

User Test Report- Hipmunk

Created by Aditi Bhat for Coursera course Evaluating Designs With Users

Updated: April 28th, 2019

Executive Summary

This User Test Report analyses Hipmunk, an online trip planner that helps you plan your trip- from flights and hotels to cars and other deals. Two participants with different demographics took part in the evaluation, one travels with family and the other for business trips. Both of them have bought a ticket online in the past year and haven't used Hipmunk before. They were given six different tasks of varying difficulty in order to determine if experienced users of online travel booking sites can use Hipmunk to plan their trips. Their interactions with the system were recorded and they were encouraged to think aloud and express what they are feeling and thinking. The report contains findings from these interactions and are assigned a severity rating from 0 (not a usability problem) to 4 (usability catastrophe) as learnt from the first Coursera Course of this specialization. Each of these findings also has a recommendation to counter the usability issue.

Introduction

System

Hipmunk, an online trip planner that helps you plan your trip- from flights and hotels to cars and other deals. They offer a comprehensive travel search, from commercial flights, trains, and charter flights to hotels and vacation rentals through Airbnb. Their website, mobile app, and AI-powered bots aim to help save time and money by comparing top travel sites to show the perfect flight or hotel at the cheapest price. You can visually compare results to choose the best option.

Key questions this study seeks to answer

1. Can experienced users of online travel booking sites use Hipmunk to plan their trips?
2. What problems do users encounter when trying to use Hipmunk to plan trips?

Why are these questions important?

Usability is one of the most important criteria of a User's Experience. If the system is not easy to use, then no matter how useful the technology is, users cannot use it. Therefore, with the answers to these questions, a better experience can be created for these users.

Methods

Target Population:

- Has bought a ticket online in the past year
- Hasn't used Hipmunk before

Within this population, will be interested in certain diversity criteria, in order to gain insight into how different types of users will experience the site. We recruited participants who differ along two dimensions:

- Flight preferences
 - Standard (no special accommodations)
 - Complex needs (dietary restrictions, travel w/ infant, special needs, etc.)
- Frequency of online bookings
 - 1-3 trips per year booked online
 - 4 or more trips per year booked online

Recruitment methods:

The participants have been recruited keeping in mind the Target Population. I requested my manager who travels very often for business meetings and a family member who travels often with their family to take part.

Participant Summary

P01:

- Project Manager
- Female
- In mid 40s
- 1 child
- Frequent business trips
- Middle-high budget

P02:

- Avid Traveller
- Female
- In early 30s
- Travels with husband and 2 children(1 infant and 1 toddler)

- Husband has diabetes
- Low-middle budget

Instruments used (All of them can be found in the appendix at the end)

- Pre Test Interview
- Logging sheets
- Video recording software
- User Test Script
- Task Descriptions
- Post Test Questionnaire/Debrief
- SUS

Analysis Methods:

- Video of interaction with the system captured along with audio
- Logging sheets
- Critical Incident Analysis
-
-

Findings and Recommendations

Summary Results

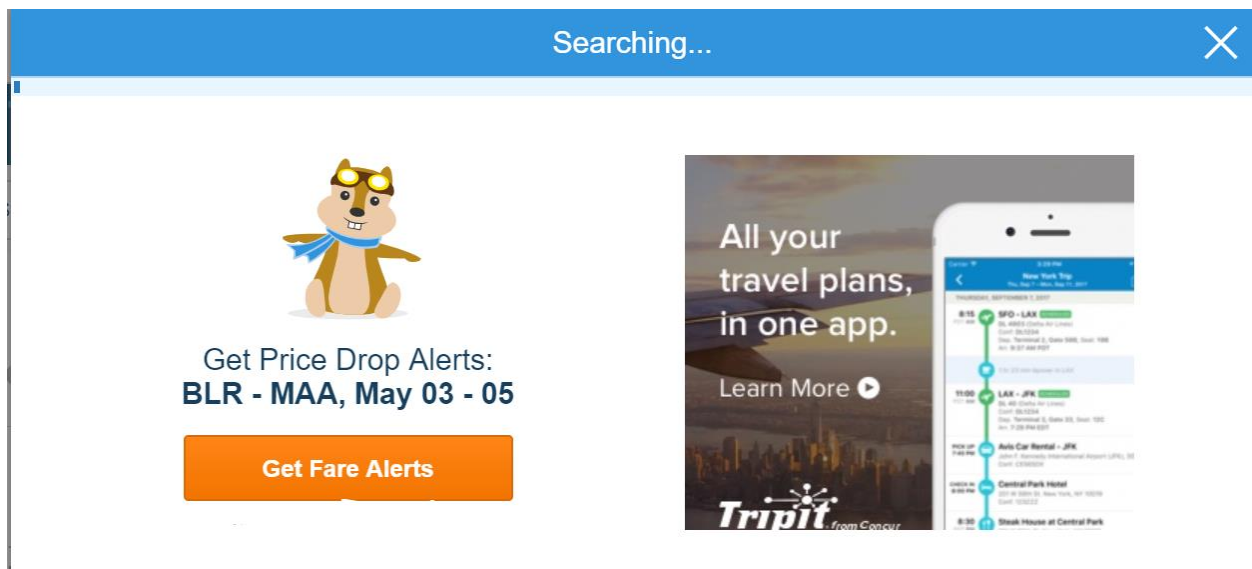
This User Report shows that there are quite a few areas of usability that Hipmunk can improve. They can make their options more visible and improve feedback. This is supported by the System Usability Scores, Post Test Questionnaires. With these improvements, Hipmunk can greatly increase their usability and in turn, their customer satisfaction.

