Design a flow to order custom bicycles online

Lars Bjørn Petersen
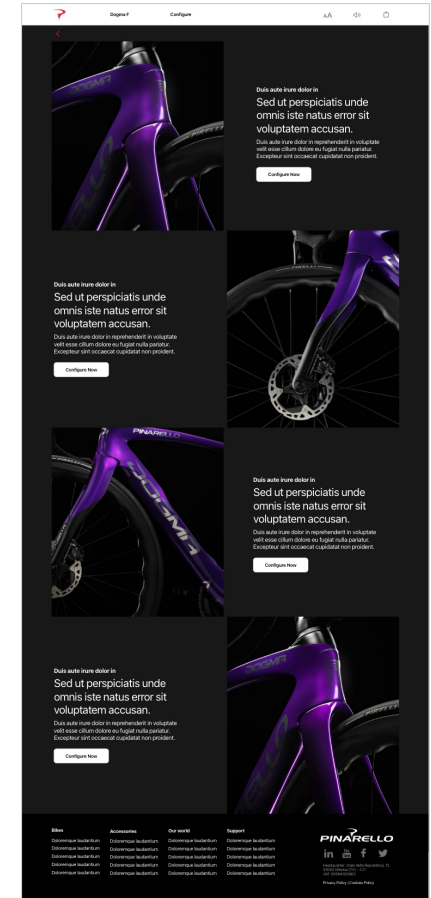
Project overview

The product:

Pinarello is a bike store that offers custom bikes. The typical user is between 30-60 years old and career professionals. The goal is to make the bike customization easy for all types of users.

Project duration:

June 2023 to July 2023

Project overview

The problem:

Many available online bike shopping websites have no or very little customization options. We need to find out if the main user experince, finding and ordering custom bikes, is easy for users to complete.

The goal:

Design a bike custom website to be user friendly by providing clear and easy flow for bike customization.

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Project overview

My role:

UX designer leading the bike custom website design.

Responsibilities:

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

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Understanding the user

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

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User research: summary

I conducted interviews and created empathy maps want to figure out what specific difficulties users encounter when they try to complete the core tasks of bike customization.

I conducted an unmoderated usability study with 5 participants: Two male, two females, and one non binary individual, aged 30 to 60 years old. The study showed that the customization and ordering were easy to complete. Assistive tools like magnified screens and screen reader would be useful.

User research: pain points

1

Customization

Bike website designs are often busy, which results in confusing customization flow.

2

No text magnification

Some users wants to have the possibility to do text magnification. This option will be added to the mockups.

3

No screen reader

Some users wants to have the possibility for a screen reader. This option will be added to the mockups.

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Persona: **Name**

"I don't fit the standard race bikes and I want to be able to customize it, so it fits my body size."

Problem statement:

Erica is a busy marketing director who needs to order a new bicycle but would like to customize it because she is a tempo cyclist with special wishes for the bike.

Goals
- I want to get a new race bike.
- Find a bike online I like.
- Want to be able to customize it so it fits my body size.

Frustrations
- Not sure on where/how to find new bike that I like.
- My old bike does not fit my body size.
- Not many brand offer customization.

Erica

Age: 35
Education: Master's degree in Marketing
Hometown: Champagne, Illinois
Family: Married with one young child
Occupation: Marketing Director

35 year old Marketing Director with 10 years of marketing experience, married with one young child. She job can be stressful with many balls in the air at the same time and she is like to stress down by biking with friends.

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User journey map

Mapping Erica's user journey revealed how helpful it would be for users if the customization is easy to complete.

