

CASEtomize Customizable Phone Cases

Jim Neessen

Project overview



The product:

"CASEtomize" is website for ordering and customizing phone cases with easy-to-use, online customization tools, so users can personalize a phone case with their own image(s), text, and art. The typical users are between the ages of 18-40, and are mostly college students or busy professional moms. CASEtomize's goal is to provide a stress-free shopping experience, so users can find and customize the right phone case to match their personality.



Project duration:

January 2023 to April 2023



Project overview



The problem:

Most online customization websites have difficult browsing options, inefficient tools for sorting and filtering reviews, and confusing customization and checkout processes.



The goal:

Design a website for “CASEtomize” that offers easy online browsing tools and intuitive customization options to give users a stress-free shopping experience, so they can find and customize the right phone case for them.

Project overview



My role:

UX/UI Designer and UX Researcher leading the “CASEtomize” website design from conception to delivery.



Responsibilities:

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

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 young moms, who are also busy professionals, who want to find and customize the right phone case to match their personality.

They want a simple way to access customer reviews, detailed descriptions, and a variety of product image views. This user group had experienced complex, overwhelming, and time-consuming shopping experiences in the past. Other user problems included not being able to filter through different types of reviews and trying to navigate through an inefficient checkout process. These users are looking for a stress-free, online shopping experience that is simple, intuitive, and offers a vast array of basic customization tools and options.

User research: pain points

1

Time

Many online customization websites are too complex and time-consuming.

2

IA

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

3

Navigation

Many shopping websites make it difficult to navigate through a series of steps. Some even lack the capability to go back and access previous steps.

4

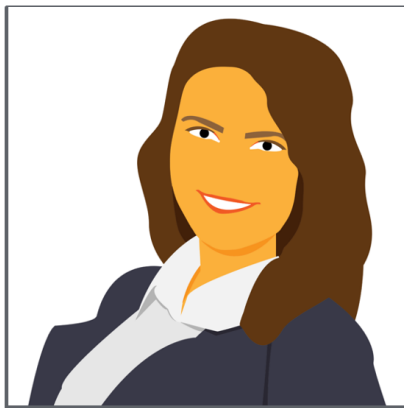
Experience

Limited product image views, minimal descriptions and the lack of tools to filter reviews makes it difficult to find the right items.

Persona: Maria

Problem statement:

Maria is a busy, professional employee and mom who needs easy online shopping tools and intuitive customization options because they want a stress-free shopping experience to find and customize the right phone case.



Maria

Age: 37

Education: BS in Applied Mathematics

Hometown: Mechanicsburg, PA

Family: Married with 2 kids

Occupation: IT Tech Support

"It important to see good close-up pictures of the cases from different angles"

Goals

- To have a phone case that matches my personality
- A shopping experience that is simple, efficient, and stress-free
- To have different options for customizing my phone case

Frustrations

- "Shopping online is complex and time-consuming."
- "There are no simple links to access reviews, descriptions, or a variety of picture views."
- "There are no filters to access different types of reviews."

Maria is a 37-year-old IT Tech Support agent for a medical company. She sometimes uses her phone to watch movies, Facetime friends, and scan social media websites, especially Facebook Watch and Instagram Reels.

Maria is frustrated with the online shopping experience because most websites are complex and time-consuming. There doesn't seem to be a lot of helpful links to useful information, like review, product features, and images showing different angles of the products. With regard to phone cases, she wishes there were more customization options.

User journey map

Mapping Maria's user journey revealed how helpful it would be for users to have access to a website with intuitive customization options to personalize a phone case using their own image(s) and text.

Persona: Maria

Goal: A quick and efficient way to order the right phone case with specific customization options.

