Booking Travel Interaction Analysis and Design

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This document is a summary of the design of our group's new website to assist in the task of booking a travel experience. Contained in this document is a set of design artifacts that detail the user experience and user interface when interacting with our website. Most importantly, we have created the wireframes that will eventually connect to form the final, polished design of our website. The following is an outline of the contents of this summary document:

1. **Executive Summary**
2. **Storyboards**
    a. (5) Individual Storyboards
3. **Link to Generalized Transition Network (GTN)**
4. **Reflection**
    a. Design Logic
    b. Design Process
5. **Appendix**
    a. (5) Individual Wireframes

Executive Summary

This summary is a brief condensation of the report that follows detailing our final design for our website/app that will assist in the task of booking a travel experience in the form of a Generalized Transition Network (GTN). Our group has also created storyboards (pg. 3-14) that essentially highlight the actions a user takes when performing the scenarios that we outlined in the previous assignment. We have also included the final and formalized design of the product concepts outlined and described in Assignment 2. This document is intended to provide a general understanding of the GTN of our website (i.e. the possible screens that a user might see/paths that they could take) as well as detailed designs and annotated wireframes of our product concepts.

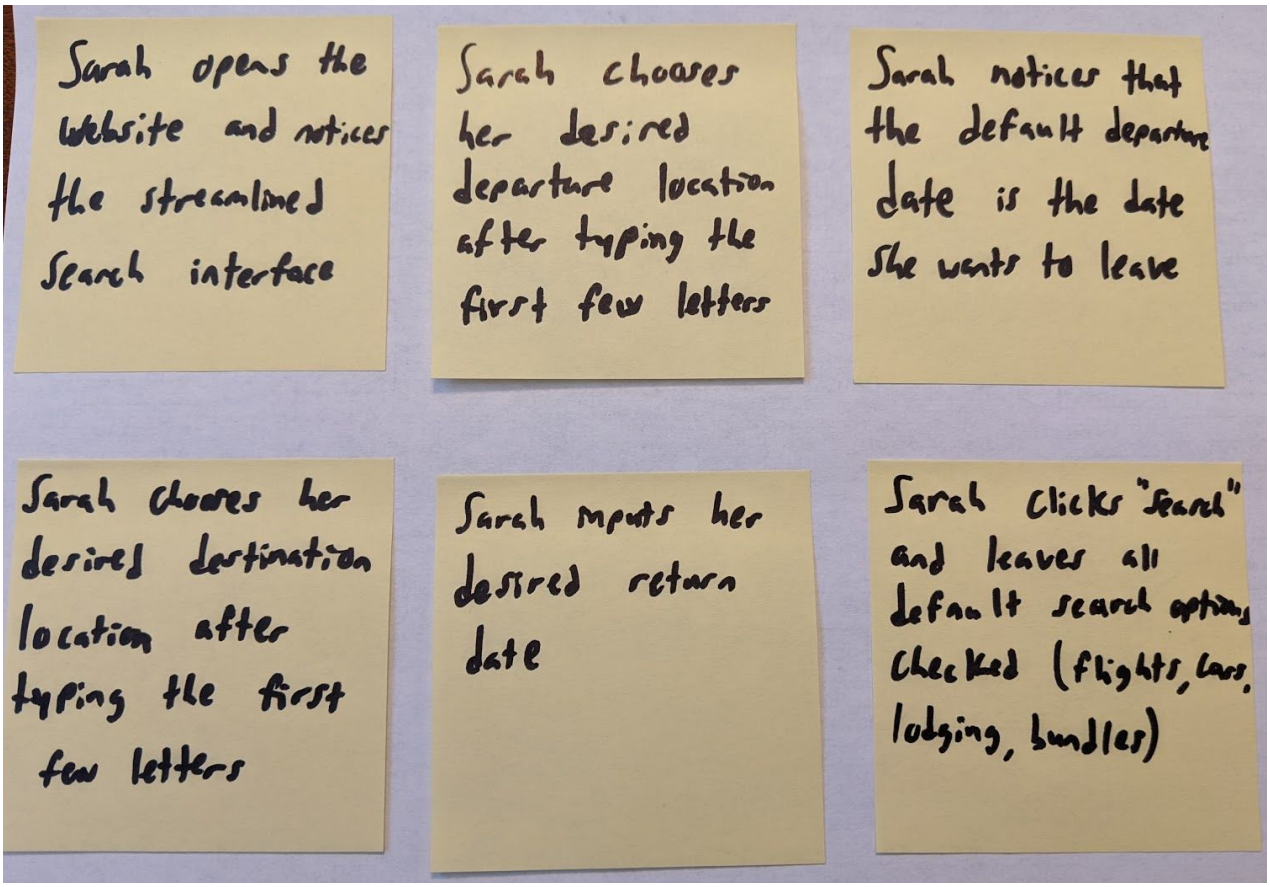
Our team first created individual storyboards based on the scenarios each of us wrote in Assignment 2. These are essentially meant to give a more detailed visualization of what the user does when interacting with a specific product concept that we came up with. We then used these to create a GTN of the whole website (link on pg. 15) which covers all product concepts that we have included in our final website design. We met virtually and created this GTN as a group by creating a rough high-level GTN for each scenario/storyboard and then subsequently combining these into one GTN and refining it into a polished version. After this, we essentially had our polished wireframes already created, so we simply divided them by the product concept belonging to each group member and annotated them from there. The annotated wireframes of each product concept can be found in the appendix on pages 18-26 of this report. We then conclude our report with a brief reflection (pg. 16-17). This section explains the "design logic" behind our entire website interface in detail. In other words, we explain the reasons why we have designed the product concepts in the way we have and how it should help the user in the completion of the task. In our reflection, we also discuss the design process itself and talk through any difficulties we had as a team.

For more details on each of these sections, please see the outline on the title page and visit the respective section's page(s).

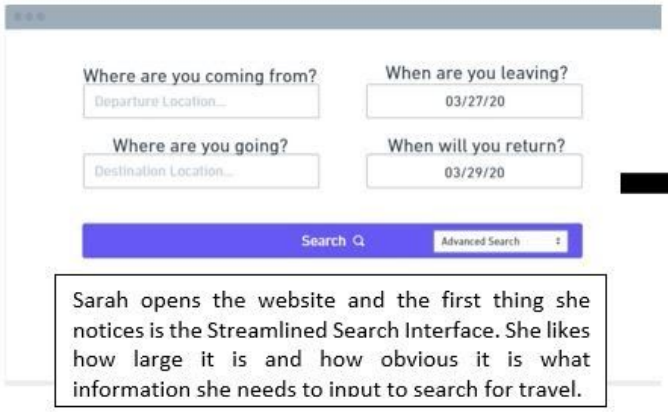
Storyboards

Reagan's Storyboard

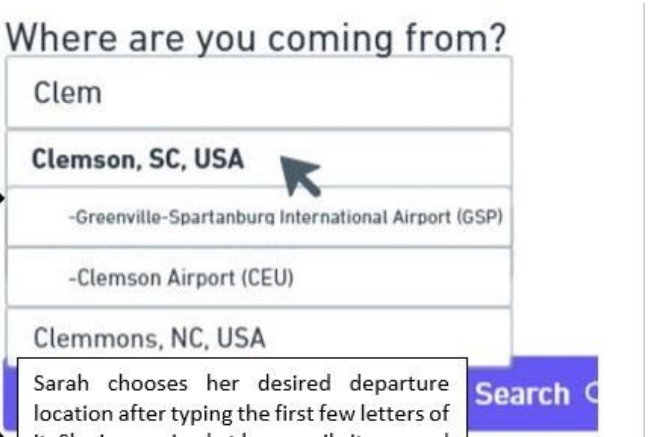
Rough Draft



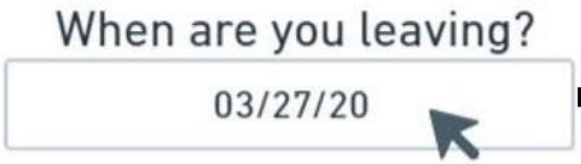
Final Draft



Sarah opens the website and the first thing she notices is the Streamlined Search Interface. She likes how large it is and how obvious it is what information she needs to input to search for travel.

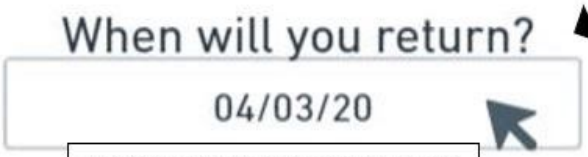


Sarah chooses her desired departure location after typing the first few letters of it. She is surprised at how easily it guessed where she wanted to leave from (based on her location and popular places).