Persona: Erica

Goal: An easy and quick way to build a custom bike

ACTION	Find bike	Browse bikes	Decide what to order	Place order	Check out
TASK LIST	Tasks A. Search online for bike stores B. Decide on bike store C. Select a bike store	Tasks A. Browse the store for bikes B. Browse through favourite bike C. Browse for customization	Tasks A. Select which bike to customize B. Start the customization flow C. Add accessories	Tasks A. Add item to order	Tasks A. View cart and items in it B. Add credentials, name, address, etc. C. Select payment type D. Enter payment info
FEELING ADJECTIVE	Overwhelmed by the number of bike stores	Annoyed that many Bike stores don't have customization	Excited Curious	Annoyed with button size	Excited Anxious
IMPROVEMENT OPPORTUNITIES	Create a dedicated website for bulding a custom bike	Provide search filters Show bikes for customization on homepage	Prices list next to each item	Make larger button size	Shipping info on ETA Instruction on what next

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Starting the design

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

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Sitemap

My goal here was to make strategic information architecture decisions that would improve overall website customization flow. The structure I chose was designed to make things simple and easy.
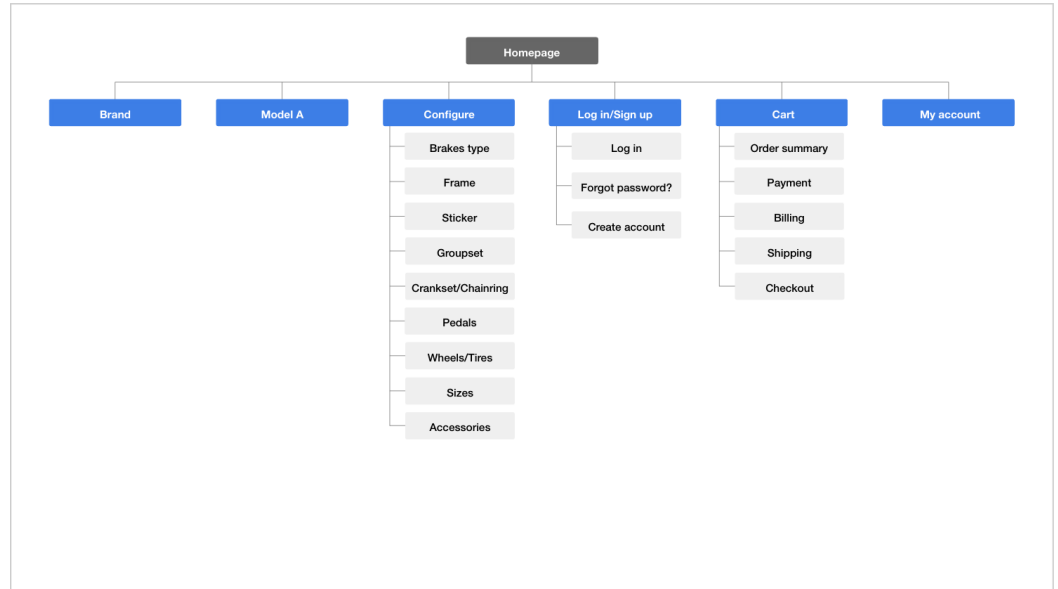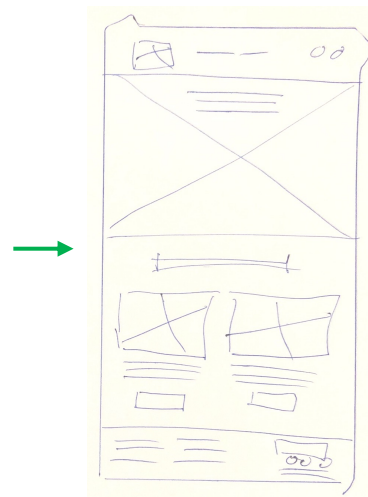
Paper wireframes