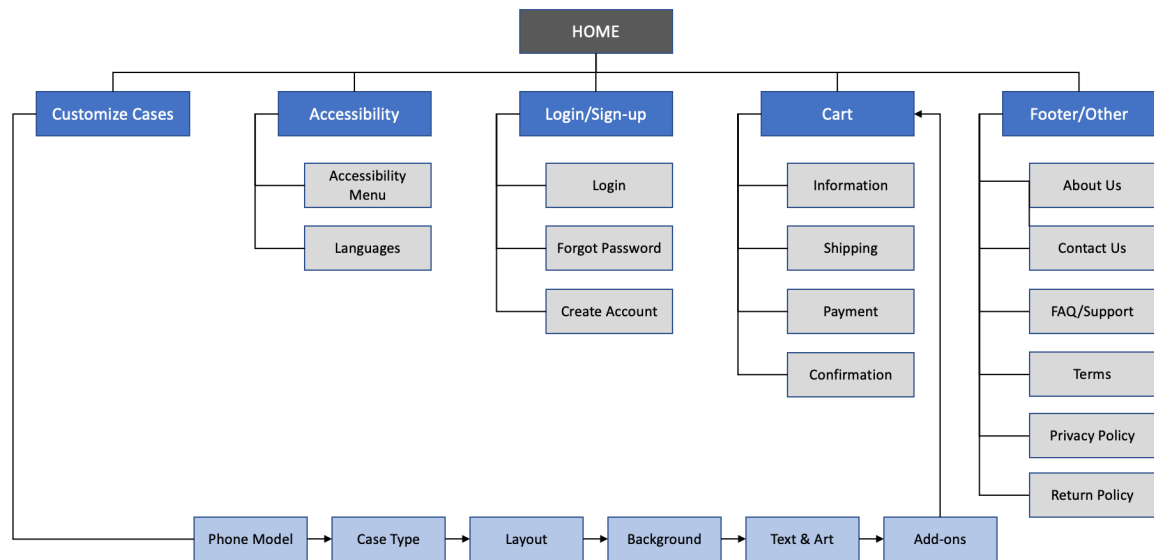
ACTION	Choose phone case	Check reviews	Customize	Add to cart	Checkout
TASK LIST	A. Browse the website to find a phone case for a specific model Phone. B. Apply filter options if available	A. Look at reviews from verified purchasers B. Search for reviews by the number of stars	A. Selecting colors, designs, and other features	A. Review cart items & price breakdowns B. Confirm order & submit payment C. Figure out when order will be delivered	A. Review cart B. Add name, address, and billing information C. Add shipping details D. Checkout
FEELING ADJECTIVE	Happy to be shopping Overwhelmed by the many different types of cases Annoyed at just seeing one small image	Frustrated by lack of filters to list reviews by number of stars and most recent.	Unsure of the color and design choices Doubtful about picking the right features and add-ons Uncertain about what the phone will look like with customizations	Overwhelmed by the total price without having a price breakdown	Second guessing choices Frustrated with checkout times Eager to attach the case to their phone
IMPROVEMENT OPPORTUNITIES	Add clear, easy-to-use filters Improve information architectures Provide multiple image views	Mark reviews from verified purchasers Provide search filters to list reviews by number of stars and most recent purchases.	Provide a clear menu for choosing customizations and add-ons Show phone with all chosen customizations	Provide price breakdowns for all features and add-ons with the ability to remove items	Add a returning customer quick checkout option Offer return policy

Sitemap

Difficulty with website navigation was a primary pain point for users, so I used that knowledge to create a sitemap.

My goal here was to create strategic information architecture decisions that includes a sequential website structure to lead users through a step-by-step process. Users can navigate between the next and previous pages, but they can't skip over pages.

