

HAVEN



Data Solutions' Website and Mobile Design Project

March 4, 2016



Luxe Design

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Prepared for Data Solutions by Luxe Design

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Proposal

The proposal was the first chance we got to articulate and flesh out our ideas. Proposals are the very start of most projects, part of convincing the client to invest in our product and company. Yet it can be one of the most important parts of the project because it allows a space for us to negotiate with the client and make sure we agree on specifics of scope, deliverables and pricing.

What we learned from this part of the project is that you have to balance specifics with easily digestible pieces of information. In our write-up we had a very detailed description of price points and the different products the client could buy into. This might have been its own type of problem because, as we would later discuss, sometimes giving the client too many options might be seen not as a positive but rather as unnecessarily confusing and problematic. But even if the detail in this case was good, when we pulled back and summarized our pricing options at the higher level for the presentation to the client we were left with a huge range of prices with no clear explanation for that decision. This was a detractor from our pitch and from it we realized that we need to be careful when we summarize the more in-depth information so that we get all the key points without giving the wrong impression.

We decided to move ahead by building a multi-platform parking application. It would be web-based and function on mobile devices.

Objectives and Personas

During this phase of the project, we wanted to imagine what our users might be like and think about how those choices should affect our design. Furthermore, we created objectives that we would use to guide our development and use to evaluate ourselves on our progress.

The first thing we did was to create the business objectives that we thought Data Solutions (our fictional client company) might have or want in a situation like this. These included goals surrounding the success of the product, user enrollment, marketing, and relationships with other companies. In presentation, the class responded well to these objectives, and I think our way of presenting them was unique. The objectives also did a good job of fully explaining what we were setting out to do and how we would accomplish our goals. One shortcoming of our project during this phase, however, was centered on the various “takeaways” we derived from each objective. While this section of the document succeeded in representing the objectives concisely, our presentation failed to be similarly transparent. The graphic used was not ideal, and several members of the class voiced their opinion that this component was not executed well. Furthermore, we failed to mention often enough how the objectives were shaping our decision making farther down the road.

Once we had these objective on paper, we wanted to start thinking about our users in order to inform our early design process. This is where personas came into play. Our group, collectively, had a lot of experience with personas and, as such, everyone seemed like an expert. To some degree, this was true! The two personas that we did develop were well-received and did serve to highlight the primary difference between the two Haven platforms, and the types of users that might use each one. One issue with our personas, however, was that we did not create enough for each platform. A specific trouble raised by the class was that our two personas, only one for each platform, implied that the mobile app was *only* being designed for the technologically inept and that web platform was *only* being designed for those with technological experience and an interest in long-term spots. In retrospect, we should have created personas with a range of technological experience for each platform in order to highlight, to ourselves, how different decisions might impact those with different skill-levels and interests.

Our personas are included below:

Persona #1: The Tourist (short term)

Xavier Smith

Age 32, On vacation in Seattle from the East Coast



"Time is precious, so let's spend as much of our time with family and less time on the trivial things"

Biography

Xavier is thinking of moving across the country with his wife, Michaela, and daughter, Christine. The family has already visited several cities on the West Coast to see if they like the feel of them. Now they're in Seattle for 10 days. They rented a car at Seatac and drove to their hotel downtown. For next few days, they want to visit the tourist destinations as well as go to some of the hidden treasures Michaela found on Yelp. Neither Xavier nor Michaela brought their laptops, only their smartphones, so they want an app that will help them find parking easily in the city.

Salary: \$35,180

Technical Comfort Level: 5/10

As a home appliance repair technician at Sears, Xavier has knowledge of hardware, but only some for software. He is comfortable with repairing devices such as refrigerators, dishwashers, and laundry machines. On the other hand, he only uses his laptop for creating simple documents, or surfing the Web.

Mobile Comfort Level: 6/10

As Xavier usually works out of the office, he always carries his Samsung Galaxy S3. It is an old phone, but he is comfortable with it since he only uses it for basic features: call, text, and search. For additional application usage, he often uses Google Maps and Yelp.

User Goals:

- Find a parking place near crowded tourist destinations
- Want to save money and time on finding parking

Persona #2: The Business Woman (long term)

Katherine Sherwood

Age 44, Marketing Consultant from Redmond



"I am **passionate** about my **career** and am always looking for a great deal"

Biography

Katherine is a Marketing Consultant in Seattle and have been with her firm for 6 years. She owns a house in Redmond with her husband but works for some of the largest companies in Seattle, often commuting to the heart of downtown. She loves her job and usually works at the same place for a few months at a time but being a consultant means she doesn't get all the perks, like a parking spot. Instead she is always scrambling to find street or garage parking that won't cost an arm and a leg. She would like to find a way to set up regular parking in advance so she knows where she is going to park each morning and, preferably, save money while doing so.

Salary: \$60,133

Technical Comfort Level: 8/10

As a Marketing Consultant for a large firm, Katherine's company-owned laptop is always by her side. She's fluent with Microsoft Office, such as Word and Excel, as well as other software programs that her company requires.

Mobile Comfort Level: 8/10

As a consultant, Katherine is always on-the-go. When Katherine is not on her laptop, it is highly likely that she is on her iPhone 6s Plus. In her pastime, she likes to surf the internet for the latest marketing trends as well as some online bargain shopping.

User Goals:

- Find a reliable place to park her car in downtown Seattle
- Find parking that allows daily parking from 8am-4pm at a reasonable price
- Be able to view all of the potential parking spots near her workplace
- Be able to pay in advance

Below is the “takeaways” graph that was mentioned earlier that certain class members objected to for being too confusing. Some of that was due to the way it was presented: each bubble was uncovered one by one and the fact that the resulting graph did not end up being a pyramid did not meet people’s expectations.



Content Strategy

The biggest challenge we faced in forming our content strategy was how could we create a plan that defined our content approach across a very diverse range of uses and targeted stakeholders. To do this, we divided our content strategy up into sections that allowed us to be very specific about each unique content need.

Most broadly, we started by distinguishing the different strategies we needed to take regarding content for current users and content for potential users.

For our potential users, we positioned our marketing strategy around how Haven can reduce stress in our users’ day to day lives. More so than the location or cost benefits that we can provide, we felt that potential users would grab onto this theme because people have an

emotional disdain for parking as it is the most annoying part of so many days. The three messages we planned to use in support of this theme are:

- **Your time is precious -- don't waste it on parking**
 - The easy navigation of Data Solutions' parking database allows you to find a parking place near your location/destination quickly.
- **Plan where to park with confidence**
 - Whether you're in a rush or simply planning ahead, the ability to know where to park and to claim that spot as your own helps eliminate a stressful factor when planning an event.
- **Make informed decisions with ease**
 - With Haven, you will be able to find parking spots at a reasonable distance from your final destination as well as compare the prices of available parking.
 - Haven's simple application design will help guide your decision in the most transparent way possible.

For current users, we focused increasingly on the content structure. One of our primary design goals was to create an “unforgettable” user experience and to do that we knew we not only had to have the *right* content, we also had to have it structured most effectively.

1. We established that the most vital content was the parking spot data. This includes the spot's location, pricing, availability, description, type of spot (residential driveway, residential garage, commercial garage, etc), and any other information that the owner had provided.
 - a. Content Structure
 - i. We found the easiest way to display this parking information was on an interactive map. Spot location is dictated using a colored bubble and further information can be accessed by clicking on the bubble.
 - ii. One thing we added later in the project life was other types of spot icons aside from the generic bubble. This is explained thoroughly later in this document, but from a content strategy perspective, this allowed us to display more content on the screen without compromising the content structure.
 - b. Content Generation and Maintenance
 - i. Parking spot location, price, and availability information was generated and will be maintained by Data Solutions.
 - ii. Tertiary spot information such as description and type will be generated by us, Luxe Design, but will be maintained by Data Solutions.
2. Our next most important content goal was to provide functionality for the user. The two ideas we initially had were a GPS navigation service for mobile users to be directed to

their reservation and functionality for web users to plan their reservation on a week by week or month by month basis.

- a. Content Structure
 - i. The navigation was a fairly straightforward content structure decision because we decided it made most sense to align with GPS navigation structures that our users would be most familiar with (like the designs found in Google Maps and Apple Maps). Furthermore, given that we had decided to use the map interface as the home screen for the mobile app, it made it very easy to include navigation functionality.
 - ii. The most intuitive way we found to structure the planning functionality was to use a calendar interface where users could add, change, or cancel reservations to ensure they had parking for the weeks that they needed it.
- 3. The last content strategy goal we had was to provide educational resources for new users. We didn't give this aspect much attention in our initial content strategy, but as we started prototyping and testing, we realized the importance.
 - a. Content Structure:
 - i. We decided that after downloading our app, upon opening it for the first time, the user would be taken through a quick animated storyboard to show them the general use case (Search, Reserve, Park).
 - ii. For our web users, we moved this general use case (Search, Reserve, Park) to 'above the fold' on our web homepage and any further support they may need can be accessed through the "Help" link on the map interface.

