JESSICA LUPANOW

UX DESIGN &
STRATEGY PORTFOLIO

About Me

Hi! My name is Jessica Lupanow. I am a junior UX designer and strategist. I love identifying areas for growth in existing products and bringing new product ideas to life.

Before working in UX, I was a doctoral researcher in socially assistive robotics. This is where I learned how to engage with users to collect useful qualitative and quantitative data about their interactions with technology.

Now I spend my time crafting unique experiences, drinking iced tea, and playing with my newly adopted dog, Bandit.

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Case Studies

This is a selection of my recent design and strategy projects.

1. Task Analysis App for Neurodiverse Users
   Includes competitive analysis, use cases, sitemap, low-fidelity wireframes, and high-fidelity mockups

2. Mobile App for Booking Flying Vehicles
   Includes customer discovery, competitive analysis, high-fidelity prototype, and online user research

3. Website Redesign for a Small Business
   Includes user research, use cases, sitemap, wireframes, visual design, and usability testing

Task Analysis App for Neurodiverse Users

Summary

Neurodiverse users have to juggle multiple childish apps to help with scheduling and task analysis. I worked with BehaveWare LLC to explore how their app, Promptly, could simplify daily life for these users. I got the lay of the land by analyzing a variety of competing apps. Then I worked with the team to define the main use cases and necessary screens. Finally I designed high-fidelity mockups of each screen. The client implemented these designs in their app, and the app is now available for download in the App Store and Google Play Store.

Role

This was work for a client. I contributed the competitive analysis, use cases, sitemap, wireframes, and high-fidelity mockups.

Timeline

October through December 2020

The Challenge

In the field of applied behavior analysis, there are two concepts that are often used: task analysis and visual scheduling. Currently, there are apps that do one or the other, but there is no app that does both. Moreover, these **existing apps are outdated and designed for children**, which can be off-putting to older users and feel out of place even for younger users who are used to popular modern apps.

BehaveWare LLC wanted to capitalize on the opportunity to create **an app to encompass both task analysis and visual scheduling** that didn't look like it was inspired by the walls of a 90's first grade classroom. They built out the basic functionality of the app, which they named "Promptly," and then brought me in to consult on the design.

The goal of this project was to make the app appealing enough so that **users of similar apps would be willing to make the switch** when Promptly launched in the App Store and Google Play Store in 2021. This meant I needed to address the expectations of users coming from competing apps while simultaneously finding ways for Promptly to differentiate itself in the market. The app had to **work for both neurodiverse children and adults**, and it needed to allow caregivers access to relevant information.

Because BehaveWare LLC wanted to get this app out as soon as possible, I **needed to get this project done quickly while maintaining quality and staying under budget**.

The Process

1. Analyze the competition
2. Define the use cases and establish a sitemap
3. Design high-fidelity mockups

Analyze the Competition

I began with a competitive analysis so the entire team could see exactly what competing apps were offering their users. I reviewed 7 competing apps, comparing their **number of downloads, features, customer reviews, pricing models, and more**. By familiarizing myself with existing competing apps, I was **not only able to identify common design patterns and features users might expect from Promptly, but also able to get a small taste of the frustrations my users must be experiencing**. I consider myself pretty tech-savvy and had plenty of time to explore each app, and I struggled to create basic tasks or schedules. Imagine being an exhausted parent trying to set up a calendar for your child at the end of a long day. Or being a busy neurodiverse adult having to figure out how to input all of the steps of your morning routine.

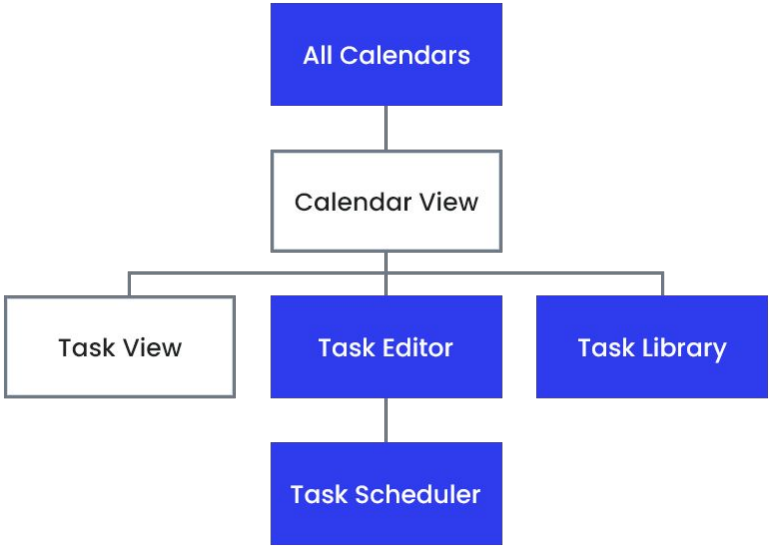
To get users to switch from other apps, Promptly would have to have a locking feature for caregivers to use, an upload feature for adding custom media to tasks, and support for multiple user profiles. I felt that **the best way for Promptly to differentiate itself was a user-friendly hierarchical app structure**: allowing users to drill down from a calendar to a task to a single step with ease. I also determined from download numbers and customer reviews that customers were responding best to paid apps.

Screens from some of the most popular competing apps.

Define the Use Cases and Establish a Sitemap

When I first joined this project, Promptly only had three screens: a main schedule/home screen, a task screen, and an export screen. From what we uncovered in the competitive analysis, we knew we'd need more screens, but which ones? How would the user move between them? What would each screen need to contain?

