Kanoe Design Critique

The Powerpuff Girls
Nikita Tran (nikitat@clemson.edu)
April 8, 2020

Description:

This document's main purpose is to report usability issues and good usability aspects of another group's product via evaluation of their wireframes. I give an overview of the product – the interface, features, purpose – and then I present nine UARs, seven focusing on problems, and two highlighting good aspects. After that, I summarize the problems I found and the recommendations I suggested for said problems, and then I reflect on my design critique process.

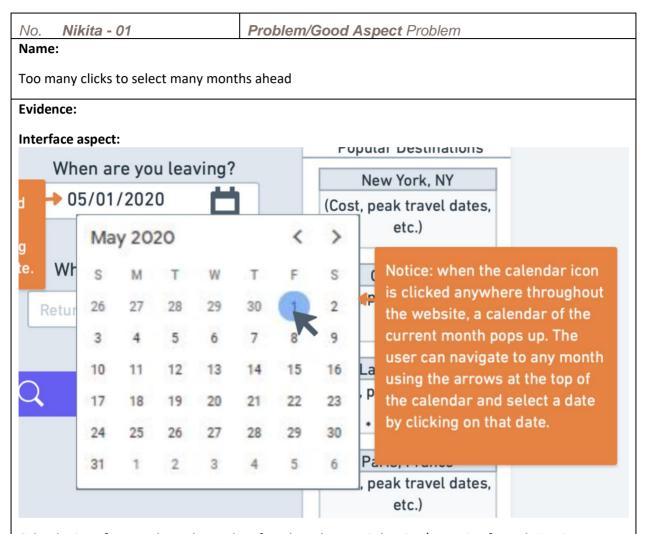
Executive Summary:

Overall, the wireframe I reviewed was pretty good. The problems I reported were not very significant and only effect "quality of life" – there were no problems that broke the functionality of the product. The problems I report are low-impact and not very significant; they only affect the user experience in a tiny amount. I would consider my recommendations as tweaks or fine-tunes to the product rather than a fix for the product. The most major qualm I had was the lack of a sorting function in the search results page – if there is a filter, why is there no sort? That should be a standard for search results of any type. Other than that, I reported on small things like optimization improvements and semantics.

Introduction:

Knowing the wireframe and nothing else, I say the purpose of Kanoe is to provide a consolidated booking service where a user can book travel and lodging for a trip in one place, instead of switching between one site for flights and another for hotels and rental cars. It features a "Streamlined Search Interface" where the user puts in their departure and destination location and chooses the dates for their trip, using a calendar interface. There is a "broad search" where the user can search flights, lodging, rental cars, and bundles that match their query and there are separate tabs to search in each of those categories separately. User can filter their search results or view details of a list item and add it to their order. The user can add extra things to their trip like insurance in the Checkout page. The product is a simple, minimalistic website with a grid-based layout.

UARs



Calendar interface used to select a date for when the user is leaving/returning from their trip.

Heuristic: Flexibility and Efficiency of Use

Explanation:

I assume the user could use this product for planning trips farther ahead, as in months ahead, since they can "navigate to any month". If the current month is May, and the user wanted to leave for their trip in September, they would have to click the next button 4 times to get to their desired month. The heuristic is violated because this is not efficient; the amount of clicks can be reduced and speed up the date-choosing process a little bit.

Severity or Benefit:

Rating: 2 – minor problem (would be nice to solve, but not a high priority)

Justification (Frequency, Impact, Persistence):

Frequency: Common problem, because choosing a date is an integral action to take for this product. Any type of user who want to plan trips more than a couple of months ahead will experience this problem, because the amount of clicks it takes to select a date months in advance does not change whither you are a newbie or an experienced user.

Impact: This problem is easy to overcome; clicking extra times isn't a hassle and doesn't delay the user in a significant way.

Persistence: Users probably will not be able to overcome the issue and it will repeat each time the user wants to select a month farther ahead than the current month.

How I weighted the factors: This is a minor inconvenience, making extra clicks is not very significant, but it does persist and I'm sure there are people want to make plans months in advance, so it is more than a cosmetic issue, but not a major issue either, so I said it is a minor issue.

Possible solution and/or trade-offs:

Show a menu of the 12 months and then once the user clicks on a month, show the current calendar interface to pick a day.

Relationships:			

Problem/Good Aspect Problem

Name:

No dates on search results pages

Evidence:



Interface aspect:

All search result pages.

