UNCHARTED

Travel for 20-somethings

Team

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Problem and Solution Overview

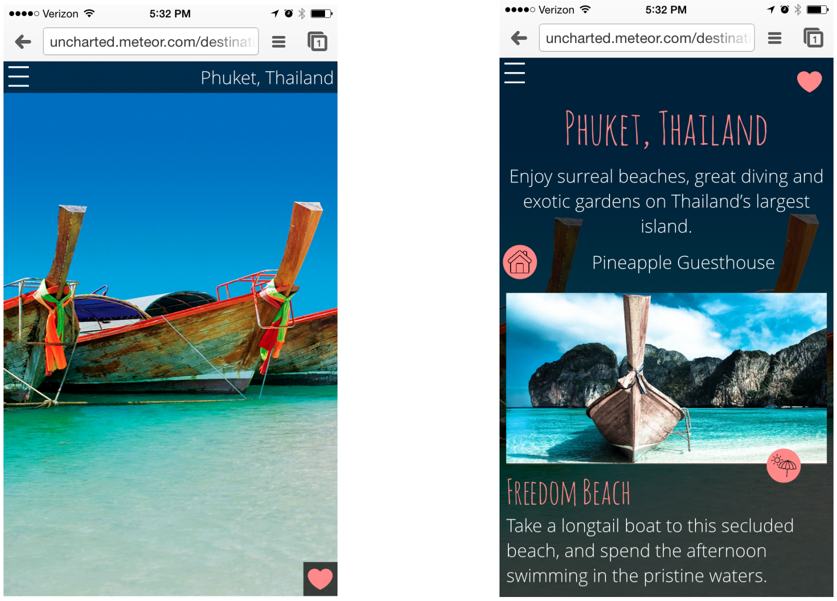
20-somethings are eager and frequent travelers, but they rarely rely on travel guides for recommendations. They find these tools frustrating for being too touristy, and not offering suggestions relevant to their interests and preferences. For these users, travel planning is a dreadful process that involves wading through extensive information on destinations, activities, and accommodations, and ultimately making decisions they still don't feel confident about.

Designed specifically for 20-somethings, Uncharted helps users explore destinations and jumpstart their travel plans. Each destination offers a quick snapshot of a possible trip, using hi-definition images and targeted activity suggestions. We also recommend the top place to stay for budget travelers. Users can filter destinations to find ones in specific regions, and use wishlists to save and organize the destinations you love.

Uncharted lets users daydream about the perfect vacation without battling information overload, or stressing over options and decisions to make. By narrowing our focus to initial travel planning and targeting 20-something travelers, we can provide content relevant to our users, and at the level of detail they need to feel confident in booking their travel plans.

Tasks & Interface Scenarios

Our main objective with Uncharted is to make discovering new destinations delightful and stress free. It was, therefore, a priority to make browsing destinations, our core purpose, as simple as possible. Currently, we found our users browse destinations by asking friends for recommended destinations and googling for top things to do in that area. We aim to simplify this process by putting the best destinations at their fingertips, using images and brief notes to help users image a couple days in each location after just a glance. Browsing destinations occurs in the Explore tab of the menu, and is accomplished by swiping right and left between destination pages, and tapping to view the trip details page on any intriguing destinations.