Looking back, a lot of our initial, general ideas on content strategy proved to be effective. The biggest thing we missed in our first approach was not including the educational resources for both mobile and web. On the web we moved some material explaining our service from 'below-the-fold' to 'above-the-fold', and for our mobile app we added a short tutorial for first time users.

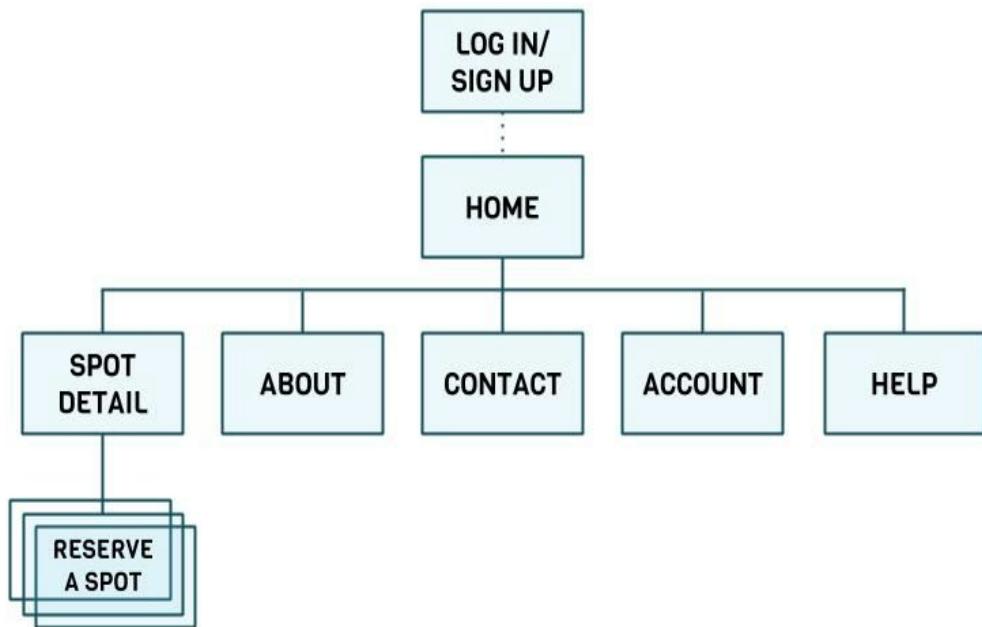
One skill that I am glad our group developed is having the ability to adapt our content plan to accommodate new features or new necessary material. Through prototyping and testing, this plan was changing frequently and we are proud that we were able to rely on the business objectives and design goals we had set for ourselves to adapt to these changes.

Sitemap and Wireframes

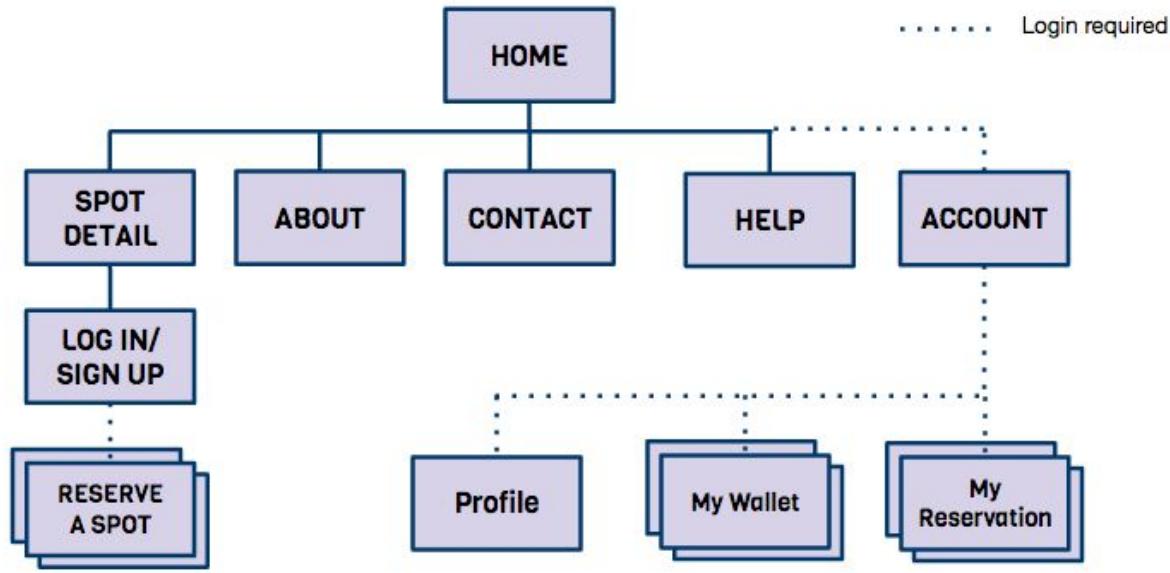
During this stage, we created sitemaps in order to visually organize the intended flow of the website and mobile. This also ensured that both the website and mobile application had the similar functionalities and the pages were interconnected with each other. By simply viewing the sitemap, it is clear to see the information hierarchy. The first challenge was determining which information was most important from the user's perspective.

Our first sitemap forced the user to initially sign in before being able to view any parking spots. However, after weeks of iteration and research, this sitemap changed.

Original Sitemap:



Revised Sitemap:



Our revised sitemap illustrates our change in thinking as the project progressed. We decided our users would want to test out the product before committing to signing up with Haven. However, in order to access certain features, such as the user's own account or making reservations, an account with Haven was required.

After diagramming the sitemap and figuring out the type and location of the content (in relation to each other), it was time to visually lay out the website and mobile app wireframes. The purpose of the wireframe is to help us and the client to mentally visualize the final product. Wireframes allow a lot of flexibility in terms of changing the format and placement. By creating a wireframe, we were able to run through our applications to find out whether or not the pages we planned made sense and were effective. This also gave the client a chance to make any changes.

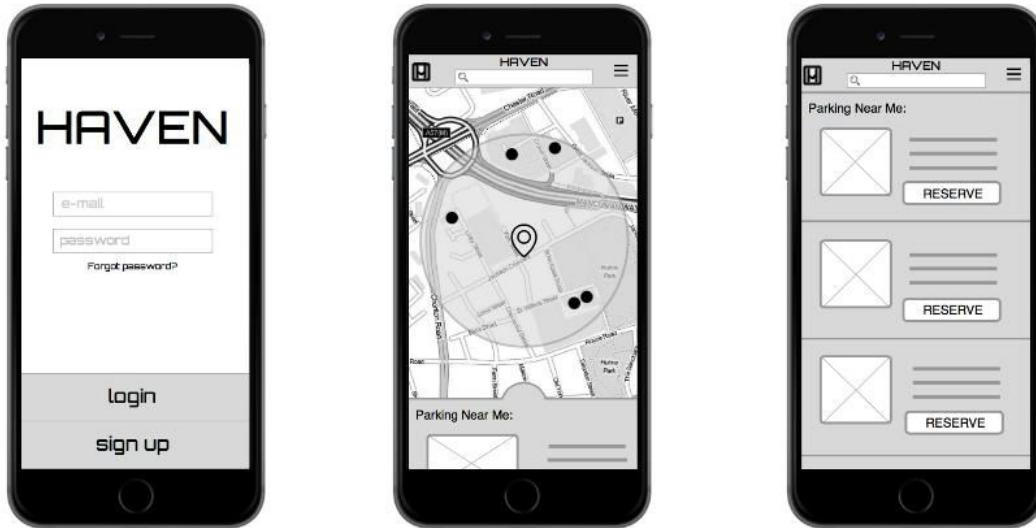
Both the website and mobile app focused on the main functionalities: signing in, map display of parking spots, and reserving a parking spot. The aesthetic design, in terms of colors and content, were not taken into consideration during this phase since it would have detracted from the main purpose of these wireframes.

Looking back on this phase, we did execute it fairly well. We adapted our sitemap and wireframes when it was necessary, and pulled this off without a hitch. The only thing that some members of the class objected to was the generality of the sitemap; perhaps next time we do this the site map should be a little more detailed. That being said, I still think our approach

worked, since most of our functionality is contained within the same page and a sitemap, as such, does not have as big of a role in this as it did for other projects.

Below are some of the deliverables we created during this phase.