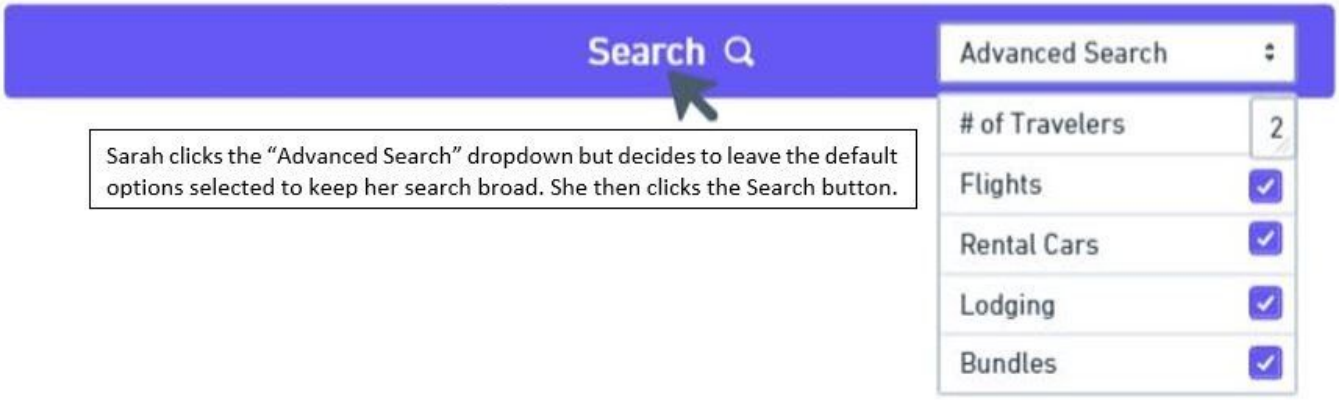


Sarah notices that the default departure date is already set to the date she wants to leave. This is a welcome surprise for Sarah; she doesn't have to do anything!

Sarah chooses her desired destination location after typing in the first few letters. She notices several popular airports listed below Pittsburgh, but decides to just select the city as she's keeping her search broad for now.



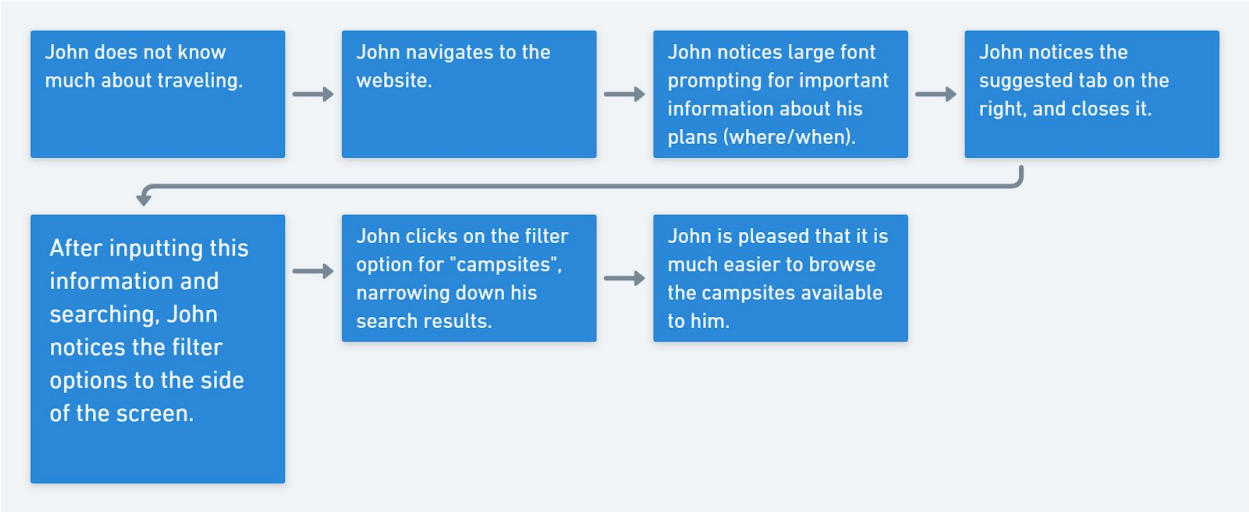
Sarah inputs her desired return date.



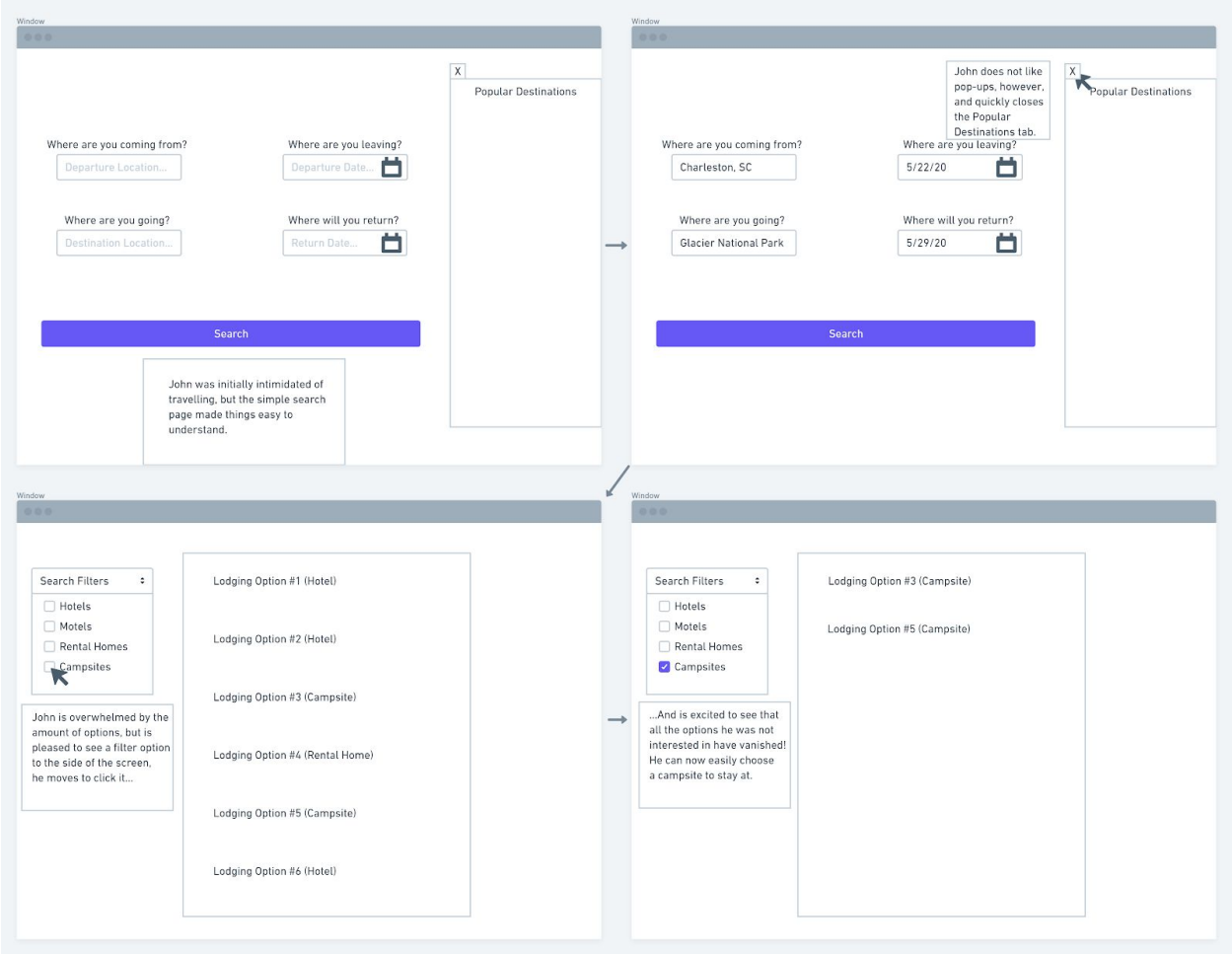
Sarah clicks the "Advanced Search" dropdown but decides to leave the default options selected to keep her search broad. She then clicks the Search button.

