

Expedia Usability Test

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Utility & Usability - Human-Centered Design



Agenda

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Testing Participants
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Background

- Expedia is a popular website for booking travel accommodations
- It aims to provide the lowest price for any booking. Backed up by “Best Price Guarantee”
- Users can search for hotels, flights, packages, cars, and even cruises





Goals & Objectives

Understand the usability of the Expedia.com website in both qualitative and quantitative measurements.



30-45 Min.



5 Participants



10 Tasks



Analyze





Methodology

Testing Participants
Tasks

Testing Participants



Name	Demographics	Travel Rate
Armando	Age: 51 Occupation: Flight Attendant Location: Austin, TX	Monthly
Linda	Age: 24 Occupation: Engineering Document Coordinator Location: Massachusetts	A few times a year
Maria	Age: 30 Occupation: Paralegal Location: Los Angeles, CA	A few times a year
Cardinal	Age: 34 Occupation: Counselor Location: Los Angeles, CA	A few times a year
Kristi	Age: 34 Occupation: Counselor Location: Los Angeles, CA	A few times a year



Tasks



1. Book a roundtrip airline ticket from Los Angeles to New York for four (4) people during Labor Day weekend (Sept. 1-4).
2. Find a family friendly activity to do on September 6-7 in Paris, France with a \$25-\$50 budget.
3. Book a fully refundable direct business flight for two people leaving from LA to New York on December 15-17.
3a: Airlines: American Airlines 3b: Departing: Early Morning
4. Book a two day cruise to Mexico for two (2) people during the first week of November.
5. Walk me through how you would sign-up for an account on Expedia
6. Find assistance on travel plans so that you can update your personal account information – specifically updating your email address in your profile.
7. Compare two different hotel properties with a \$200 budget per night.
8. You're needing to rent a car, how would you go about reserving a vehicle?
9. Let's say you were a coach for a middle school baseball team (10 people total - 1 adult, 6 kids, 3 chaperones) and needed to book a group trip for your team. How would you book this on Expedia.com?
10. Your flight got canceled and you're stranded in Chicago overnight. How would you find a hotel room in Chicago for the night using Expedia?





Usability Findings

Tasks #1-10

Task 1

Book a roundtrip airline ticket from Los Angeles to New York for four (4) people during Labor Day weekend (Sept. 1-4).

Usability Issue

Errors

- 2 out of 5 participants didn't know they were booking a hotel instead of a flight. This caused them to have to go back and restart the process.

Visibility of System Status

(Jakob Neilsen's 10 Usability Heuristics for User Interface Design)

- Users that struggled with booking an airline ticket, didn't know initially what tab they were on
- Any indicators communicating the current system status failed these participants. They were confused on why they only were seeing hotels instead of flights.



2 out of 5 participants were unsatisfied with booking an airline ticket

Confusion with tab selection

The screenshot shows the Expedia website interface. At the top, there are navigation tabs: 'Stays', 'Flights', 'Cars', 'Packages', 'Things to do', and 'Cruises'. The 'Flights' tab is selected and highlighted. Below the navigation, there are search filters for 'Roundtrip', 'One-way', 'Multi-city', and 'Economy'. The search criteria are: 'Leaving from Los Angeles, CA, United States...', 'Going to New York, NY, United States...', 'Dates Sep 1 - Sep 4', and 'Travelers 4 travelers'. The search results are displayed in a table format, showing flight options from Los Angeles to New York. The table includes columns for 'From', 'Price', 'Airlines', 'Travel and baggage', and 'Roundtrip per traveler'. The first row shows 'Flexible dates' for \$540. The second row shows 'Earn OneKeyCash on top of airline miles and make your miles go further' for \$541. The third row shows 'Expedia Bargain Fare' for \$513. The fourth row shows a flight from Los Angeles to New York with a price of \$513. The fifth row shows a flight from Los Angeles to New York with a price of \$540. The sixth row shows a flight from Los Angeles to New York with a price of \$540.