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

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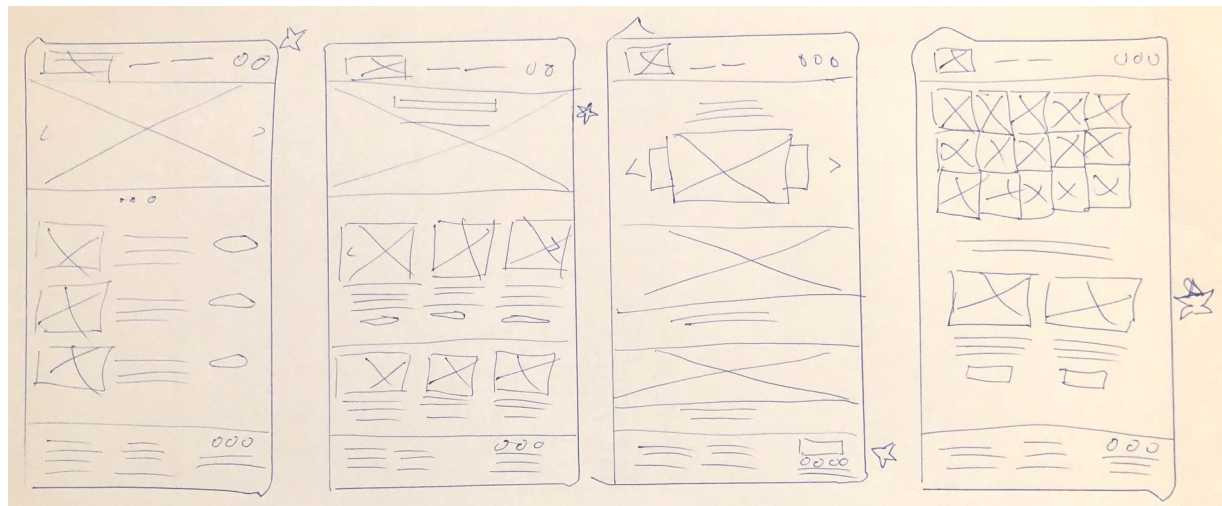

Stars were used to mark the elements of each sketch that would be used in the initial digital wireframes.

Refined paper wireframe

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Paper wireframe
screen size variation(s)

Because Pinarellos' 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.

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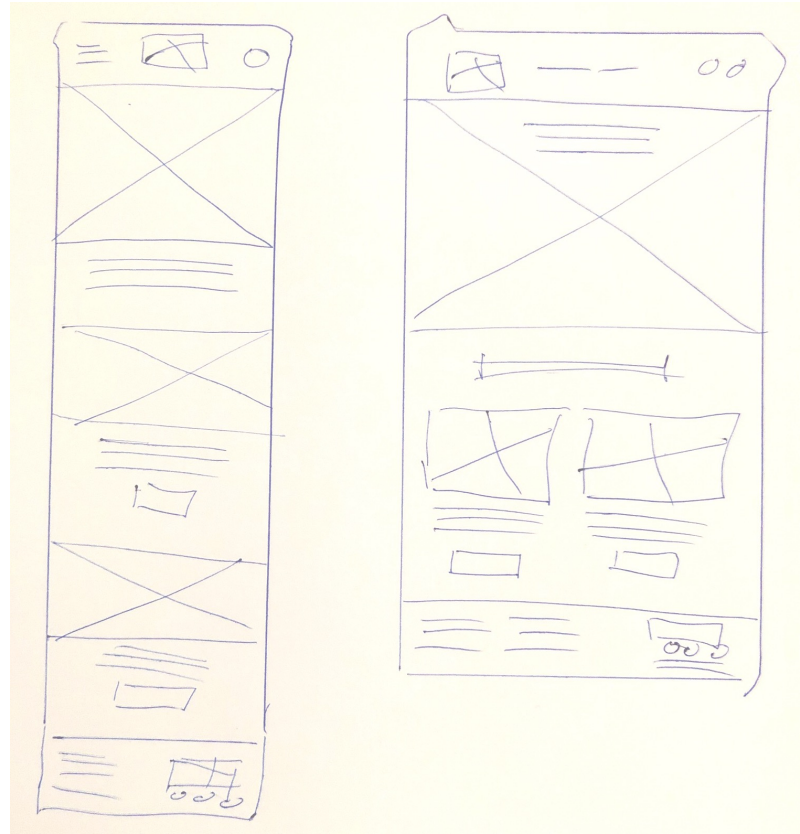
Digital wireframes