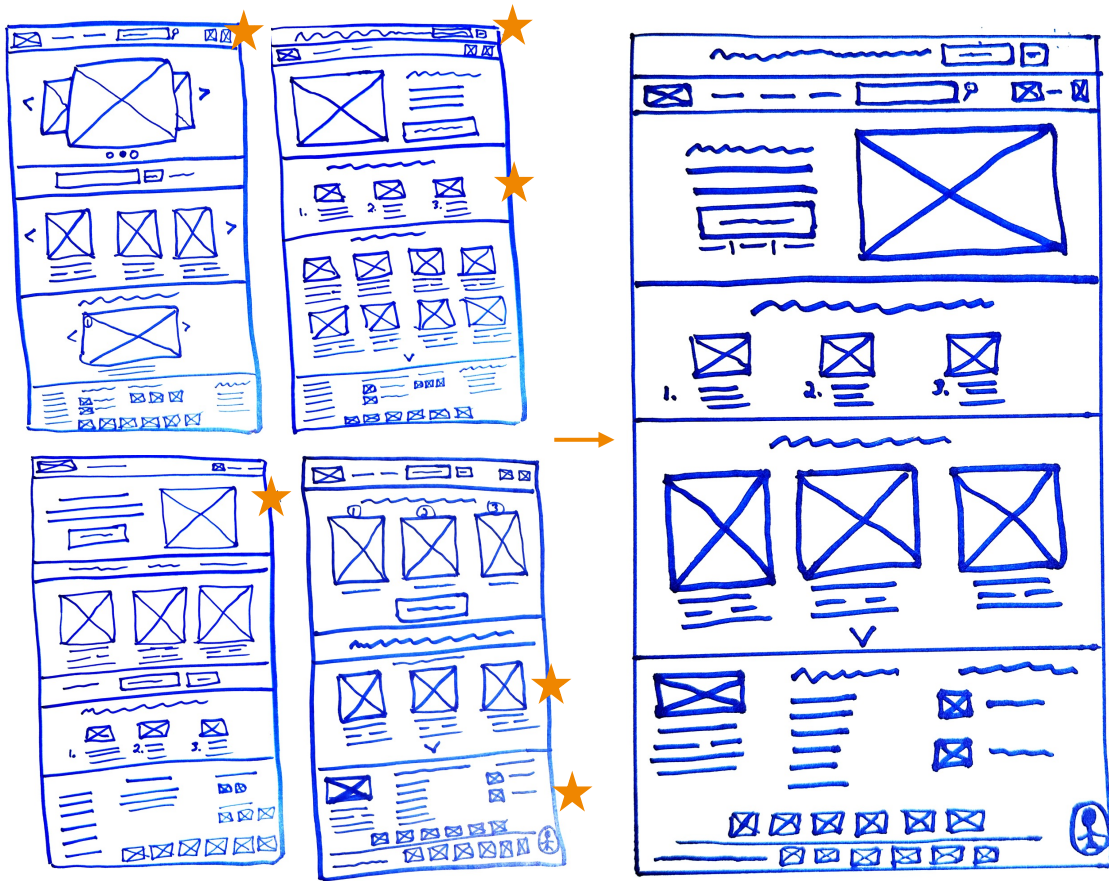
The structure I chose was designed to make the phone case customization and checkout process simple and easy.



Paper wireframes

Next, I sketched out paper wireframes for each screen in my app, keeping the user pain points about navigation, browsing, customization, and checkout flow in mind.

The home screen paper wireframe variations to the right focus on optimizing the browsing experience for users.

