

# The Cycle – Responsive Web Design

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Brian Thompson

# Project overview



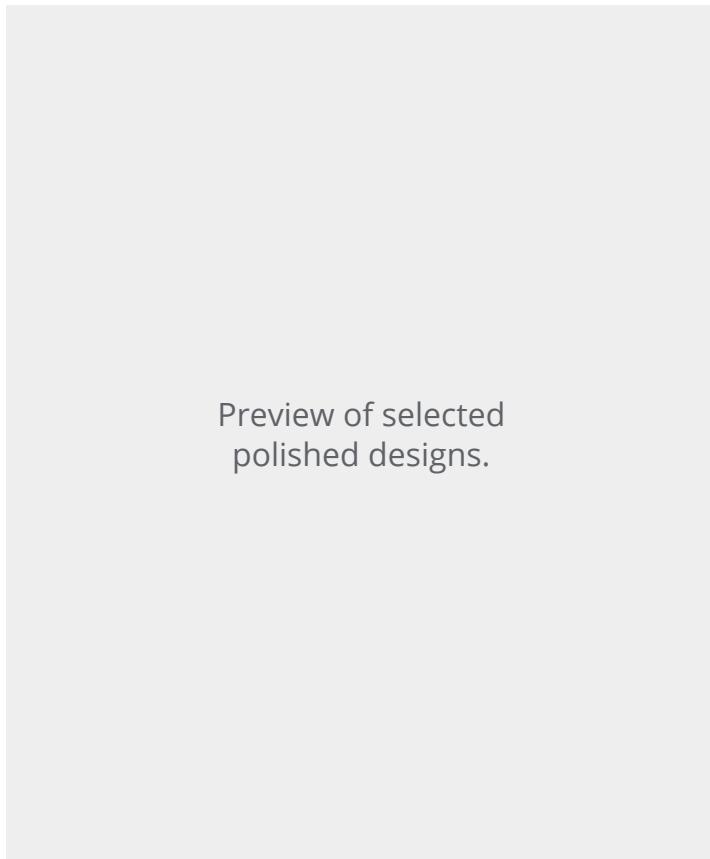
## The product:

The Cycle is a responsive website that provides an opportunity for those to build a custom bicycle from start to finish. The typical user is between 28-50 years old, and most users are early to mid level professionals. The Cycle's goal is to make designing a custom bike easy, fun, and fast for all types of users.



## Project duration:

December 2021 – January 2022



Preview of selected polished designs.

# Project overview



## The problem:

Available custom bike websites were not easy to navigate, cluttered designs, and confusing checkout process.



## The goal:

Design The Cycle website to have a user friendly and clear navigation to customize a bike and offer a fast and effective checkout process.

# Project overview



## My role:

UX designer and researcher from conception to completion



## Responsibilities:

Conduct 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 user interviews in order to create empathy maps to discover who the appropriate users would be, their pain points, and needs. I discovered that my target users take building their custom bikes seriously because they like the attention to detail they can put in their bikes; some users even compete professionally. Users ultimately want this process to be seamless as they have experienced quite a bit of frustrations with navigation on websites that offer this service.

# User research: pain points

1

## Navigation

Write one to two sentences reflecting on the pain point listed above and how it will guide designs moving forward.

2

## Interaction

Write one to two sentences reflecting on the pain point listed above and how it will guide designs moving forward.

3

## Experience

Write one to two sentences reflecting on the pain point listed above and how it will guide designs moving forward.

4

## Pain point

Write one to two sentences reflecting on the pain point listed above and how it will guide designs moving forward.

# Persona: Cliff

## Problem statement:

Cliff is a full time worker and avid cyclist who needs a user friendly website with a great selection of bikes that can be customized because he wants to be able to have the best bike for his needs.



Cliff

**Age:** 33  
**Education:** Bachelors in Forensics  
**Hometown:** Charlotte, NC  
**Family:** Single  
**Occupation:** Investigator

*"I am an adventurous person who likes to use my bike whenever I can."*

## Goals

- Obtain a promotion at his company
- Perform a Triathlon

## Frustrations

- The user can't find customized bikes
- Has a ankle injury
- Isn't too tech savvy
- Doesn't have availabilityy to go to a local shop for a bike

Cliff is a bachelor who lives in the heart of downtown Charlotte, NC. Cliff works as a investigator for a Forensics company. He uses his bike whenever he can. Whether that's commuting to work, on a trail, for a workout, or just a relaxing ride for fun with his friends. However he has some frustrations with ordering bikes online. He wants a bike he can customize for his needs, and is affordable.

