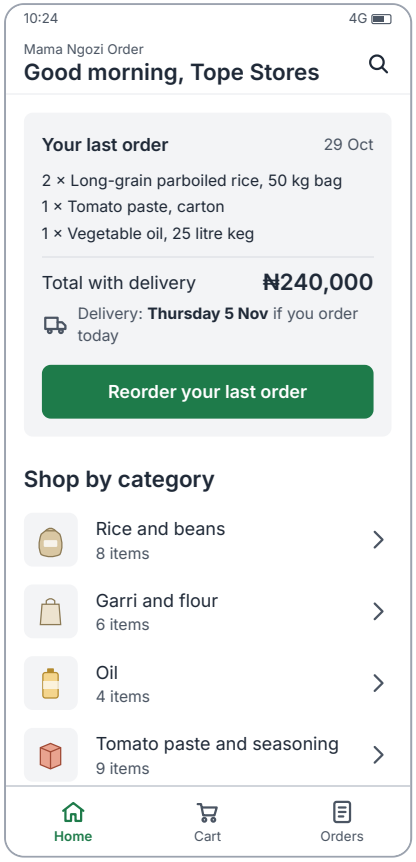
COMPONENTS



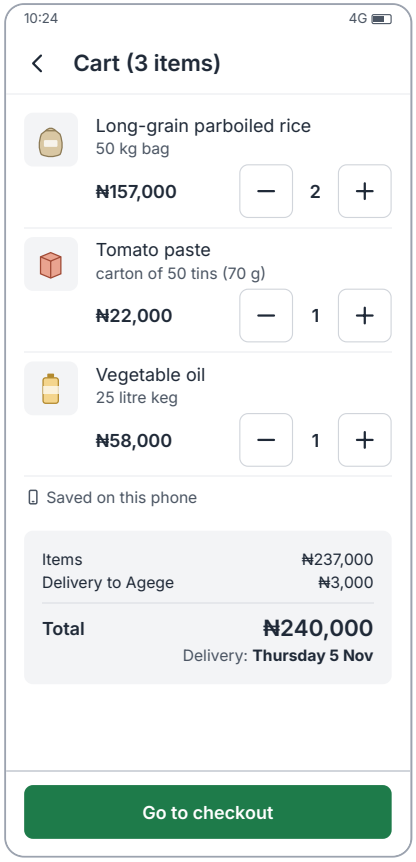
Also: Input (default, focused, error), Product row, Quantity stepper with 48 dp buttons 8 dp apart, Payment option. Every screen uses instances and styles.

DELIVER

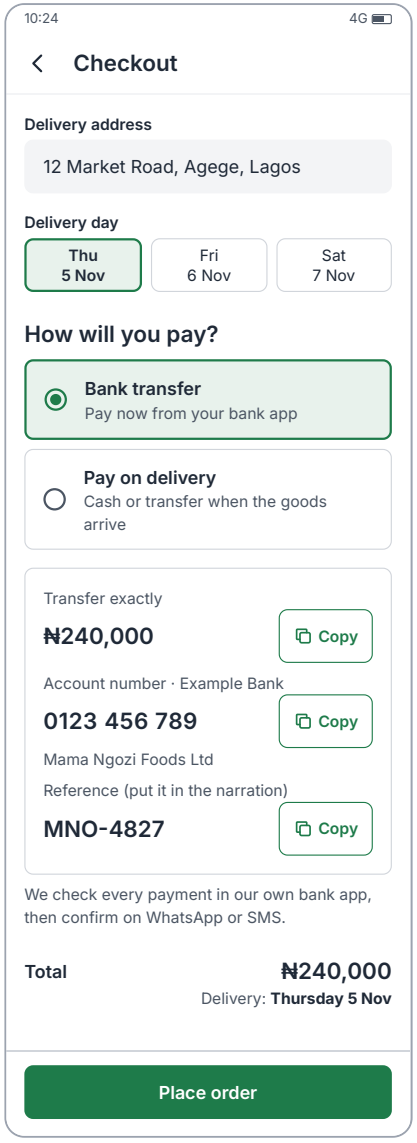
The final screens: the reorder in three taps



