

CarBuy

Car Buying At Your Fingertips

Project overview

CarBuy is a mobile application made to change the way people browse and purchase vehicles. This app is meant to make looking or purchasing the right vehicle for the user quick and easy while being trustworthy. It is designed for anyone in the market for a vehicle.

My role:

UX Research

UX Design

UI Design

03/2022 - 05/2022



Understanding the user

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

User Research: Summary

After conducting 2 interviews and 2 empath maps, to better understand the needs their needs. A primary user group identified were people ages 22+, did not like enjoy the traditional process of purchasing vehicles and would prefer doing this online from the comfort of their own home.

Research also revealed that the process to buying a vehicle was not the only factor to purchasing a vehicle. Participants that have used other sites/apps to browse vehicles have mentioned difficulty navigating through the site/app itself.

User Research: Pain Points

Not Being able to add the event to the user's calendar straight from the app.

Users say that other movie theater apps are overloaded with promos and unnecessary information. This makes it difficult to navigate.



Jane Doe

Age: 23

Education: Attends CU Boulder

Hometown: Thornton, CO

Family: Single, no siblings

Occupation: Intern

"I have just gotten an internship at a company that is too far to commute without a car. I need the right car for me immediately"

Goals

- Easily find the right vehicle for me without dealing with any pain points.

Frustrations

- Having trouble finding what she needs from a site/app.
- When processes become too complicated and dragged out.

Jane is a 23 year old student and newly interned by a company. With a lots of commuting required, she needs to find her own vehicle in replace of public transportation to ensure she is on time wherever she needs to be. Because she has just started this internship she needs to find a vehicle as easily and quickly as possible in order to stay punctual.



John Doe

Age: 50

Education: General , CU Denver

Hometown: Aurora, Colorado

Family: Married, 2 Children

Occupation: High School Teacher

“Technology is not my strong suit, so I prefer simple sites/apps”

Goals

- Minimize stress when using technology.
- Explore a variety of vehicles without being overwhelmed.

Frustrations

- Coming across a site/app that does not work how it should.
- When sites/apps are difficult to navigate.

John, is a 50 year old history teacher located in Aurora, CO that can no longer ride his bike to work. He is interested in browsing for a potential vehicle to get to work before going into dealerships. However, through his experiences with complicated and buggy sites/apps it has made it difficult. He prefers using simplistic and easy to navigate sites/apps.

Persona: Jane

Goal: Quickly browse and select the right vehicle for her.

ACTION	Going to the dealership to browse	Browsing for vehicle	Deciding on which vehicle	Speaking to salesman for credit check/loan approval from bank	Purchase vehicle
TASK LIST	Tasks A. Finding a way to get there B. Commuting C. Cost for commute	Tasks A. Find/speak to a salesman B. Walk around lot browsing C. Requesting CarFax for vehicles	Tasks A. Comparing the different vehicles B. Possibly having to go back to the dealership C. Negotiate price on vehicles	Tasks A. Salesman does credit check B. Ask bank for loan C. Wait for credit check to come back and response from bank.	Tasks A. Sign documents B. Give a downpayment in check, wire, or cash C. Get keys to vehicle
FEELING ADJECTIVE	Excited to buy a new vehicle. Dreading public commute	Happy to see options, but overwhelmed with too many options	Indecisive on which is the right vehicle for her	Anxious to get approved for loan	Frustrated by all of the documents and upselling, but happy that she will finally find the right car for her
IMPROVEMENT OPPORTUNITIES	Browse anywhere you are from your phone or desktop	Include many filters to narrow search	Allow user to add vehicle to favorites list and a feature to compare vehicles side by side with all information for both	Credit checks and loan applications done electronically through the phone or desktop	-E-sign for documents w/ options to add certain upgrades. -Option for sending downpayment straight from banking app -Offer the user pickup or delivery of vehicle