Mobile App Wireframe:



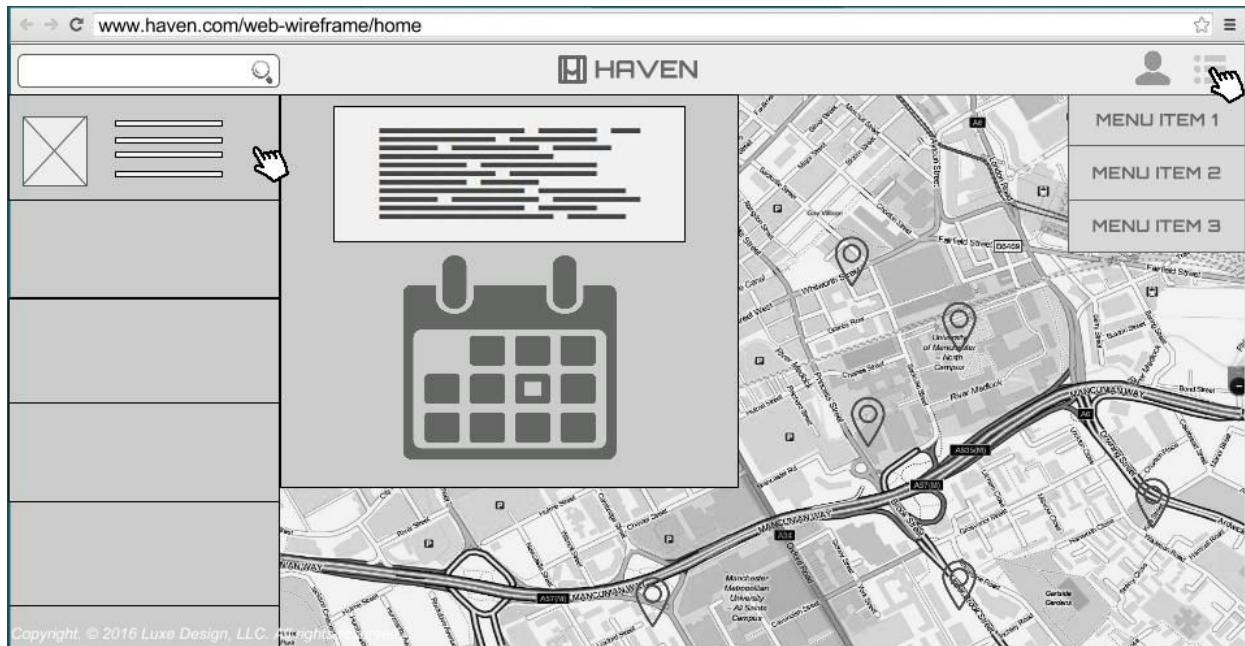
More In-Depth Details About the Mobile App:

Page ID	Page Title	Needs/Specs	Wireframe Strategy
A1	Login/Sign up	<ul style="list-style-type: none"> ● Logo ● Sign up button ● Log in button ● Marketing content: <ul style="list-style-type: none"> ○ Our solution 	<ul style="list-style-type: none"> ● On mobile, we chose not to include all the marketing content you see on the web Login/Sign up page (W1) because we don't think all that information can be displayed effectively on a mobile screen size. We chose to include the "Our solution" section because we want all new customers who download the app to know how to use the product
A2	Home	<ul style="list-style-type: none"> ● Logo ● Links to Account page (A4), About page (A5), and Contact page (A6) ● Search bar ● Available spot presentation 	<ul style="list-style-type: none"> ● We chose to present the spots on a map display because it seemed like an intuitive way to convey the most important information (location) about a large number of nearby spots. ● We chose to put the search tool in the top center and the account and other links in the upper right corner because that is the intuitive location for the user.
A3	Spot Detail	<ul style="list-style-type: none"> ● Spot location ● Spot description ● Spot pictures ● Spot availability ● Spot pricing ● Reserve button 	<ul style="list-style-type: none"> ● We chose to include this on its own page for the app because this information could not be effectively displayed within the Home page.

A4	Reservation	<ul style="list-style-type: none"> ● Basic spot information ● Reservation time confirmation ● Payment form 	<ul style="list-style-type: none"> ● We designed the reservation page in this fashion so that the user could (1) First - confirm that they were reserving the right spot, (2) Second - confirm that they were reserving the spot for the correct time, and then (3) Third - Complete the purchase.
A5	Account	<ul style="list-style-type: none"> ● Display and allow editing of basic account information (name, email, etc) ● Display and allow editing of payment options (saved credit cards, set primary payment option, etc) ● Display recent transactions 	<ul style="list-style-type: none"> ● We chose to include the items listed to the left in the order that we did because we thought that order reflected each item's importance. ● For the recent transactions section on mobile, we decided not to display any recent transactions by default because screen real estate on mobile is so valuable. We will allow the user to see their full customer history by clicking a "Recent transactions" button.
A6	About	<ul style="list-style-type: none"> ● Company Information ● Company values and mission ● Company members or leadership team information 	<ul style="list-style-type: none"> ● We elected to include this page because it allows the customer to get to know us. This will allow our user to understand where we're coming from and why HAVEN is the best parking app on the market. ● This page contains less information than the web version because screen real estate is far more limited on the mobile platform.
A7	Contact	<ul style="list-style-type: none"> ● Contact form (web ticketing system) ● Customer support email, phone, hours of operation 	<ul style="list-style-type: none"> ● This page serves the user by allowing them to contact us in the event of any problems using our platform. This page's utility is twofold: it allows us to ensure every user is able to use our application, and it allows us to gather information about any troublesome features/aspects of the application.

Website Wireframe:





More In-Depth Details About the Website:

Page ID	Page Title	Needs/Specs	Wireframe Strategy
W1	Login/Sign up	<ul style="list-style-type: none"> ● Logo ● Sign up button ● Log in button ● Marketing content: <ul style="list-style-type: none"> ○ Problem description ○ Our Solution ○ Our mission 	<ul style="list-style-type: none"> ● We decided to put the signup and login buttons at the top of the page to make it as easy as possible for user to sign in or for new visitors to join our service.
W2	Home	<ul style="list-style-type: none"> ● Logo ● Links to Account page (A4), About page (A5), and Contact page (A6) ● Search bar ● Available spot presentation ● Selected spot details presentation 	<ul style="list-style-type: none"> ● We chose to present the spots on a map display because it seemed like an intuitive way to convey the most important information (location) about a large number of nearby spots. ● For the web version, we chose to include the spot details on this page. Instead of this information being on its own page, when the user selects a spot, a panel slides over and covers roughly 1/3 of the page which displays the selected spot's details. ● We chose to put the search tool in the upper left corner and the account and other links in the upper right corner because that is the intuitive location for the user.
W3	Reservation	<ul style="list-style-type: none"> ● Basic spot information ● Reservation time confirmation ● Payment form 	<ul style="list-style-type: none"> ● We designed the reservation page in this fashion so that the user could (1) First - confirm that they were reserving the right spot, (2) Second - confirm that they were reserving the spot for the correct time, and then (3) Third - Complete the purchase.
W4	Account	<ul style="list-style-type: none"> ● Display and allow editing of basic account information (name, email, etc) 	<ul style="list-style-type: none"> ● We chose to include the items listed to the left in the order that we did because we thought that order reflected each item's importance.

		<ul style="list-style-type: none"> ● Display and allow editing of payment options (saved credit cards, set primary payment option, etc) ● Display recent transactions 	<ul style="list-style-type: none"> ● For the recent transactions section, we decided to display the five more recent transactions by default with a “More” button beneath to see the full customer history.
W5	About	<ul style="list-style-type: none"> ● Company Information ● Company values and mission ● Company members or leadership team information 	<ul style="list-style-type: none"> ● This page allows the customer to get to know us. This will allow our user to understand where we’re coming from and why HAVEN is the best parking app on the market. ● This also makes it transparent to the user/shareholders who are on the leadership team as well as our mission statement and values.
W6	Contact	<ul style="list-style-type: none"> ● Contact form (web ticketing system) ● Customer support email, phone, hours of operation 	<ul style="list-style-type: none"> ● This page serves the user by allowing them to contact us in the event of any problems using our platform. This page’s utility is twofold: it allows us to ensure every user is able to use our application, and it allows us to gather information about any troublesome features/aspects of the application.

Prototyping

Based on the sitemap and wireframes, we designed the primary prototypes. We aimed to meet different requirements for each target group: short-term parking vs. long-term parking. In order to identify the users’ expectation or needs for Haven, we decided to use AB Strategy before designing the prototypes. Instead of just asking open-ended questions to testers, we expected that the AB strategy would allow us to meet details of user requirements.

There were two primary things that we were trying to determine with our A and B prototypes. First, we want to know if our mobile users prioritize finding the closest spot quickly, or if they’d rather have a slightly longer process that allows more immediate flexibility. We would determine this by implementing one method, where the user is presented with a pop up / light box offering them the closest spot, and one method where the user is simply brought to the main map. In both cases, the main map is accessible, it is simply that in the first implementation the user sees the “find a parking spot” offering first.