# User journey map

The goal of the user journey map was to help us hone in on the users specific pain points through their typical experience through ordering a customized bike online.

## Persona: Cliff

Purchases a custom bike through a website

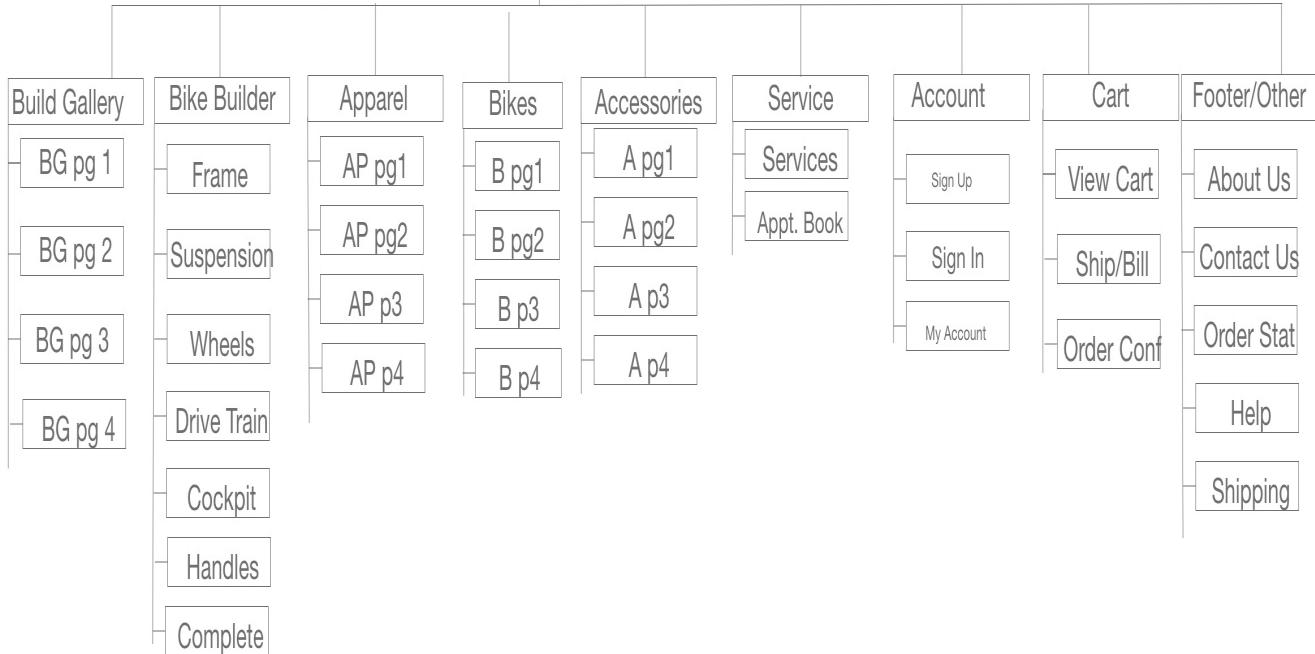
Action	Goes to website	Browse website for bikes	Customizes a bike	Checks Out	Order Confirmation
Task List	<ul style="list-style-type: none"><li>Choose a search browser</li><li>Goes to website</li></ul>	<ul style="list-style-type: none"><li>Navigates through the bikes on the website</li><li>Chooses a bike he would like</li></ul>	<ul style="list-style-type: none"><li>Goes through the options that can be customized</li><li>Selects what he wants to be customized</li></ul>	<ul style="list-style-type: none"><li>Adds bike and any other items to cart</li><li>Goes to checkout</li><li>Types in payment info</li></ul>	<ul style="list-style-type: none"><li>Cliff receives a order confirmation on the next page</li></ul>
Feeling Adjective	<ul style="list-style-type: none"><li>Neutral</li></ul>	<ul style="list-style-type: none"><li>Excited</li></ul>	<ul style="list-style-type: none"><li>Excited</li><li>Frustrated</li></ul>	<ul style="list-style-type: none"><li>Frustrated</li></ul>	<ul style="list-style-type: none"><li>Neutral/Happy</li></ul>
Improvement Opportunities	<ul style="list-style-type: none"><li>Include SEO for website so it is easy to search</li></ul>	<ul style="list-style-type: none"><li>Improve layout of website</li><li>Need clear navigation</li></ul>	<ul style="list-style-type: none"><li>Provide clear step by step instructions on how to customize</li><li>Have more options for customization</li></ul>	<ul style="list-style-type: none"><li>Have icons and clear design that shows items in cart and a defined place to checkout</li></ul>	<ul style="list-style-type: none"><li>Send the confirmation to his email and phone</li></ul>



