

Bianca's Bakery App Design

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Project overview



The product:

Bianca's is a local bakery located in the suburbs of a metropolitan area. Bianca's Bakery offers a variety of quality baked goods. They focus on satisfying their customers' needs, including specific dietary restrictions and accessibility concerns. Bianca's Bakery targets busy professionals with unpredictable work schedules.



Project duration:

July 2022 to January 2023



Project overview



The problem:

Busy, visually challenged, professionals with an unpredictable work schedule need an easy-to-use bakery app with a screen reader to assist them in ordering fresh baked goods because having a visual impairment makes finding and ordering the right products difficult.



The goal:

Design an app for Bianca's Bakery that allows users to easily order and pick up fresh baked goods. This will especially benefit users who are busy, visually-challenged, professionals by providing screen-reader technology that will make browsing and ordering menu items quick and easy. We will measure effectiveness by tracking orders that have used the text-to-speech feature.

Project overview



My role:

UX designer designing an app for Bianca's Bakery from conception to delivery.



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 conducted interviews and created empathy maps to understand the users I'm designing for and their needs. A primary user group identified through research was busy professionals who want to invite colleagues and friends over for coffee and dessert, but don't have the time to bake.

This user group confirmed initial assumptions about Bianca's Bakery customers, but research also revealed that time was not the only factor limiting users from baking at home. Other user problems included obligations, interests, or challenges that make it difficult to order fresh bakery goods, including visual impairments and dietary restrictions .

User research: pain points

1

Time

Working professionals are too busy to spend time ordering fresh bakery items.

2

IA

Text-heavy menus and small images often make it difficult to find and order the right products.

3

Accessibility

Platforms for ordering bakery items are not equipped with screen reader technologies.

4

Convenience

Having to re-enter credit card details & other information each time an order is placed is tedious and time consuming.

Persona: Shawna

Problem statement:

Shawna is a busy visually challenged, professional with an unpredictable work schedule who needs an easy-to-use bakery app with a screen reader to help her order fresh baked goods because of her visual impairment, which makes finding and ordering the right products difficult.



Shawna

Age: 38

Education: Doctor of Medicine (MD)

Hometown: Harrisburg, PA

Family: Single, lives alone

Occupation: Doctor

"I am a busy career professional who wants to find time for a social life. I want to invite people over for delicious desserts and coffee"

Goals

- To grow in my career, but still have a social life
- Forge positive relationships at work
- To simplify basic chores, like shopping and cooking

Frustrations

- "Many apps and websites are inconvenient and are not optimized to support my visual disability."
- "I want to have guests over, but I don't have time to cook or bake."

Shawna is a doctor with a strong work ethic and an unpredictable schedule. She often takes appointments at the last minute and stays late. She stays active by swimming for a local, semi-professional team. Shawna would like to spend as much of her non-work time as possible on her hobbies and personal life. Specifically, she would like to invite her co-workers and swim team friends over to her apartment for meals, or even just coffee and dessert. Since she doesn't have a lot of time to cook or bake, she would like to order online with quick pick-up options near her. Unfortunately, due to her visual limitations, most of the apps she has used do not provide screen reader technology. This makes the ordering process difficult and frustrating. Shawn would like to order fresh, baked goods to be picked up on the go.

User journey map

Mapping Shawna's user journey revealed how helpful it would be for users to have access to a dedicated app for Bianca's Bakery.

Persona: Shawna

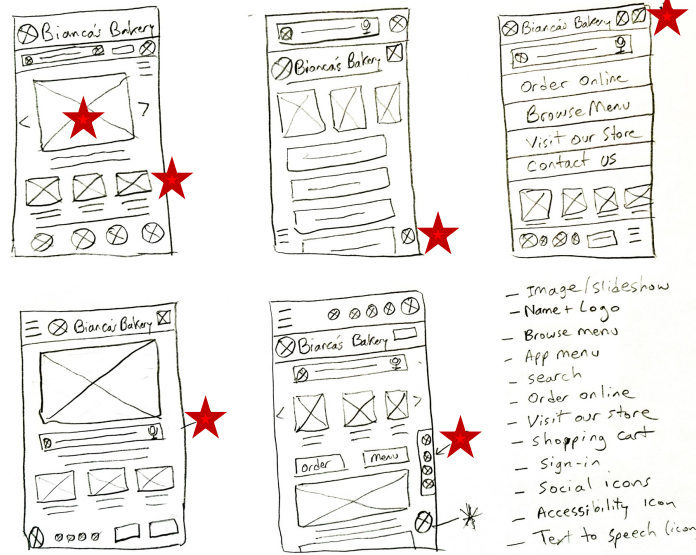
Goal: A quick and easy way to order fresh-baked goods for pickup.