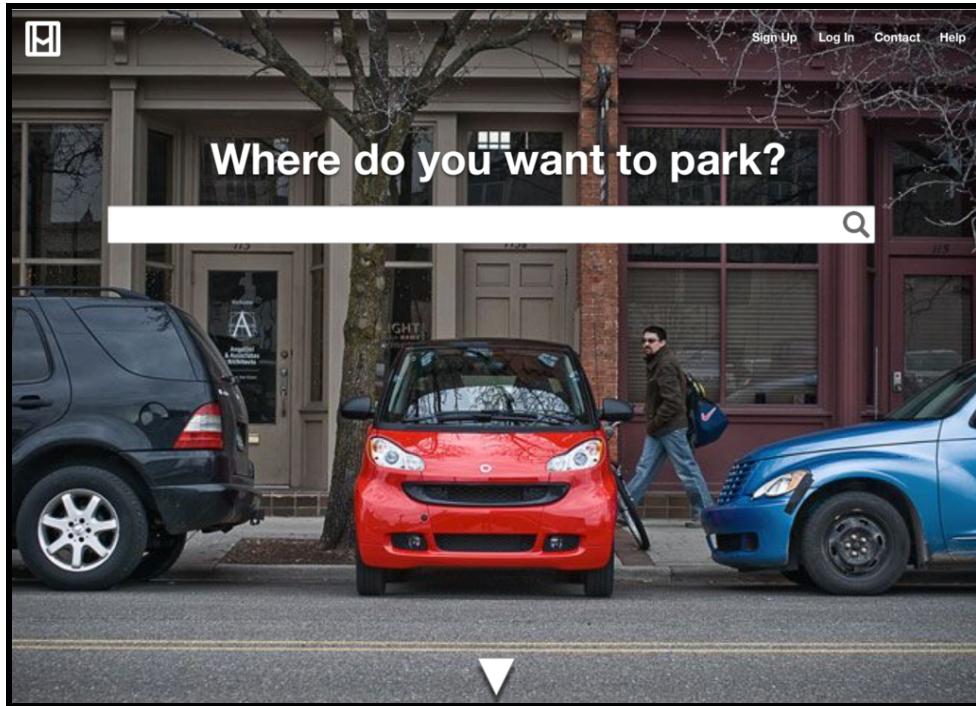
For our web users, we wanted to determine whether they’d rather only see spots that conform to their schedule, or whether they’d rather see *all* available spots, and then filter /browse to find something that works for them. The implementation for the first case is simple; we will ask for some schedule / availability information to accompany each query. In the second case, the user simply queries by location, and then has options to filter results to hone in on the perfect

spot. Furthermore, we would explore whether it's preferable to allow the user to view available spots before signing in, or whether they must log in to interact with the interface at all.

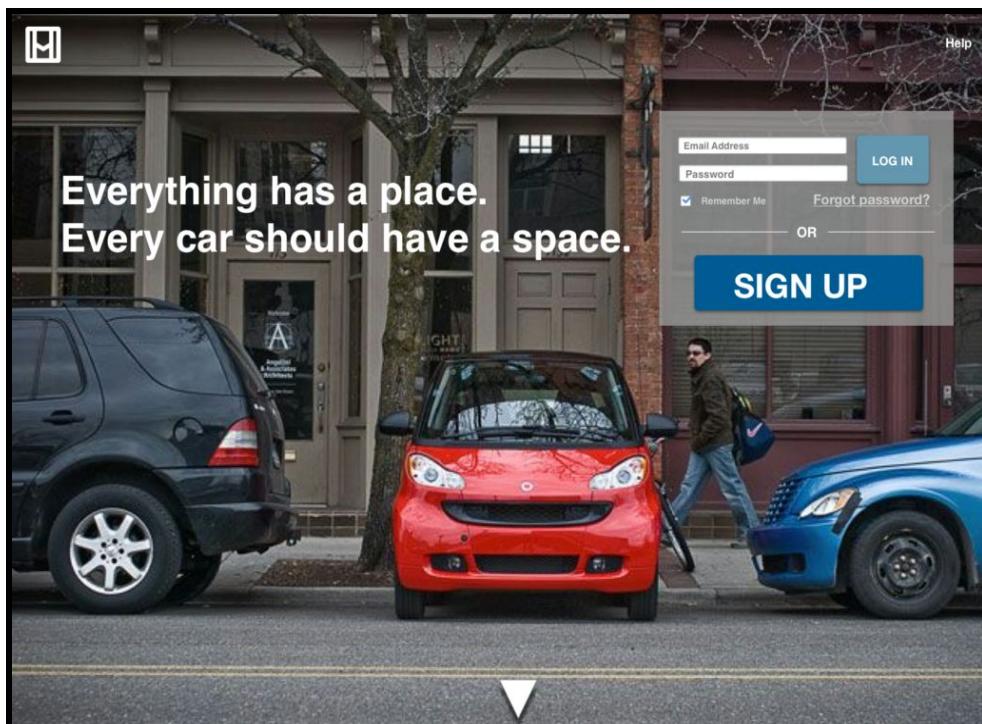
Details of each page are available below.

● Desktop sign-in

- Approach “A”: Search for parking immediately



- Approach “B”: Sign up for an account first



Both of these screens scroll down to the following description that tells users more about our company:



● Desktop homepage

○ Approach “A”: Anonymous viewing

University of Washington

Central Plaza Garage Gatehouse

15th Ave NE & Northeast 41st Street, Seattle, WA 98105

Type: Garage Parking
Time Restrictions: 6am-12am
Comments: Compact
Price:
0 to 1 hr - \$5.00
1 to 3 hr - \$7.50
3 to 6 hr - \$10.00
6 to 9 hr - \$12.50
9 to 12 hr - \$15.00

February 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

Feb.24 ~ Feb.26 (3)
6 hour(s) / day

Total Price : \$30 [Detail](#)

Reserve

HAVEN

○ Approach “B”: User with an account viewing

The screenshot shows a user interface for a parking reservation system. At the top, there's a search bar with "University of Washington" and a magnifying glass icon. To the right are links for "Account", "Contact", and "Help". A vertical sidebar on the right contains "Profile Settings", "Payment Settings", and "Reservation".

Central Plaza Garage Gatehouse

15th Ave NE & Northeast 41st Street, Seattle, WA 98105

Type: Garage Parking
Time Restrictions: 6am-12am
Comments: Compact
Price:
0 to 1 hr - \$5.00
1 to 3 hr - \$7.50
3 to 6 hr - \$10.00
6 to 9 hr - \$12.50
9 to 12 hr - \$15.00

February 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					Feb.24 ~ Feb.26 (3)	
					6 hour(s) / day	

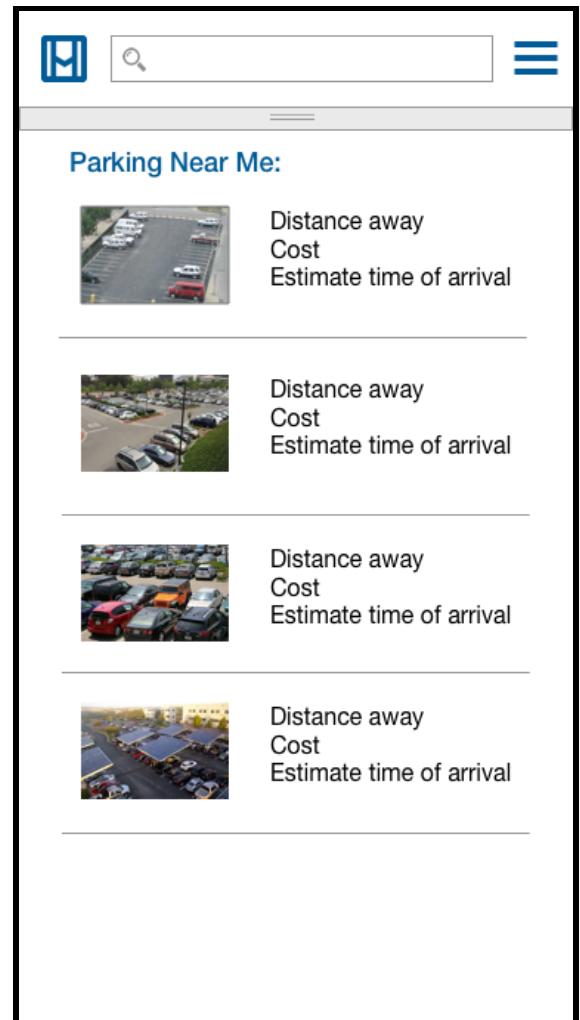
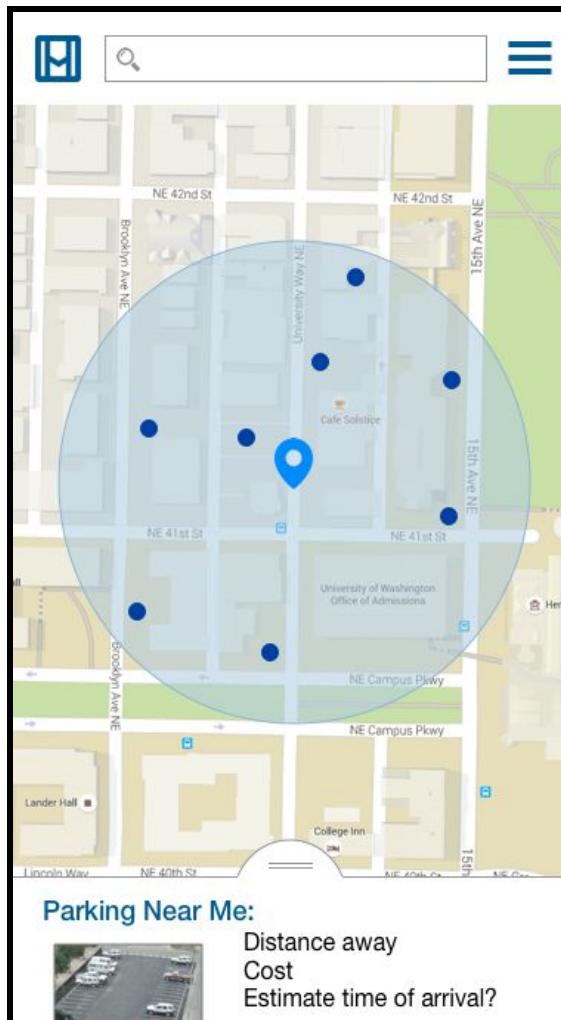
Total Price : \$30 [Detail](#)