# Home Page

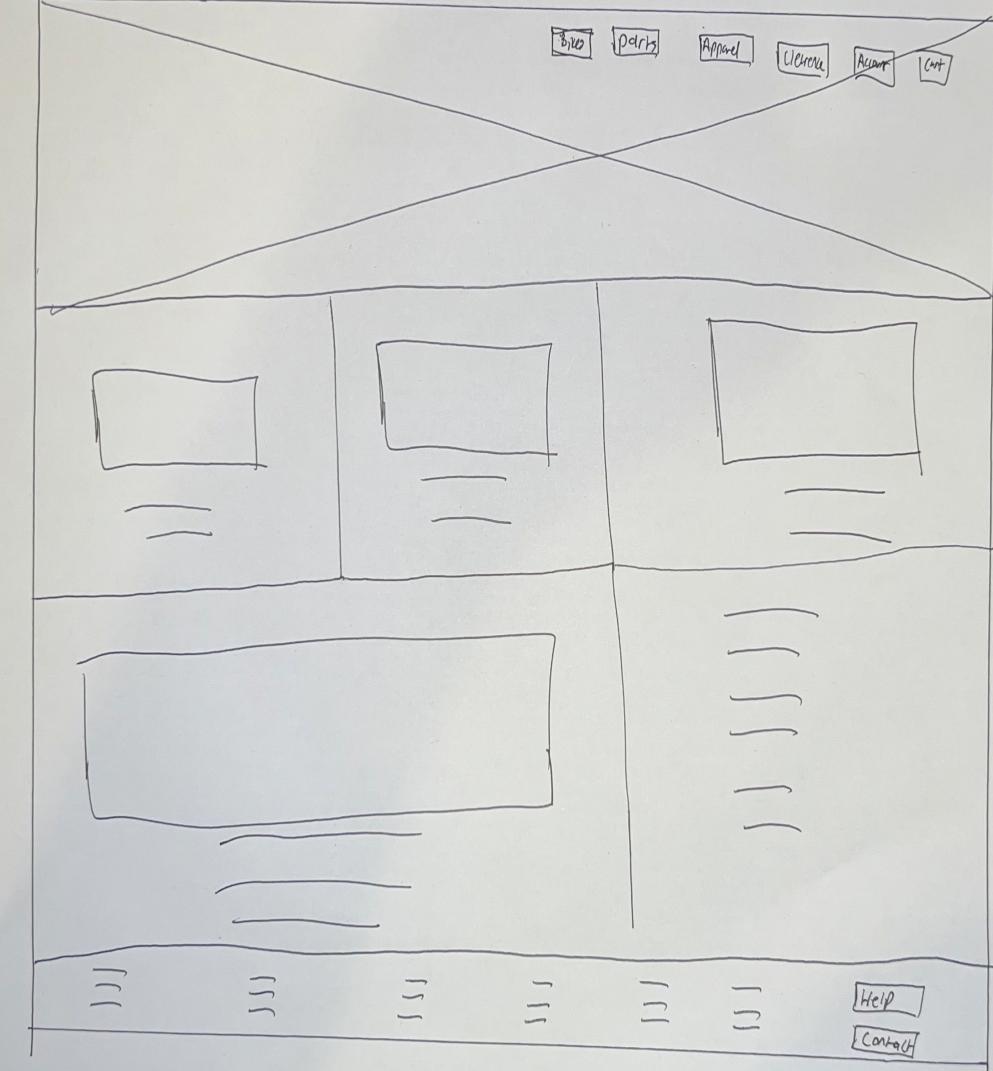
# Sitemap

The sitemap outlines the specific tabs the user will see on the website. The bike builder portion shows what steps the user will take to build their bike.