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 a useful customization flow was a key part of my strategy.
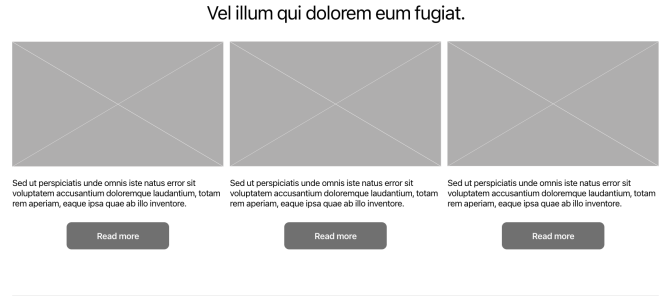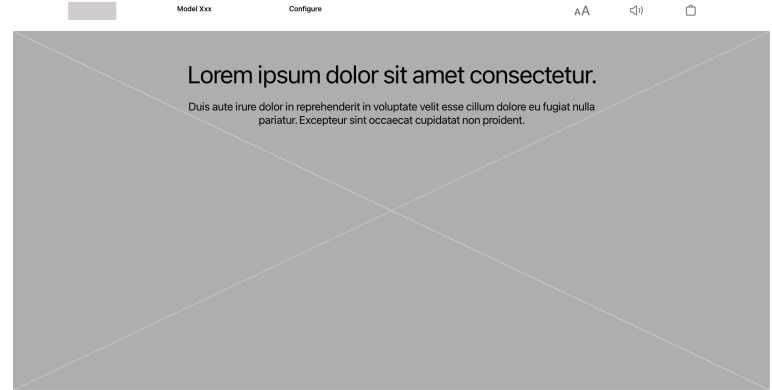
Easy access to configure bike In menu

Configure page is optimized for easy browsing through custom options


Google

Digital wireframe screen size variation(s)

Because Pinarellos' 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.

Model Xxx   Configure

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Low-fidelity prototype

To create a low-fidelity prototype, I connected all of the screens involved in the primary user flow of adding an item to the cart and checking out. At this point, I had received feedback on my designs from members of my team about the customization flow. I made sure to listen to their feedback, and I implemented several suggestions in places that addressed user pain points.

View: Pinarello low-fidelity prototype
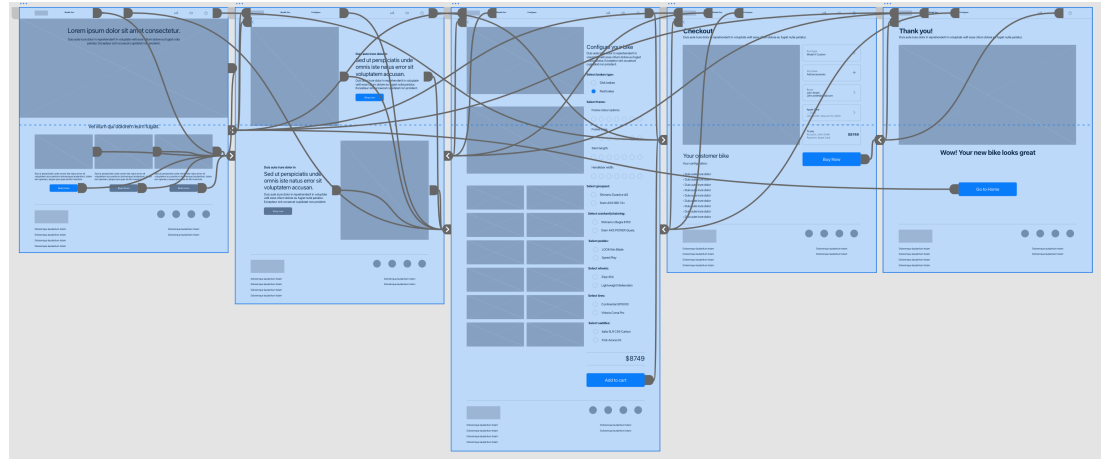
Usability study: parameters

Study type:

Unmoderated usability study

Location:

United States, remote

Participants:

5 participants

Length:

20-30 minutes

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Usability study: findings

These were the main findings uncovered by the usability study:

1

Finding

Users wants the "custom bike" stated clearly on the website.