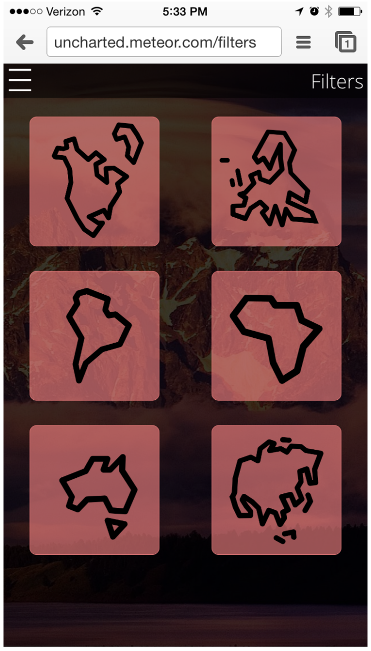


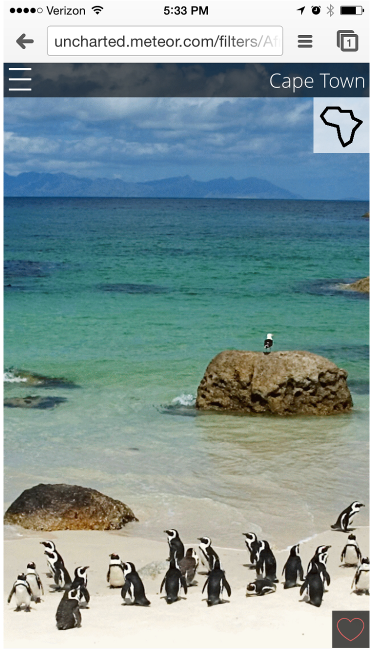
Enjoy surreal beaches, great diving and exotic gardens on Thailand's largest island.

Take a longtail boat to this secluded beach, and spend the afternoon swimming in the pristine waters.

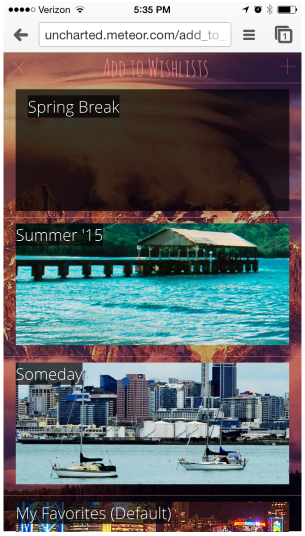
Main destination screen (left) and trip details page (right)

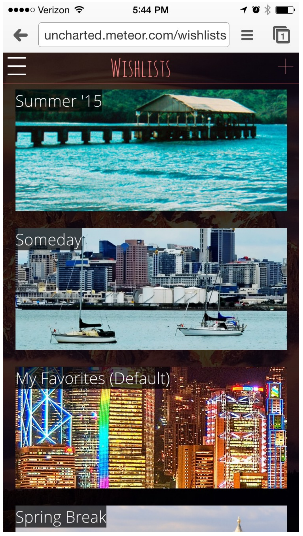
The medium complexity task is filtering the destinations by general region. Users that come into the application with a more specific goal, for example finding a good city to visit in Europe, or a wild adventure in Africa, can use filters to accomplish this task. We found that many users have a vague idea of the kind of destinations they are looking for, and/or which they typically enjoy most. In order to leverage this knowledge, and improve upon current tools that don't take these preferences into account, allowing users to filter was critical. We initially imagined offering a variety of filters, including geographical region, setting (outdoors v. urban), and budget. However, in order to simplify the user experience and focus our application, we decided to only implement geographic filtering, as our users unanimously agreed it was the most useful for them. To filter the destinations seen in the Explore tab, users navigate to the filters page via the menu, and then choose a continent by tapping its icon. We indicate an active filter in the explore section with the outline of that continent on the upper right corner of the screen.

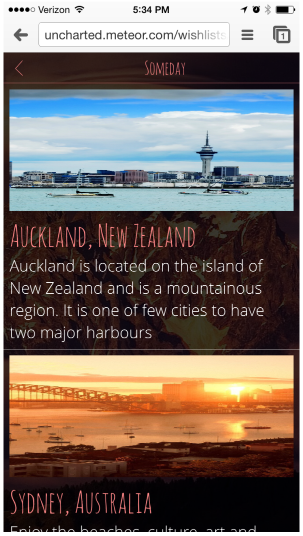




Finally, the most complex task is saving and organizing destinations in wishlists. We found that users do not typically search for destinations in isolated occasions, but instead consider a couple potential destinations, or collect a series of destinations to visit on longer journeys. Wishlists help in the logistics of travel planning, as they help users compare options directly, or formulate a plan to travel though all desired destinations. While browsing in the Explore tab, users can add destinations to a default "favorites" list by quickly tapping the heart on the lower right of the screen. Long tapping the heart allows users to add the destination to a custom list they create. Users can later review their lists by navigating to the Wishlists page from the menu.