Daniel's Storyboard

Rough Draft

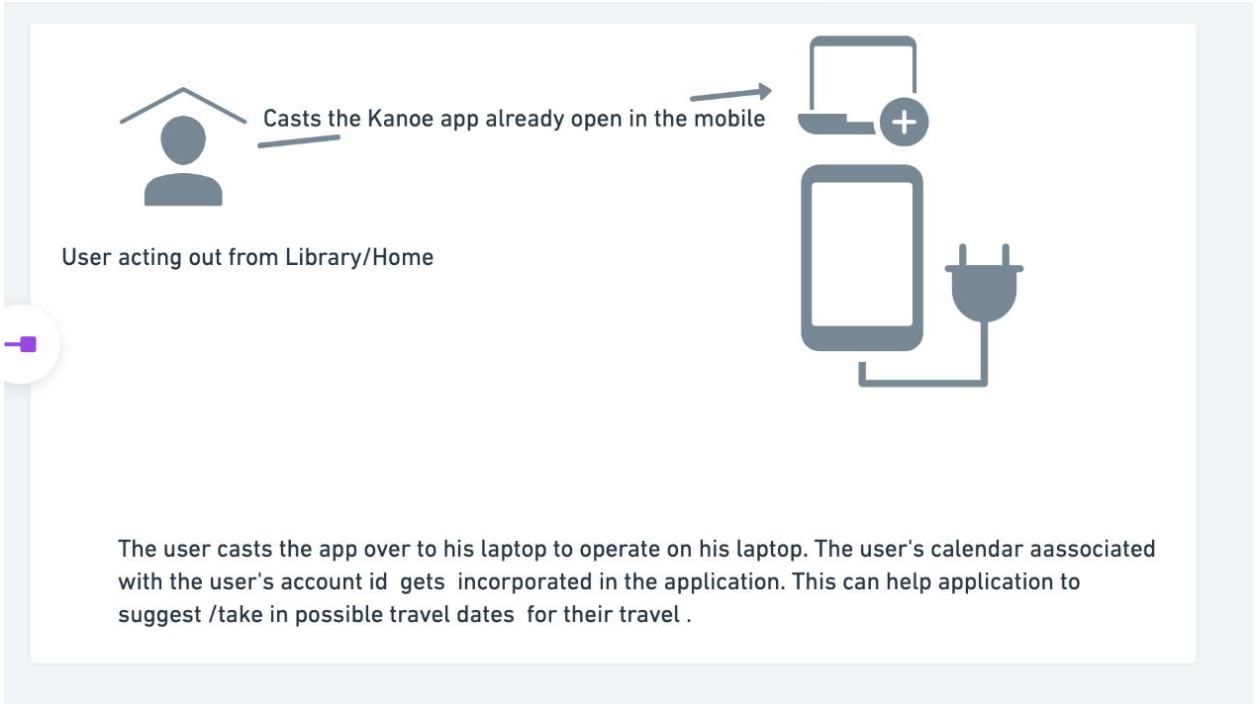


Final Draft


Window
X
Popular Destinations
Where are you coming from?
Departure Location...
Where are you leaving?
Departure Date...
Where are you going?
Destination Location...
Where will you return?
Return Date...
Search
John was initially intimidated of travelling, but the simple search page made things easy to understand.
Window
John does not like pop-ups, however, and quickly closes the Popular Destinations tab.
X
Popular Destinations
Where are you coming from?
Charleston, SC
Where are you leaving?
5/22/20
Where are you going?
Glacier National Park
Where will you return?
5/29/20
Search
Window
Search Filters
Hotels
Motels
Rental Homes
Campsites
John is overwhelmed by the amount of options, but is pleased to see a filter option to the side of the screen, he moves to click it...
Lodging Option #1 (Hotel)
Lodging Option #2 (Hotel)
Lodging Option #3 (Campsite)
Lodging Option #4 (Rental Home)
Lodging Option #5 (Campsite)
Lodging Option #6 (Hotel)
Window
Search Filters
Hotels
Motels
Rental Homes
Campsites
...And is excited to see that all the options he was not interested in have vanished! He can now easily choose a campsite to stay at.
Lodging Option #3 (Campsite)
Lodging Option #5 (Campsite)

Abhimanyu's Storyboard:

user on leaving one of his classes chooses to act on his plan of travelling during the spring break. So while being in transit opens the flight booking app(Kanoe) on his mobile and feeds in his intended departing and destination locations. For the dates of travel user chooses to first refer his calendar to confirm on his schedule and choose his dates of travel from there only. Scrolls the listed options but realises exploring for this trip would be lot more comfortable over a desktop app.



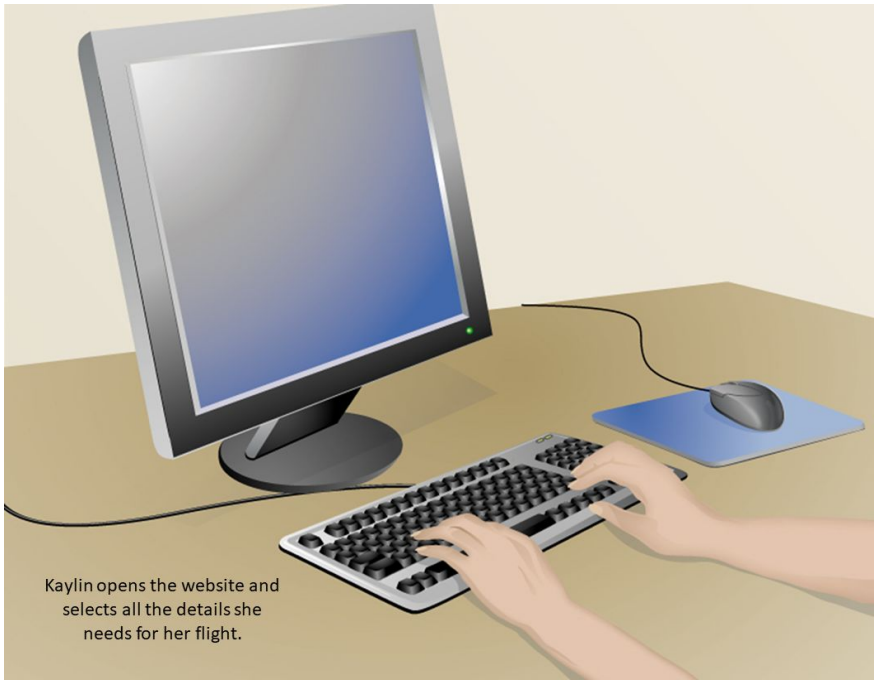
Continuing his search efforts , user searches for his ideal flight suiting his schedule , budget, and comfort by applying various filters such as price, time of the day departure/arrival, No.of stops, refundable flights.

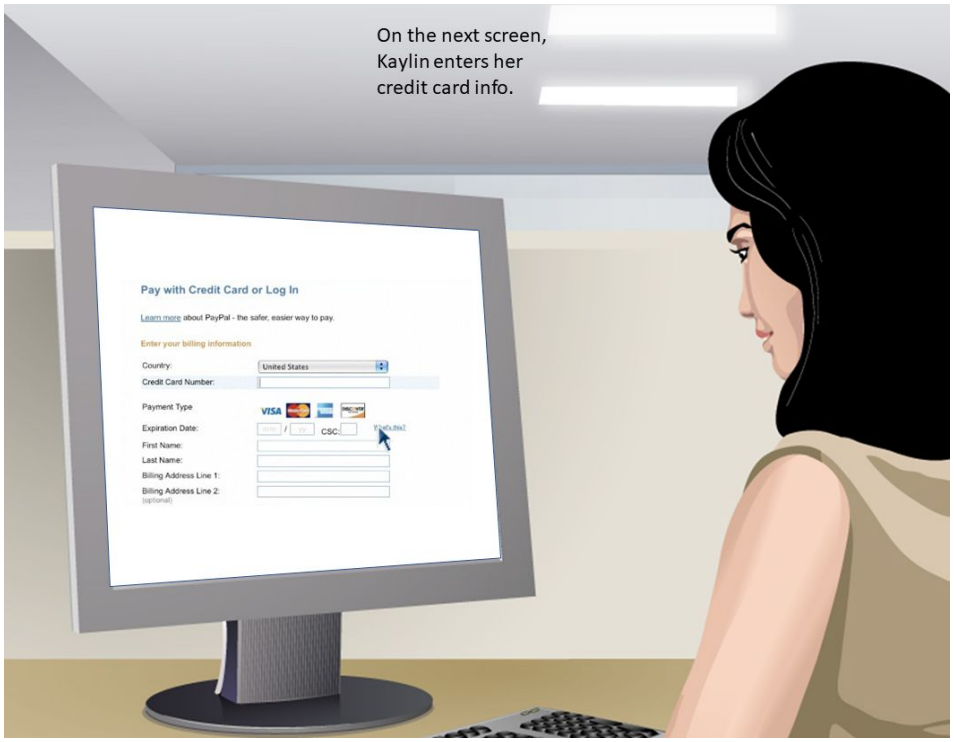
Users feels like exploring flights from other nearby airports to see if he has any better options in terms of price and traavel duration. This would include his expenditure (If extra) on taxi/cab. So he searches for detour routes , compares his options for total cost of travel, duration, airport parkings facilities, cab drop-off location proximity etc.