2

Finding

Users find the customization flow easy to use.

3

Finding

Some users want screen reader and magnification option.

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Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

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Mockups

Based on the insights from the usability study, I made changes to improve the site's customization flow. One of the changes I made was adding the prize for each option.

Before usability study
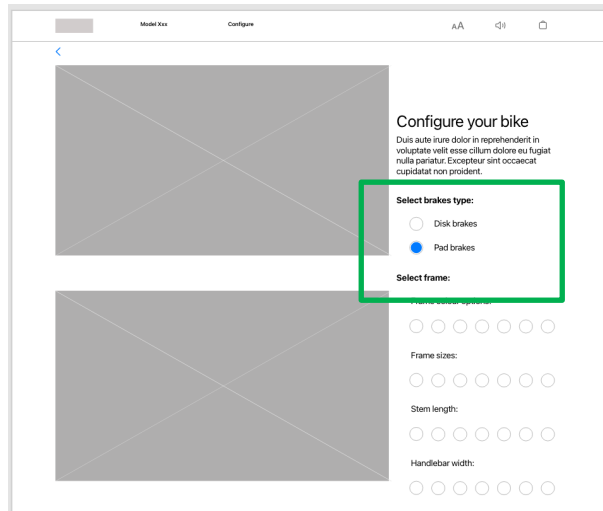
After usability study
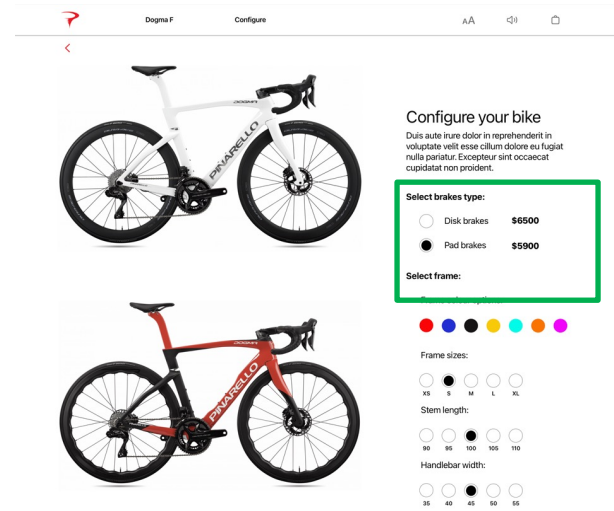
Mockups

To make the custom bike selection even easier for users, I added "Configure Now" text in the buttons and a clear top headline that indicates customization.
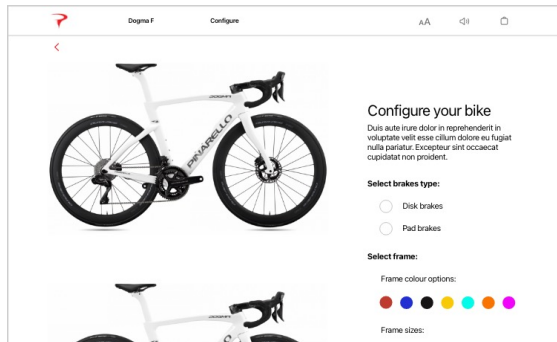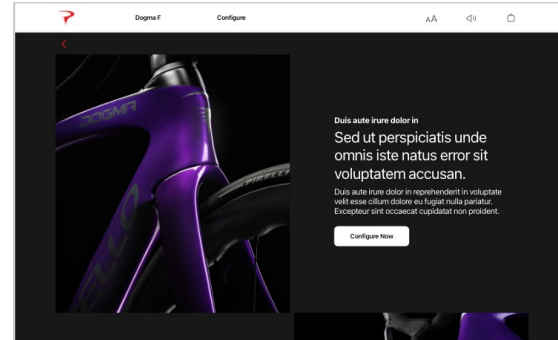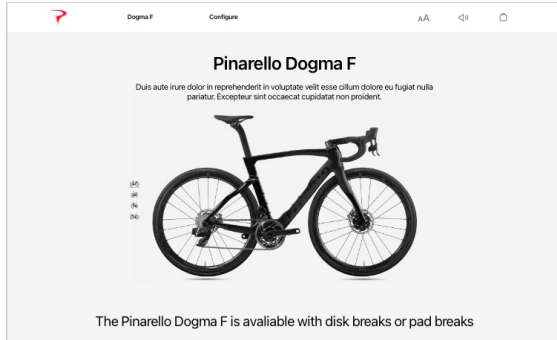