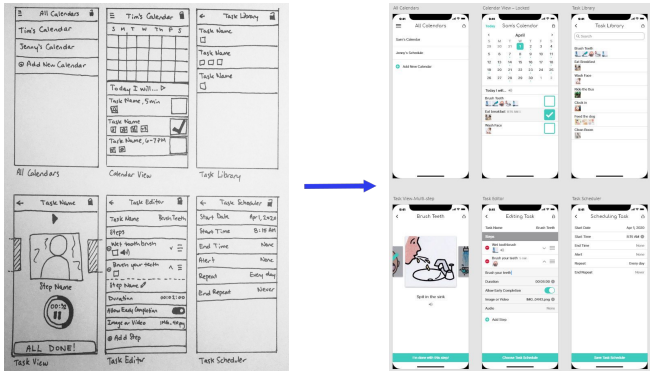
To keep things focused on the user, I defined three major use cases: creating a new task, scheduling an existing task, and viewing/completing tasks. **Writing out the steps of how a user might accomplish each task allowed me to communicate my ideas to the rest of the team before mocking up a single screen**. Refining the use cases got us all onto the same page, and I generated a sitemap to confirm the screens needed before beginning the design work.



Sitemap depicting the screens needed to support the use cases. Screens in purple are only available in unlocked mode (for caregivers).

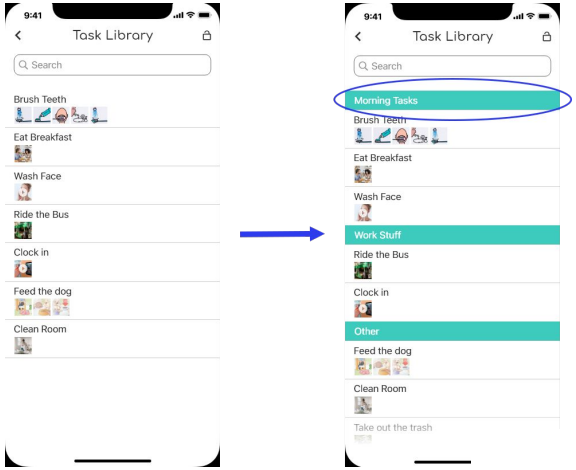
Design High-Fidelity Mockups

To me, bringing the team from words on a page to realistic designs is one of the most exciting parts of being a designer. Combining the content described in the use cases with modern design elements inspired by influencers like Google Calendar and lesser known visual schedulers and task managers, I was able to bring each screen from the sitemap to life. I **brainstormed the layouts for each screen and then sketched them out more clearly on paper before moving on to clearer, high-fidelity designs in Adobe XD**.



From low-fidelity paper wireframes to high-fidelity mockups in Adobe XD.

Then I linked the screens together so I could demonstrate the basic functionality of the app. A design review with the rest of the team **found an element that had gotten lost: task groupings**. Fortunately, the minimalistic design left plenty of room to incorporate this feature into the library and editor screens.

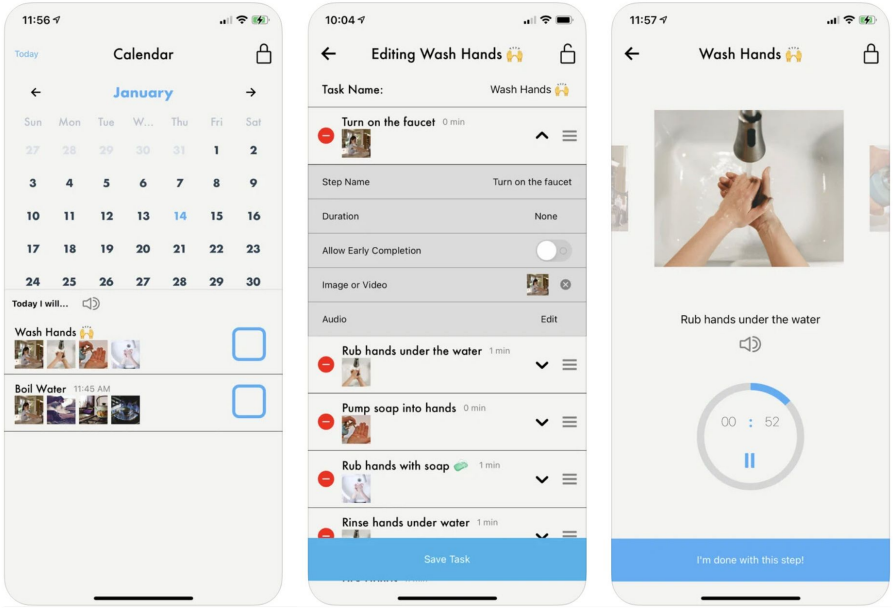


Updates to the Task Library screen to reflect the grouping feature.

The Outcome

With the high-fidelity designs in hand, the developers on the team were able to build Promptly, which you can see below. **Promptly by BehaveWare is now available for download** in the App Store and Google Play Store. I'm thrilled that the team was able to meet the goal of releasing the app to the public. Users are excited, with one reviewer commenting: "This app is straightforward, streamlined, and very user friendly. The step-by-step walkthroughs and intuitive design help you get started making tasks right away."