Task 2

Find a family friendly activity to do on September 6-7 in Paris, France with a \$25-\$50 budget.

Usability Success

Effectiveness

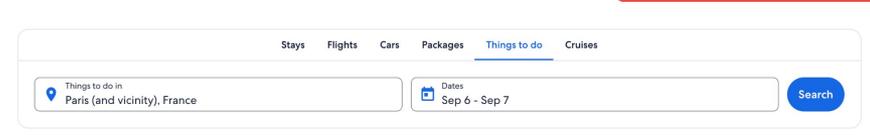
- The options to use various filters in order to narrow down a search helped participants complete the task. Majority of users navigated the left hand side for filters, while some used the “sort by” option.

Consistency and standards

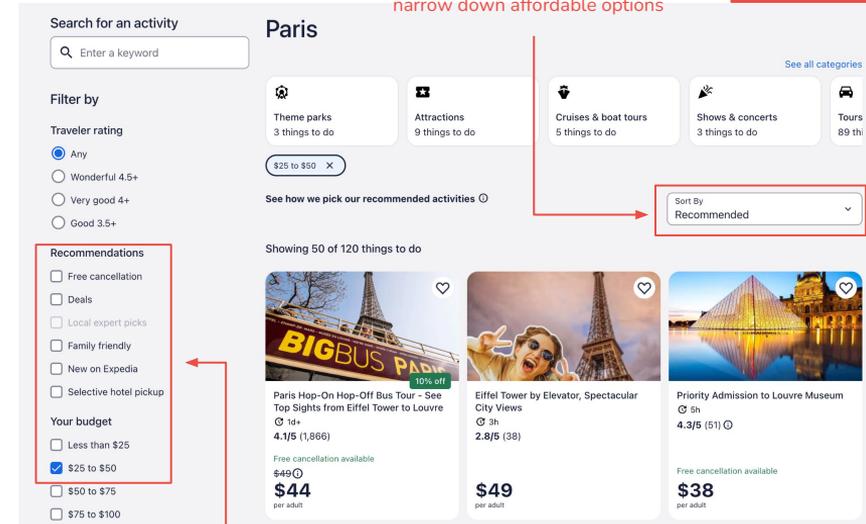
(Jakob Nielsen's 10 Usability Heuristics for User Interface Design)

The filters found on the left side are consistent with user expectations. Eye tracking research shows users tend to spend more time directing their gaze on the left half of a page

<https://www.nngroup.com/articles/horizontal-attention-leans-left/>



Second filter option was used to narrow down affordable options



Users used filters to narrow down search quickly

Task 3

Book a fully refundable direct business flight for two people leaving from LA to New York on December 15-17.

3a: Airlines: American Airlines

3b: Departing: Early Morning

Usability Issue

Efficiency

- Users found it difficult to locate whether or not the flights were refundable. It was only once they clicked on an individual flight, more information was included. This caused more effort for the user and creates extra steps.

Usability Success

Learnability

- 5 out of 5 participants were able to complete the sub tasks(3a-3b). Once users were familiar with the filter categories, they were able to quickly narrow down their search

Non refundable displayed with other key information

The screenshot shows a flight selection interface. On the left, a list of flight options is displayed, including times like 3:55pm - 7:51am and 6:00am - 10:58pm. On the right, a detailed view of a flight is shown, including the price \$1,556 and the 'Flexibility' section where 'Non-refundable' is selected and highlighted with a red box. A red arrow points from the text 'Non refundable displayed with other key information' to this box.

Filters are found on the left side of the website

The screenshot shows the Expedia search results page. The 'Filter by' section on the left includes 'Airlines' with 'American Airlines (1)' selected and highlighted with a red box. A red arrow points from the text 'Filters are found on the left side of the website' to this box. Below the filters, flight options are listed with details like '12:45am - 11:53am' and '12:45am - 11:53am'. A red box highlights the 'Early Morning' filter category, and a red arrow points from the text 'Icons are used to differentiate departure times' to this box.