Heuristic: Recognition rather than recall

Explanation:

This heuristic is violated because the search results, I assume, will show lodging/flights/cars/bundles available within the date range the user selected on the previous search page, yet there is no clear label on the results page to confirm this. If the user were to get distracted or do another task and come back to the page at a later time, they may forget what date range the results are covering.

Severity or Benefit:

Rating: 1 – cosmetic problem (does not matter too much)

Justification (Frequency, Impact, Persistence):

Frequency: Common problem. None of the search results pages have it. Only forgetful or distracted users are likely to find a problem with the lack of labels for the selected date range.

Impact: This problem is easy to overcome. They can go back to the previous page and see what dates they searched up (assuming the form keeps the user input like other websites do when returning to a previous page).

Persistence: This problem will only occur once or twice. I assume the user will realize they have to remember what dates they put in and will take more care to remember their input from the search page.

How I weighted the factors:

The problem is consistent on all search results pages, but it doesn't impact the overall process of booking a hotel/flight/etc. and is a minor inconvenience to the user only if they have forgotten what dates they inputted. Because this is an issue for only a specific group of people and isn't significant, I

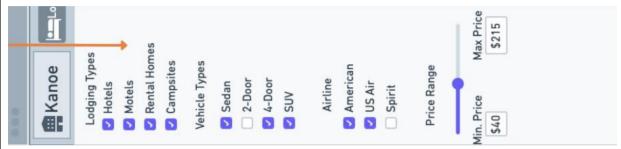
said it is simply a cosmetic issue.
Possible solution and/or trade-offs:
Using the same look as the "Search for lodging/bundles/rental vehicles/etc." headers in the search page, have text above the search results list saying "Showing results for mm/dd to mm/dd."
Relationships:

Problem/Good Aspect Problem

Name:

No price sorting

Evidence:



Interface aspect: Sidebar on search results page that gives user options to filter the search results.

Heuristic: Consistency and Standards

Explanation:

This heuristic is violated because typically booking sites have sorting functionality alongside filtering. I see no option to filter by price (lowest to highest or vice versa) or by rating. I assume the user would like to at least have the lowest to highest sorting option for their search results, because people usually want to spend as little money as possible.

Severity or Benefit:

Rating: 3 – major problem (a problem that should definitely be solved with high priority)

Justification (Frequency, Impact, Persistence):

Frequency: Common problem; no sorting functionality in all types of search result pages. Many users will be affected by the issue if they want to sort their search results by a certain criteria.

Impact: Difficult to overcome. There's no way to sort results in the presented wireframe. Does not affect overall purpose of the product, but will make the user take longer to pick out their choices in the search results page.

Persistence: Persistant problem; the lack of sorting will be apparent every time the user wants to sort their search results.

How I weighted the factors: Persistent + difficult to overcome + high frequency = major problem. Expedia, Google Flights, hotel booking sites have the option to sort results so I believe it's an important standard to implement in any booking website.

Possible solution and/or trade-offs:

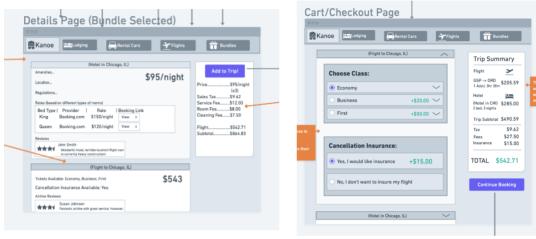
Under the price range picker, have a drop-down menu with sorting options for the price (like highest

to lowest, lowest to highest, best deal).	
Relationships:	

Name:

Slight inefficiency in adding amenties/features to a hotel/flight/etc.

Evidence:



Interface aspect:

Details page where user can see details of a list item and checkout page where user can add extras to each item in their cart.

Heuristic: Flexibility and efficiency

Explanation:

The current wireframe has a flow like this: search \rightarrow look through results \rightarrow look at details of list item \rightarrow add to cart \rightarrow go to cart and pick out amenities \rightarrow payment

The user could add amenities/features while in the details page and add all of that to their cart, so they don't have to think about it later, after they've focused on something else. Being able to add features while in the details page keeps the focus on that particular list item, instead of after an amount of time at the checkout page.

Severity or Benefit:

Rating: 2 – minor problem (would be nice to solve, but not a high priority)

Justification (Frequency, Impact, Persistence):

Frequency: I say this is a common problem because it does not seem like you can add features in the details page as it is right now. Users who want to compare their extra options for a hotel/flight/etc. would probably want this problem fixed to speed up their booking process.

Impact: Easy to overcome; just go to cart if user wants to add a feature to their order. Doesn't hinder user in achieving their goals, just adds an extra step in the process.