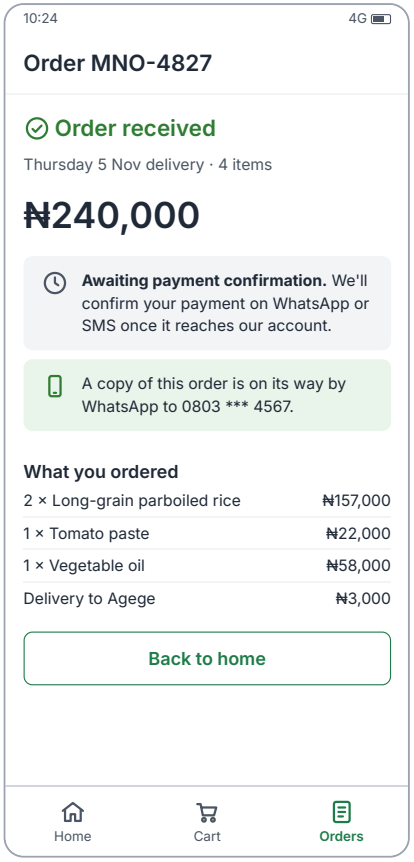
1. Home
Tap Reorder your last order



2. Cart
Total, delivery fee and day before paying. Tap Go to checkout



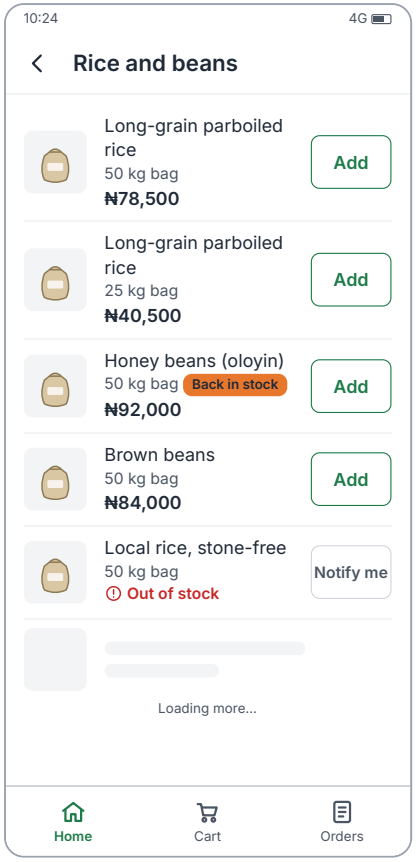
3. Checkout
Two equal payment choices, details to copy. Tap Place order



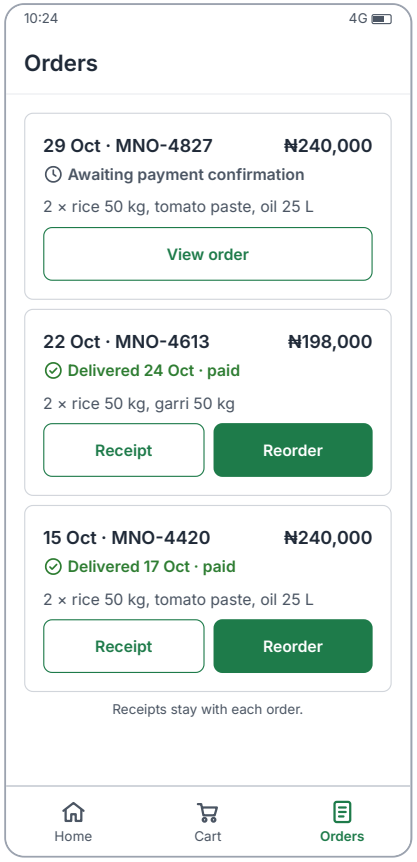
Order confirmation
Honest status: awaiting payment confirmation, copy on WhatsApp