Once he fixes on his flight option, depending on his situation he mights explore cab option to /from the airport. For this the user can avail the provides automated cab booking feature in the application.

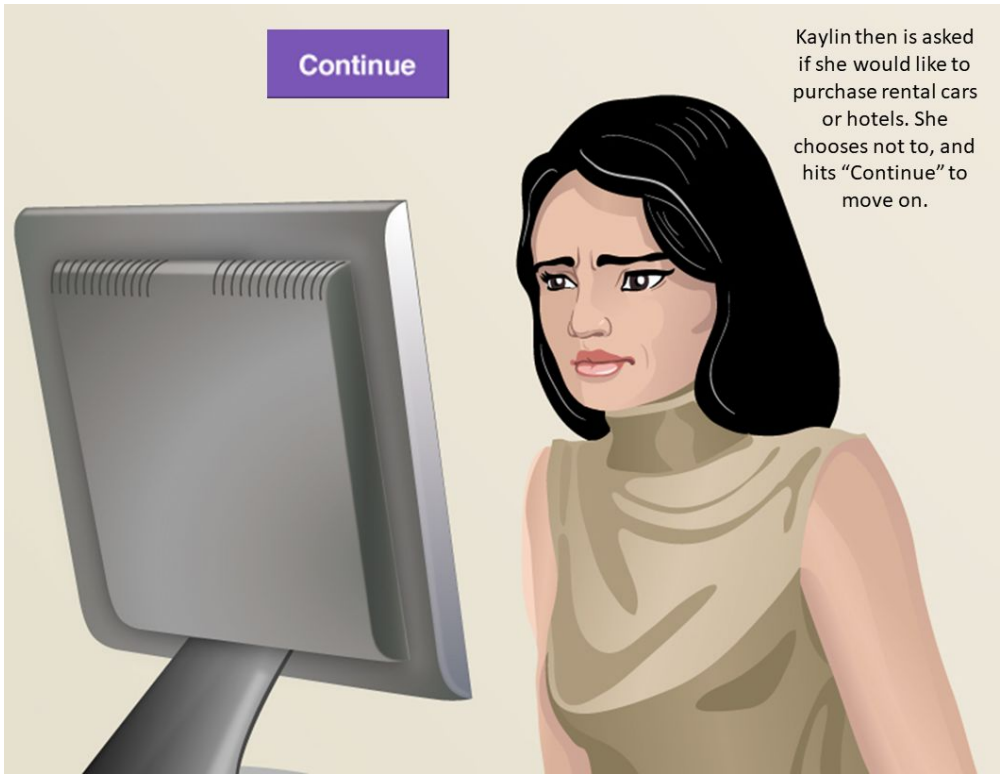
User makes payment and confirms his booking and sends a ticket copy over his mail id to be accessed in future if need be.

Tyler's Storyboard:




On the next screen, Kaylin enters her credit card info.
Pay with Credit Card or Log In
Learn more about PayPal - the safer, easier way to pay.
Enter your billing information
Country:
United States
Credit Card Number:
Payment Type
Expiration Date:
CSC:
First Name:
Last Name:
Billing Address Line 1:
Billing Address Line 2:
(optional)


Cover your trip with Travel Guard® insurance
+$18.08 Total Premium
AIG
Add Travel Guard insurance. Plan includes:
— Flight refund if you can't travel for covered illness
— Lost baggage including laptops, phones and cameras
Select an option:
Yes, insure my trip for only $18.08
I have read and understand the Policy of Insurance and agree to the Terms and Conditions of the insurance coverage provided.
No, I don't want to purchase this travel insurance.
She scrolls to find a menu asking for flight insurance, and after thinking, chooses no.



Kaylin then is asked if she would like to purchase rental cars or hotels. She chooses not to, and hits “Continue” to move on.

She sees the flight class selection screen and after weighing options, chooses Economy.


She is then brought
to a summary screen
for her trip.


She then confirms
her purchase, and
is satisfied with
how few clicks the
process took.

Malaya's Storyboard:

The base screen for this story board is as follows: It shows the home page with our site, with our logo and cart icon at the top, the menu bar underneath, and the search area below that. In the "where are you leaving from" box, Greenville Spartanburg airport has been selected, and Phoenix Sky Harbor airport has been placed in the "where are you going to" field.

Picture 1: Under the destinations, a mouse pointer points to the calendar icon next to the departure date. The user is excited about planning her trip.

In picture 2, the same page is presented, only this time the calendar is open and covers some of the search information. A mouse pointer is on the date of July 19th, and it is highlighted. The departure date field above shows that date as well.

In picture 3, The pointer is now on the calendar icon next to the departure date.

In picture 4, the calendar is again open, and the pointer is on the date of July 29, and it has been highlighted. The return date field has been populated with that date as well.

In picture 5, the calendar has been closed, and the previously mentioned dates are still displayed in the departure and return date fields. Under these 2 boxes is text that states that the trip length is 10 days. The user sees this and realizes she has entered the incorrect return date.

In picture 7, the calendar for the return date is again open, and the user's pointer is pointing to July 26, and the new date is shown in the return date field.

The final picture shows the fields populated with the correct dates, and the trip length is displayed as 7 days. The mouse pointer is now pointing to the search button, indicating that the user is satisfied with her selections and is ready to proceed.

Generalized Transition Network (GTN)

Full GTN can be found at this link (the file was too large for Google Docs to handle):

https://whimsical.com/FrTXZtLe5UGfFgiHVUNmtb

Reflection

During the design process, our goal was to create a site that was streamlined and intuitive. We wanted to design it such that our users could complete their task in as few steps as possible, while providing the greatest flexibility to the user. For users who wanted to search for multiple trip components at once, we provided a comprehensive search option just below the menu bar. This page functions as our home screen. It should also be noted that on any page in our GTN, the user may click on the Kanoe website logo and be brought back to the home screen at any time. This is a standard feature offered on most websites that we wanted to include to add another dimension of connectedness to all nodes within the generalized transition network of our website. Once the user clicks the "Search" button, this page then leads directly to a search results page that provides the user with search results for their selected components (it includes all components by default).

For those who want to search for only one component, or who want more in-depth information for that component, we offer such access through a menu bar. The user can click on their desired component (Lodging, Rental Cars, Flights, or Bundles) and search specifically for just that component from the page they are then brought to. Each of these more narrow search pages (one for each travel component) has slightly different questions related to the type of travel component. (This is more easily explained in our GTN annotations.) Once the user has inputted their search specifications on the individual search page and clicked the "Search" button, they are presented with a search results page. All of these search results pages---for both the broad search or the individualized searches for specific components---are structured in the same way, with the only difference being in the displayed search results themselves and the filter options (which are based on the search results shown).

While on this search results page, the user can click on a result to view more details and select additional options. They can then add it to their trip if desired. After clicking the "ADD TO TRIP" button, the user is presented with the cart page. This screen contains detailed information for the options the user has selected. This page can be accessed at any time by clicking the cart icon at the top of any page. The user can edit their options as needed, then continue to a payment screen where they can enter their payment information. This allows the user to book all desired components with one transaction. Finally, the user is presented with a confirmation screen letting them know that their booking has been completed.

The design process happened very organically, but in a different manner than was presented in the assignment prompt. This was primarily because our discussions about how we wanted to design the overall GTN ended up being very detailed. Each person naturally took the lead on the pages they had designed in their product concept, so they were the primary designers of the wireframe for that screen, but we all had some input into the design. So in essence, we

ended up designing the GTN and wire frames at the same time, although we did take more than one session to complete the process.