Persistence: Occurs only once; if users want to add a feature right after adding something to their cart, they can add trip in details page, then go to cart and add a feature, and then go back to search results page to continue what they were doing.

How I weighted the factors: the problem can be worked around in the current state of the wireframe, and it does not hinder the functionality of anything, but I do believe that some users would want to streamline their booking process by choosing features to add right in the details page rather than switching to checkout to do so. So, I said this was a minor issue rather than cosmetic.

Possible solution and/or trade-offs:

In details page, add extra dropdown menu to add amenities/features. Keep the checkout page the same though, just in case the user wants to change their mind about a feature they added.

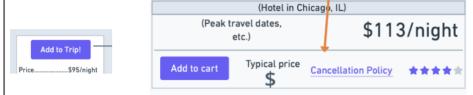
Relationships:			

Problem/Good Aspect Problem

Name:

Inconsistent button label for adding item to order

Evidence:



Interface aspect: "Add to Trip!" in Details page and "Add to Cart" in broad/bundle/flight search result listings

Heuristic: Consistency and Standards

Explanation:

This heuristic is violated because there are two terms used to refer to the same action. Also, "Add to cart" is more suitable for shopping sites like for clothes or groceries where in real life you'd carry them in a shopping cart. You can't carry a flight or a hotel in a shopping cart.

Severity or Benefit:

Rating: 1 – cosmetic problem (does not matter too much)

Justification (Frequency, Impact, Persistence):

Frequency: This problem shows up on 4 of the 14 provided wireframes so I say it is rare-ish. Anyone using the site that knows how to read will be able to notice this terminology mismatch.

Impact: Easy to overcome. It doesn't affect any functionality.

Persistence: Persistent because it is a label that shows up a few times. It could be something users notice but not really be bothered as it is just a different wording to explain the same action.

How I weighted the factors: The inconsistent terminology occurs on only a handful of screens and doesn't affect the functionality in any way. It is just a cosmetic issue.

Possible solution and/or trade-offs:

Use "Add to Trip" for all buttons used to add trips to user's order or "Add to itinerary" to be more specific

Problem/Good Aspect Problem

Name:

Inconsistent action options throughout listing types

Evidence:



Interface aspect: Listings for car/lodging/bundle/broad search results

Heuristic: Consistency and standards

Explanation:

The heuristic is violated because only the flights listings have both a compare option and "Add to cart" button; broad search and bundles only have "add to cart" and car and lodging don't have either.

Severity or Benefit:

Rating: 2 – minor problem (would be nice to solve, but not a high priority)

Justification (Frequency, Impact, Persistence):

Frequency: Any user who searches more than one type of listing might notice the difference in options presented. Problem is common because it is noticable and reproducable if user switches between listing types, which I assume they would because this product is an all-in-one booking website where you can book housing, flights, etc. without going to several websites.

Impact: Both easy and difficult to overcome. User can still "add to cart" on listings that don't have the button on the search results page if they go to the details page, but user would have to compare prices for things other than flights on their own without help from the site.

Persistence: Will always occur on the search results page. Users can work around it after they realize the available options are inconsistent.

How I weighted the factors: The inconsistency is persistent throughout the types of search results, but functionality isn't affected much and can be worked around. Because of the persistence I said this was a minor issue. I believe it is better to match the layouts between all variations of listings.

Possible solution and/or trade-offs:

Add a "compare prices" check box for listings that aren't flights (since flights already has one); add "add to cart" button on car and lodging listings

Relationships:

Nikita – 05. The buttons should have the label change too

Problem/Good Aspect Problem

Name:

Unable to edit search terms after results show up

Evidence:

Interface aspect: Search Results pages



Heuristic: User Control and Freedom

Explanation:

This heuristic is violated because there is no option for the user to edit their search query within the same page; user would have to go to previous page to edit their query. The user would probably want to quickly change their search to compare prices of different locations.

Severity or Benefit:

Rating: 2 – minor problem (would be nice to solve, but not a high priority)

Justification (Frequency, Impact, Persistence):

Frequency: Common problem. The lack of edit search function in the search result pages is more likely to be noticed by users experienced with other booking sites that have an edit search function in the results page.

Impact: Easy to overcome. Go to previous page to make another query.

Persistence: Users will be repeatedly bothered by it. They can't magically make a search bar appear on the results page

How I weighted the factors: It's easy to overcome but it has the potential to become an annoyance to users, having to press back every time to change their search terms, so I said this is a minor issue rather than cosmetic. Not major because the user can change their search terms, just in a less efficient way.