DELIVER

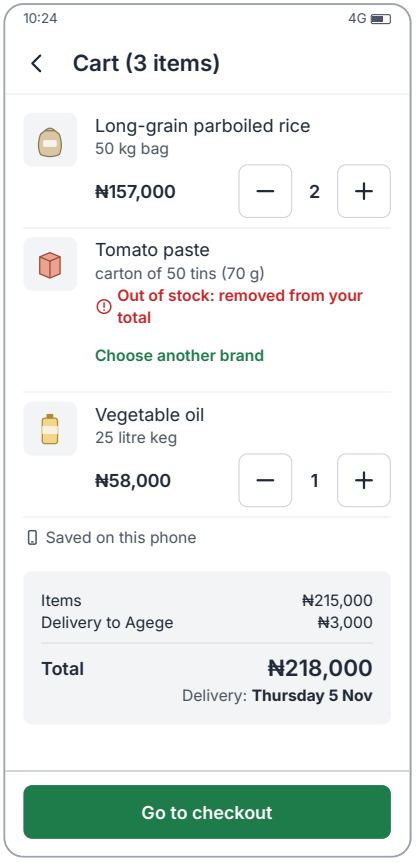
The rest of the flow, and the unhappy paths designed



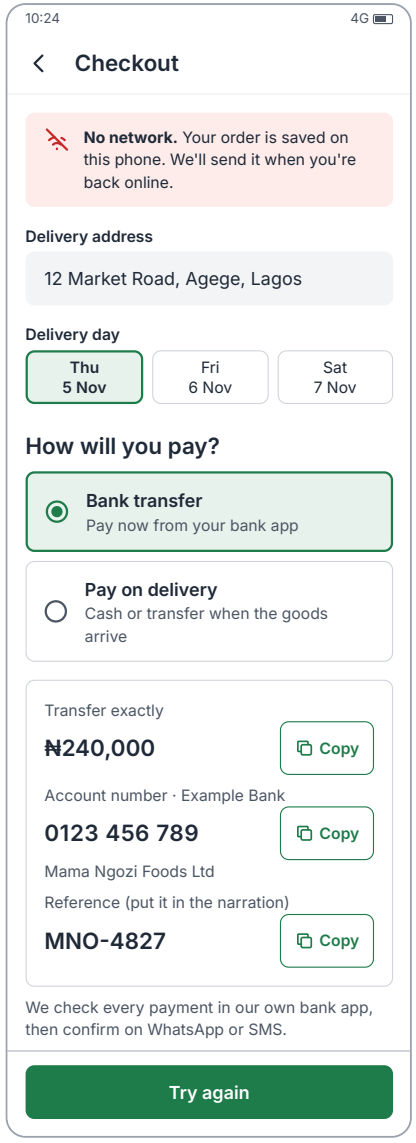
Product list
56 dp drawn thumbnails, prices at 16, out of stock in words, a skeleton row while loading



Order history
Each receipt stays with its order (card sort, 4 of 5)



Cart: out of stock
Marked in words and an icon, removed from the total



Checkout: no network
Everything typed is kept; one Try again button

DELIVER

Accessible and data-light: the decisions and the checks

ACCESSIBILITY CHECK SHEET (CART AND CHECKOUT)

ELEMENT	CHECK	RESULT
Item names and prices, 16	#1F2937 on white	14.7:1, pass
Place order button	White on green, 48 dp tall	5.3:1, pass
Back in stock badge	Dark text on orange	5.0:1, pass (white failed)
Plus and minus	Touch area	48 × 48 dp, 8 dp apart
Out of stock	Not colour alone	Words + icon
Delivery address	Visible label	Label above the field
Remove item icon	Screen reader name	"Remove Tomato paste from cart"
Large-font setting	Layout at the phone's big font	One frame checked: nothing cut off

DESIGNED FOR THE PHONES AND DATA OUR CUSTOMERS HAVE

DECISION	BECAUSE
No banner photo; drawn category icons and 56 dp thumbnails	Finding 2: heavy pages get closed
One larger image, only on Product detail	The one place people check the bag
Skeleton rows while loading, never a blank screen	Slow networks feel broken without them
Cart saved on the phone as items are added	Finding 7: lost typing
Offline message + Try again, not start over	Finding 7
Loading button that can't be tapped twice	Slow taps caused double orders in testing
Account number at 20 with Copy buttons and a reference	Finding 6; test finding 3
Order received is not payment confirmed	The shop checks its own bank app first

Not done yet: local-language copy. It is a decision to test with customers, not to assume (see What next).