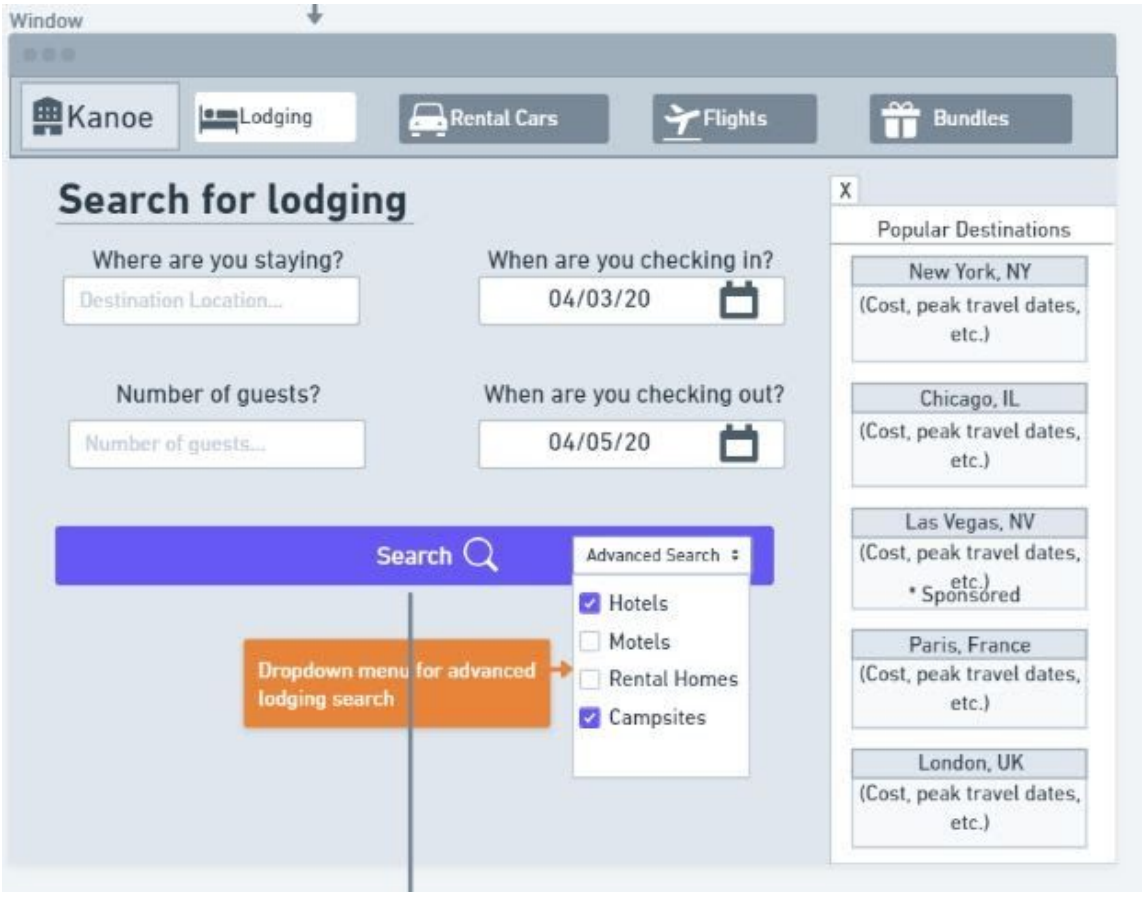
The advantage of completing this assignment in this manner was that we all could draw on our previous experience in discussing the elements in the site. By working as a group, we were actually able to incorporate more of our user research into the design than we probably would have had we completed the wire frames by ourselves. Our group once again worked extremely well together in completing this assignment.

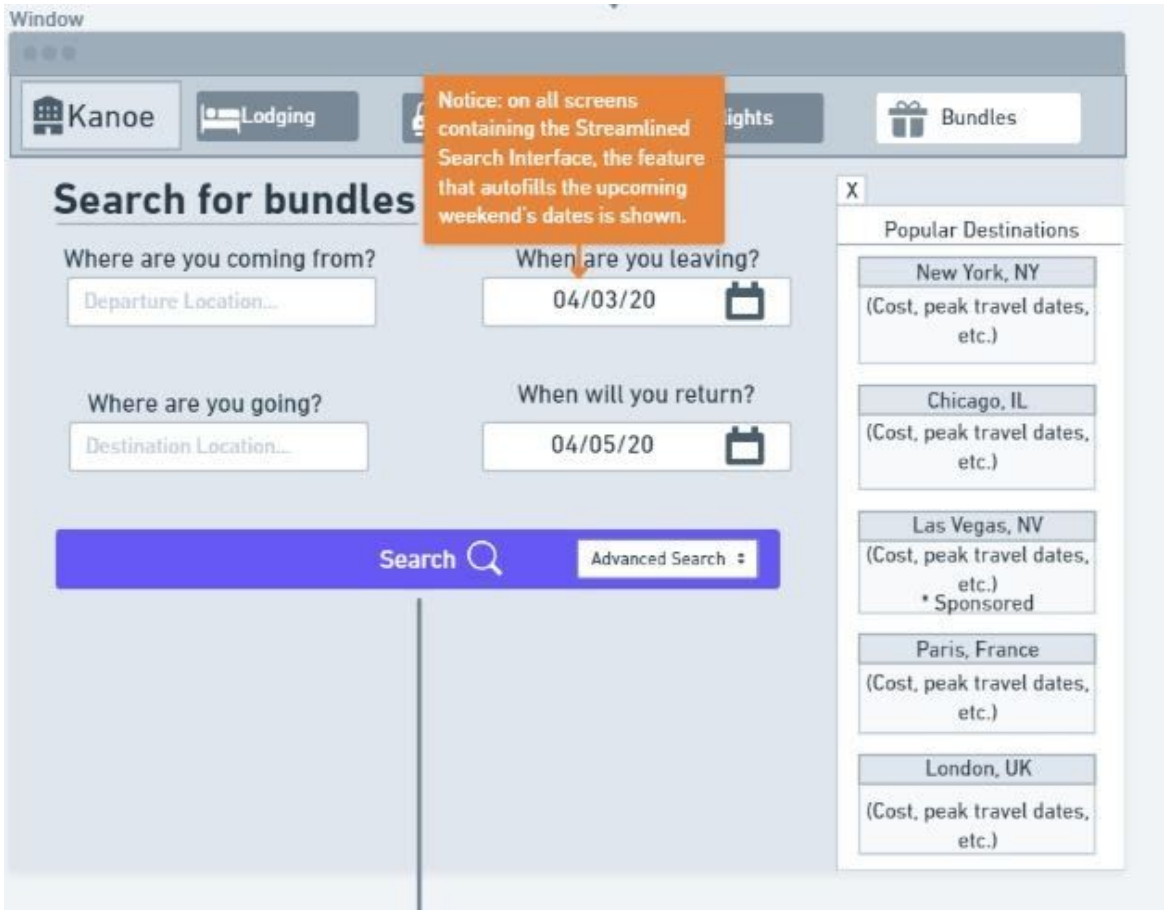
Appendix

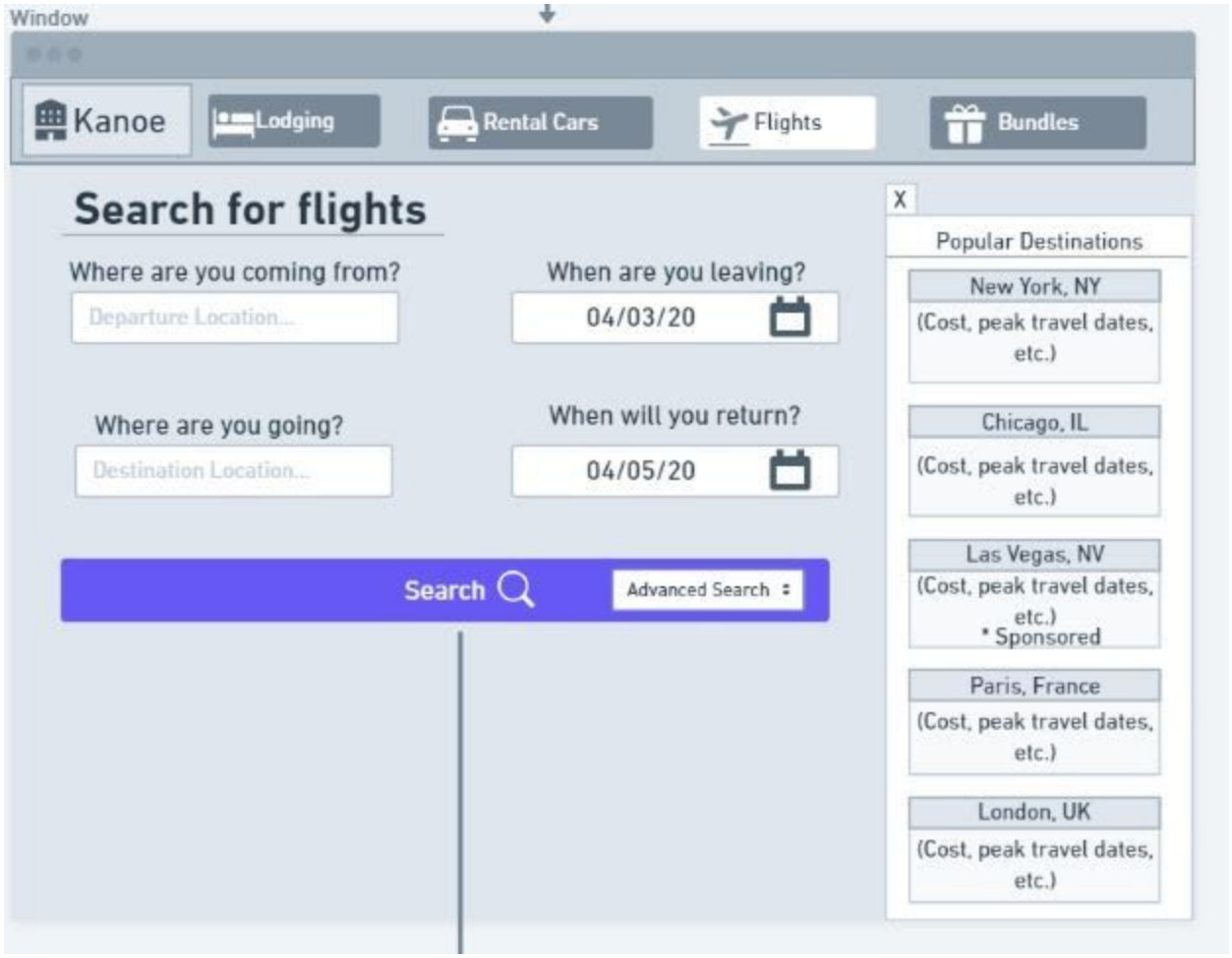
A note regarding wireframes:

While wireframes are listed below as belonging to a specific person, in reality we all collaborated on all wireframes that were created. Each of us gave our inputs on how to make the wireframe as good as it possibly could be, and as such we would like to emphasize this group effort. The name associated with the wireframe denotes whose product concept the wireframe is based off of and who made the annotations.

Reagan's Wireframe (Home screen + Streamlined Search Interface)

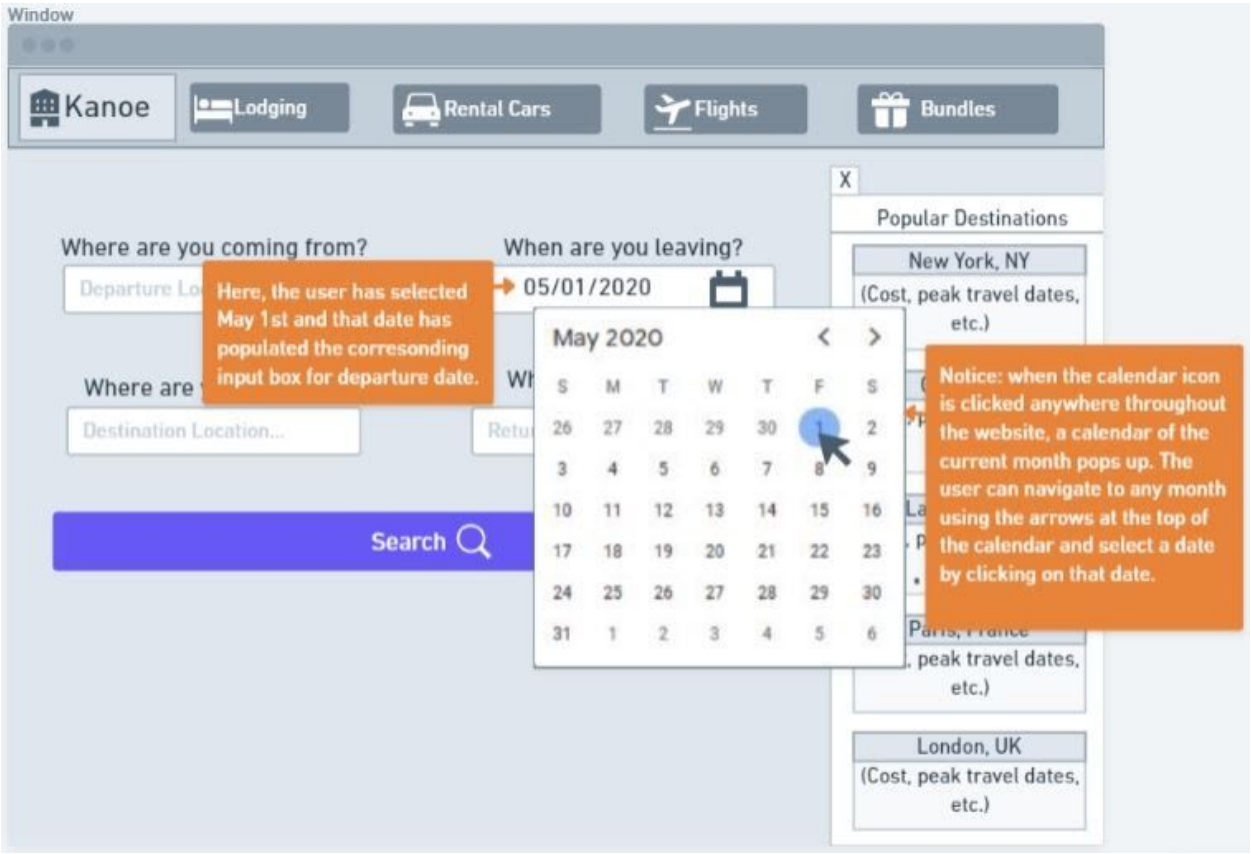

Window
Kanoe
Lodging
Rental Cars
Flights
Bundles
Search for lodging
Where are you staying?
Destination Location...
When are you checking in?
04/03/20
Number of guests?
Number of guests...
When are you checking out?
04/05/20
Search
Advanced Search
Hotels
Motels
Rental Homes
Campsites
Dropdown menu for advanced lodging search
X
Popular Destinations
New York, NY
(Cost, peak travel dates, etc.)
Chicago, IL
(Cost, peak travel dates, etc.)
Las Vegas, NV
(Cost, peak travel dates, etc.)
* Sponsored
Paris, France
(Cost, peak travel dates, etc.)
London, UK
(Cost, peak travel dates, etc.)


Window
Kanoe
Lodging
Bundles
Notice: on all screens containing the Streamlined Search Interface, the feature that autofills the upcoming weekend's dates is shown.
Search for bundles
Where are you coming from?
Departure Location...
When are you leaving?
04/03/20
Where are you going?
Destination Location...
When will you return?
04/05/20
Search
Advanced Search
X
Popular Destinations
New York, NY
(Cost, peak travel dates, etc.)
Chicago, IL
(Cost, peak travel dates, etc.)
Las Vegas, NV
(Cost, peak travel dates, etc.)
* Sponsored
Paris, France
(Cost, peak travel dates, etc.)
London, UK
(Cost, peak travel dates, etc.)