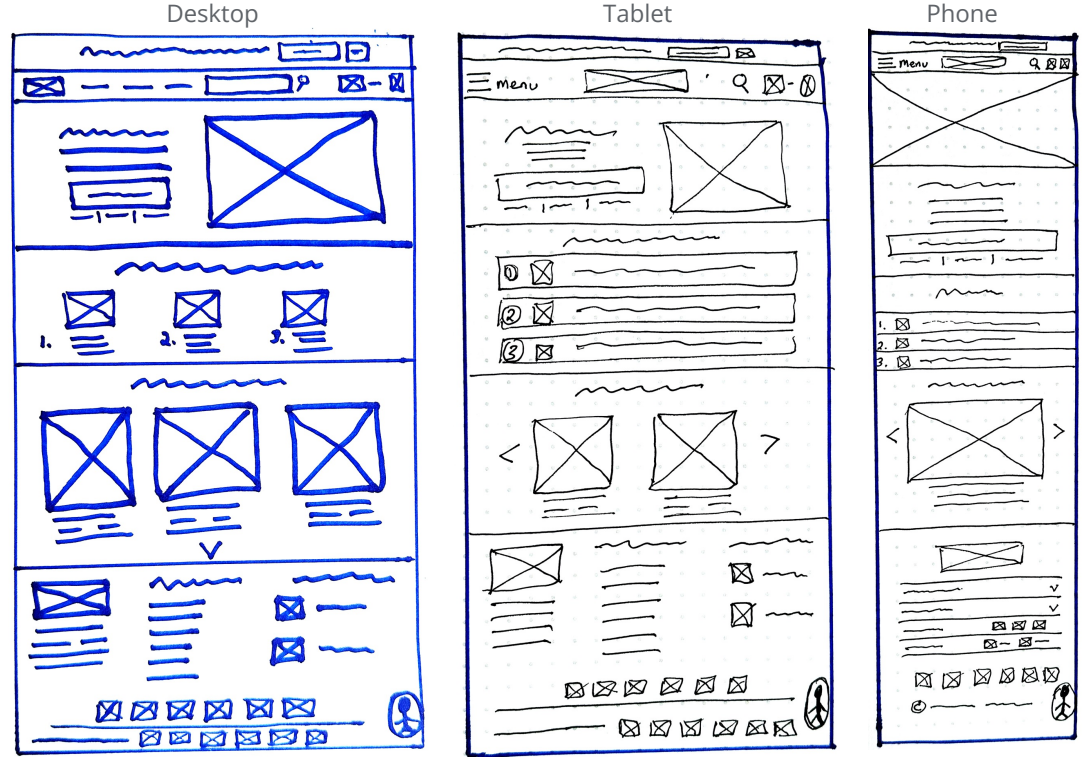


Stars were used to mark the elements of each sketch that would be used in the initial digital wireframes.

Refined paper wireframe

Paper wireframe screen size variations

Because CASEtomize's customers access the site on a variety of different devices, I started to work on designs for additional screen sizes to make sure the site would be fully responsive.

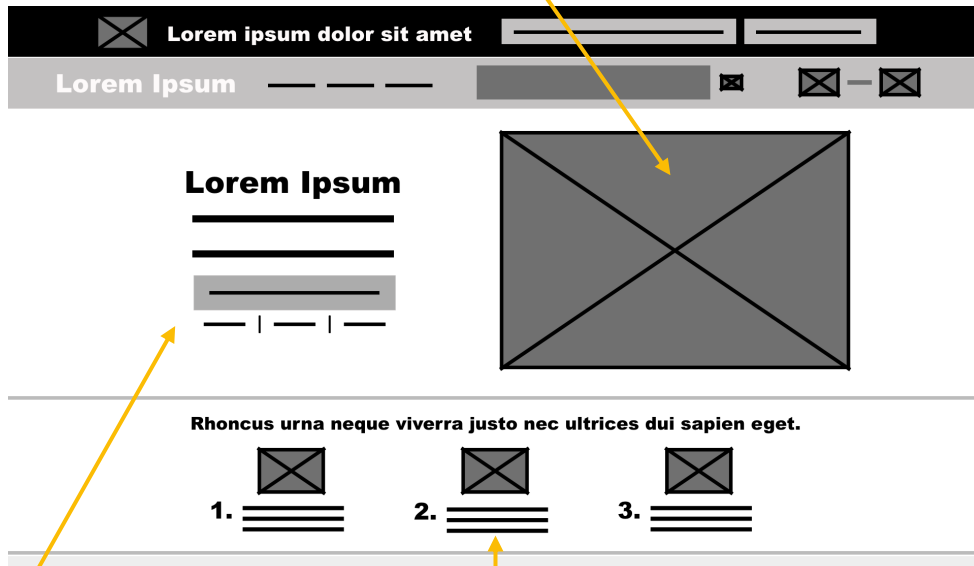


Digital wireframes

Moving from paper to digital wireframes made it easy to understand how the redesign could help address user pain points and improve the user experience.

Prioritizing useful button locations and visual element placement on the home page was a key part of my strategy.

Hero image illustrates an example of a customized phone case to help users clearly see what the website is offering.