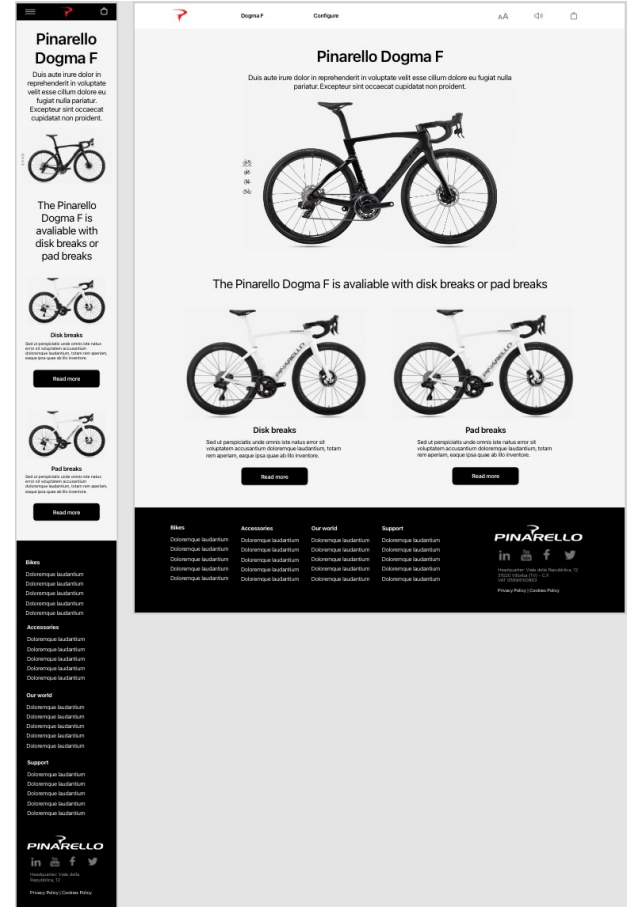Before usability study
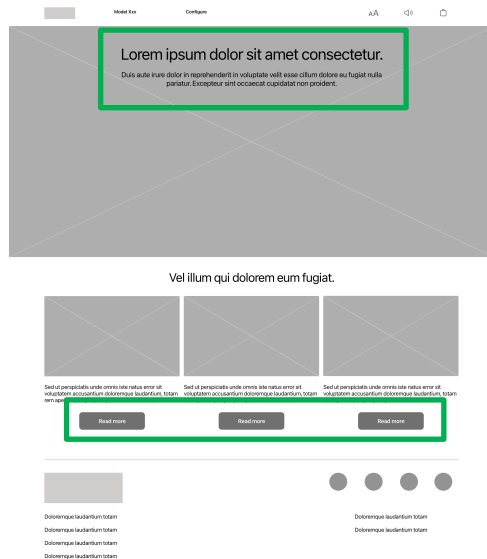
After usability study
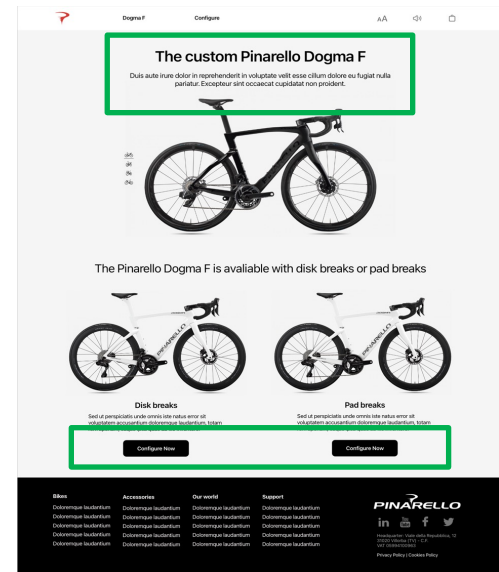
# Mockups: Original screen size