ACTION	Select bakery	Browse options	Add items to cart	Checkout	Pick up order
TASK LIST	A. Search reviews for good bakeries near me B. Explore websites & ordering options C. Select a bakery	A. Browse through categories B. Search for items within categories	A. Selecting several items under different categories B. Checking total cost before submitting order.	A. Review cart items & prices B. Confirm order & submit payment C. Figure out when order will be ready & how to get to store	A. Drive to bakery B. Pick up and inspect order C. Drive home D. Sample items E. Refrigerate desserts for later
FEELING ADJECTIVE	Overwhelmed by number of bakeries and options Excited about positive reviews	Frustrated with long text descriptions with limited images, ingredients lists, and nutrition facts	Frustrated with trying to find multiple items within categories of interest and adding them to the shopping cart.	Impatient with having to enter card number & other info Annoyed at time it takes to drive to the bakery and back	Pleased with the taste and freshness
IMPROVEMENT OPPORTUNITIES	Create a mobile app for Bianca's Bakery with an easy ordering process	Optimize with screen reader technology Include larger images, ingredients lists, & nutrition facts Provide search filters	Provide quick "add" buttons for recommended product suggestions that match the customer's interests Provide cost breakdowns near the submit order button	Provide option to store payment info for future orders Provide a delivery option.	Provide gift options Offer customization options for special occasions & events Include loyalty/referral program

Paper wireframes

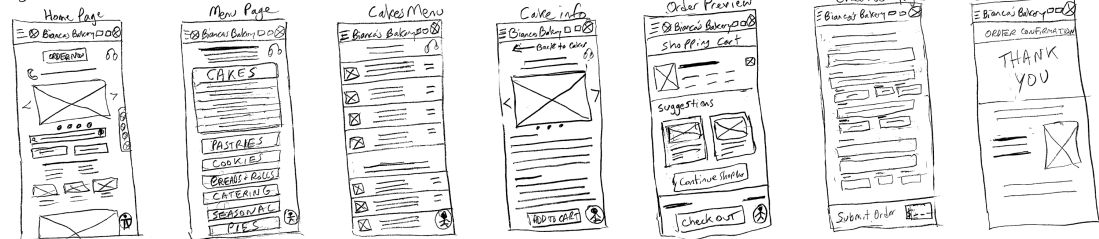
Taking the time to draft iterations of each screen of the app on paper ensured that the elements that made it to digital wireframes would be well-suited to address user pain points. For the home screen, I provided an accessibility tool and prioritized a quick and easy process to help users search, browse, and order cakes.

Bakery App Home Page



- Image/slideshow
- Name + Logo
- Browse menu
- App menu
- Search
- Order online
- Visit our store
- Shopping cart
- Sign-in
- Social icons
- Accessibility icon
- Text to Speech (icon)

UX Design - UserFlow (Bianca's Bakery)



Digital wireframes

As the initial design phase continued, I made sure to base screen designs on feedback and findings from the user research.

This button at the top of the home screen makes it fast and easy for users to order.



This accessibility button makes it easy for users to activate features like the text-to-speech screen reader.

Digital wireframes

An audio button to activate the screen reader was a key user need to address in the designs in addition to equipping the app to work with text-to-speech assistive technologies.