Persona: John

Goal: Understand how to use the app/site to browse for vehicles

ACTION	Download app or go to website	Browse for available vehicles	Go to dealership	Speak to salesman	Purchase vehicle
TASK LIST	Tasks A. Download app from app store B. Search for site on desktop	Tasks A. Navigate to new or used vehicles B. Browse through inventory C. Compare vehicles	Tasks A. Find a way to get to the dealership B. Costs to commute	Tasks A. Find a salesman B. Locate the vehicle previously searched for	Tasks A. Sign documents B. Give a downpayment in check, wire, or cash C. Get keys to vehicle
FEELING ADJECTIVE	Feels anxious to use any apps/sites	Frustrated by how difficult navigating is and not being able to compare vehicles side by side.	Excited to see the vehicles selection	Nervous about speaking to a salesman directly.	Frustrated by all of the documents and upselling, but happy that he will finally find the right car.
IMPROVEMENT OPPORTUNITIES	Create a simple and clean UI to make it more comfortable to use	Design the app/site to be user friendly to make it convenient.	Create a mobile app that can be easily downloaded.	Offer online shopping through the app with virtual assistance	-E-sign for documents w/ options to add certain upgrades. -Option for sending downpayment straight from banking app -Offer the user pickup or delivery of vehicle

Starting the design

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

Paper wireframes

These are 5 different drawn wireframes for the mobile home screen.

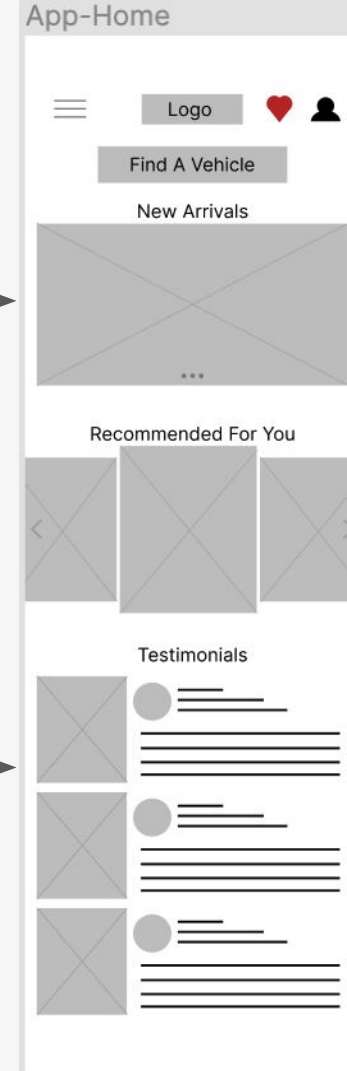


Digital wireframes

I tried to take ideas that I liked from each paper wireframe and combined them into my digital wireframe.

This is an automatic hero carousel that will change every 3 secs showcasing new arrivals