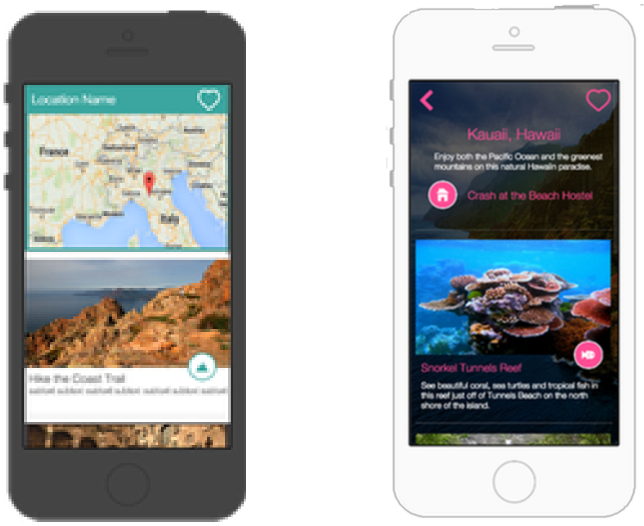
Auckland is located on the island of New Zealand and is a mountainous region. It is one of few cities to have two major harbours

Enjoy the beaches, culture, art and

Major Usability Problems Addressed

The most severe problem, severity 4, reported in our heuristic evaluation was an issue with user control and freedom. We intended the swiping navigation in the explore section to be a quick and easy way to find the destinations that interest you and pass on the ones that don't. However, the evaluators found that it is easy for users to swipe past destinations by mistake, or want to revisit ones they maybe weren't sure about at first. To correct this issue, we implemented sipe right, allowing users to return to destinations they have recently passed.

The second usability issue we encountered was a violation of visibility of system status on the trip details page, severity 3. The evaluators reported that it is unclear how to exit the trip details page, as there were no visual cues that tapping anywhere would take you back. Additionally, we thought the transition from the main destination screen to the trip details screen was too jarring and disassociated the user from their current task. In order to make it more clear how you arrived at the trip details screen and how you would exit the screen, we made the screen on a translucent overlay of the main destination screen and added a visible back button.

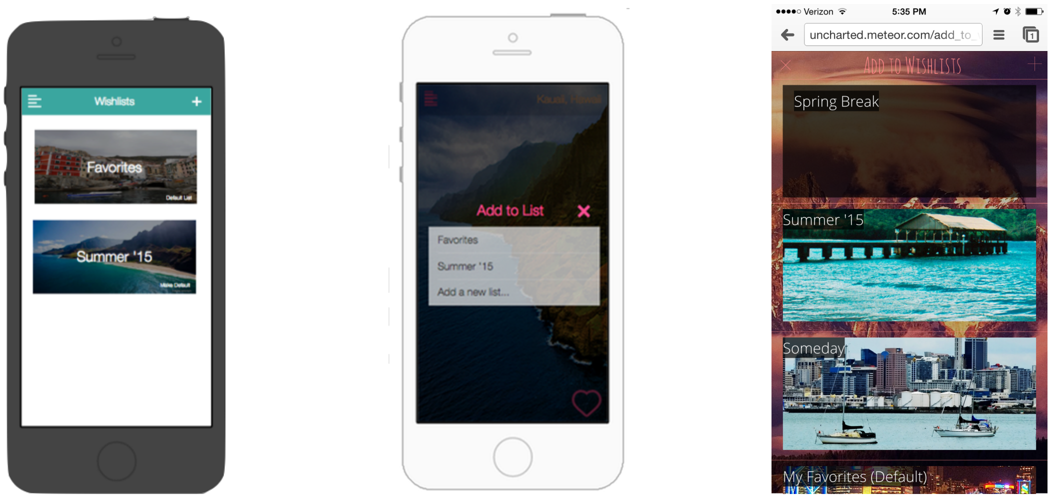


Enjoy both the Pacific Ocean and the greenest mountains on this natural Hawaiin paradise.