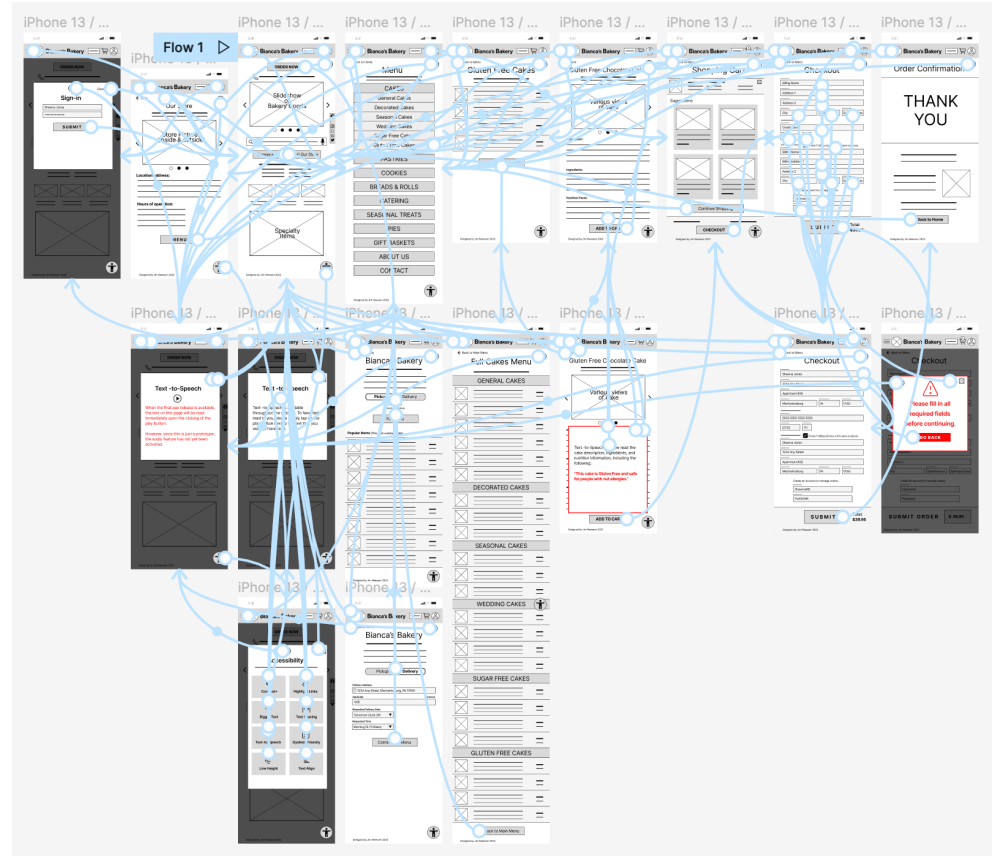


audio button to have the text on the page read aloud.

Low-fidelity prototype

Using the completed set of digital wireframes, I created a low-fidelity prototype. The primary user flow I connected was finding and ordering the right cake to meet specific dietary restriction, so the prototype could be used in a usability study.

View Bianca's Bakery App
[low-fidelity prototype](#)



Usability study: findings

I conducted 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 want a more familiar icon to activate the text reader
- 2 Users need a more intuitive process to select which text they want read
- 3 Users want a single “submit” button with no rectangle around the price.

Round 2 findings

- 1 There should be a delivery option on the checkout page
- 2 Full amount paid (with tax/shipping) should be on the confirmation page
- 3 The audio reader play button should be clearer on the home page

Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

Mockups

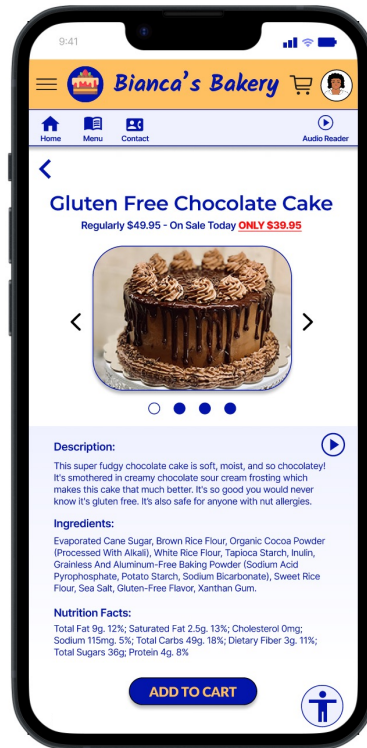
In early designs I used the headphones icon to play the screen-reader audio, but after the usability studies, I changed the icon to a **play button** with the **“audio reader”** label.

I also revised the design by allowing users to **play the audio by clicking on the text**; and adding a play button alongside.

Before usability study



After usability studies

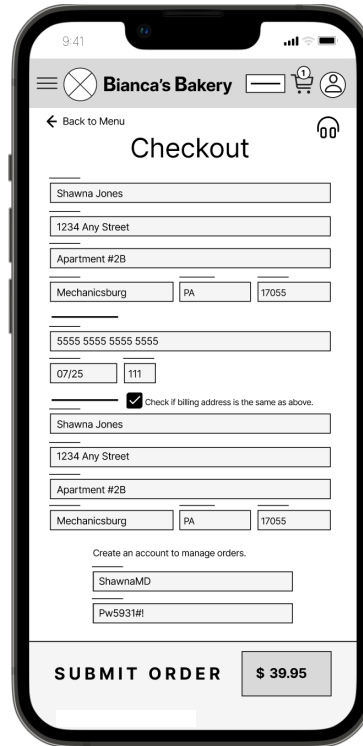


Mockups

The first usability study revealed frustrations with the submission process and the order total. Study participants were confused about what to click on and how much they were being charged (with tax).