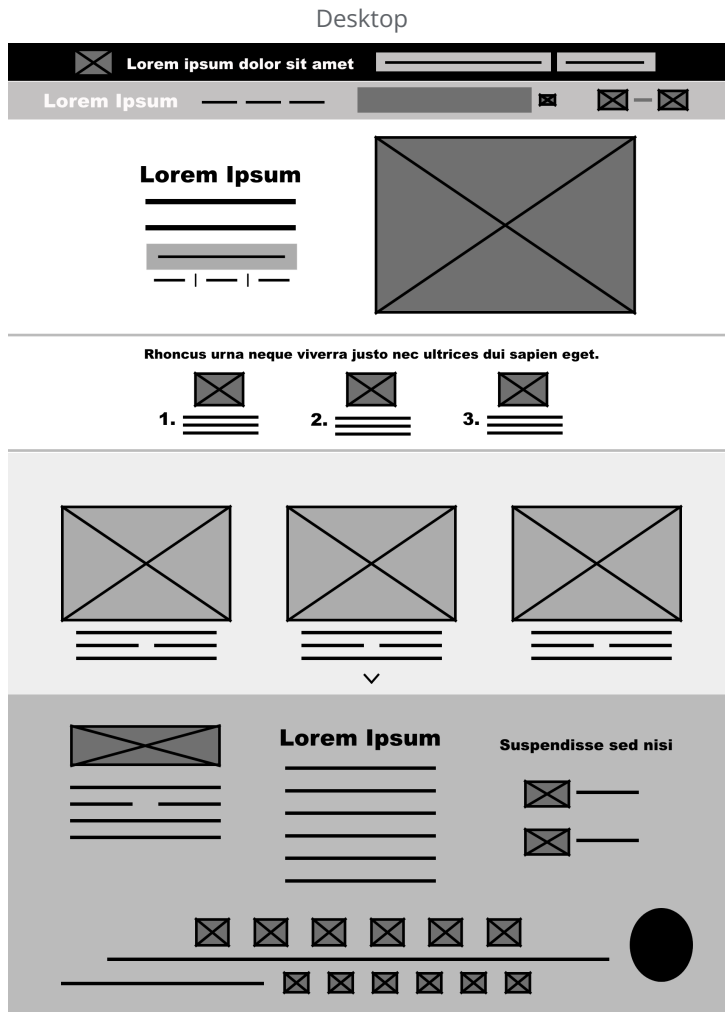
Quick access to the "Customize Your Case" call-to-action button is prominently placed on the home page.

Quick breakdown shows how simple it is to get a customized phone case in 3 easy steps.

Digital wireframe screen size variations

I created different screen size variations to accommodate various screen sizes.

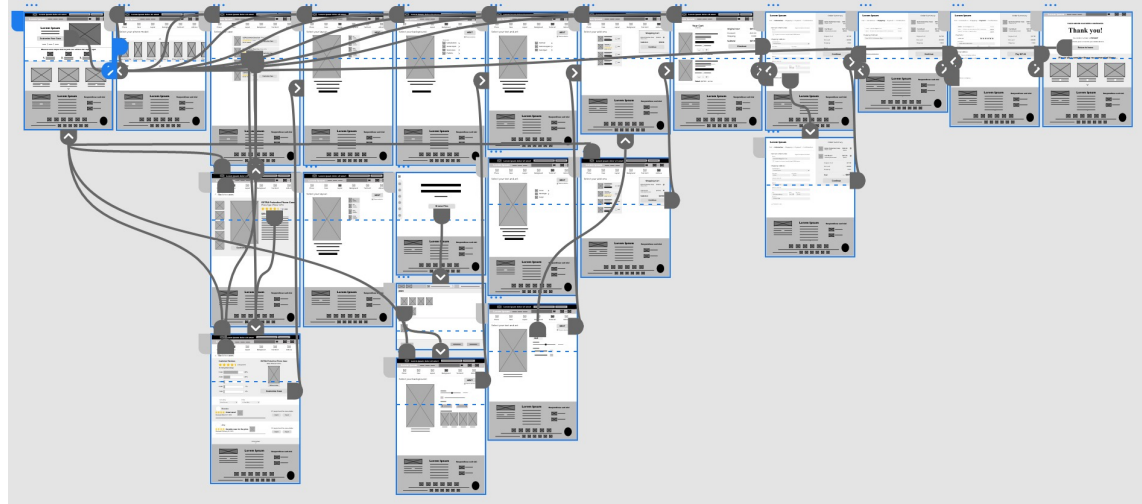
The examples to the right show the home page viewed from a desktop and mobile phone device. I wanted to maximize space with the mobile version by using an image carousel and placing the headline text and call-to-action button below the main hero image.



Low-fidelity prototype

To create a low-fidelity prototype, I connected all of the screens involved in the primary user flow of checking phone case reviews, customizing a case, ordering an add-on, and checking out.