Given more time to work on this project, I would **assess the success of the designs with a survey**, asking Promptly users how many had previously used a competing app, how they felt Promptly compared to other apps, and who they feel this app is built for. I would also **work on improvements for the app, starting by conducting user interviews and contextual inquiry** with current users and non-users of Promptly in an effort to uncover pain points in the user journey.



Screens from the Promptly by Behaveware iOS app.

Lessons Learned

1

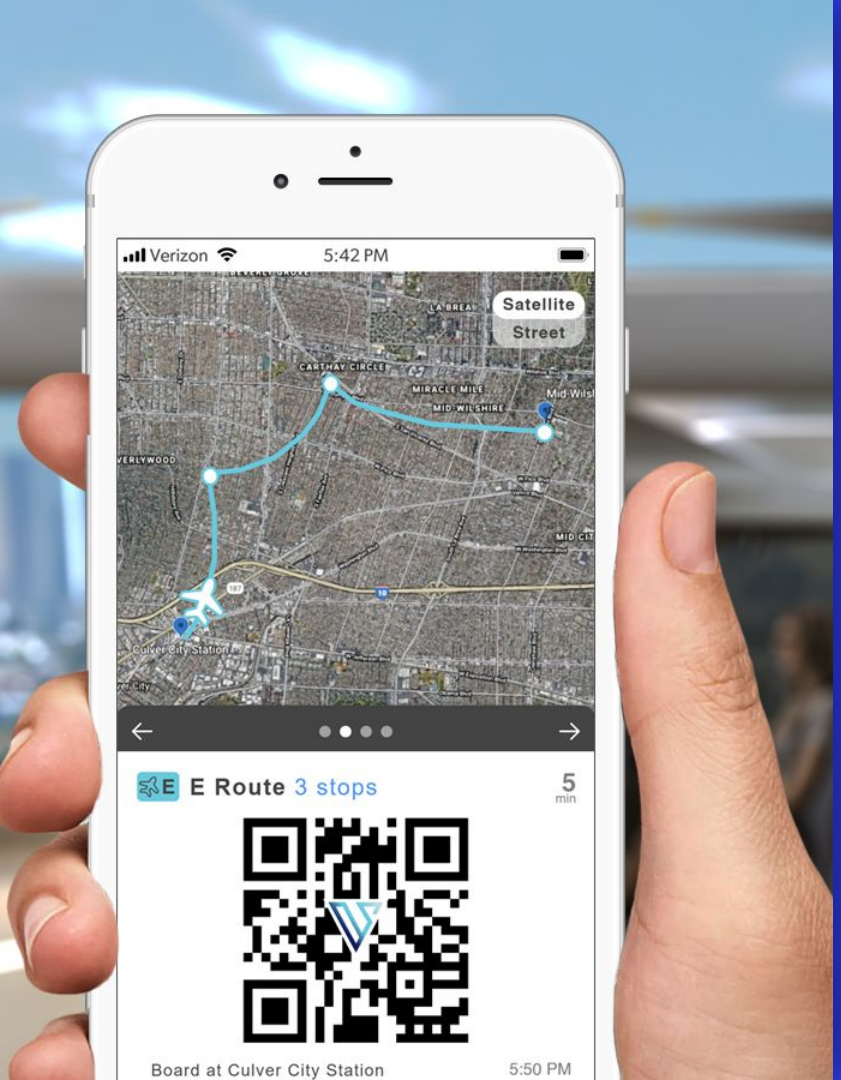
Regular design reviews are essential for good collaboration.
The team collaborated to refine the use cases, but then I stepped away to create the mockups solo and didn't share the designs until I was done with all the screens. Sharing early and often would have helped catch things like the missing grouping feature.

2

Don't jump straight to mockups.
Taking the time to check out the competition and really flesh out the use cases ensured that the mockups would be on target. Skipping those steps would have been a disservice to the client and the end users.

3

Never lower the bar for your design just because the competing designs aren't great.
Neurodiverse users appreciate good looking, user friendly apps just like anyone else.



Mobile App for Booking Flying Vehicles

Summary

Autonomous flying vehicles are estimated to hit the commercial market in 2025, but what will using these vehicles look like? I explored what users would want out of an app for booking one of these vehicles. After getting to know the customer and a performing a competitive analysis, I shifted my value proposition from Uber for autonomous flying vehicles to an app for booking an autonomous flying shuttle as part of a multi-modal route. Then I validated this value proposition and honed in on a subscription-based pricing model over the course of both qualitative and quantitative user research experiments using a high-fidelity prototype.

Role

This was a solo university project. I worked on the customer discovery, competitive analysis, high-fidelity prototype, and online user research.

Timeline

January through May 2020

The Challenge

According to Porsche and Boeing, **commercial passenger drones will enter the market around 2025**. Eccentric millionaires may be able to purchase these vehicles for private use, but how will the general public gain access? Will there be sufficient interest to support incorporating these vehicles into existing public transit systems? Are people willing to shell out to have a vehicle pick them up at their door and take them to their destination on demand?

I needed to **explore different value propositions and business models to find a way these vehicles could be made accessible to the general public**, namely those working or living in the city of Los Angeles.

This project needed to be completed **within one semester** (i.e. 5 months) and **within a budget of $125** (which was to be used for user research and advertising campaigns).