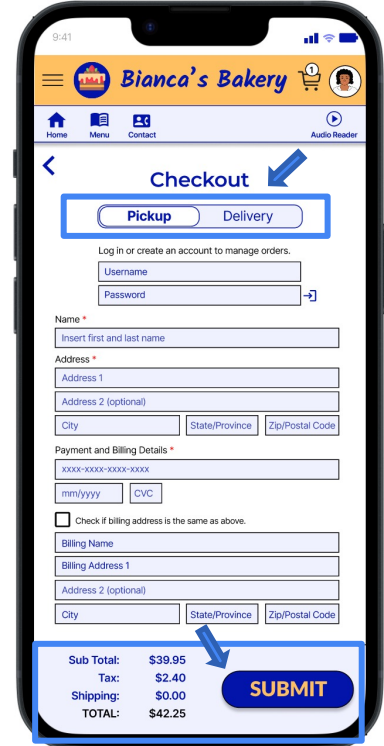
I fixed this by creating **one simple submit button** that is prominently displayed. I also added a **total cost breakdown** and a **pickup or delivery option** to this screen.

Before usability study



This mockup shows a checkout screen for 'Bianca's Bakery'. It features a 'Back to Menu' link, a 'Checkout' title, and a form with fields for name, address, city, state, zip, and phone number. There is a checkbox for 'Check if billing address is the same as above.' and a 'Create an account to manage orders.' section with fields for username and password. At the bottom, there is a 'SUBMIT ORDER' button and a total cost of '\$ 39.95'.

After usability studies



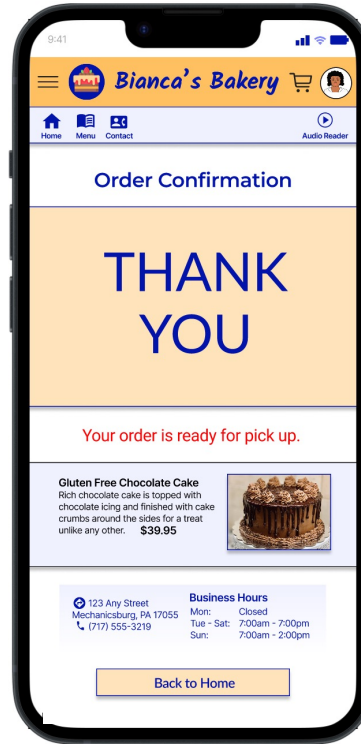
This mockup shows the updated checkout screen. It includes a 'Home', 'Menu', and 'Contact' navigation bar. The 'Checkout' title is prominent, with 'Pickup' and 'Delivery' options. There is a 'Log in or create an account to manage orders.' section with fields for username and password. The 'Name' field is labeled 'Insert first and last name'. The 'Address' section includes fields for Address 1, Address 2 (optional), City, State/Province, and Zip/Postal Code. The 'Payment and Billing Details' section includes a card number field, a CVC field, and a checkbox for 'Check if billing address is the same as above.' At the bottom, there is a 'SUBMIT' button and a total cost breakdown: Sub Total: \$39.95, Tax: \$2.40, Shipping: \$0.00, TOTAL: \$42.25.

Mockups

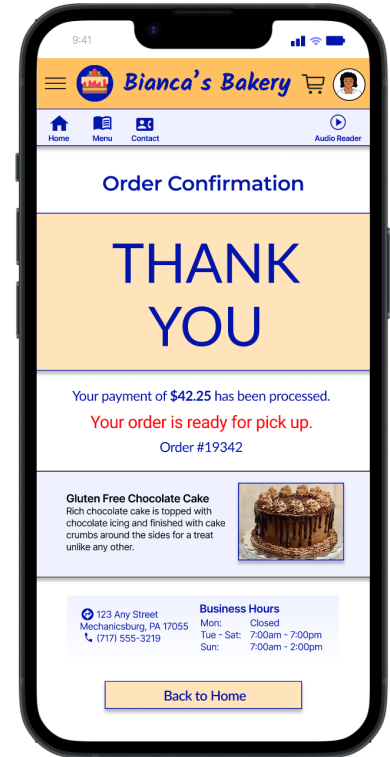
The second usability study revealed the need to add the **transaction total** and an **order confirmation number** to the thank you page.