At this point, I had received feedback on my designs about things like placement of buttons and adding product images to the shopping cart. I made sure to listen to their feedback, and I implemented several suggestions in places that addressed user pain points.



CASEtomize Low-Fidelity Prototype

Usability study: parameters



Study type:

Moderated usability study



Location:

Pennsylvania, United States



Participants:

5 participants



Length:

15-20 minutes

Usability study: findings

These were the main findings uncovered by the usability study:

1

Customization

Users want to see different views of selected phone cases and a consistent button label to continue through the customization steps.

2

Reviews

Users would like to see customer pictures/videos on the reviews and a images of the ordered items in the shopping cart.

3

IA

Users don't want to have to scroll up and down to see product information and complete the checkout process.

Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

Mockups

Based on the insights from the usability study, I made changes to improve the site's checkout flow. One of the changes I made was adding images of the ordered items in the shopping cart. This allowed users to visually verify the products being purchased. I also placed the payment button in the "Order Summary" box, so users didn't have to scroll down to finalize their order.

Before usability study

Lorem Ipsum
Cart > Information > Shipping > **Payment** > Confirmation

Contact: MariaM1938@gmail.com [Change](#)

Ship to: 123 Any St., Mechanicsburg, PA 17055, United States [Change](#)

Method: Free USPS - 1-4 Business Days [Change](#)

Payment

Credit Card:

Card number *
XXXX-XXXX-XXXX-XXXX

Month * Year * CVC *
January 2023 xxx

Billing Address

☒ Same as shipping address

☐ Use a different billing address

Pay \$67.90

Order Summary

Extra Protective Case iPhone 14 Pro	\$39.95 \$49.95	<input checked="" type="checkbox"/>
Car Mount Universal phone mount	\$27.95 \$39.95	<input checked="" type="checkbox"/>
Original Cost	\$87.90	
Discount	- \$20.00	
Shipping	FREE	
Total	USD \$67.90	









After usability study

CASEtomize
Cart > Information > Shipping > **Payment** > Confirmation

Contact: MariaM1938@gmail.com [Change](#)

[Method](#) Free USPS - 1-4 Business Days [Change](#)

Payment

Credit Card:      

Card number *
XXXX-XXXX-XXXX-XXXX



Month * Year * CVC *
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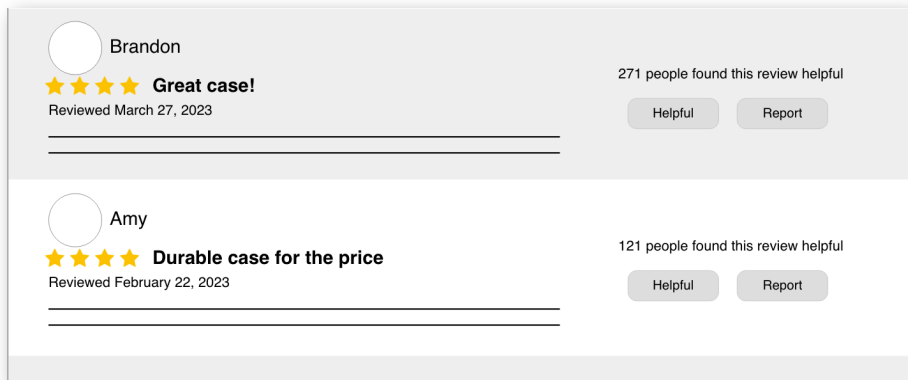
Pay \$67.90

[Return to shipping](#)