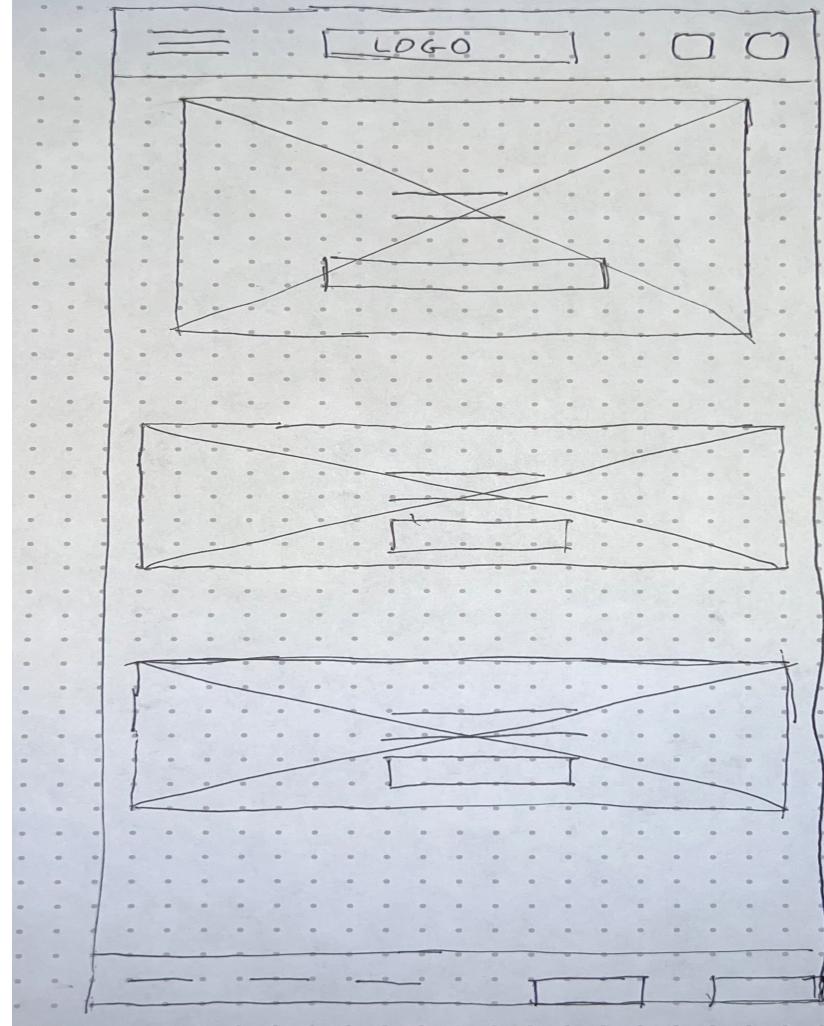
# Paper wireframes

The goal of the paper wireframe was to iterate on the overall design of the homepage. A tiered layer cake layout was used for the homepage to best display the information.



# Paper wireframe screen size variation(s)

This is a mobile variation of the original paper frame for the website. The mobile version uses a one column layout, and the navigation features a hamburger menu that will flyout when the user clicks on it. Logo has been moved to the middle of the header.