This section is for reviews/testimonials from previous users

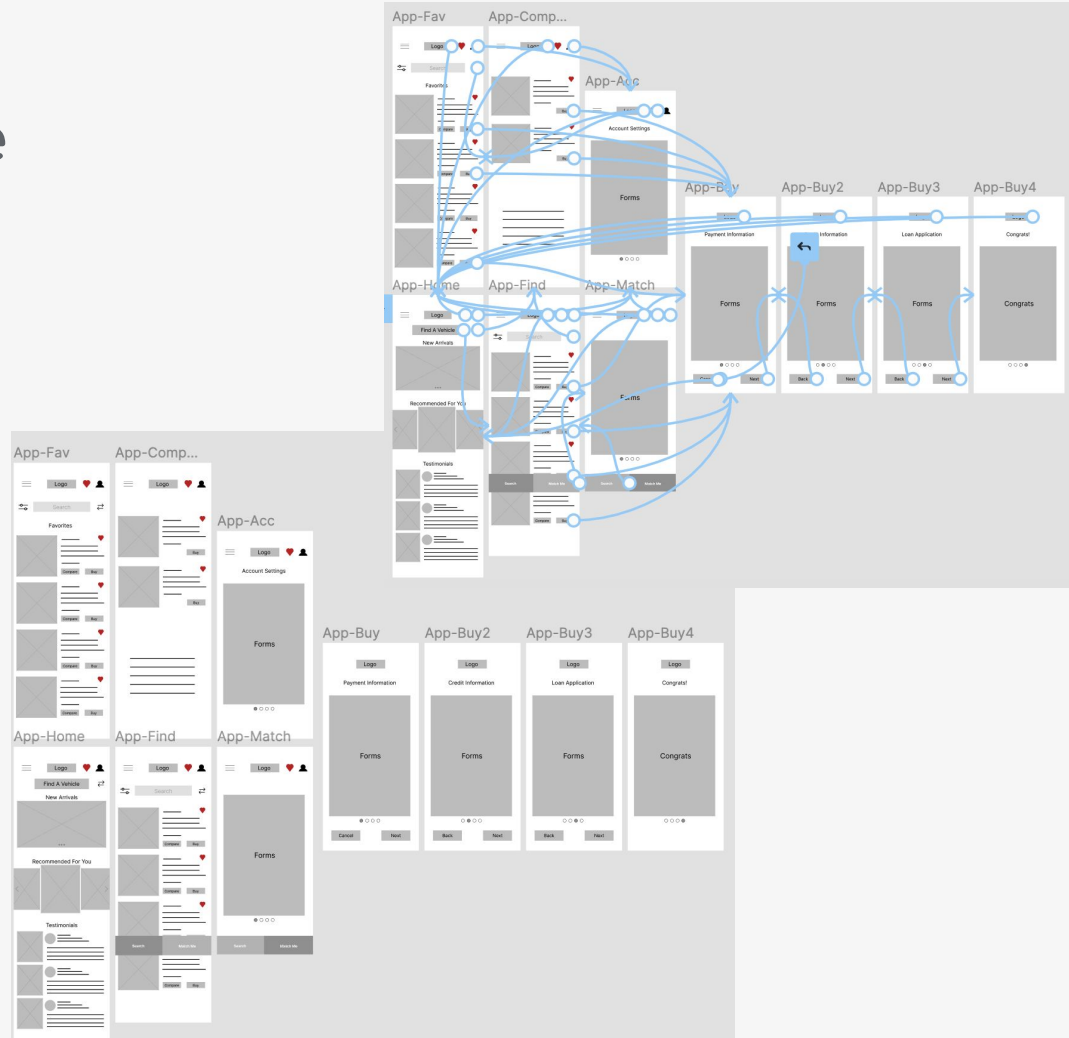


This is the Nav bar containing the hamburger nav, logo, favorites, and account settings

This is an interactive carousel for vehicles that are recommended for the user.

Low-fidelity prototype

<https://www.figma.com/proto/2hqvwVFdzVxPYc9I1a15Ra/CarBuy-Portfolio-Project?node-id=2%3A2&scaling=scale-down&page-id=0%3A1&starting-point-node-id=2%3A2>



Usability study: findings

The user will be apart of a moderated usability study. They will be prompted to complete 3 tasks that can be done through the app, share any ideas, and provide any feedback.

Round 1 findings

The process to buy and sell is too long. Users want a feature that will easily populate information.

Participants found that the “Match Me” feature is not necessary and acts as a filter feature.

Round 2 findings

Users wanted an indication and tracking of the buying process.

Users wanted to be able to save their progress in the car buying process for later.

Users wanted a way to reserve a specific vehicle.

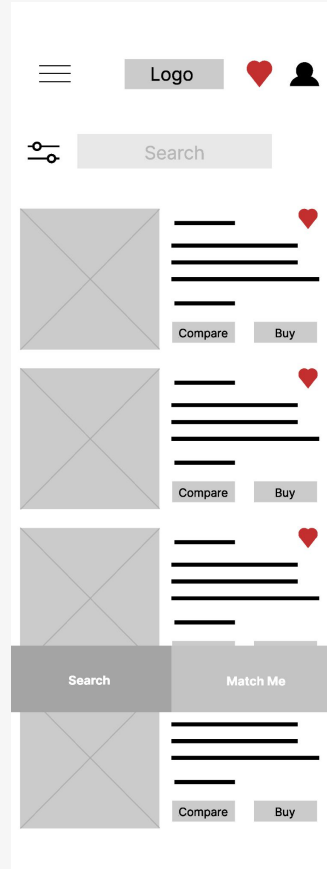
Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

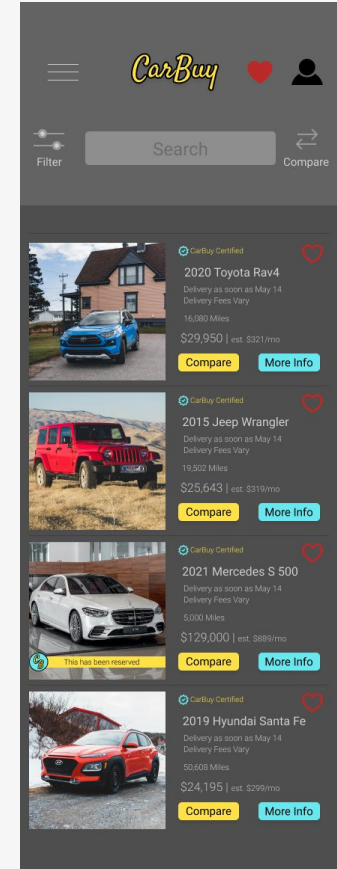
Mockups

I wanted to include a unique feature that helped users find vehicles that matched the user with their dream car. After usability studies, I found that this feature would not be necessary and that it took up too much space. I removed this feature and made the filter feature functional