Icons are used to differentiate departure times

Task 4

Book a two day cruise to Mexico for two (2) people during the first week of November.

Usability Issue

Learnability

- When booking a cruise, participants found it confusing when booking how many nights they would like to stay. Subconsciously they assumed they were choosing days and nights. Instead the options are for minimum nights and maximum nights.

Usability Success

Satisfaction

- Majority of users never used the cruise tab option. All new user that used it enjoyed the process. Users also enjoyed the visual photo of the cruise ship, which helped them decide if they wanted to book a trip.

Confusion between days and nights

For expert cruise advice, call 1-800-916-8585.

Going to Departing between Duration Travelers Search

Duration: Min nights Max nights

Your recent searches

Expedia More travel ▾ English List your property Support Trips Sign in

Filter by

Departure ports

Cruise lines Carnival Cruise Lines Disney Cruise Line

Ships

Cabin experience Any Inside Oceanview Balcony Suite

0 cruises found - Prices are per traveler, available within last 24 hours and valid for US and Canadian residents only. Taxes, fees, and port expenses not included. Fuel supplement may apply.

Sort by Price (Lowest)

Filter by Earn OneKeyCash on this cruise when you sign in and book

No matches
Try modifying dates, duration, or travelers

Cruises that don't match all your filters

2 night Mexico
Carnival Radiance
Sep 6, 2024 - Sep 8, 2024
Long Beach, United States - Ensenada, Mexico - Long Beach, United States
Explore on Map

\$234
inside cabin per traveler

Get expert advice
If you have a question, or would like personalized assistance booking your cruise, contact an Expedia Cruises™ travel agent today.
1-866-403-9848 Request a consultation

70% off

NORWEGIAN Cruise Line®
35% OFF ALL CRUISES
FREE AT SEA
FREE UNLIMITED OPEN BAR AIRFARE & MORE

OCEANIA CRUISES®
FREE Champagne, Wine & More

Photos help the user decide

Task 5

Walk me through how you would sign-up for an account on Expedia.

Usability Issue

Learnability

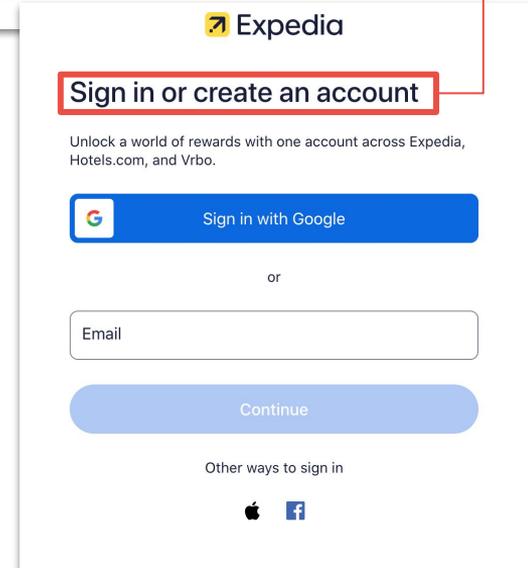
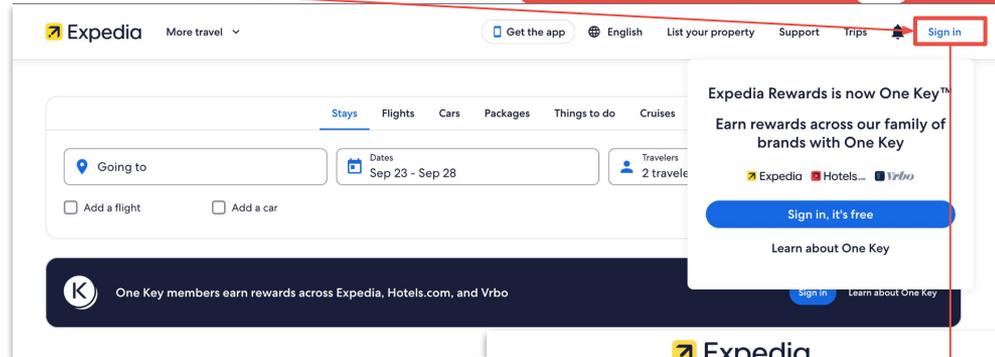
- All users found it **confusing** that “sign-up” or “create a new account” was the same as the “sign-in” button.