See beautiful coral, sea turtles and tropical fish in this reef just off of Tunnels Beach on the north shore of the island.

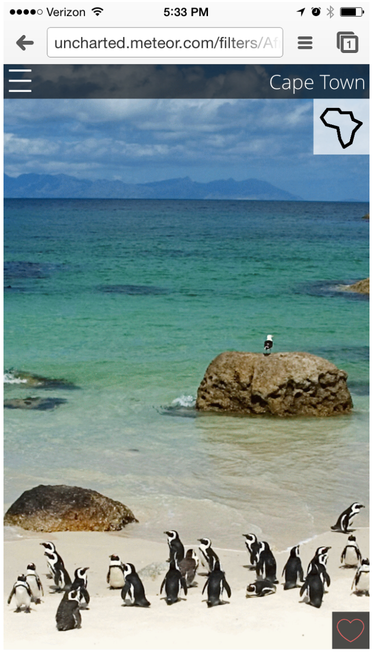
Initial trip details page (left) and revised version with back button and translucent background (right)

There was a similar issue with the add to wishlist page being too discontinuous with the browsing pages, and missing a back or exit button. To fix this, we designed a translucent black overlay, similar to our new trip details design, to make the flow more continuous, and also added a close button to allow uses to abort if needed. Implementing this page however, proved to be a challenge and we were not able to develope it exactly as we wanted. We ended up using an entirely new screen, but made the background consistent with the other pages to minimize disruption.



Original add to wishlist page, accessed by long tapping a heart (left), re-designed version (middle), and final version revision due to technical implementation problems.

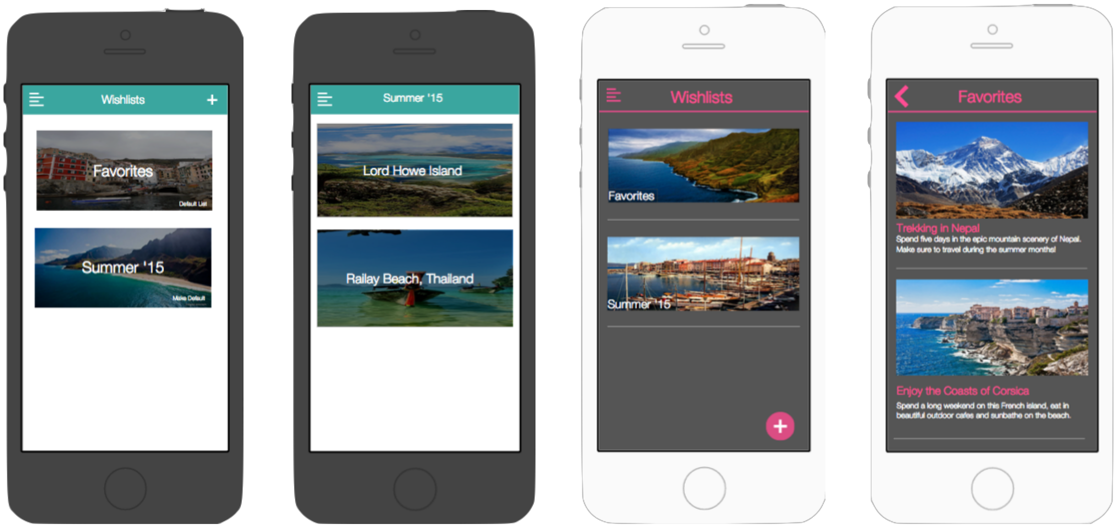
We encountered another visibility of system status issue, severity 3, with filtering. The evaluators reported that there should be a visual indication of an active filter on in the Explore section of the app to avoid confusion around why the destinations are limited. To remedy this issue, when a filter is active we display the outline of that continent on the destinations pages as you scroll through. You can also use this icon to cancel the filter, in order to avoid navigating through the menu to do so.