The Process

1. Get to know the customers
2. Analyze the competition
3. Design a high-fidelity prototype
4. Conduct online qualitative user research
5. Conduct online quantitative user research

Get to Know the Customers

There is only so much you can learn about customers' needs and goals by reading about LA transportation online. I **developed a provisional persona based on my online research**, but I needed to know more about what everyday people expected from these futuristic modes of transportation. Would they anticipate them working like modern public transit, coming and going from common stops, or would they expect them to be more like Uber, calling up a vehicle on demand? To answer this question, I **hit the streets of downtown Los Angeles to catch my would-be customers and ask them some questions** to learn more about their current transportation experience and their expectations for the future of LA transit. My customer discovery process included 10 individuals. Based on the insights I gathered during the interviews, I **defined my value proposition as "Uber for autonomous flying vehicles" and fine-tuned my persona** to ensure I accurately captured real user needs and behaviors. Meet the efficient millennials. They worry about the safety of autonomous flying vehicles but also know that they're not very far off in the future. They like to relax or work while in transit and need quick and affordable ways to get around, even if it means carpooling occasionally.

Description

20s or early 30s
Work or live in LA County
Disposable income

Behaviors

- Worries about the **safety** of autonomous flying vehicles
- Thinks autonomous flying **vehicles will be in LA in < 25 years**
- Uses **ride sharing services or public transportation** once a week to make it easier to travel in and around the city
- Interested in **getting work done or relaxing** while in transport

Needs & Goals

- Needs **quick, affordable, and safe** ways to get around
- Wants to traverse LA area while **avoiding parking and traffic**
- Needs to stay within **monthly transportation budget**
- Wants to **carpool** occasionally

Persona refined through customer discovery.

Analyze the Competition

Armed with an understanding of the problems faced by my persona and their interest in my value proposition, I moved on to conducting a competitive analysis. Though the technology is still a ways off, there was a surprisingly large existing market for autonomous flying vehicles (both the manufacturing and design of the vehicles themselves as well as solutions for bringing the technology to the public). I evaluated 3 direct competitors and 5 indirect competitors, **comparing their funding, revenue streams, number of prototypes, competitive advantages, customer reviews** (where appropriate), and more. Unsurprisingly, with a value proposition of Uber for autonomous flying vehicles, the **biggest competitor was Uber itself**. With $24.7 billion in funding and an enormous existing customer base, Uber Air (also called Uber Elevate) was a formidable competitor.

However, they were planning to charge customers $5 per mile to fly, which would be inaccessible for many of Los Angeles commuters. Rather than contend with Uber by trying to make my own Uber for flying autonomous vehicles, I decided to **pivot to an app for booking autonomous flying shuttles** with lower flat rates and discount passes. This way I could **differentiate by focusing on the needs of more budget-conscious customers**.

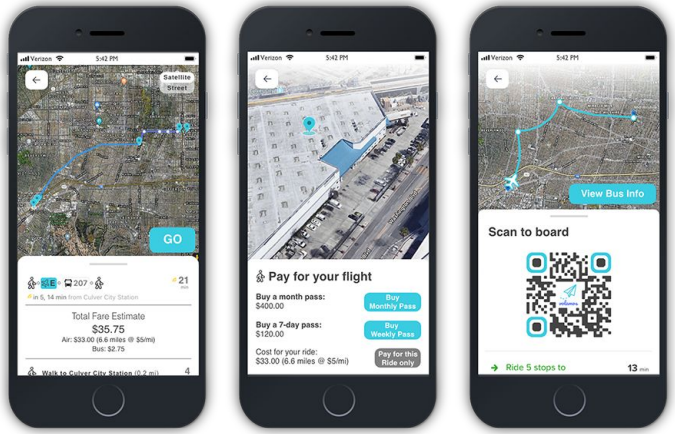
This change in value proposition was inspired by an insight from my customer discovery: people were interested in seeing these vehicles used like modern public transportation. Satisfied that the new value proposition was sufficiently unique in the marketplace, I began creating a high-fidelity prototype to get in front of potential customers.

Design a High-Fidelity Prototype

Using Adobe XD, I crafted a high-fidelity prototype that would walk a customer through the experience of taking a flight as part of a multi-modal route. I looked at relevant UX influencers, such as Uber, Lyft, and CityMapper because I wanted to **include familiar features to make using this new technology feel as familiar as hopping on a bus**. This process led me to include a detailed route overview as well as easy payment options and clear boarding directions.

Needing to test the pricing model, I provided options for paying for a single ride as well as buying week and month passes. To test the app with potential customers, I also needed to **give it a name and logo**. I chose "Volamos" since it is Spanish for "we fly" and there is a large Spanish-speaking population in Los Angeles. And I selected a paper airplane as the logo to convey these ease and excitement with which someone could ride in an autonomous flying vehicle.

With a working prototype in hand, it was time to evaluate whether or not this solution was something real people would want or need. But the prototype was completed in March 2020, just as the **COVID-19 pandemic** struck in Los Angeles. This meant that for the first time, I would have to conduct my user research entirely online.



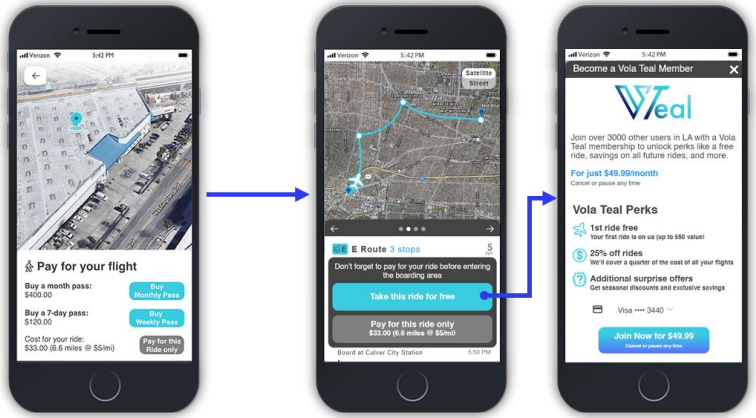
Initial prototype screens.