TEST

Usability test: five customers, then a retest

PLAN

Goal: can shop and hotel customers reorder last week's items and pay without help?

Who: 5 customers, not the 5 we interviewed, on phones like their own; 3 in person, 2 by video call. Consent before recording the screen.

TASKS (NEVER THE BUTTON'S WORDS)

- Your shop is running low on the same things you bought last week. Order them again for delivery this Thursday.
- Your transfer didn't go through today. Finish the order another way.
- Find the receipt for your order of 22 October.

Moderator rule: no helping. "What would you try if I wasn't here?"

FINDINGS, WORST FIRST

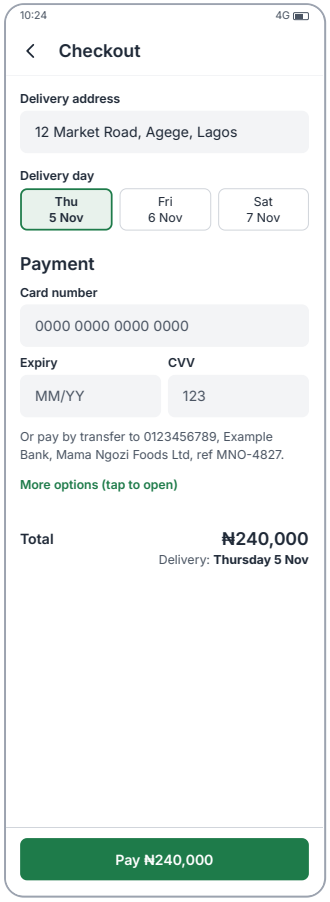
#	SCREEN	WHAT HAPPENED	USERS	SEVERITY	CHANGE
1	Checkout	Pay on delivery hidden under More options; could not find it	4 of 5	Critical	Two large payment choices
2	Cart	Looked for delivery day and total before Place order	3 of 5	Major	Delivery day and total above the button
3	Checkout	Could not read account number; copied it wrongly	2 of 5	Major	Account number at 20 with a Copy button
4	Home	Missed Reorder your last order below a banner	2 of 5	Major	Reorder to the top, banner removed
5	Order confirmation	Unsure the order was sent	1 of 5	Minor	"A copy is on its way by WhatsApp or SMS"
6	Product list	Said the grey divider lines look faint	1 of 5	Cosmetic	Left for now

Retest after the changes, 3 new customers: all 3 found pay on delivery; all 3 checked the total and delivery day before placing the order; all 3 copied the account number with the Copy button. Finding 6 is still open.