Consistency & Standards

(Jakob Nielsen's 10 Usability Heuristics for User Interface Design)

- All users had the understanding to look at the top right corner to find the “sign-in” button with the assumption that it would mean “sign-up”
- Users should not have to guess if “sign-in” means the same as “sign-up”
- All users found it intuitive to “Sign in with Google” account but noted that older adults may want a “Create an account” button if they are unfamiliar with Google onboarding flows.

Confusion with understanding “sign-in” to mean “sign-up” or “create an account”



Task 6

Find assistance on travel plans so that you can update your personal account information – specifically updating your email address in your profile

Usability Issue

Satisfaction

- Users understood to go to “Profile” to make any edits to their personal information, however **found it confusing** to then be redirected to “Settings” to change their email address.

Efficiency & Errors

- All users **did not** find it efficient and experienced errors resulting in redirecting themselves to the “Settings” left navigation after being on “Profile > Contact” page.

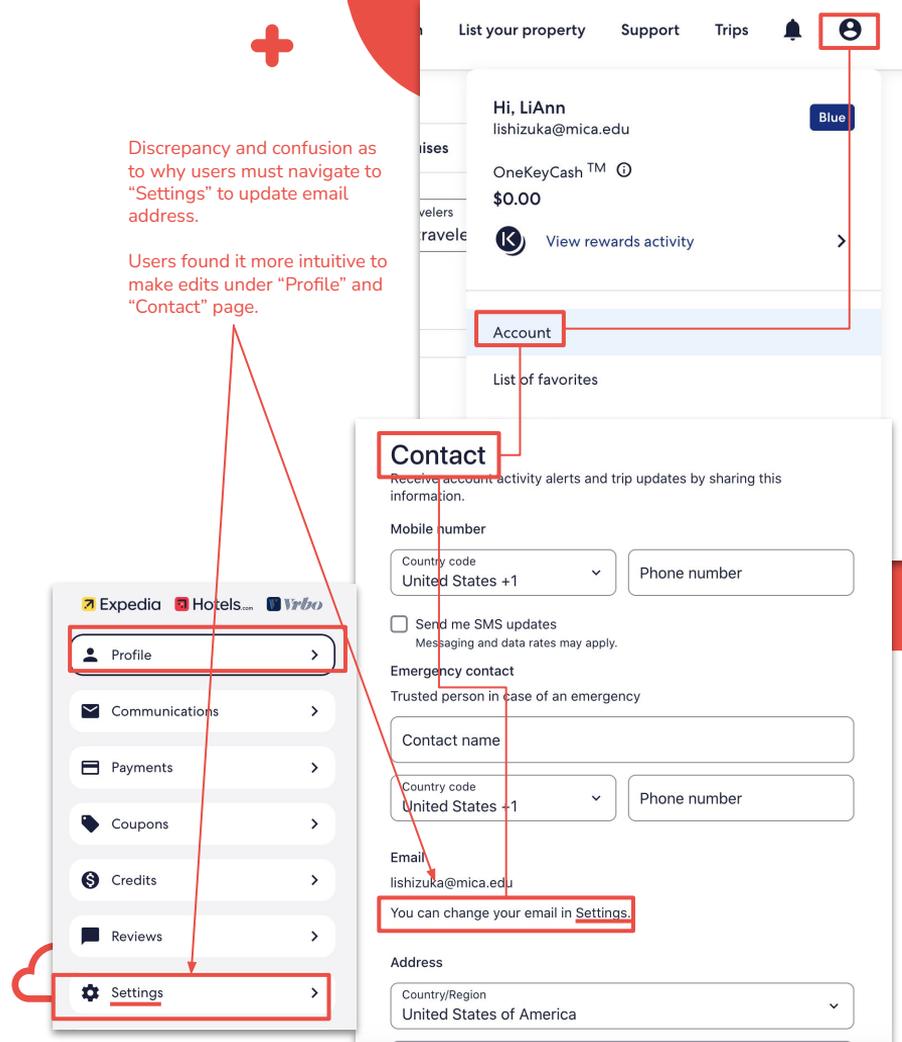
Help & documentation

(Jakob Nielsen's 10 Usability Heuristics for User Interface Design)