# Digital wireframes

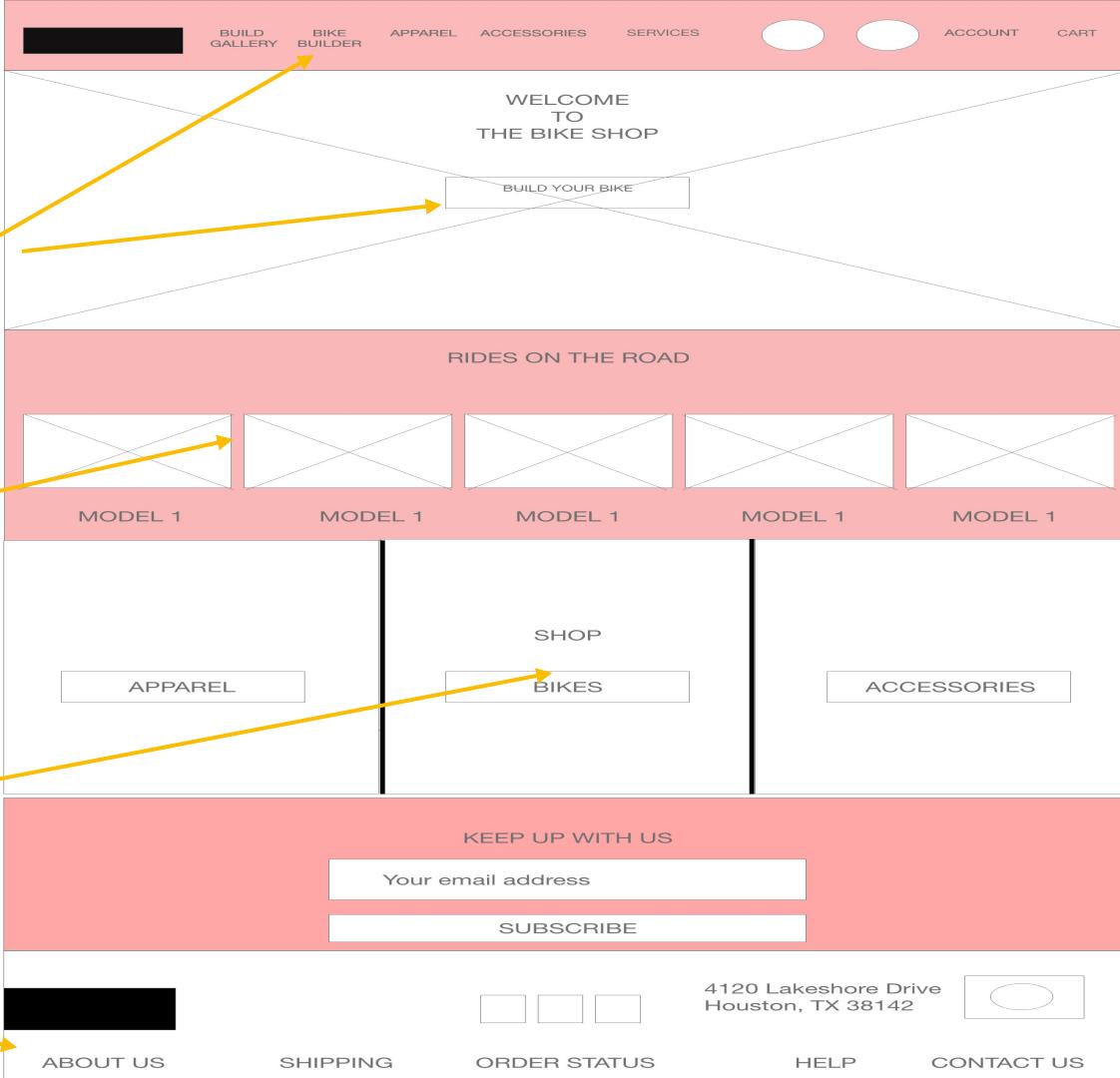
This is the homepage of the website. The goal of the website was to present the user with the option to build their bike as soon as they arrive at the page, and see what type of custom bikes have been made by others.

Users can access the bike builder feature here

Bikes that have been customized by others.

Users can go to these to buy other things within the website

Footer

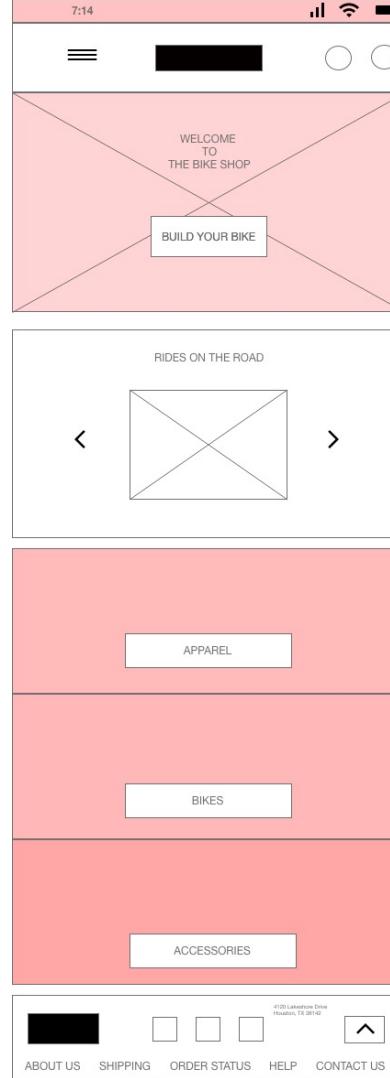


# Digital wireframe screen size variation(s)

This digital wireframe features a hamburger navigation, carousel for users to see the latest customized bikes users have made, and the build your bike button on the hero image.