Reserve

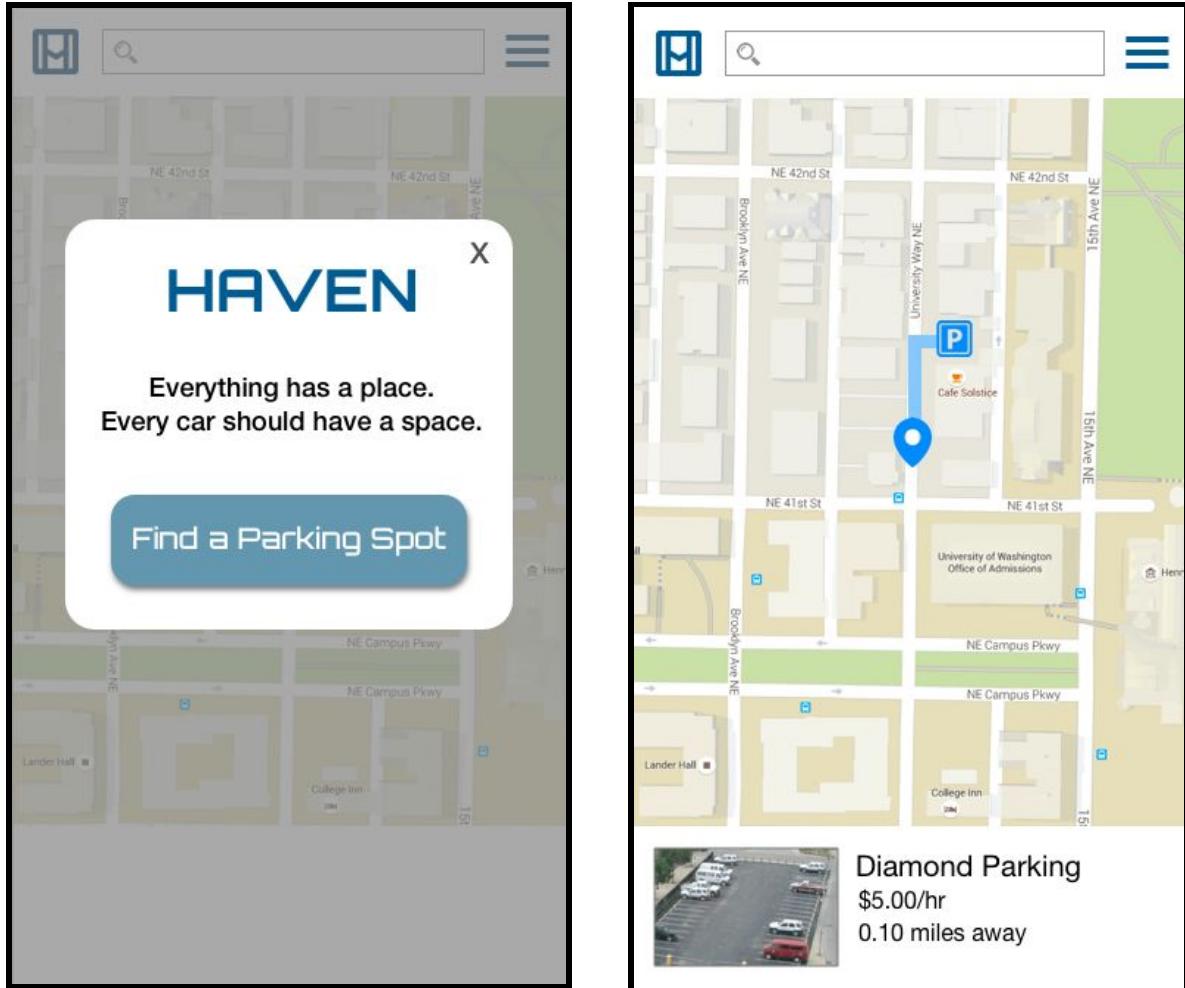
The map on the right shows the University of Washington campus with the Central Plaza Garage Gatehouse marked by a blue location pin. The HAVEN logo is in the bottom right corner of the map area.

● Mobile sign-in/homepage

○ Approach “A”: Nearby spots (map and list)



○ Approach “B”: *Find a Spot* button



● Prototype Reflection

Using AB Strategy for prototyping allowed us to identify what the users actually need, which was different from what we expect them to need. For example, we expected “Finding a Spot” button is necessary for those who are looking for a parking space while driving. However, from the AB Strategy and interviews, we learned that the users would prefer to control over selecting information, rather than information is automatically selected for the users.

Although it was a helpful method to iterate our design process, we could have done it in more efficient way if we had more time to work on it. Instead of just interviewing few

people, we could have deployed an interactive prototype online, so that the users can actually experience the application. In such way, we could let more users to test the prototypes since it they are accessible online. With the results from various users, we could have conclude more precise user requirements. The statistics of the result would support the design change that we would likely to make in the next version of prototype.

Another way to improve our prototypes is to research more on similar applications. Since our time was limited, we could not completely research and compare good examples to those that need to be improved. Thus, we could have focused on gathering more information before jumping into designing, so that it could have been more efficient and better.

Testing

The testing phase was one of the most “hands-on” parts of this project. When making our personas we didn’t do much user research, we just based them on what we already knew about the needs of different users. Thus, the testing phase was the first time we actually talked to potential users of our product. We wanted to get an idea not just of how they would use the product but also what they would feel about it and how they thought it could be improved. There was a real back and forth with the people we interviewed and it was refreshing to get a new perspective on our project after we’ve spent so many weeks involved in the minutiae.

We did a good job brainstorming with our interviewees and getting feedback about what worked and didn’t work about our AB testing prototypes. However, upon presenting our findings we realized we may have gone too far in the direction of depth and not had enough breadth in our findings. For example, rather than having only qualitative interview questions that cannot be easily compared to one another we could have mixed in some quantitative questions so that we could get statistics about how many people felt a certain way or completed a certain task accurately. Or, if we were determined to stick to qualitative interviewing styles we should have gone the extra distance and qualitatively coded the results so we could turn the different responses into common themes that we could report on more concretely.

As it is I think we learned a lot about our product and our users through the testing phase. We found that our intuition to make the app as simple as possible was limiting and users preferred more options. This actually goes back to feedback we received on our personas, that most early adopters are quite tech savvy and will want more options and more features rather than less. We also learned that our client wants concrete reporting of results which our presentation of our testing didn’t have.