Conduct Online Qualitative User Research

I recruited participants on Facebook, screened them using Qualtrics, and scheduled 5 participants for interviews over Zoom. I **hypothesized that participants would prefer the subscription-based pricing model** over other options and that they would find the listed prices agreeable. I set my success criteria at 80%, meaning 4 out of 5 participants would need to confirm each hypothesis for me to move forward with this value proposition and business model.

80% of participants **liked the subscription-based pricing model**, but 0% agreed with the listed prices, so I **swapped expensive unlimited ride passes for cheaper membership options**. Also, participants were confused by the app's name and logo. They felt that the futuristic transportation option needed stronger branding that inspired more confidence with a logo that looked like those of other transportation apps.

I updated the prototype to include the new membership option (inspired by the perks of Lyft's membership program), **redesigned the logo and shortened the name to "Vola," and provided some clearer in-app guidance** where participants had stumbled.

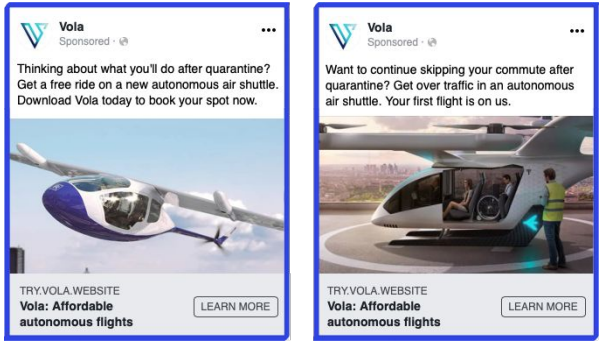


Prototype screen updates based on insights from user interviews. On the left is the payment screen before the interviews and on the right are the payment screen and membership screen after the interviews.

Conduct Online Quantitative User Research

I needed to know why my potential customers would want to use this app. Was it really for commuting as I had imagined? Or would it be for the experience of flying? **Understanding this driving force for customers would help me curate the user experience appropriately and influence future marketing decisions**: what route information would be conveyed, how the app could be advertised after development, etc. To this end, I created two different advertisements linked to identical Unbounce landing pages with app download buttons. **One ad referred to the app as a chance to book a one-off experience while the other referred to using it as part of a regular commute**. As a control, I targeted the exact same audience with each ad and ran them with the same budget for the same period of time. I also showed those who clicked on either ad the exact same landing page.

With a lower cost per result, higher number of link clicks, and higher conversion rate, **people were more interested in the app for commuting** rather than for one-off experiences. This experiment validated that people were interested in using an app for booking an autonomous flying shuttle for commuting.



	One-Off Experience Ad	Commuting Ad
People Reached	1147	1401
Link Clicks	11	43
Cost per Click	$0.45	$0.12
Total Views	12	44
Conversions	3	13
Conversion Rate	25%	30%

Top: Facebook advertisements used for A/B testing value proposition. Bottom: Advertising results showing the commuting ad resulting in higher conversion rates and lower cost per click.

The Outcome

By the end of this project, I was **able to validate the value proposition** of an app for booking an autonomous flying shuttle for commuting purposes and **uncover customer interest in a subscription-based pricing model**.

Because this was a university project, this app was not developed (but you can check out the final prototype here). If I were to continue working on this project, **I would conduct more thorough user interviews with a larger sample size** to validate that the changes I made after the first round of interviews addressed real customer needs and to uncover additional areas for improvement. If the app was developed, **I would use customer reviews and complaints** in addition to usability testing to assess the impact of the design on business objectives.

Flying autonomous vehicles will be here before we know it, and I greatly enjoyed the opportunity to explore how we might make this technology more accessible and affordable for the general public in Los Angeles.