To provide customers with more **detailed order verification information**, I added the total amount being processed (with tax), along with an order number on the confirmation page.

Before usability study 2



After usability study 2



Mockups

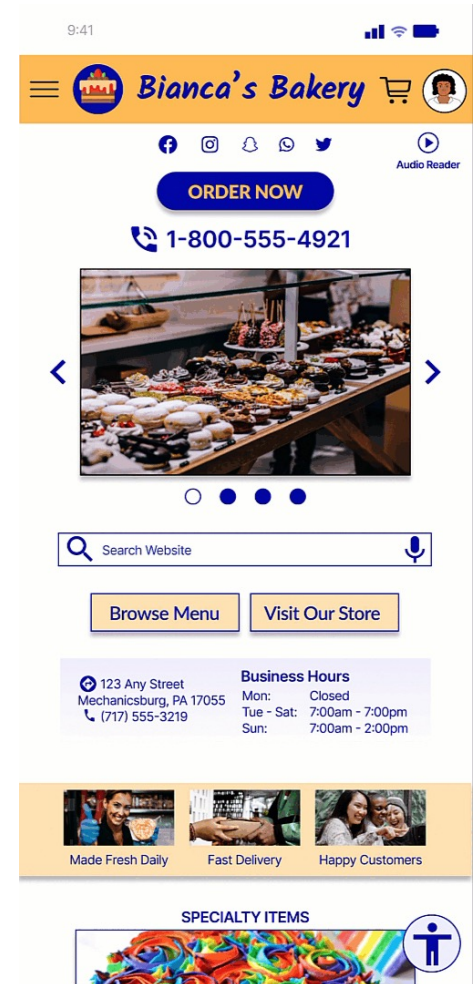
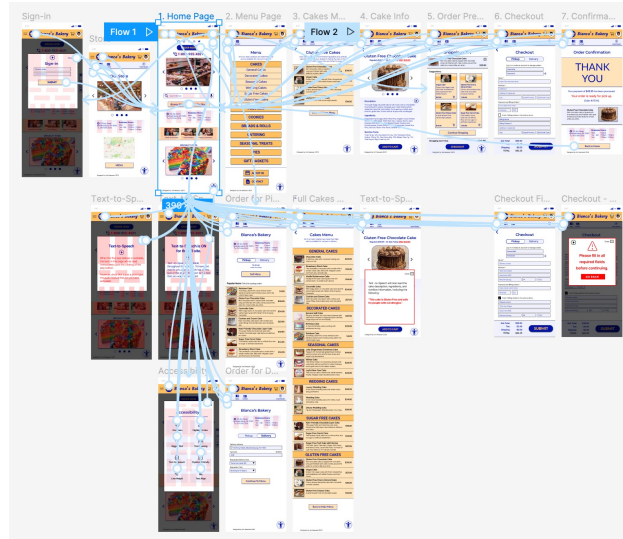


High-fidelity prototype

The final high-fidelity prototype presented easier audio-reader activation and cleaner shopping cart/checkout screens and flow.

It also met user needs for a transaction total with order number, as well as other customization.

View Bianca's Bakery App
[high-fidelity prototype](#)



Accessibility considerations

1

Provided access to users who are vision impaired through adding text-to-speech play buttons and alt text to images for screen readers.

2

Used consistent typography and iconography to help make navigation easier.

3

Used contrasting colors for text and detailed imagery for cake designs to help all users better understand product variations.

Going forward

- Takeaways
- Next steps

Takeaways



Impact:

The app makes users feel like Bianca's Bakery really thinks about how to meet their needs.

One quote from peer feedback:

"The app made browsing different cakes easy and fun. I like how the cakes were organized into different categories. I would definitely use this app to order delicious cakes that meet various dietary restrictions."



What I learned:

While designing the Bianca's Bakery app, I learned that the first ideas for the app are only the beginning of the process. Usability studies and peer feedback influenced each iteration of the app's designs.

Next steps

1

Update the research study plan to include a new set of research questions, KPIs, and methodologies focused on participants who use screen-readers and other assistive technology.

2

Broaden our sample of usability research study participants to include users who have visual impairments. This is essential to conducting an accurate assessment going forward.

3

Synthesize the results from the usability study to identify new patterns and themes.

Let's connect!



Thank you for your time reviewing my work on the Bianca's Bakery app! If you'd like to see more or get in touch, my contact information is provided below.

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Thank you!