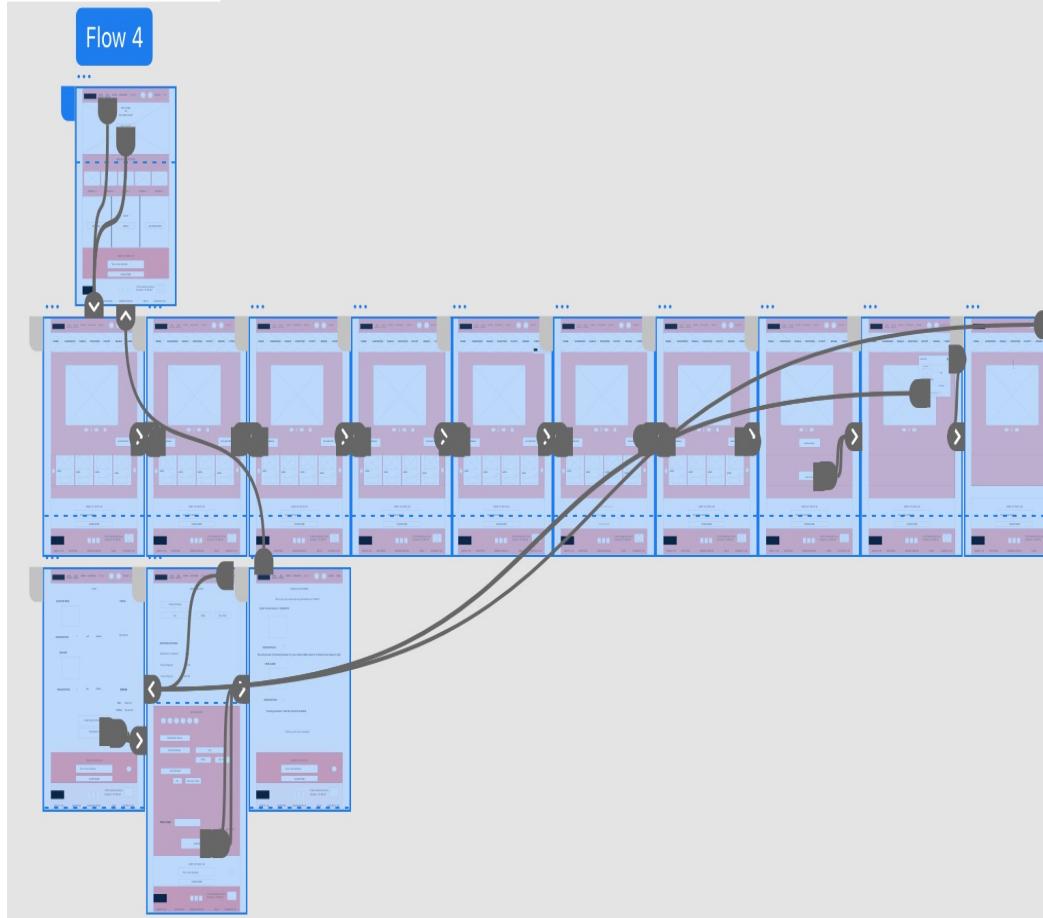
A one column layout was used to achieve a uniform look.

A scroll up arrow at the bottom right will allow the user to scroll back up to the top of the page.



# Low-fidelity prototype

PROTOTYPE 1



Link to Low-fidelity prototype

[here](#)

# Usability study: parameters



## Study type:

Unmoderated usability study



## Location:

United States, remote



## Participants:

5 participants



## Length:

20-30 minutes

# Usability study: findings

1

**Shipping Selection**  
5 out of 5 users had difficulty selecting a shipping option when checking out.

2

**Progress of Building Bike**  
3 out of 5 users had difficulties remembering which step they were on in the bike building process.

3

**Shipping Options**  
3 out of 5 users were dissatisfied when they couldn't have items shipped together if ordering a custom bike with other items.

## Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

# Mockups

The progress bar has been modified to show what step the user is on, as well as a previous and next button were added so the user can go back or forward when building their bike if modifications are needed.

Before usability study

This screenshot shows the 'Bike Builder' interface. At the top, there's a navigation bar with links for 'BIKE BUILDER', 'BUILD GALLERY', 'APPAREL', 'ACCESSORIES', 'SERVICE', 'ACCOUNT', and 'CART'. Below the navigation is a horizontal progress bar with steps: 'FRAME', 'SUSPENSION >', 'WHEELS', 'DRIVETRAIN', 'COCKPIT', 'BRAKES', and 'COMPLETE'. A large central area displays a wireframe of a bicycle frame. At the bottom of this area are three small circular icons. Below the wireframe is a 'GO TO NEXT STEP' button. At the very bottom of the page, there's a footer section with a 'KEEP UP WITH US' form, a map showing '4120 Lakeshore Drive Houston, TX 38142', and links for 'ABOUT US', 'SHIPPING', 'ORDER STATUS', 'HELP', and 'CONTACT US'.