Lessons Learned

1

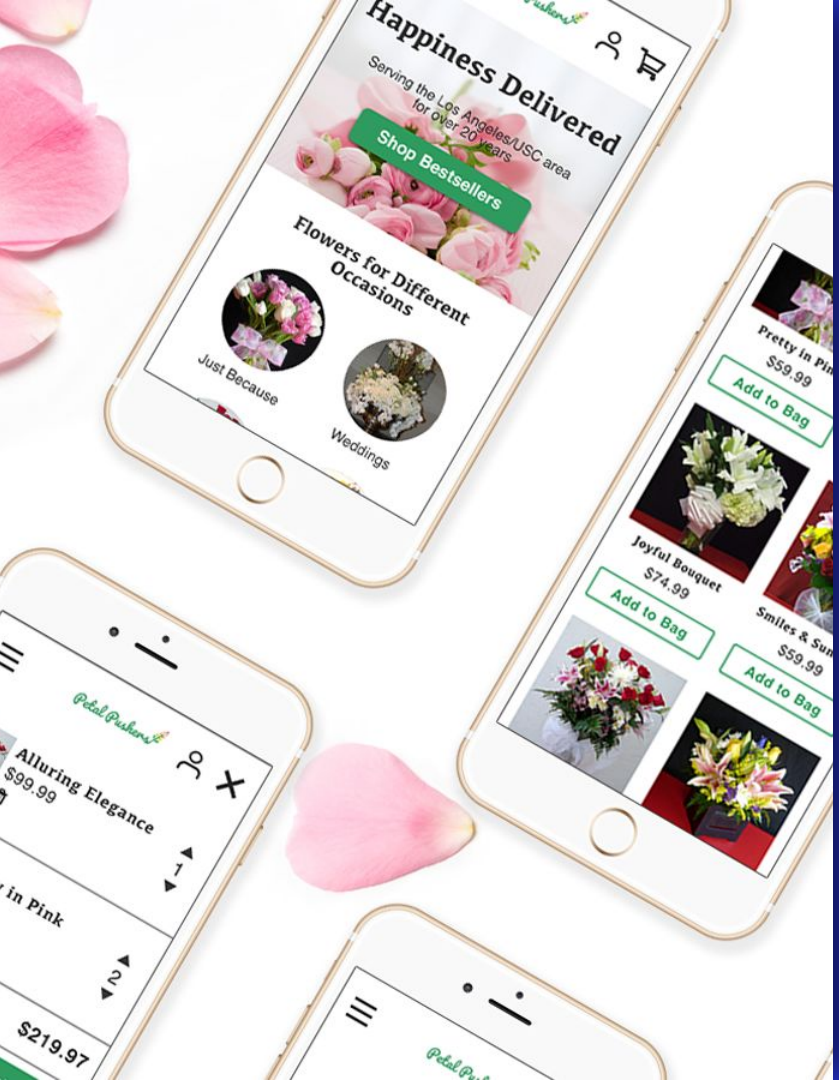
The fastest way to learn how to prototype is to prototype.
This was my first time using Adobe XD, and although there was a steep initial learning curve, it's now my go-to tool for designing and prototyping. I never would have learned how great it is if I hadn't been willing to switch things up and spend a little more time learning a new tool.

2

Even a pandemic isn't an excuse for skipping user research.
By being flexible and a bit creative, I was able to gather the feedback I needed even as a worldwide pandemic struck. Shout out to everyone who was doing online user research long before I came along who took the time to write up their advice and tips online!

3

Focus on the biggest question/variable/risk associated with your value proposition.
Prior to running the advertising campaign described above, I ran two other campaigns where I learned nothing because I didn't have a clear hypothesis. Being more thoughtful and deliberate in my experiments would have saved time and money.



Website Redesign for a Small Business

Summary

There is an ever-growing expectation for all businesses to support online shopping, but this can be difficult for small business owners who may not have the time or money to bring their operations online. In this project, I looked at ways of bringing a small business into the modern age of e-commerce. I first got to know the current customers and their needs before defining the use cases. Then I was able to lay out the information by way of a sitemap and wireframes. Finally, I applied visual design principles to finish my prototype and tested the usability of the new design.

Role

This was a solo university project. I worked on the user research, use cases, sitemap, wireframes, visual design, and usability testing.

Timeline

September through December 2019

The Challenge

Petal Pushers is a small floral shop serving the Los Angeles area for over 20 years. They are known for their excellent customer service and fresh arrangements made to order. With over 70 five star reviews on Yelp, they're a popular local choice, but the **ratings began dropping in 2019 with many reviewers blaming the out-of-date website**. With outdated graphics, broken links, non-functional flash player plug-ins, and non-responsive displays, the original site was not an accurate reflection of the shop's emphasis on quality and attention to detail.

The challenge for the owner was that his florists crafted each arrangement based on talking to the customer about their budget and preferences. The florist and the customer would work together, either in person or over the phone, to come up with the best arrangement. So the **owner thought that he couldn't sell arrangements online because he wouldn't be able to replicate this personalized process**. I needed to find a way to bring his operations online with a new responsive website design that would **improve customer perception of the business, resulting in increased traffic, revenue, and ratings**.

This project needed to be completed **within one semester** (i.e. 5 months) and **within a budget of $100** (which was for user research and usability testing).

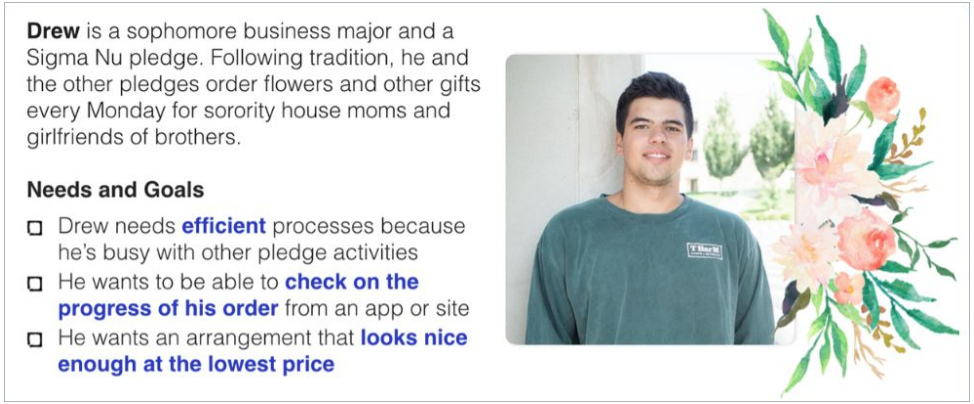
The Petal Pushers site as of November 2019.