Before usability study



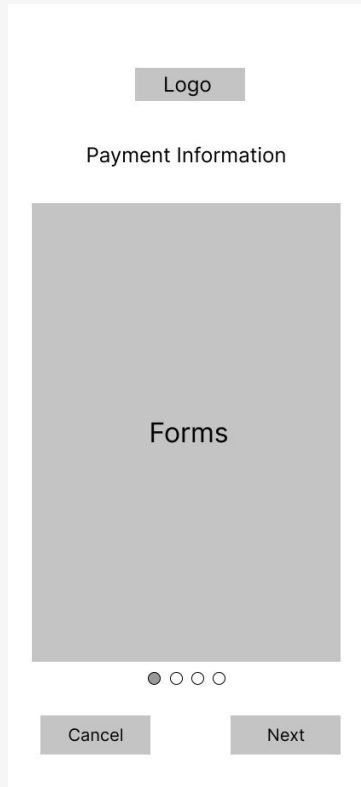
After usability study



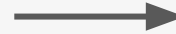
Mockups

The second usability study revealed frustration when going through the car buying process. Users wanted a way to be able to upload information to avoid filling out forms manually. I added an option to upload a driver's license that would help auto populate information.

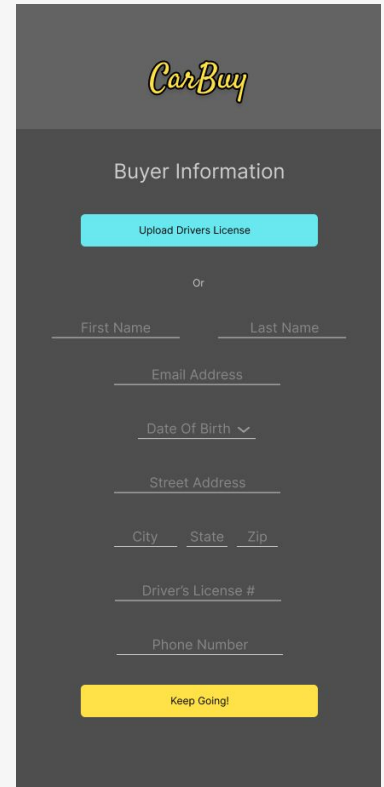
Before usability study



This mockup shows a simple, functional but less user-friendly interface. At the top is a 'Logo' button. Below it is the section header 'Payment Information'. A large gray rectangular area labeled 'Forms' represents the manual data entry section. At the bottom, there are 'Cancel' and 'Next' buttons, and a progress indicator consisting of four circles, with the first one filled.