- While there was documentation on where users could change their email in the “Settings” it added unnecessary steps. The content should be easy to search and focused on the user's task to help them complete their goal of updating an email address.

Discrepancy and confusion as to why users must navigate to “Settings” to update email address.

Users found it more intuitive to make edits under “Profile” and “Contact” page.



Task 7

Compare two different hotel properties with a \$200 budget per night.

Usability Issue

Learnability

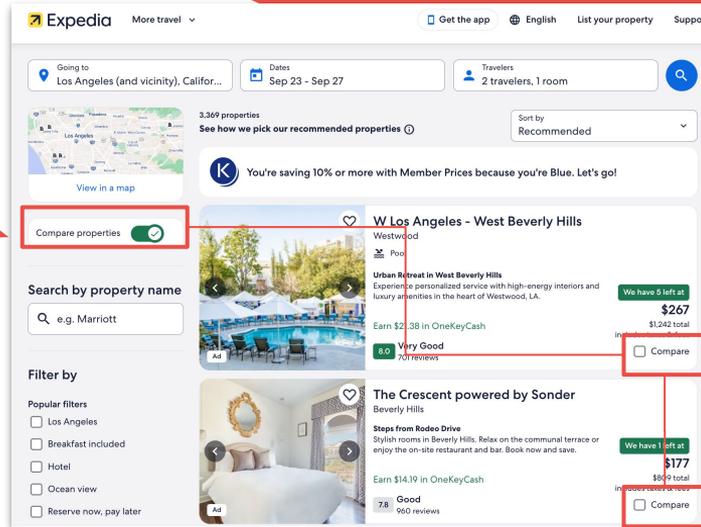
- Only one user was able to successfully learn how to use the “Compare” button which was a hidden toggle on the left-hand navigation list.
- A majority of users (80% of users who participated) found other methods of comparing prices by either favoriting, opening new tabs, or looking at the map to compare hotels.

Flexibility & efficiency of use

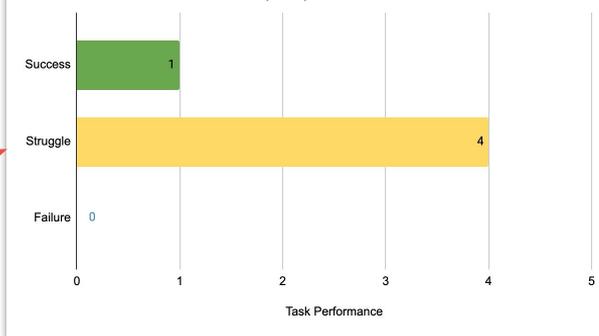
(Jakob Nielsen's 10 Usability Heuristics for User Interface Design)

- One user noted that it would be helpful if the “Compare” button stood out more by either bolding it or making it more prominent.
- Opportunity to create a shortcut to the “Compare” toggle would help both novice and experienced users speed up the interaction.

Users struggled to find this “Compare properties” toggle in order to see the checkbox to compare two different hotel properties.



Task Performance: Task 7 (n=5)



80% of users (4 out of 5) struggled to successfully find the “Compare” toggle button during the Usability Testing and resorted to alternative, unique methods to compare and complete the task.