The Process

1. Get to know the customers
2. Define the use cases
3. Lay out the information
4. Visualize the final product
5. Test the usability

Get to Know the Customers

In my initial stakeholder interview, I found that most **customers fell into one of three groups**. Some were parents of students at USC ordering congratulatory flowers to be delivered to their children. Some were office managers getting regular arrangements delivered to use as workplace decor. And most surprisingly, some were USC students in fraternities who were ordering flowers every Monday for other students in sororities. While the parents and office managers were more comfortable ordering over the phone, fraternity students often called just to ask if they could order online. This interest coupled with the regularity of their purchases led me to believe that the **fraternity student customer segment had the greatest potential for increasing traffic and revenue**. Therefore, I focused my user interviews on these students. I went door to door at the USC's fraternities looking for people who had placed orders with Petal Pushers or other local florists before. I found 6 fraternity students who had ordered arrangements from local florists, 2 of which had ordered from Petal Pushers. Asking them about their experiences ordering arrangements revealed that **they were actually tasked by older fraternity members with getting arrangements**. They didn't even always know the girls they were ordering arrangements for! I used the information I gather during my user interviews to create the following persona.



Persona for the fraternity student buyer.

Define the Use Cases

To better understand **how my primary persona would navigate the site to accomplish their goals**, I fleshed out a goal-directed context scenario and the three main use cases for the new site. I also **needed to support Petal Pushers' collaborative, personalized processes**: accepting requests, providing a client with options based on budget and preferences, and asking clients to select and pay for their arrangement prior to delivery.

Submit an Arrangement Request

1. User lands on homepage and clicks on "Shop Bestsellers"
2. User browses shop page and clicks "Add to Cart" under one of the arrangements
3. In the cart, user clicks "Request Arrangements" then "Log in to Order Online"
4. User enters login info and clicks "Log In"
5. User fills out online request form and clicks "Submit Arrangement Request"

Pay for an Arrangement

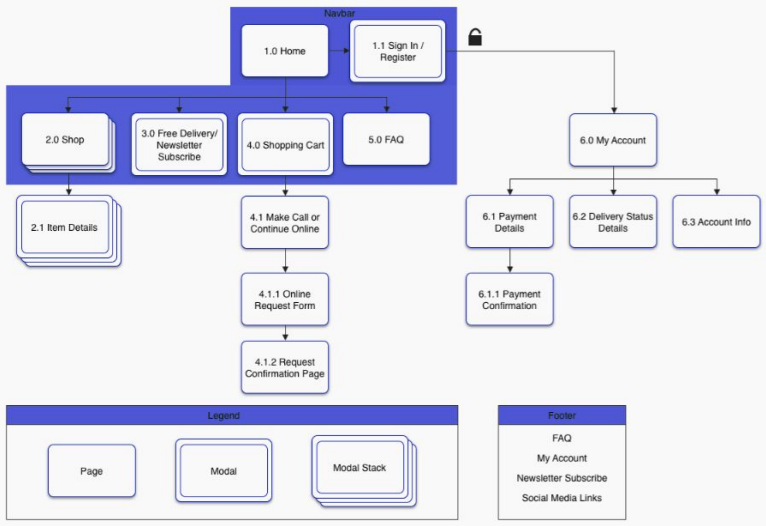
1. User clicks on the user icon on the homepage, enters login info for an existing account, and clicks "Log In"
2. User sees current and past orders and within one of the orders, clicks "View Florist Message and Make Payment"
3. User reviews florist message and any updates to their order, then clicks "Purchase these Arrangements"
4. User enters their payment info and clicks "Purchase these Arrangements"

Track a Delivery

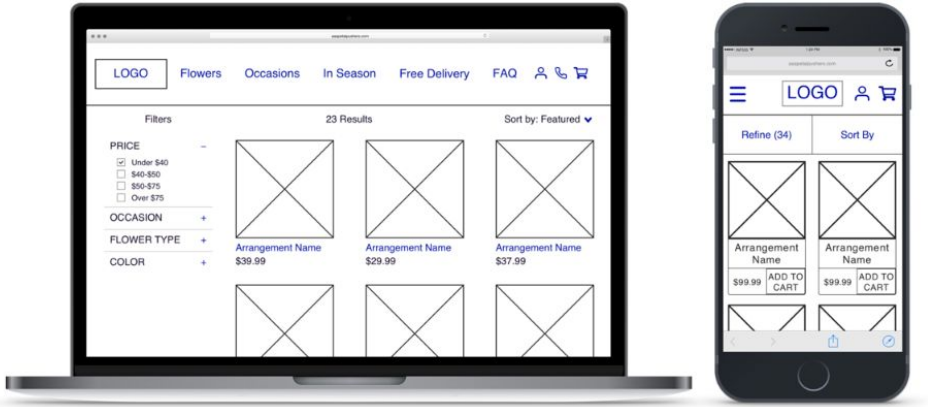
1. User clicks on the user icon on the home page, enters login info for an existing account, and clicks "Log In"
2. User sees current and past orders and within one of the orders, clicks "View Delivery Status Details"
3. User views the delivery status of the arrangement

Lay Out the Information

After conducting preliminary user research and defining the desired experience of my primary persona, I began work on the information architecture by way of a site map. **The sitemap gave me a way to share the screens I was planning to create with my peers and get feedback before putting together a single one**. Based on the feedback I received, I found ways to simplify user flows and pare down the overall number of screens. The sitemap, coupled with features and functionality lists and user flows, then drove the creation of the desktop and mobile wireframes.