Final Product

Mobile Version



Image 1: Loading Screen

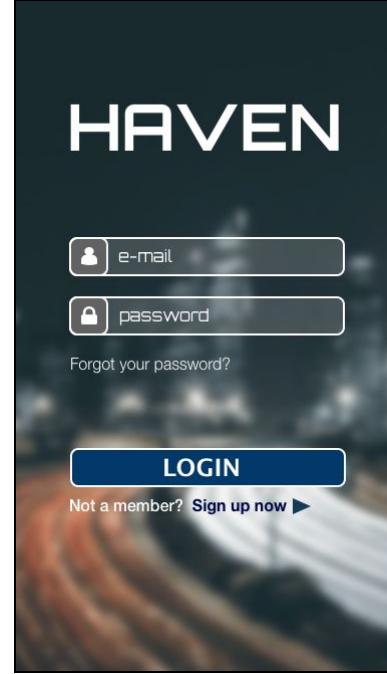


Image 2: Login Screen

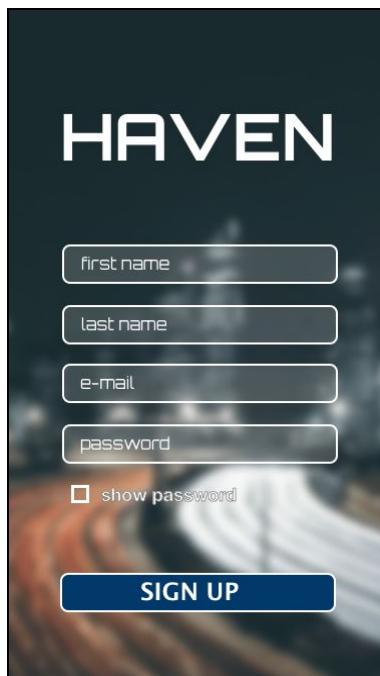


Image 3: Sign Up Screen

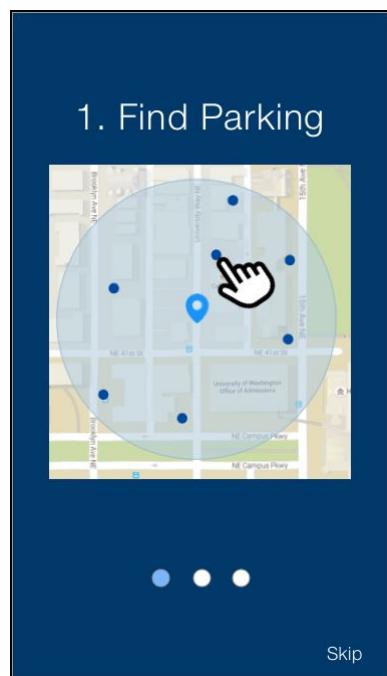


Image 4: Tutorial Screen 1

Mobile Version

continued...

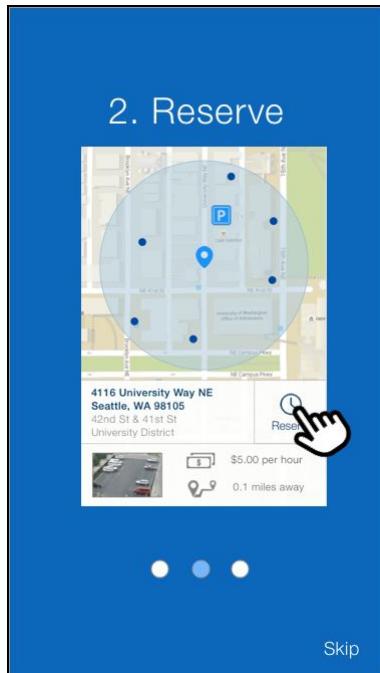


Image 5: Tutorial 2



Image 6: Tutorial 3

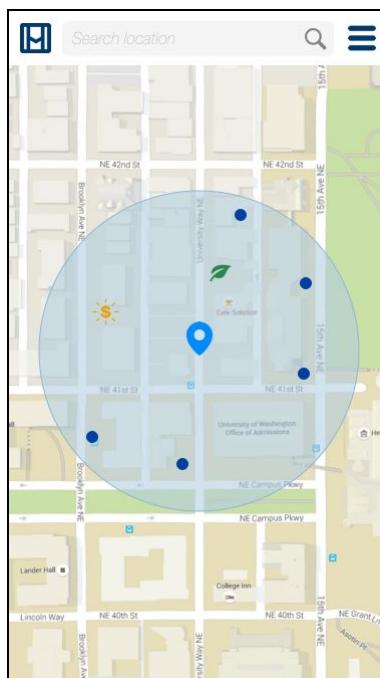


Image 7: Main Map

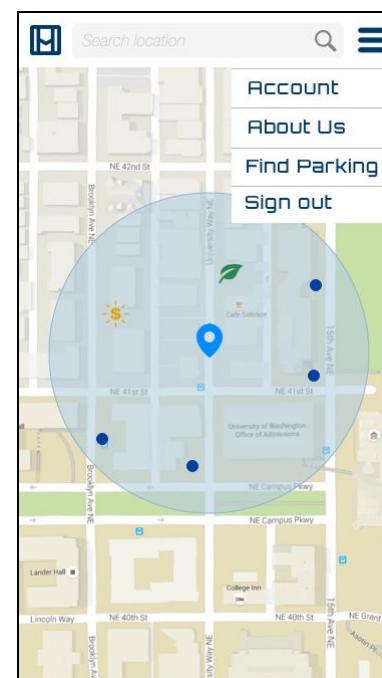


Image 8: Show Menu

Mobile Version

continued...

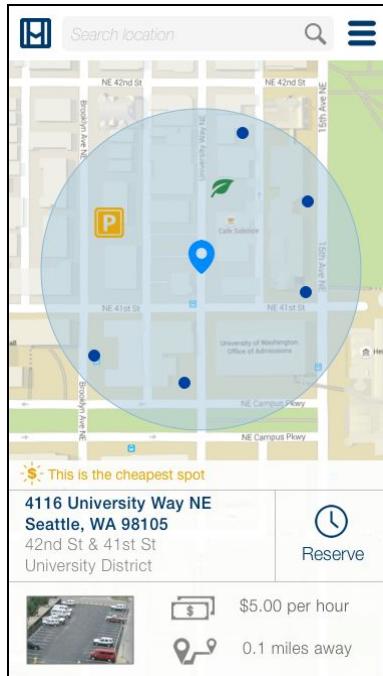


Image 9: Cheapest Spot

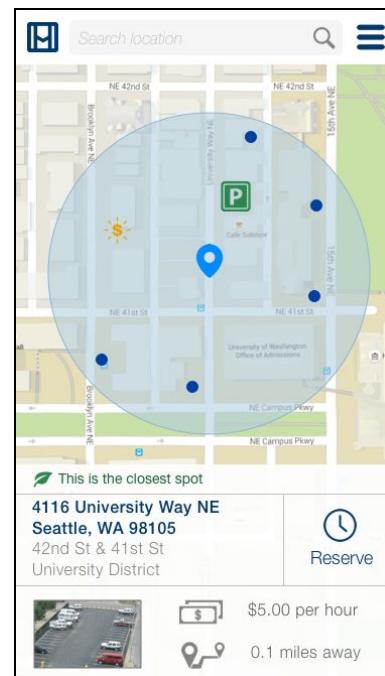


Image 10: Closest Spot



Image 11: About us

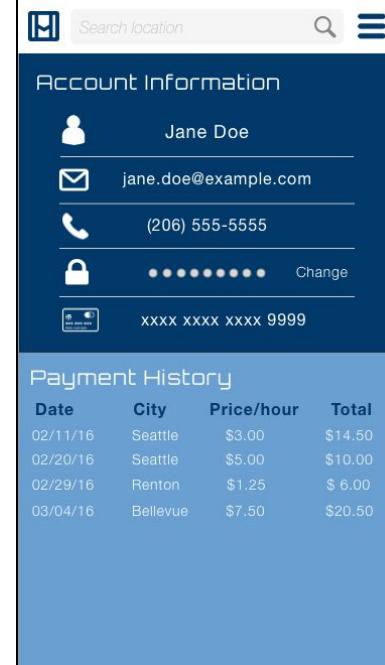


Image 12 Account Information

Web Version

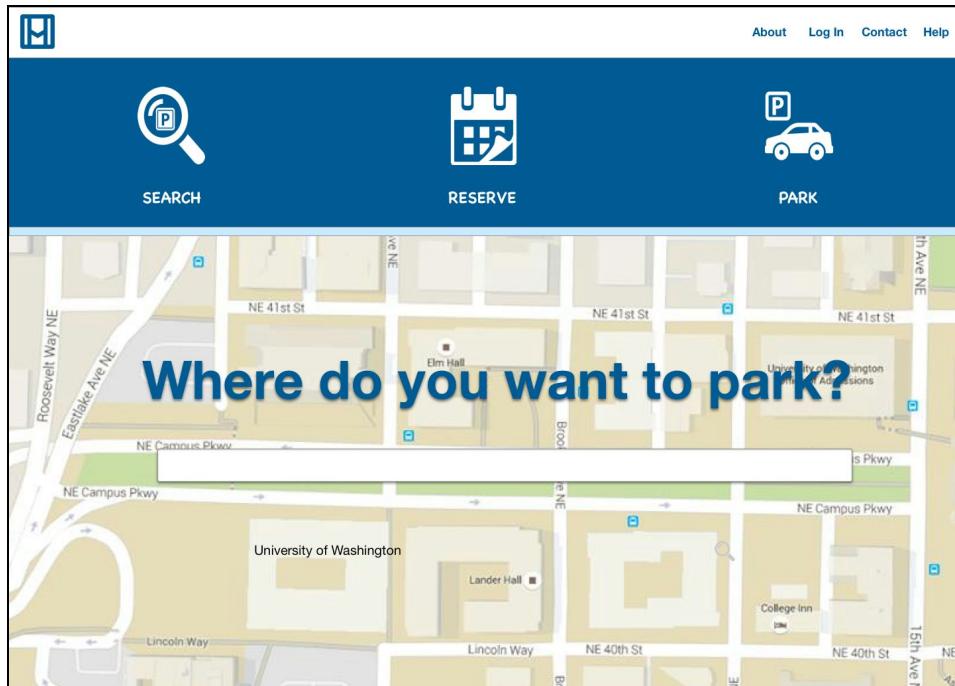


Image 13: Home Page (default)