Task 8

Renting a car

Usability Success

User control and freedom

(Jakob Nielsen's 10 Usability Heuristics for User Interface Design)

- The presence of filters allowed all users to have full control over the options they are being shown
- Users were drawn to "great deal" and "member price" graphics as well as the budget slider so that they can control how much they are spending

Satisfaction

- Simplicity and match between system and mental models of the users allowed for greater satisfaction in renting a vehicle
- Prior knowledge of domain meant users had an easier time finding filters that worked for them and settled on results that fit their expectations

Memorability/Learnability/Efficiency

- This late in the test participants were familiar with the navigation system and filtering system that finding results was quick and efficient

Once initial errors with this feature were recovered from, participants had no issue finding "cars" category

"great deal" graphic gave users a sense of control

Participants were familiar with left-hand filters and were able to set their preferences easily

Stays Flights **Cars** Packages Things to do Cruises

Rental cars Airport transportation

Pick-up Same as pick-up Dates Sep 13 - Sep 14 Pick-up time 10:30am Drop-off time 10:30am Search

Show AARP rates Discount codes



Great Deal

Mini Van

Chrysler Pacifica or similar

7 H Automatic

Unlimited mileage

Shuttle to counter and car

Free cancellation

Online check-in

Pay at pick-up

Reserve without a credit card

Alamo 92% recommend

\$60
per day
\$86 total

Reserve

Car type

- | Car type | From |
|---|-------|
| <input type="checkbox"/> Economy | \$41 |
| <input type="checkbox"/> Compact | \$41 |
| <input type="checkbox"/> Midsize | \$48 |
| <input type="checkbox"/> Standard | \$51 |
| <input checked="" type="checkbox"/> Full-size | \$52 |
| <input type="checkbox"/> Premium | \$69 |
| <input type="checkbox"/> Luxury | \$86 |
| <input checked="" type="checkbox"/> Minivan | \$60 |
| <input type="checkbox"/> SUV | \$54 |
| <input type="checkbox"/> Van | \$221 |
| <input type="checkbox"/> Pickup | \$51 |
| <input type="checkbox"/> Sports Car | \$78 |
| <input type="checkbox"/> Other | \$38 |

Capacity

- | Capacity | From |
|---|------|
| <input type="checkbox"/> 2-5 passengers | \$52 |

Task 9

Booking a trip as a coach of a little league team. 1 coach, 6 players and 3 chaperones.

Usability Issue

Error Prevention

(Jakob Nielsen's 10 Usability Heuristics for User Interface Design)

- Participants expressed frustration with there being a lack of warning that Expedia only supports bookings for 6 people at a time
- This led to participants clicking in circles trying to remedy the situation and caused friction

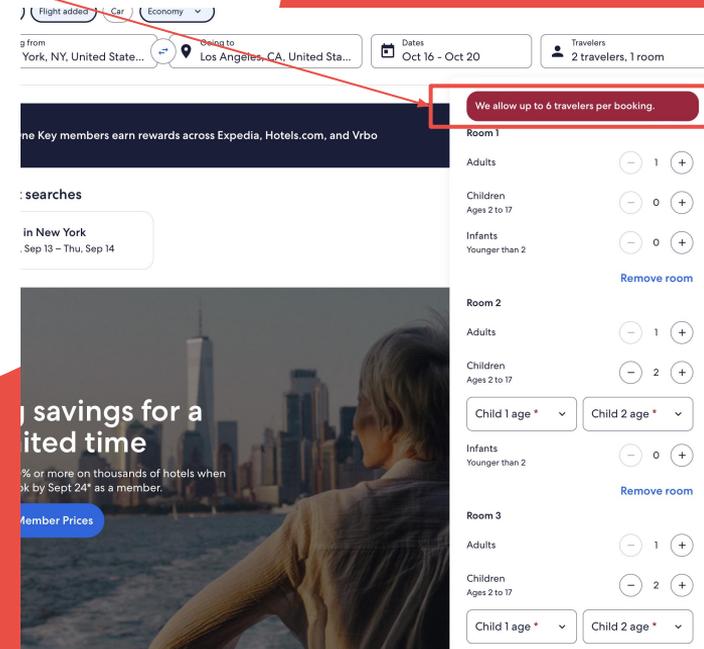
Learnability

- Participants saw a mismatch between mental model and the system as the group booking process did not match expectations
- Regardless of familiarity with the navigation system at this point in the test, users were unable to successfully figure out the system for group booking