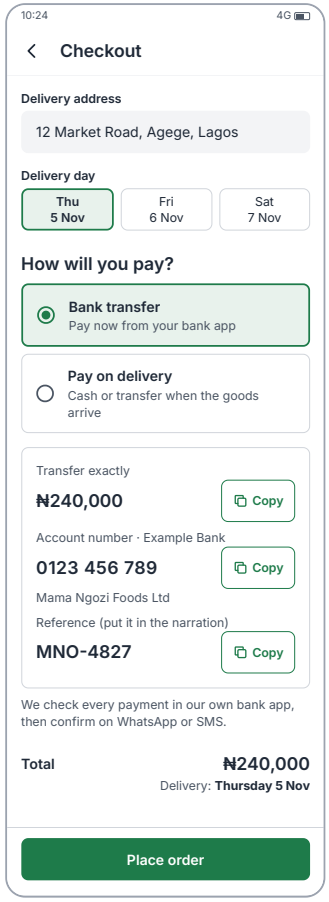
ITERATE

Two changes the test forced

FINDING 1, CRITICAL: PAY ON DELIVERY WAS HIDDEN

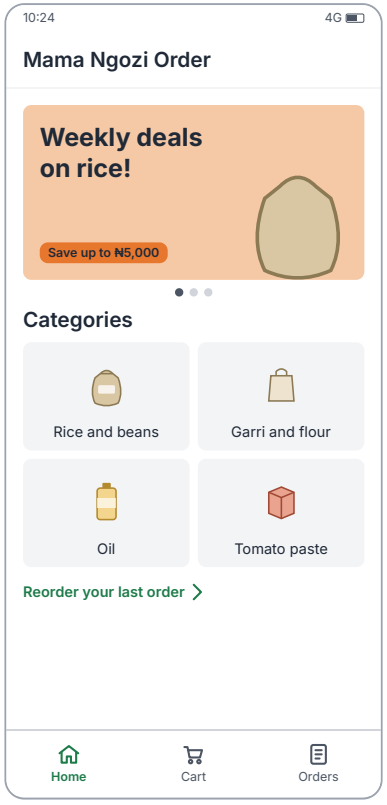


Before
Card form first; pay on delivery under More options; account number small

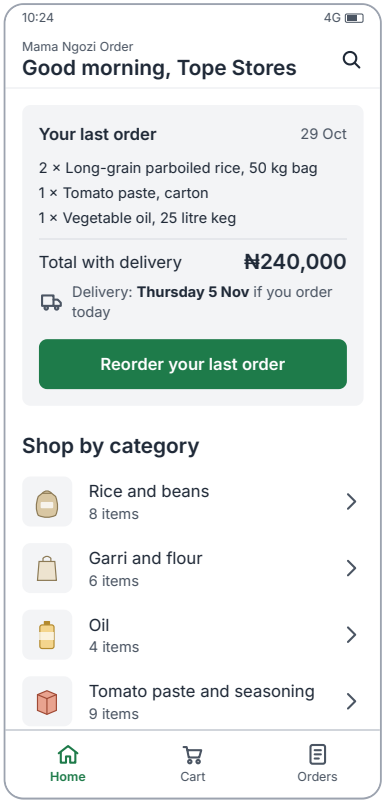


After
Two equal choices; account number at 20 with Copy

FINDING 4, MAJOR: REORDER WAS BELOW A BANNER



Before
Weekly-deals banner first; Reorder a small link



After
The last-order card and Reorder first, no banner

REFLECT

What I learned, what I'd do next, and how I used AI

WHAT I WOULD DO NEXT

- Test local-language copy (Pidgin and Yoruba first) with C1-type customers before building it.
- Fix the faint dividers, then retest the whole flow on the cheapest phone we can borrow.
- Design the order-tracking screens customers asked about after delivery day.
- Walk the developer through the Ready for dev page and review each built screen against the design.

WHAT I GOT WRONG FIRST

In my first test I helped a participant who paused on Cart. That pause was the finding, so I reran the session without helping.

THE AI TEST

I gave an AI design tool our brief, without any participant data, and scored its screens beside mine:

ROW	AI SCREENS	OURS
Grounded in research	No	Yes
Solves the problem statement	No: browse-first shop	Yes
Unhappy paths	No: happy path only	Yes
Nigerian conditions	No: banner photo, card form	Yes
Accessible	No: 12 px grey prices	Yes: measured
Tested with real people	No	Yes: 5 + 3
Ready for handoff	No: one-off screens	Yes: components

The AI's spacing was more even than my first Cart. I fixed mine before showing it. The AI screens are kept in my working file, labelled, and are not shown here as design work.

AI USE

I used an AI assistant to check my interview guide for leading questions and to draft error-message wording, which I rewrote and tested with customers. I ran the AI test above. The research, synthesis, flows, screens, prototype and usability test are my own. No participant's name, recording or notes went into any AI tool.

THE FILES

This PDF; the screens exported from Figma as PNG at 1x, 360 px wide (folder 02_screens); the research and test tables (folder 03_research-and-testing). In a real submission, the Figma prototype link goes here, shared as "Anyone with the link can view", for the human reviewer.