Added a filter indicator in the explore section (icon top right)

The evaluators also reported that the lack of more specific location filtering was a violation of flexibility and efficiency of use, severity 3. As a group, we disagreed that this was a violation and decided not to implement their suggestions as we believed it would distract from our core purpose. Continent level filtering is as specific as we would want to allow, as the purpose of our application, for example, is to help users find new destinations for their winter holiday in South America, not to explore different villages in the south of France. We believe users in the second bucket would be beyond the initial travel planning stages that we are targeting with Uncharted.

Another flaw in our design had to do with the similarity of the wishlists page, and the page to view the destinations in a single wishlist. Our designs for these two pages were essentially the same, showing destination images in rectangles with with text overlaid on them. Especially because a user would navigate between these two pages frequently, this was a violation of visibility of system status and the two pages needed to be more visually distinguished from one another. To fix this, we moved the text on the single wishlist page to below the destination image, and added more detail by including the destination description. This makes the individual list page clearly more detailed at a glance, indicating it is the more specific list or page.

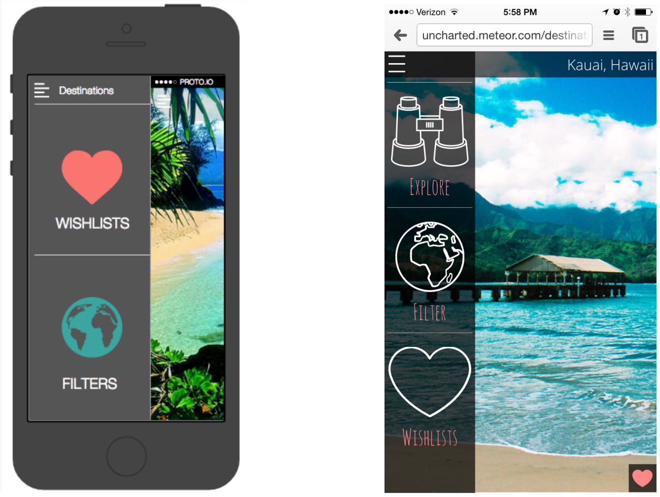


Spend five days in the epic mountain scenery of Nepal. Make sure to travel during the summer months!

Spend a long weekend on this French island, eat in beautiful outdoor cafes and sunbathe on the beach.

Original wishlist and individual list page (left) and revised version to distinguish the two (right)

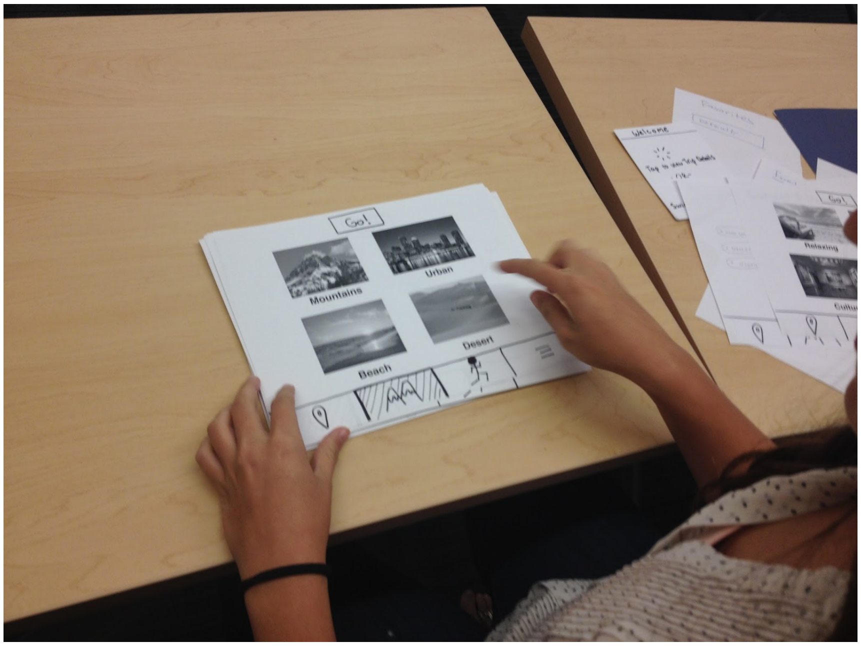
We also found that it wasn't perfectly clear how to use our menu to navigate between tasks. We originally had icons for the filters and wishlists page, and used the word "destinations" to link to the main page where you swipe between destinations. We didn't think destinations needed to be highlighted in the menu as users would spend most of their time in that section, and wouldn't use the menu to get there. For example, selecting a continent on the filters page would automatically take you back to the destinations pages, you do not have to use the menu. However, our heuristic evaluation said this was a violation of consistency and standards, so we redesigned the menu to have an icon for each of the three major tasks in the application. To comply with visibility of system status, we planned to indicate which section the user was currently in by making the icon a different color or the background darker, but we unfortunately did not get to implementing this.