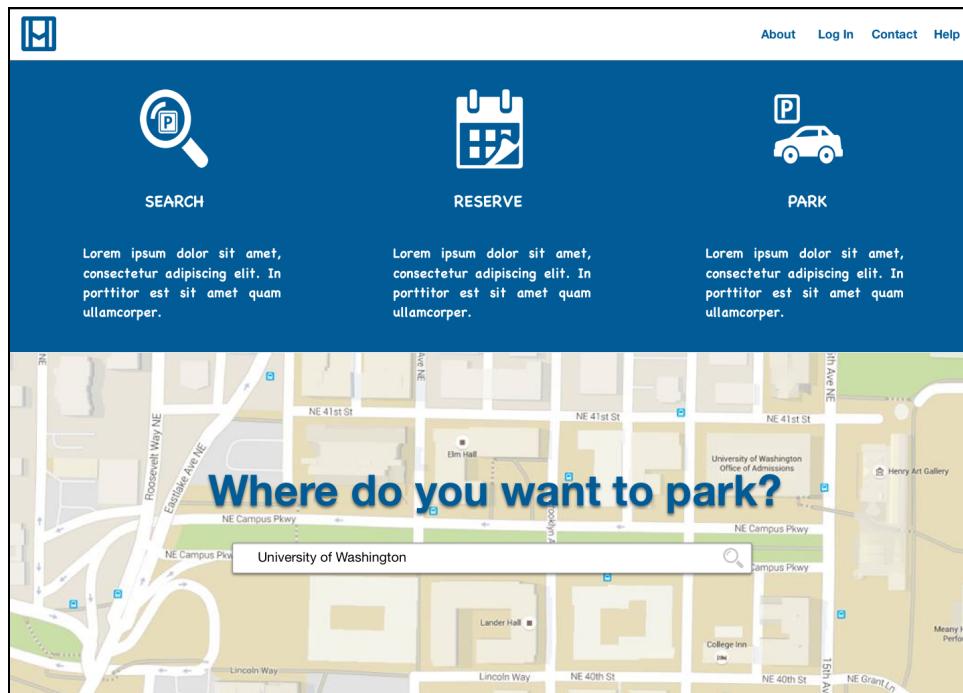


Image 14: Home Page (scrolled up)

Web Version continued...

The screenshot shows a search interface for parking at the University of Washington. On the left, there is a sidebar with a search bar and sorting options: 'Sort By : Popular' (selected), 'Distance', and 'Cost'. Below the sidebar, five parking options are listed:

- Central Plaza Garage Gatehouse**: Located at 15th Ave NE & Northeast 41st Street, Seattle, WA 98105. Includes a thumbnail image of the garage.
- Lorum ipsum Garage**: Located at 15th Ave NE & Northeast 41st Street, Seattle, WA 98105. Includes a thumbnail image of a parking lot.
- Ipsum Public Parking**: Located at 15th Ave NE & Northeast 41st Street, Seattle, WA 98105. Includes a thumbnail image of a parking lot.
- Sunshine Parking**: Located at 15th Ave NE & Northeast 41st Street, Seattle, WA 98105. Includes a thumbnail image of a parking lot.
- Metropolitan Parking**: Located at 15th Ave NE & Northeast 41st Street, Seattle, WA 98105. Includes a thumbnail image of a car parked outside a building.

On the right side of the screen is a map of the University of Washington campus. The map shows various buildings, streets, and landmarks. Five blue location pins are placed on the map, corresponding to the parking locations listed on the left. A legend in the bottom right corner indicates that a blue circle with a white 'P' represents a parking location.

Image 15: Search

The screenshot shows a detailed view of the Central Plaza Garage Gatehouse parking option. At the top, there is a back button labeled '<< Back'. Below it, the parking details are listed:

- Type:** Garage Parking
- Time:** 6am-12am
- Price:**
 - 0 to 1 hr - \$5.00
 - 1 to 3 hr - \$7.50
 - 3 to 6 hr - \$10.00
 - 6 to 9 hr - \$12.50
 - 9 to 12 hr - \$15.00
- Reservation Duration**
- From:** 2016-03-07 8:00 AM
- To:** 2016-03-09 4:00 PM
- Total Price :** **\$37.50**
- Payment :** My Wallet, PayPal

At the bottom of the sidebar, there is a 'Reserve' button and a link to 'Terms & Policies'. The right side of the screen is a map of the University of Washington campus, showing the location of the Central Plaza Garage Gatehouse with a blue pin.

Image 16: Parking Detail

Web Version continued...

University of Washington 

[« Back](#)

Central Plaza Garage Gatehouse 

15th Ave NE & Northeast 41st Street, Seattle, WA 98105

Type: Garage Parking

Time: 6am-12am

Price:

- 0 to 1 hr - \$5.00
- 1 to 3 hr - \$7.50
- 3 to 6 hr - \$10.00
- 6 to 9 hr - \$12.50
- 9 to 12 hr - \$15.00

Reservation Duration

From 2016-03-07  8:00 AM 

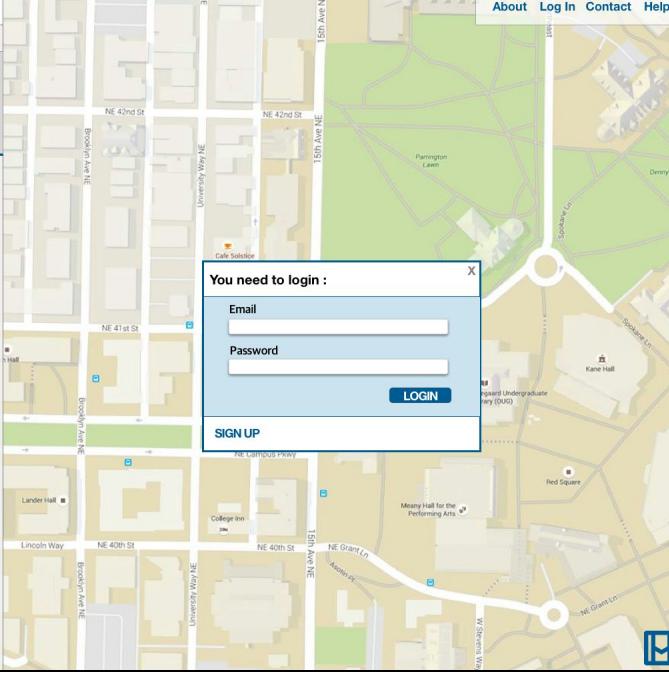
To 2016-03-09  4:00 PM 

Total Price : **\$37.50**

Payment :

 
We accept secure payments via
Visa MasterCard American Express Discover

Reserve [Terms & Policies](#)



You need to login :

Email

Password

LOGIN

SIGN UP

[About](#) [Log In](#) [Contact](#) [Help](#)

Image 17: Login

University of Washington 

[« Back](#)

Central Plaza Garage Gatehouse 

15th Ave NE & Northeast 41st Street, Seattle, WA 98105

Type: Garage Parking

Time: 6am-12am

Price:

- 0 to 1 hr - \$5.00
- 1 to 3 hr - \$7.50
- 3 to 6 hr - \$10.00
- 6 to 9 hr - \$12.50
- 9 to 12 hr - \$15.00