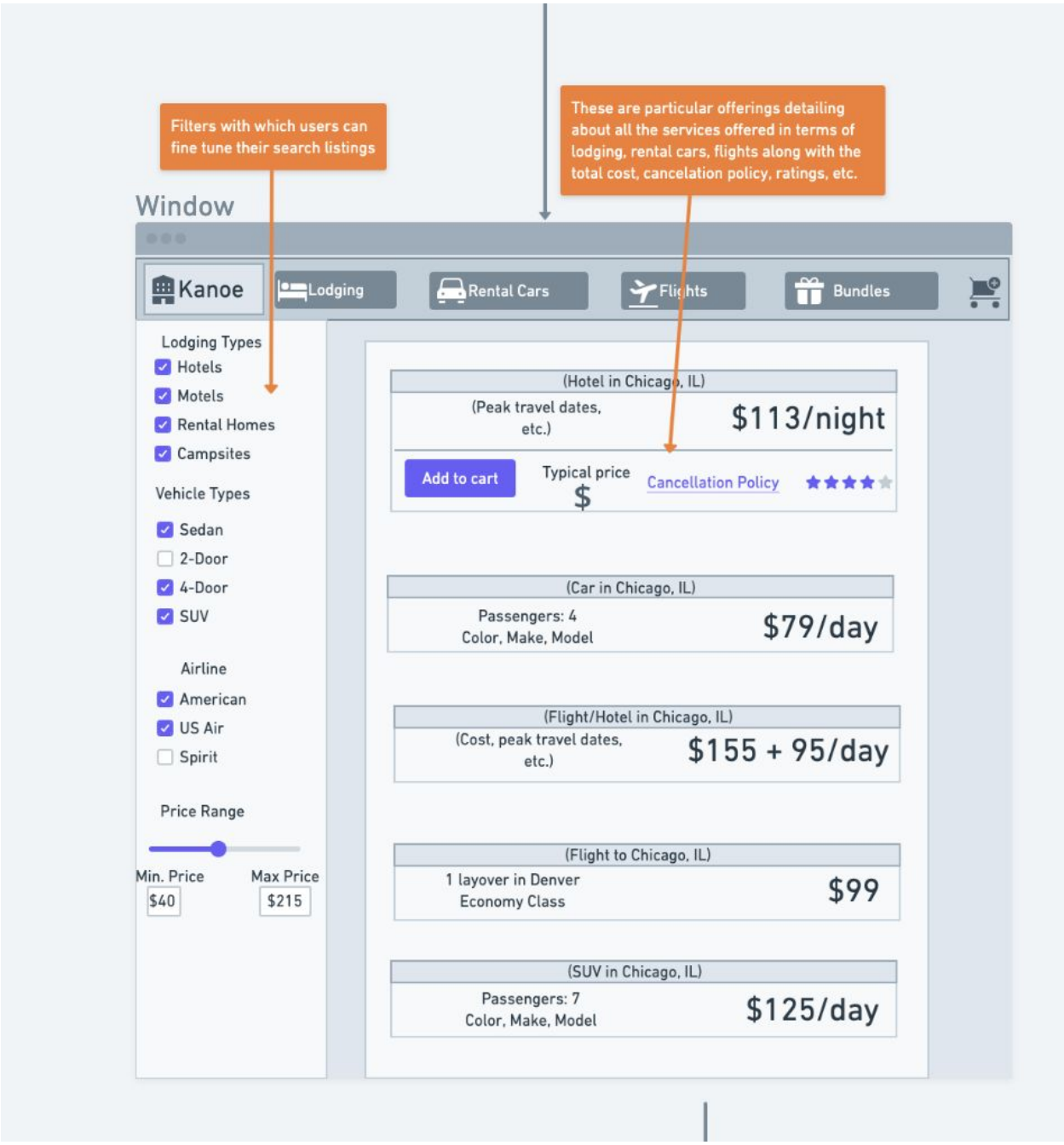

Window
Kanoe
Lodging
Rental Cars
Flights
Bundles
Search for flights
Where are you coming from?
Departure Location...
When are you leaving?
04/03/20
Where are you going?
Destination Location...
When will you return?
04/05/20
Search
Advanced Search
X
Popular Destinations
New York, NY
(Cost, peak travel dates, etc.)
Chicago, IL
(Cost, peak travel dates, etc.)
Las Vegas, NV
(Cost, peak travel dates, etc.)
* Sponsored
Paris, France
(Cost, peak travel dates, etc.)
London, UK
(Cost, peak travel dates, etc.)

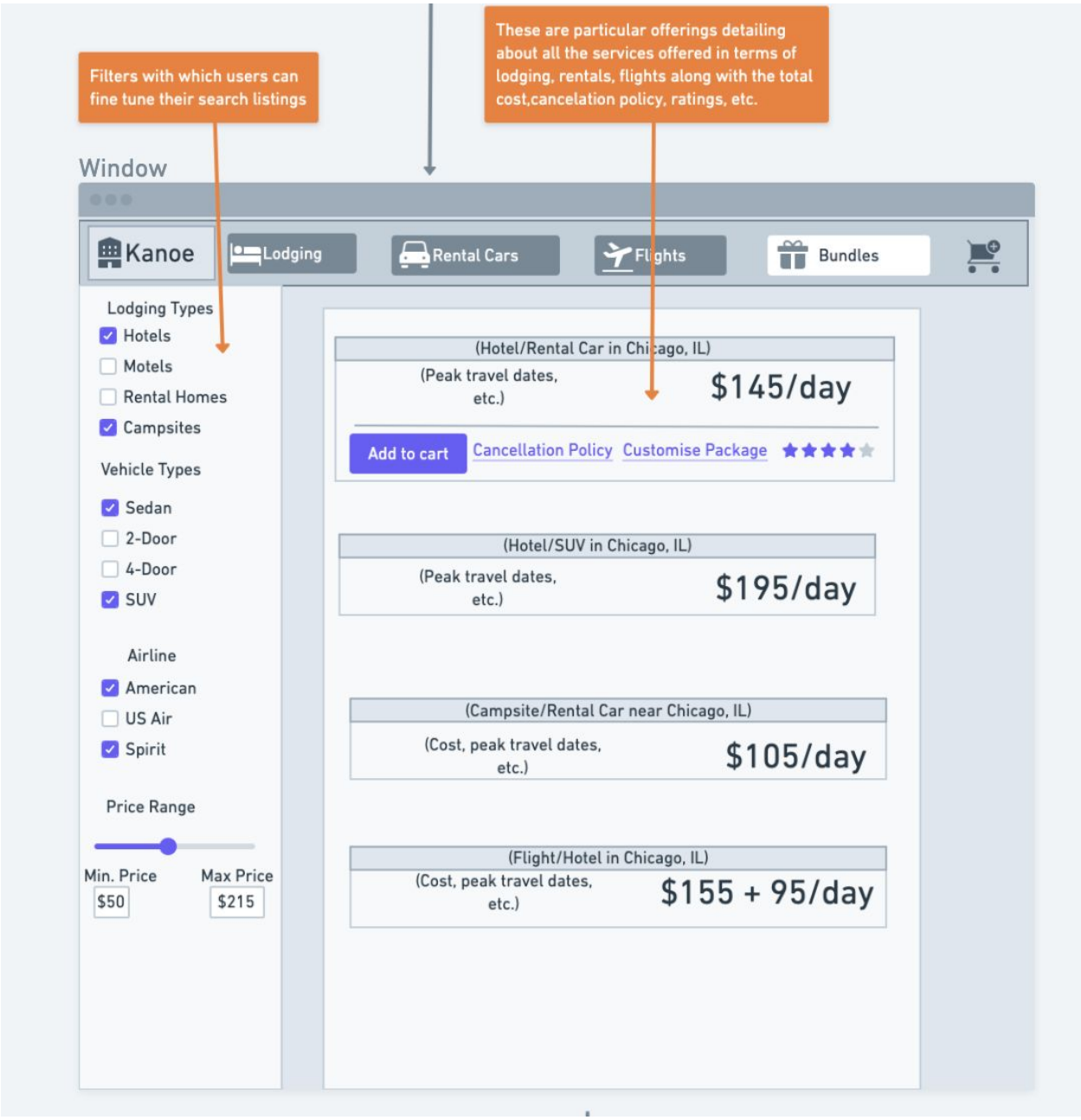
Malaya's Wireframe (Calendar Date Selection)

(thought of/designed by Malaya, physically made by Reagan)



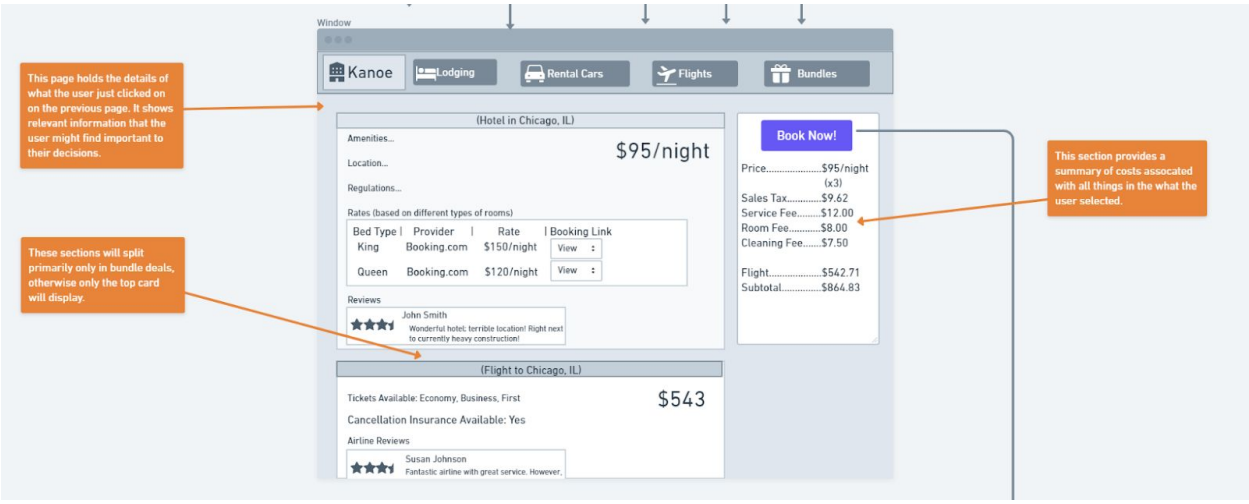
Abhimanyu's Wireframe (Search Listings)