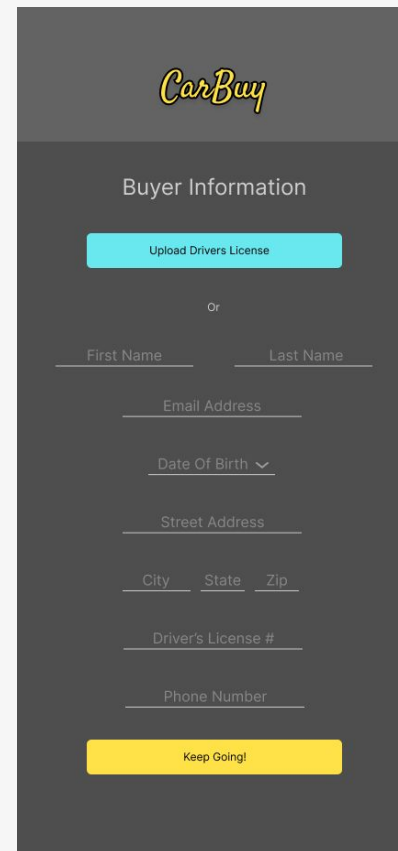
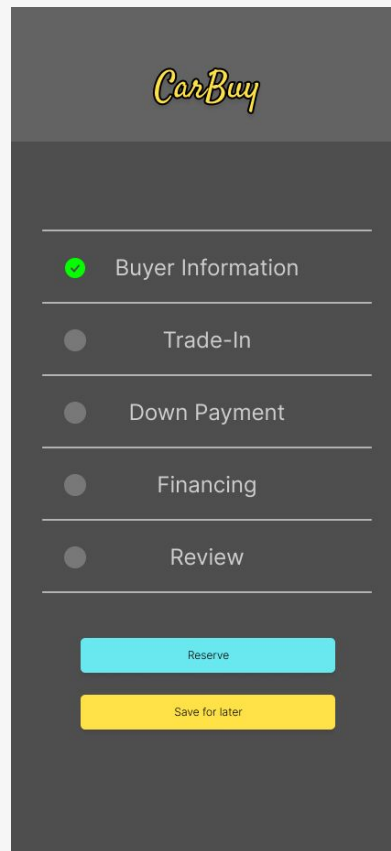
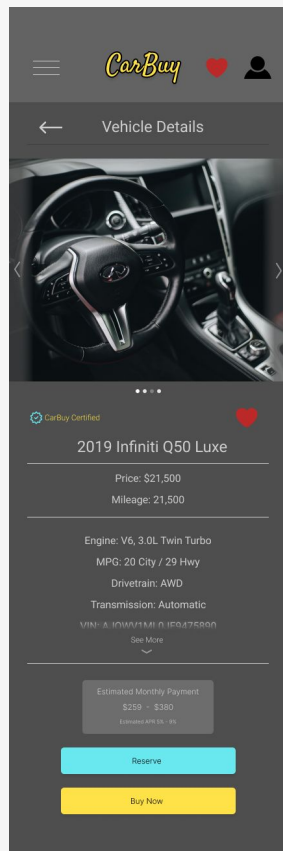
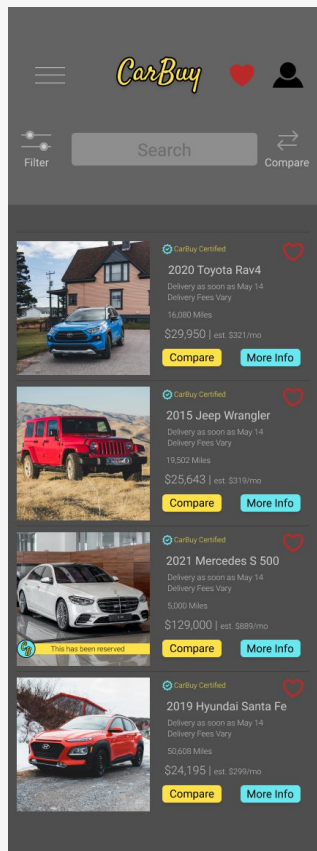


After usability study



This mockup shows a more modern and user-centric interface. It features the 'CarBuy' logo at the top. The section is titled 'Buyer Information'. A prominent cyan button labeled 'Upload Drivers License' is at the top of the form area. Below it is an 'Or' separator. The form fields are organized into a clean, vertical stack: 'First Name' and 'Last Name' (split), 'Email Address', 'Date Of Birth' (with a dropdown arrow), 'Street Address', 'City', 'State', and 'Zip' (split), 'Driver's License #', and 'Phone Number'. At the bottom is a large yellow button labeled 'Keep Going!'. The progress indicator is not visible in this view.

Mockups



High-fidelity prototype

The final high-fidelity prototype presented a cleaner user flow for the car buying process. It also includes features that meet the users wants.

View CarBuy:

<https://www.figma.com/proto/2hqwVFdzVxPYc9I1a15Rq/CarBuy-Portfolio-Project?node-id=192%3A608&scaling=min-zoom&page-id=166%3A407&starting-point-node-id=192%3A608>



Accessibility considerations

1

Used Icons to help
make navigation easier.

2

Used detailed images
to represent the
vehicles that were
populated on the
screen to help users
understand what they
were clicking.

3

Tested color contrast
on WebAIM and
compared to WCAG to
make sure users are
able to see certain
texts.

Going forward

- Takeaways
- Next steps

Takeaways

Impact:

The CarBuy app truly makes the car buying process simple and easy.

"This app was pleasant to use and easy to navigate. I would use this app for purchasing vehicles!"

What I learned:

While designing this app, I learned how to use Figma to wireframe, mockup, and prototype a design.

Next steps

1

Conduct another round of usability studies, to make sure that all of the identified user pain points have been addressed.

2

Conduct more user research to identify any areas that need improvement.

3

Polish off design and complete the light mode.

Let's connect!

Thank you for reviewing my work on the Movie Night app! If you'd see more of get in touch, my contact information is posted below!

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