Reservation Duration

From 2016-03-07  8:00 AM 

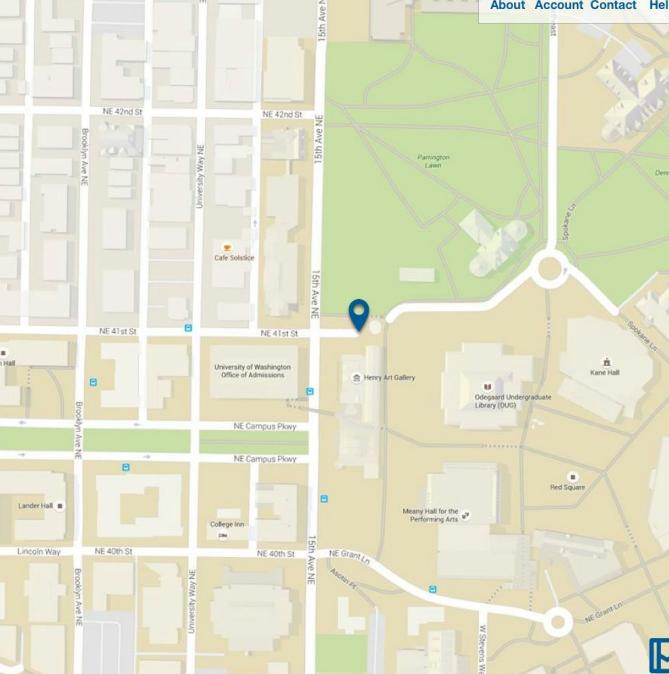
To 2016-03-09  4:00 PM 

Total Price : **\$37.50**

Payment :

 
We accept secure payments via
Visa MasterCard American Express Discover

Reserve [Terms & Policies](#)



[About](#) [Account](#) [Contact](#) [Help](#)

Image 18: Account Logged In

Web Version continued...

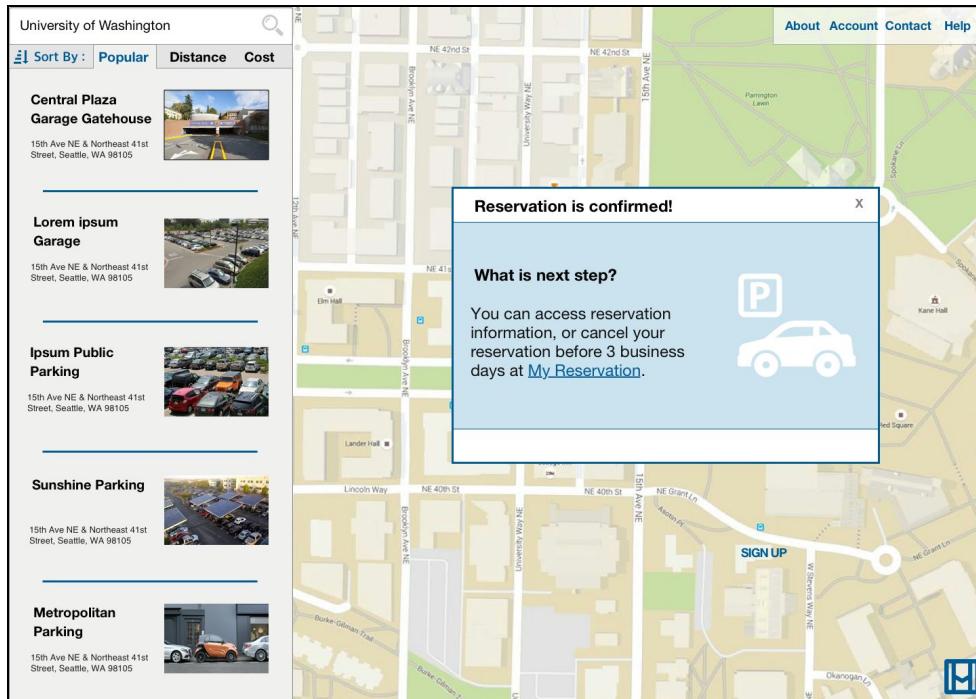


Image 18: Reserve a Parking Spot

We took heavy influence from some of the apps that exist today, both mobile and web. Some standard screens that we created for the mobile version are shown in Image 1, 2-3, 4-6. Image 1 was the loading screen that the app would display when first being opened. Images 2-3 are login and signup screens and 4-6 are the tutorials that would help new users (and only prompt new users) how to use our apps.

We intentionally only had three steps in our tutorial because we wanted to be true to our primary UX principle: simplicity for the user. We know the user just wants to reserve a parking spot as fast and as easy as they can. That's why it's as easy a couple clicks, literally, to do so.

Images 7-10 show the map view as well as when the settings tile is toggled open. The leaf icon and the dollar icon on the map indicate closest and cheapest parking locations respectively. We put a lot of thought into whether to use colors or symbols as we wanted to address accessibility issues. As a result we decided upon using both colors and symbols to make it stand out *and* accessible to those who are color blind.

Image 11 displays a short ‘About Us’ screen that tells users who we are and how this app came to be. We also included social media outlets for users to facebook, twitter, email or phone in comments, feedback, questions or concerns.

Image 12 is the ‘Account Information’ view where users can access their account and payment information as well as their reservation history.

Image 13 and 14 are our newly designed home screens for our web interface. After feedback on our first prototype, we wanted to make our search bar more intuitive. Placing it on top of a map was our way of conveying that it will be used as a query to the map. The same question ‘Where would you like to park?’ still prompts the user for an expected response.

Image 15 shows the view when you search for a location. It brings a map with a certain radius around it and highlights locations where parking is available. You are able to see different parking spots in a list on the left. When you click on it, it brings you to Image 16.

Image 16 details critical information a user needs to make a decision on whether to reserve the selected parking location. With an easy one-click “reserve” button, users can quickly reserve their preferred parking spot.

Image 17 indicates that up till this point, users won’t have to log in. But when they decide to finally reserve, we’ll need necessary information, particularly billing to be able to process their reservation.

Image 18 shows the view for users when they are logged in. Notice that the top right navigation bar has changed from “Log In” to “Account”.

Finally, following through with Image 16 and clicking on “reserve” as a signed in user, you are notified that you have successfully reserved the parking spot, assuming that user billing information is correct.

All in all, we believe we successfully met our user experience goals that we set out to achieve at the very beginning of our project. Most notably, making it simple, was critical in our decision making process. We believe we were able to make our mobile and web app as simple as possible, while still allowing the flexibility and features that users love. On reflection, we think that this would be a great product for any user who encounters the issue of finding a place to park. Thinking forward, this prototype can be used as a proof-of-concept for organizations who wish to develop our app to simplify and solve the parking frustration people face everyday.

Project Evaluation

What did we learn from this project/class?

Isabelle Edwards

This project taught me a lot about balancing our own opinions and the knowledge we bring to a project with the knowledge we can gain from research and outside insight. In a sense even coming into this class we had some idea about User Experience because we had all been users, but we've only ever had to think about our own perspective and desires whereas this class and this project really taught me to balance different viewpoints and be open to changing my ideas based on feedback from others.

Brittney Hoy

Being part of Haven made me realize that the User Experience (UX) design process is an iterative process. There are many moving parts in UX and they are all interrelated, meaning that at anytime during any iterations, another UX factor could impact the design (for example, realizing a key aspect during a UX research). I've learned that while your designs may not be set in stone, it's important to focus on the early stages in order to set your team up for success. It definitely makes the later stages of the design process much more manageable.

Graham Kelly

Over the course of our project, I learned a couple of things. First and foremost, I learned how to work well in a team "from a distance." This is basically just working/collaborating over chat and with a minimum of meetings. Additionally, I was able to improve my presentation skills dramatically. Finally, and most importantly, I learned about my own assumptions about UX design and how those assumptions can play out in a project environment.

Sean Ker

I learned a lot about collaborating in a team and working together to accomplish a common goal. The textbooks assigned to class were also very helpful in my learning process. Particularly useful were analyzing the presentations that everyone was giving and getting feedback.

Nick Nordale

The most beneficial thing I learned from working with my team was how to settle differences of opinion in an effective way. Sometimes design can be a very qualitative practice, but by using strategies like personas and A/B testing, you are able to resolve differences of opinions and create a design that everyone can agree is the *right* one.

From class, the discussions I found most beneficial were the ones about dealing with clients. I have never built websites or designed prototypes for clients and I found it very beneficial to hear some of the strategies you can use to keep your client happy.

Woosuk Seo

While working on this project, I learned several things. First of all, I learned the importance of teamwork. My trustful teammates worked hard for each weekly assignment, so that we could produce the best product. Particularly, we did not have work together in face-to-face meeting. In other words, we usually worked individually. Everyone was responsible for the part that is assigned. For the user experience aspect, I learned that what designers expect the user to need could be different from the actual user requirements. Thus, in order to meet the actual user needs, I realized that designers should conduct various researches , prototyping and testing. Overall, the project allows me to expand my perspective on group work and user experience.