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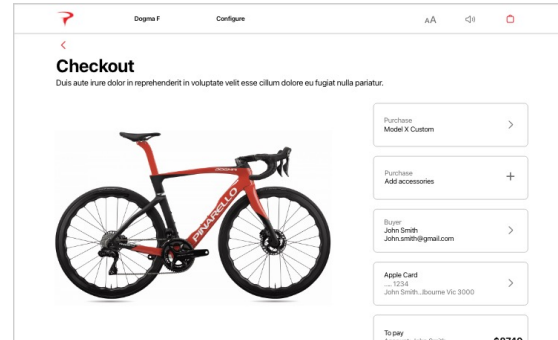
Mockups: Screen size variations

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.

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High-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, as well as several changes suggested by members of my team
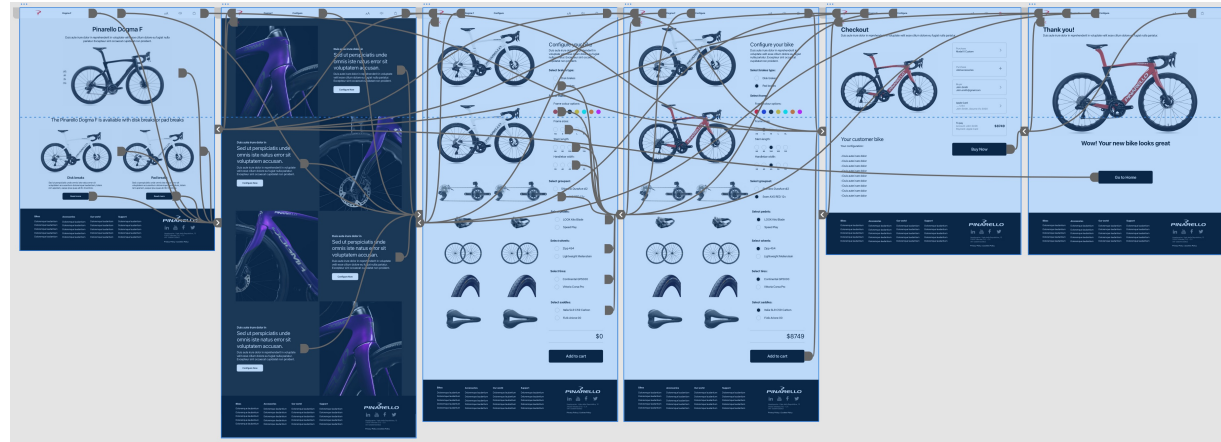
View: Pinarello high-fidelity prototype

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Accessibility considerations

1

Added a help page for general "how to" with accessibility tools for magnification and screen reader on the website.

2

Added a general accessibility icon in the navigation.

3

Added a "magnification option" and "screen reader option" on the website.

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Going forward

- Takeaways
- Next steps

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Takeaways

Impact:

The website provides users with a full bike customization experience. By adding accessibility tools on the website, will help more users get a better experience.

What I learned:

Design: While designing, 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. Iconography: using icons from other known apps is helpful in recognition. Creating a unique icon isn't always beneficial to the user.

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Next steps

1

The engineers can start working on the homepage, customization flow and checkout page.

2

I will continue designing the user profile page and search page.

3

I will have a talk with the engineers about how to implement the assistive tools in the app.

Let's connect!

Thank you for reviewing my work on the Pinarello website!

If you'd like to see more, or would like to get in touch, my contact information is provided below:

Email: xxxx@email.com
Website: xxxxdesign.com

Google