After usability study

This screenshot shows the 'Bike Builder' interface after the usability study. The top navigation bar and progress bar remain the same. The central area now displays a detailed image of a red Ritchey mountain bike frame. Below the image are three zoom controls: a plus sign, a minus sign, and a magnifying glass. At the bottom of this area is a 'GO TO NEXT STEP' button. Below the frame image, there are four smaller cards, each showing a different bike model: 'TREK 650' (gray), 'EXOS 35' (green), 'WAMBA' (red), and 'YOSEMITE 25' (orange). Each card has a 'SELECT' button below it. The footer section at the bottom of the page is identical to the one in the 'Before' screenshot.

# Mockups

User now has an option to select what option they would like to have for shipping, and if ordering a custom bike with other items, can select if they want to ship their bike with those items or not.

Before usability study

BUILD GALLERY BIKE BUILDER APPAREL ACCESSORIES SERVICES ACCOUNT CART

SHIPPING INFO

Street Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

CHOOSE SHIPPING OPTION

Standard (1-2 Weeks) Free  
 3 Day Shipping \$15.00  
 1 Day Shipping \$25.00  
 Pick Up In Store Free

SHIPPED ITEMS

Do you want to ship item(s) with your custom bike?  
 Yes  No

BILLING INFO

Cardholder Name \_\_\_\_\_  
Street Address \_\_\_\_\_ City \_\_\_\_\_  
State \_\_\_\_\_ Zip Code \_\_\_\_\_  
Card Number \_\_\_\_\_  
CV \_\_\_\_\_ Security Code \_\_\_\_\_

Promo Code \_\_\_\_\_

TOTAL \$3,025.00

ORDER

KEEP UP WITH US  
Your email address \_\_\_\_\_  
SUBSCRIBE

4120 Lakeshore Drive  
Houston, TX 770142

ABOUT US SHIPPING ORDER STATUS HELP CONTACT US

After usability study

BUILD GALLERY BIKE BUILDER APPAREL ACCESSORIES SERVICES ACCOUNT CART

SHIPPING INFO

Street Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

CHOOSE SHIPPING OPTION

Standard (1-2 Weeks) Free  
 3 Day Shipping \$15.00  
 1 Day Shipping \$25.00  
 Pick Up In Store Free

SHIPPED ITEMS

Do you want to ship item(s) with your custom bike?  
 Yes  No

BILLING INFO

VISA MASTERCARD AMEX DISCOVER

Cardholder Name \_\_\_\_\_  
Street Address \_\_\_\_\_ City \_\_\_\_\_  
State \_\_\_\_\_ Zip Code \_\_\_\_\_  
Card Number \_\_\_\_\_  
CV \_\_\_\_\_ Security Code \_\_\_\_\_