Original menu (left) and its revised version with three sections (right)

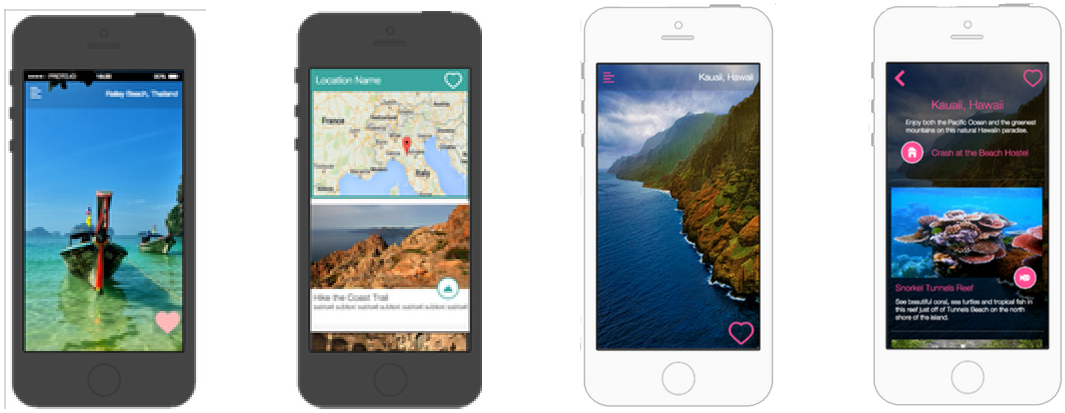
Design Evolution

We first tested our product concept by conducting user tests with a paper prototype. We found that our target users really supported the core concept of simplified destinations pages and details, confirming that information overload is a huge issue with current travel planning tools. Overall, our testers were very happy with the information we provided on the trip details page. We also gained a lot of insight on how users thought about finding destinations which helped simplify and narrow our filtering options. Our paper prototype allowed users to filter by geographic location, setting (urban, mountain, beach etc), or activity (cultural, outdoors, nightlife). We found users were overwhelmed by the options and didn't understand how they were different from one another. Users expressed some anxiety when faced with all of the choices and spent a lot of time navigating through the pages, making the task completion time very high. When asked which type of filter was most valuable to them, all users replied geographic filtering. They explained that filtering by continent helped them implicitly filter by the other categories as well. For example, users knew they could expect more outdoors-focused destinations when choosing Australia as compared to Europe. Similarly, users had a good general concept of which regions were expensive for them to travel to and live in, so geographic filtering helped them find destinations in their price range as well. Our biggest revisions after the paper prototype and user testing, therefore, were in re-designing the filters task to be solely focused on geographic filtering.



User interacts with filters page of paper prototype during user testing

With the insight we gained from our paper prototype user tests, we designed our second iteration of Uncharted on proto.io, an online prototyping tool. Our medium-fidelity prototype was evaluated by classmates for design heuristic violations. The majority of the feedback we received had to do with having more consistency between screens that visually unified the application and indicated where the user was in the flow of each task. In our revised design, we utilized a number of translucent black overlays to allow the user to see through to the previous screen, reducing jarring screen transitions. We created this updated design, the third iteration of our application, in proto.io in order to try a couple different strategies for solving the violations wihtout having to code them. When we were happy with our revisions, we started development.