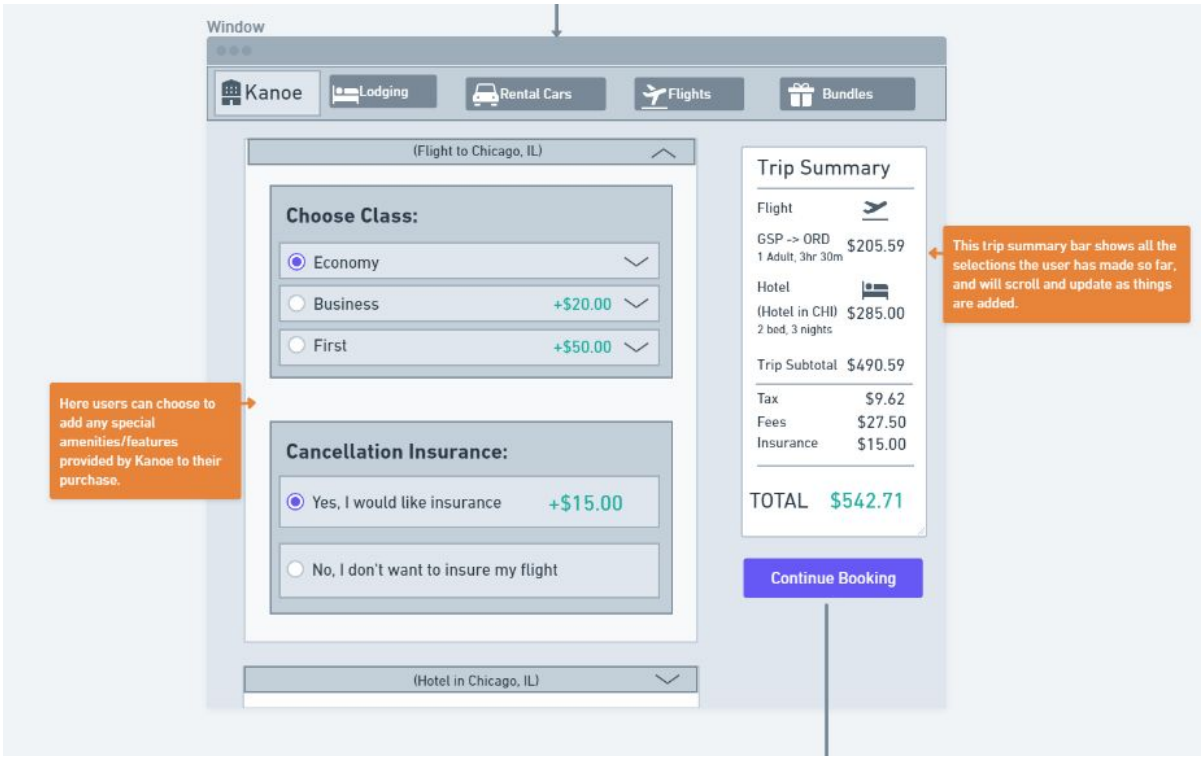

Filters with which users can fine tune their search listings
These are particular offerings detailing about all the services offered in terms of lodging, rentals, flights along with the total cost,cancelation policy, ratings, etc.
Window
Kanoe
Lodging
Rental Cars
Flights
Bundles
Lodging Types
Hotels
Motels
Rental Homes
Campsites
Vehicle Types
Sedan
2-Door
4-Door
SUV
Airline
American
US Air
Spirit
Price Range
Min. Price
$50
Max Price
$215
(Hotel/Rental Car in Chicago, IL)
(Peak travel dates, etc.)
$145/day
Add to cart
Cancellation Policy
Customise Package
(Hotel/SUV in Chicago, IL)
(Peak travel dates, etc.)
$195/day
(Campsite/Rental Car near Chicago, IL)
(Cost, peak travel dates, etc.)
$105/day
(Flight/Hotel in Chicago, IL)
(Cost, peak travel dates, etc.)
$155 + 95/day

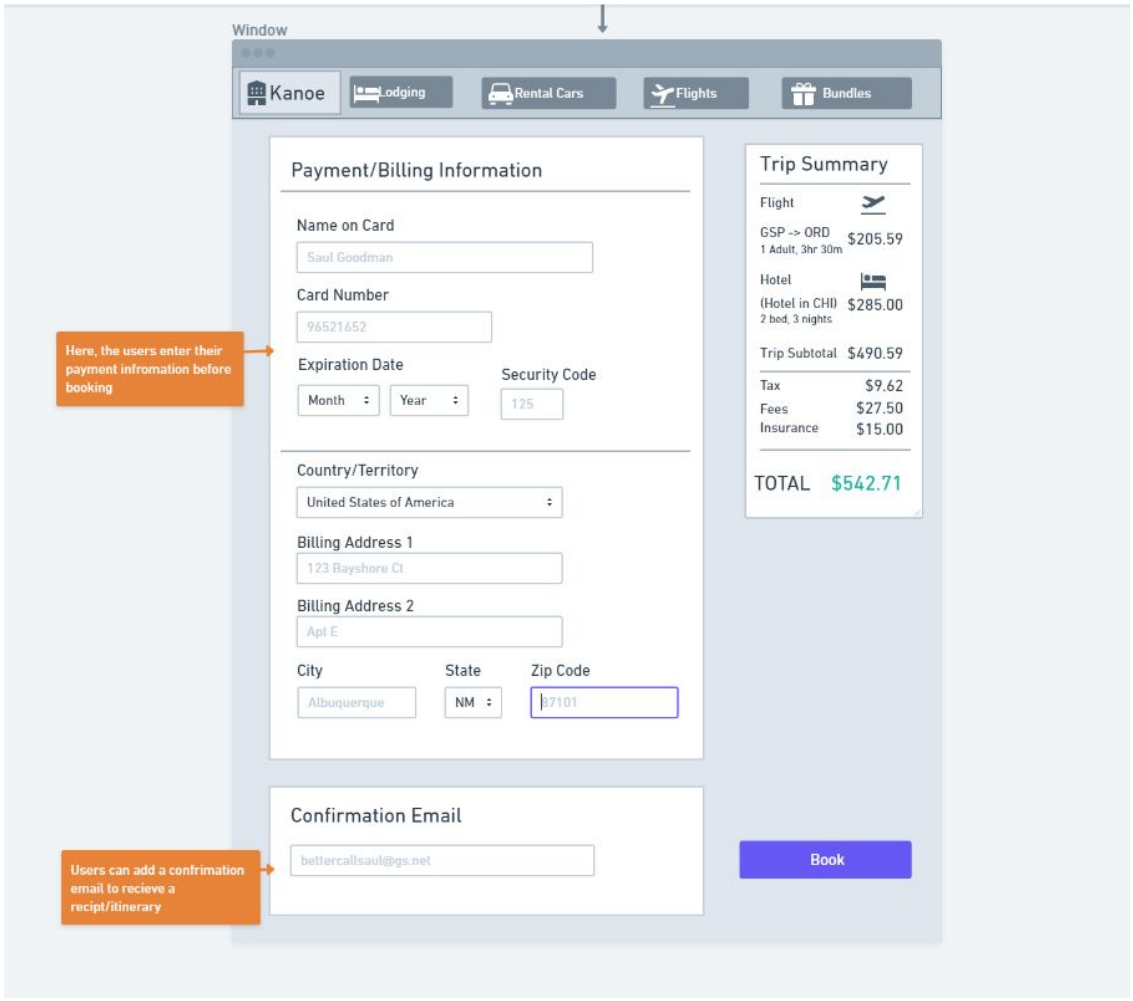

These are the individual flight options for the user entailing info about price, departure /arrival time, stopovers, luggage allowance, refundability options, rating stars. Also typical price for that route is shown to the user with short trend visuals.
Filters with which users can fine tune their search listings
Window
Kanoe
Lodging
Rental Cars
Flights
Bundles
Airline
American
US Air
Spirit
Price Range
Min. Price
$68
Max Price
$179
Stops
0
1
2
Round Trip
Flexible Dates
Detour Routes
Ratings
Refubdable Trips
(Flight to Chicago, IL
1 layover in Denver
Economy Class
$99
Compare
Add to cart
Typical price
$
Stops
2
Ratings
(Flight to Chicago, IL)
1 layover in Dallas
Economy Class
$89
(Flight to Chicago, IL)
Nonstop Flight
Business+ Class
$159
(Flight to Chicago, IL)
Nonstop flight
Economy Class
$109

Daniel's Wireframe (Detail page following search)



Tyler's Wireframe (Summary and Purchase Page)




Window
Kanoe
Lodging
Rental Cars
Flights
Bundles
Payment/Billing Information
Name on Card
Saul Goodman
Card Number
96521652
Expiration Date
Month
Year
Security Code
125
Country/Territory
United States of America
Billing Address 1
123 Bayshore Ct
Billing Address 2
Apt E
City
Albuquerque
State
NM
Zip Code
87101
Confirmation Email
bettercallsaul@gs.net
Trip Summary
Flight
GSP -> ORD
1 Adult, 3hr 30m
$205.59
Hotel
(Hotel in CHI)
2 bed, 3 nights
$285.00
Trip Subtotal $490.59
Tax $9.62
Fees $27.50
Insurance $15.00
TOTAL $542.71
Book
Here, the users enter their payment infromation before booking
Users can add a confrimation email to recieve a recipt/itinerary