Promo Code \_\_\_\_\_

TOTAL \$3,025.00

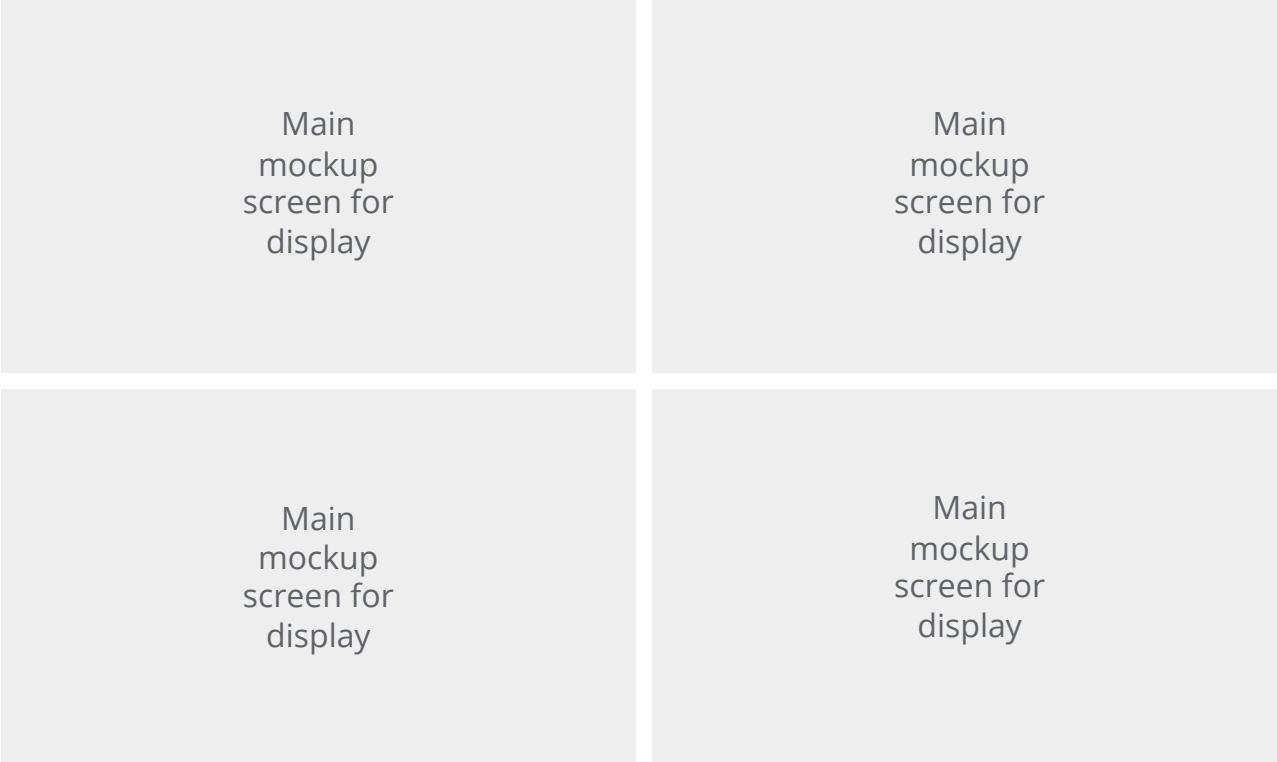
ORDER

KEEP UP WITH US  
Your email address \_\_\_\_\_  
SUBSCRIBE

4120 Lakeshore Drive  
Houston, TX 770142

ABOUT US SHIPPING ORDER STATUS HELP CONTACT US

# Mockups: Original screen size



Main  
mockup  
screen for  
display

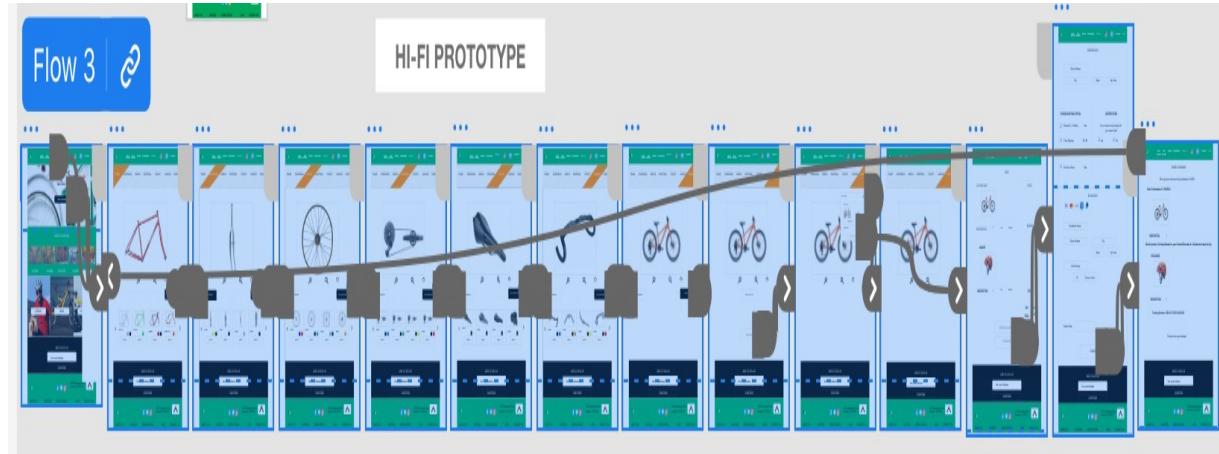
# Mockups: Screen size variations



Main  
mockup  
screen for  
different  
screen size  
variations

# High-fidelity prototype

Link to High-Fidelity Prototype [here](#)



# Accessibility considerations

1

A accessibility button is placed on the home screen for users that may need more assistance navigating the website.

2

On the homepage the user can select which language they would like to have the website in by clicking on the flag and selecting their language.

3

The overall typeface and contrast of colors are used in a way that are easy to read and navigate for any user.

## Going forward

- Takeaways
- Next steps

# Takeaways



## Impact:

Overall after iterating after usability studies, participants seemed to be able to make and order their custom bike easily and were satisfied with the experience.



## What I learned:

There are a lot of components that go into making a website that allows users to customize a product. However, I learned that sometimes less is more when creating these kinds of websites.

# Next steps

1

Continue usability studies  
with participants

2

Iterate and revise  
mockups and high fidelity  
prototypes

3

Create code for the website

# Let's connect!



Thank you for checking out my work! If you would like to contact me, here is my information:

Email: knightrider1117@outlook.com