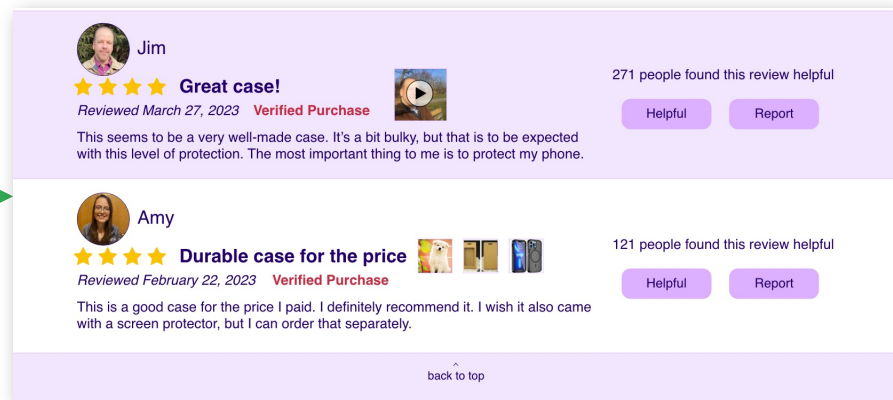
Mockups

Based on the feedback I received during the usability study, I added customer pictures/videos and “verified purchase” labels on the reviews. This allowed users to feel more confident about their purchase choices. I also added a “back to top” link to help guide users back through the customization steps.

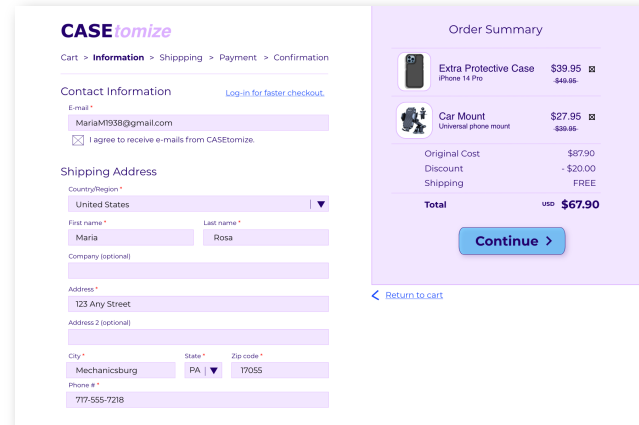
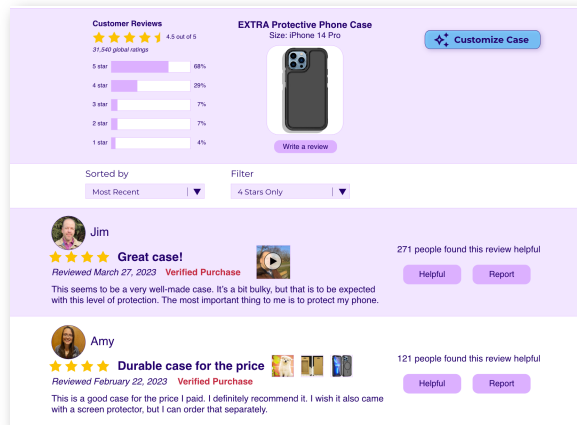
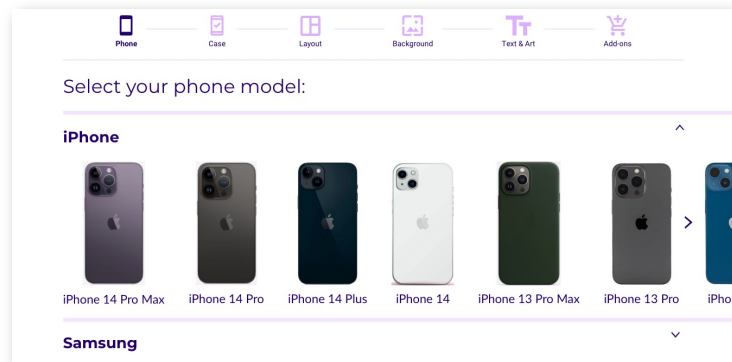
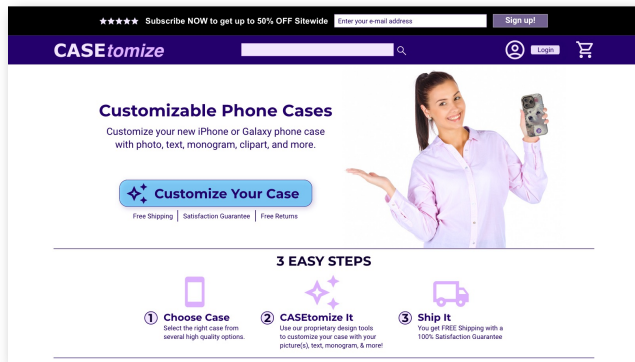
Before usability study