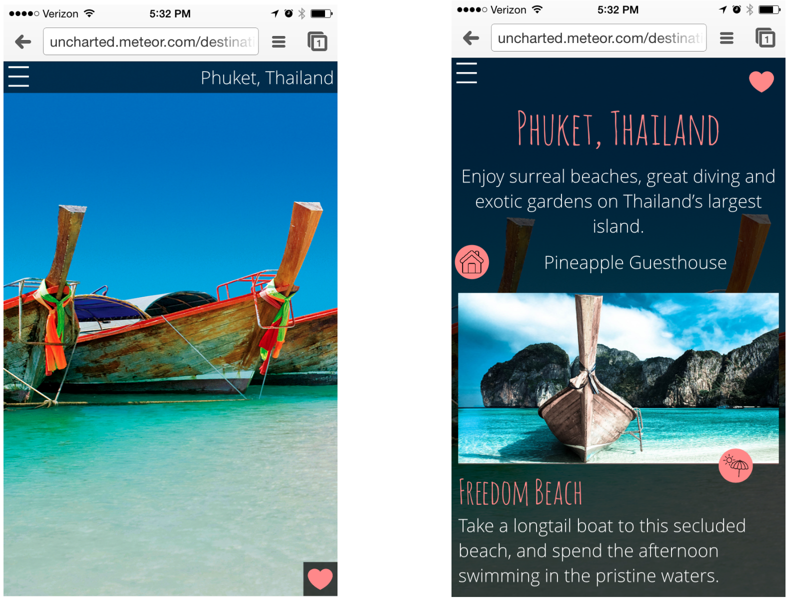


Enjoy both the Pacific Ocean and the greenest mountains on this natural Hawaiin paradise.

See beautiful coral, sea turtles and tropical fish in this reef just off of Tunnels Beach on the north shore of the island.

Left two screens are original medium-fi prototype, right two screens are the revised version

Our final iteration, our high-fidelity prototype, was based on the second iteration of our proto.io prototype. It was developed in the Javascript framework Meteor and operates as a mobile website. We had to make a few design changes based on technical implementation, however, including the add to wishlist page.



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Browse destinations screens in final high fidelity prototype

Prototype Implementation

We developed our high-fidelity prototype with the Javascript framework Meteor. We choose Meteor because none of our team members had experience with native app development, but we all had some familiarity with Javascript which meant that the development responsibilities could be shared. One of meteor's biggest advantages is its reactive programming model that extends from the database to the users screen, all using the same language. This allows for real time updating, eliminating the need to update views when backend changed states. These features were particularly helpful in linking routes to our various templates, which required dramatically less work than it would otherwise.

Meteor presented some challenges as well, however. Because it is a relatively new framework there is less documentation and help available online, which meant it was more difficult to find the best strategies to accomplish some tasks. Additionally, meteor is not catered to mobile as it lacks common functionality like touch support. Therefore, in order to make our application run like a mobile website, we had to integrate with jQuery mobile which was a tricky processes. Even with jQuerey mobile, implementing the various touch events we wanted to support was difficult. We had to activate and deactivate listeners for tap, long tap and swipe in various methods to prevent these events from firing at the same time. jQuery mobile also introduced some styling problems that we had to fix by revising the source code.

The most major feature we were not able to implement in time is creating a custom wishlist. We hard coded in a couple example lists (“Summer ‘15”, “Spring Break”), but there is no functionality for the user to create their own custom lists. Implementing this was a low priority because we were able to communicate the concept in the prototype with the hard coded lists, and unfortunately we ran out of time. Secondly, we want users to be able to remove wishlists, and remove individual destinations from a wishlist if they want, but we didn’t prioritize this functionality as it isn’t central to our major tasks. We imagine this would be accomplished by swiping left on the list or destination, similarly to deleting a text conversation in iOS.

Another feature we would add if we built out the application, is the ability to view a wish list in map form. We imagining adding a map pin for each destination in the list. Our users said this would be advantageous when planning a longer journey with multiple cities/stops to be able to visually see the best route through their desired spots.