Possible solution and/or trade-offs:

Have text input similar to ones in search page on the right side or on top of the search result listings

Name:

Sidebar with list of Popular Destinations

Evidence:



Interface aspect: Popular Destinations side bar on search page

Heuristic: Flexibility and Efficiency of Use

Explanation:

Speeds up interaction for user if they want to go to a popular destination. They can see the info all at once in the sidebar instead of having to search for it in the results listing. I assume the listings in the sidebar are clickable and lead to the details page where users can add it to their trip/cart.

Severity or Benefit:

Rating: NA – good aspect

Justification (Frequency, Impact, Persistence):

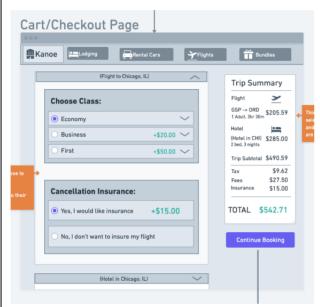
How I weighted the factors: Benefits seen: faster assessment of costs and faster process of booking

Possible solution and/or trade-offs:

Name:

Trip summary updating on checkout page as extras are added

Evidence:



Interface aspect: Trip summary sidebar on checkout page

Heuristic: Visibility of system status

Explanation:

The dynamically updating Trip Summary keeps the user informed on their current trip cost through visual feedback (change in text).

Severity or Benefit:

Rating: NA – good aspect

Justification (Frequency, Impact, Persistence):

How I weighted the factors: Benefits seen: user is always up-to-date and aware of the total cost of their order even when changes happen

Possible solution and/or trade-offs:

Conclusion

Problems Summary:

A good majority of the problems I noticed were in the Search Results pages. In those pages, I noted issues with inconsistent and semantically-improvable labelling, inconsistent list item options, lack of headings, and lack of features that are available in competing booking sites (sorting search results, editing query on results page). The rest of the problems I noted regarded efficiency – a less optimal order of operations to perform some tasks.

Design Recommendation Summary:

My recommendations range from copying functionality available in one page/item into another for consistency or efficiency, changing/adding labels or headers for clearer understanding, restructuring the order of operations for some features, and adding new functionality to compete with similar websites or for better streamlining.

Reflection

How many problems did you find?

I found eleven problems, but I only made UARs for the seven because that is the amount of problems we should report at the minimum. The seven I covered were the ones that I found most noteworthy. The problems I did not report were:

- Lack of headings for the home page to clarify that that page is for a broad search of all booking types
- Lack of choice for broad search (Recommendation: Have checkboxes so user can make selection
 of types they want to broad search (at least 2 have to be selected so it can constitute as
 "broad"))
- The auto-filling of the upcoming weekend dates on the Bundles Search page (some people might not want that date range)
- No help/documentation on the Payment page (some websites have a little help button next to CVV/security code to make sure user knows what that is and where to find it on their credit card)

Do you think you found all problems, or were there more beyond the ones you reported?

If I could interact with the wireframes instead of looking at static pictures, I believe I could find more problems once I gain further understanding of how the product works.

How much time did you spend on the evaluation and on finalizing the UARs?

Evaluation – around 2 hours UAR finalization – around 4-5 hours (I worked carefully and slowly)

Do you think Nielsen's Heuristics are a good tool for finding usability problems? Why (not)?

I think they are a good tool because I could categorize each problem I found into a heuristic. The heuristics give a helpful guideline on what to look out for and cover important usability areas.

Do you think that UARs are a good way to describe usability problems? Is there anything you would add to the UAR template to make it better?

I think UARs are good in describing usability problems in an organized manner, ensuring important details about the problem are recorded, details that could help the developer understand the nature of the problem from the user side. I would add guiding questions as part of the form instead of annotated free-response text-fields to speed up the reporting process.

Instead of:

Frequency: <Is this problem common or rare? Why? How many users (and what type of users—new, causal, experienced) are likely to experience the problem? Why?>

Have this:

Frequency:

This problem is (Bold your choice): **Common** Rare In-between

Amount of users impacted: Many Average Little None

What kind of users would experience this problem?

[Free-response]

Other things you want to say?

[Free-response]

How would you improve the process if you had to do the same assignment again?

When I evaluated the wireframes, I took notes in my notepad, because the UAR form seemed overwhelming and I wanted to jot down my findings as fast as I could before they left my mind. Next time, now that I'm familiar with the UARs, while evaluating, I will fill out the Name and Evidence parts of the UARs to speed up their finalization.