After usability study



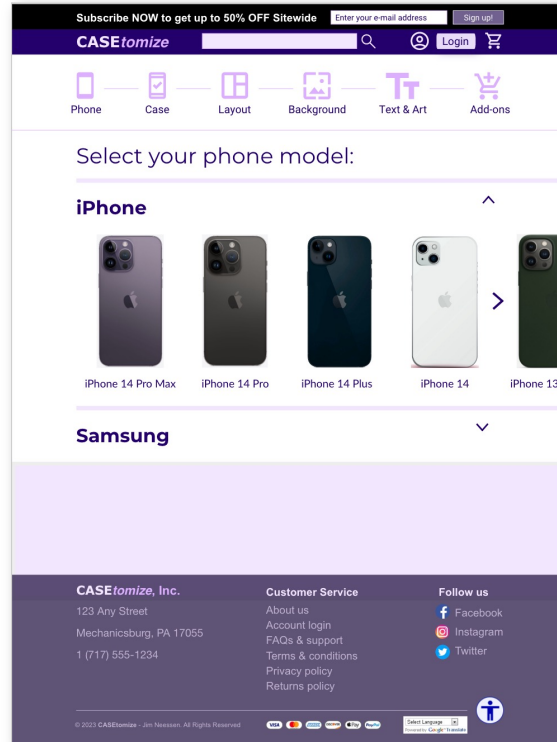
Mockups: Original screen size



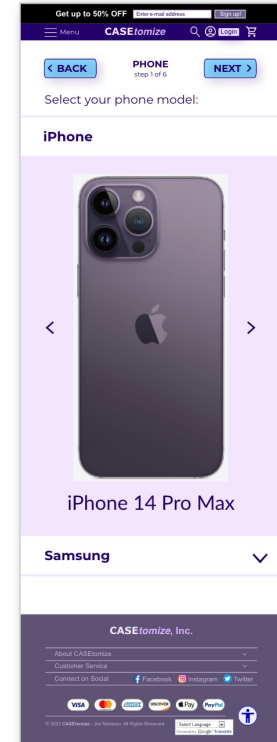
Mockups: Screen size variations

I included considerations for additional screen sizes in my mockups based on my earlier wireframes. Because users shop from a variety of devices, I felt it was important to optimize the browsing experience for a range of device sizes, such as mobile and tablet so users have the smoothest experience possible.

Tablet



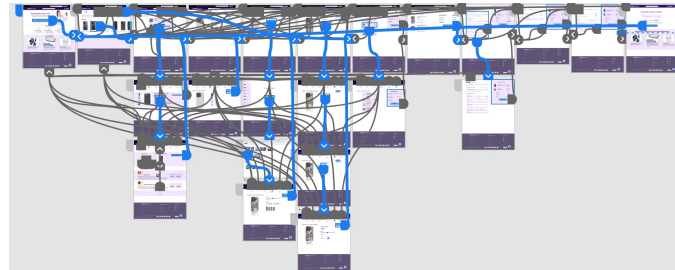
Phone



Hi-fidelity prototype

My hi-fi prototype followed the same user flow as the lo-fi prototype, and included the design changes made after the usability study.

View the CASEtomize [hi-fidelity prototype](#)



Accessibility considerations

1

I used navigation icons with text labels to indicate a clear customization flow.

2

I used landmarks to help users navigate the site, including users who rely on assistive technologies

3

I used headings with different sized text and colored border sections to show a clear visual hierarchy.

Going forward

- Takeaways
- Next steps

Takeaways



Impact:

The CASEtomize website offers easy browsing/filtering tools and intuitive customization options, so users can find and customize the right phone case for them through an enjoyable shopping experience. One quote from peer feedback:

"It's good that you can see how recent the reviews are and how many people found them helpful."



What I learned:

While designing the CASEtomize website, I learned that the first ideas for the site are only the beginning of the process. Usability studies and peer feedback influenced each iteration of the website's design and functionality.

Next steps

1

Update the research study plan to include a new set of research questions, KPIs, and methodologies.

2

Conduct follow-up usability testing on the newly updated website and synthesize the results to identify new patterns and themes.

3

Identify any additional areas of need and ideate on new features.

Let's connect!



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

Email: contact@jimNees.com

Website: jimNees.com