Satisfaction

- 0/5 participants were able to complete the task and expressed frustration with the failure

No warning that there is this limitation. Participants expressed frustration with having to make two bookings to accommodate 11 people



Task 10

Booking an impromptu room for the night in Chicago after flight cancellation

Usability Success

Memorability/Learnability

- Previous experience in the test using the navigation and parameter input systems allowed participants to quickly find the results they were looking for

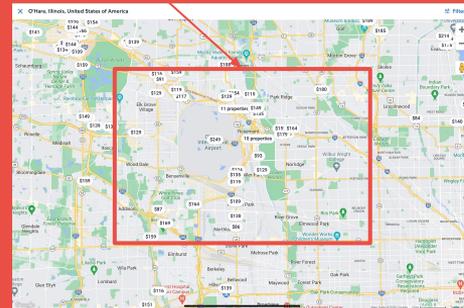
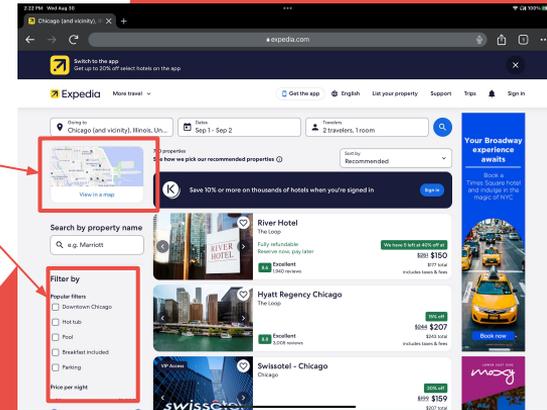
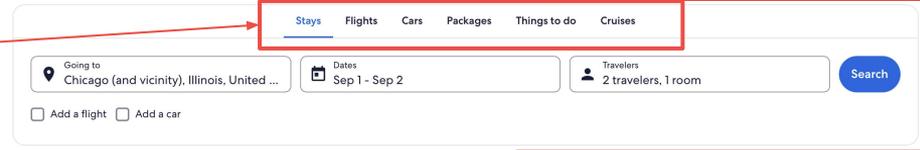
Satisfaction

- Due to the compounding factors of experience, memorability and efficiency, 0/5 participants had issues completing this task.
- All participants walked away feeling they had successfully completed the task both by test parameters and their personal preferences

Once initial errors with this feature were recovered from, participants had no issue finding “stays” category and inputting that day’s date

Participants were familiar with left-hand filters and were able to set their preferences easily

Some participants used the map function to find stays closest to the airport



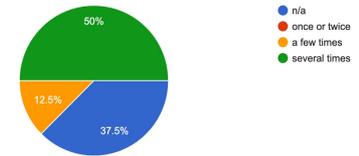


Next Steps & Learnings

Next Steps & Learnings

- **Recommend** Expedia address core aspect of usability: **Efficiency, Satisfaction, and Learnability** by addressing the following:
 - Consistent content and vocabulary for onboarding flow (i.e. “sign-up” vs “sign-in” vs “create an account” or error prevention messages for group bookings)
 - Provide short-cuts or accelerators to users and help them find the information they need when comparing listings or updating personal contact information.
- **Learned** that while a **majority of users (62.5% of users screened)** have used Expedia.com or it’s companion app in the last 2 years, each user had **unique challenges and usability issues** that impacted both novice and experienced users.

How many times have you used Expedia.com or its companion app in the last 2 years?
8 responses



Results from Screener form found 62.5% of users have used Expedia.com or its companion app in the last 2 years.

Appendices



Test Recordings

[User Interview Recordings]

Individual Notes

[User Interview Notes]

Survey Results

[Screener Results]