Final sitemap for the new Petal Pushers site.

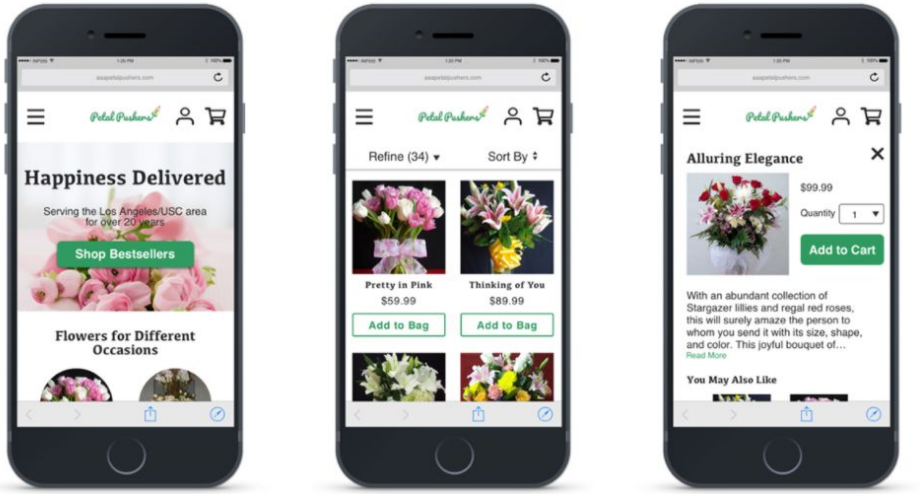


Desktop and mobile wireframes of the shop page (2.0).

Visualize the Final Product

To determine if these designs meet the needs of my primary persona, I applied visual design principles to the mobile wireframes and turned those into a functional prototype so that I could test the functionality along with the look and feel of the site with potential customers.

The shop owner asked that I keep the site “bright” as I recreated it, so when it came time to apply visual design, I chose a palette that worked well with the shop’s content while also appearing bright. I incorporated green for key visual elements, shades of pink in the main image on the home page, and used a dark gray and white for all other elements so the site wouldn’t appear overwhelming. I also redesigned the logo so it would fit with this new color scheme and the overall more modern look of the site. **Using this new color palette and logo along with new visual design elements brought the wireframes to life**. I converted these images into a prototype in Sketch so that I could test the new site out with customers.



Home page (1.0), shop page (2.0), and item details modal (2.1) with visual design applied.

Test the Usability

With the functional prototype, I was able to begin usability testing. I needed to **test the site with those that fit my persona to see if the design was clear enough that they could follow the use cases**. I used the tool Validately to conduct 4 unmoderated usability tests. Users who passed the screener navigated through the prototype online while recording their screens and talking aloud.

With **75% of participants failing to complete their order** after getting a message from the florist, the key finding of this study was that there **needed to be clearer instructions and notifications** to support this unique user flow.

Goals and Assumptions

Determine if users can easily submit an arrangement request and order
Assume users have bought flowers before

Establishing Questions

1. How did you go about buying flowers the last time? Was it easy or hard and why?
2. Have you ever bought flowers online? If so, which websites did you use and was it easy or hard? If not, why haven't you?
3. Are you a current or recent college student?

Tasks

1. Explore the home page.
2. Browse the options on this site.
3. You have some arrangements in your cart. Now order the arrangements (don't worry about filling out the fields).
4. You just got an email telling you that the florist has responded to your request and that you should check your account for more info. Finish placing your order.

Research plan outlining key components of the usability test.

	Avg Time	Passed	Failed
Task 1: Home page	00:01:03	4	0
Task 2: Explore flowers	00:01:12	4	0
Task 3: Request flowers	00:01:09	4	0
Task 4: Finish order	00:03:26	1	3

Table showing average time to complete each task along with number of participants who passed and failed each task.

The Outcome

Because this was a university project, this app was not developed (but you can check out the final prototype here). If I were to continue working on this project, **I would further simplify the user flow** by allowing customers to place their order right away (with the caveat that arrangements are subject to change but the total cost will always be equal to or less than the listed price) and send them an email asking them to review any changes to their arrangements. The florist would be able to adapt the arrangement based on the current floral selection, and neither party has to wait for messages before proceeding with the order. Thus, the simplified user flow would make the process easier for customers and support business objectives of increasing revenue through online sales without changing the traditional operation methods.

If the website was developed, **I would use online sales numbers to assess the impact of the design on business objectives**. I would also check out the latest customer reviews and conduct additional rounds of user interviews to find ways of improving the site.

I enjoyed the the chance to help a local business owner see how his shop could thrive online.

Lessons Learned

1

An hour of planning now will save many hours of designing later.
If I had skipped out on my sitemap, use cases, etc. and jumped straight to creating the screens, I may have had to complete five different designs before I found one that worked.

2

Not everyone will know what a prototype is.
Some participants in the usability testing got frustrated with the lack of functionality because they thought it was an actual website. It would have been a better experience for all involved if I made it clear that this wasn't a complete website.

3

Do not be afraid to abandon failed designs.
I spent a lot of time designing the requesting/ordering process, but it wasn't clear enough for customers. If I could do it over again, rather than adding more instructions, I would try out different user flows and see if I could come up with something simpler.

THANK YOU

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