Key Findings

Finding 1: User was not sure if clicking the X on the search popup would cancel the search, or just close the dialog box.

Severity: 2

The Users wanted to close the dialog box as they did not want fare alerts, but they weren't sure what clicking the X would do.





Recommendation: The X icon can be put above the dialog box instead of at the end of the searching tab.



Finding 2: When the user clicks on the amenities icon, the entire page refreshes and is different, which confused both users.

Severity: 3

Once the search results loaded, the page looked like this:

<div>Select</div> <div>\$475+</div> <div>American¹ Economy Fri, 6:27 am – 8:12 am</div>	<div>1h 45m</div> <div></div>	<div>DTW → LGA</div>
<div>Basic — Economy \$475 Premium — Biz/First \$709</div>	<div>1 Republic dba American Eagle operated</div>	<div>ad</div>
<div>See Flights</div> <div>----</div>	<div>hotwire</div> <div>Get up to 40% off with Hot Rate® Flights</div>	
<div>Select</div> <div>\$475+</div> <div>American¹ Economy Fri, 7:42 pm – 9:29 pm</div>	<div>1h 47m</div> <div></div>	<div></div>

The user clicked on the WiFi icon out of curiosity and suddenly, the page refreshed and turned into this:

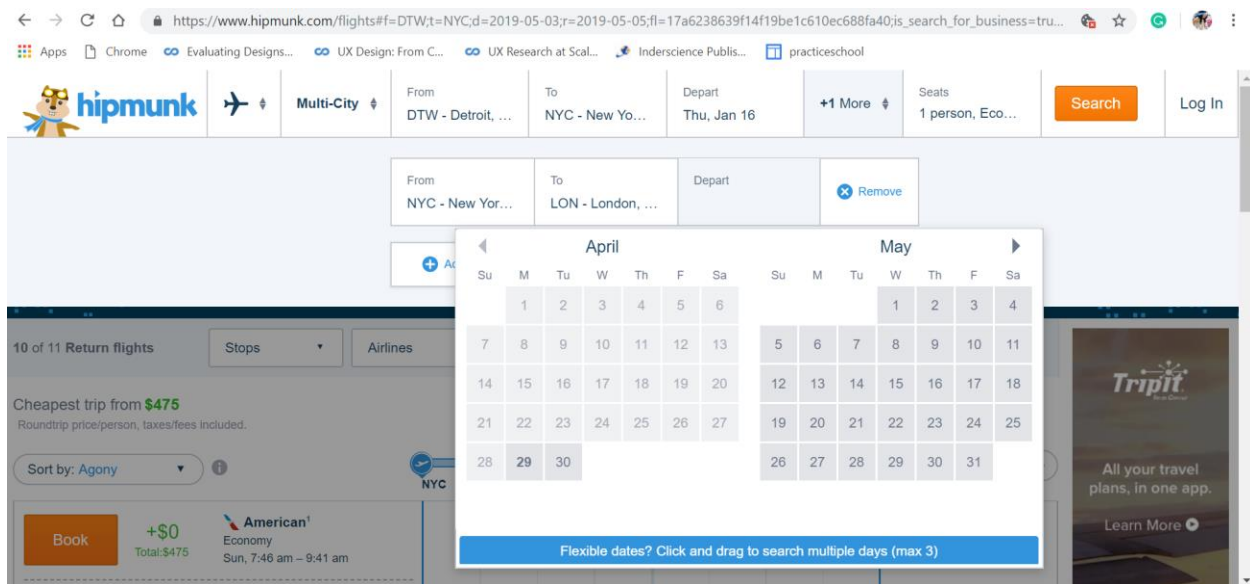
<div>Basic — Economy \$475 Premium — Biz/First —</div>	<div>1 Republic dba American Eagle operated</div>	<div>LGA → DTW</div>
<div>Book</div> <div>+\$0 Total:\$475</div> <div>American¹ Economy Sun, 5:05 pm – 7:10 pm</div>	<div>2h 05m</div> <div></div>	<div></div>
<div>Basic — Economy \$475 Premium — Biz/First —</div>	<div>1 Envoy Air dba American Eagle operated</div>	<div>LGA → DTW</div>
<div>Book</div> <div>+\$0 Total:\$475</div> <div>American¹ Economy Sun, 2:40 pm – 4:46 pm</div>	<div>2h 06m</div> <div></div>	<div></div>
<div>Basic — Economy \$475 Premium — Biz/First —</div>	<div>1 Envoy Air dba American Eagle operated</div>	<div>LGA → DTW</div>

Recommendation: When the user clicks on the icon, a hover message can show up indicating what action will be performed. Or a more intuitive icon to the action can be included.

Finding 3: In Multi city trip, every time you add a date, you have to go to the year.

Severity: 2

While booking a multi city trip, if you are planning a trip in the distant future, it can be irritating to keep going to the date.

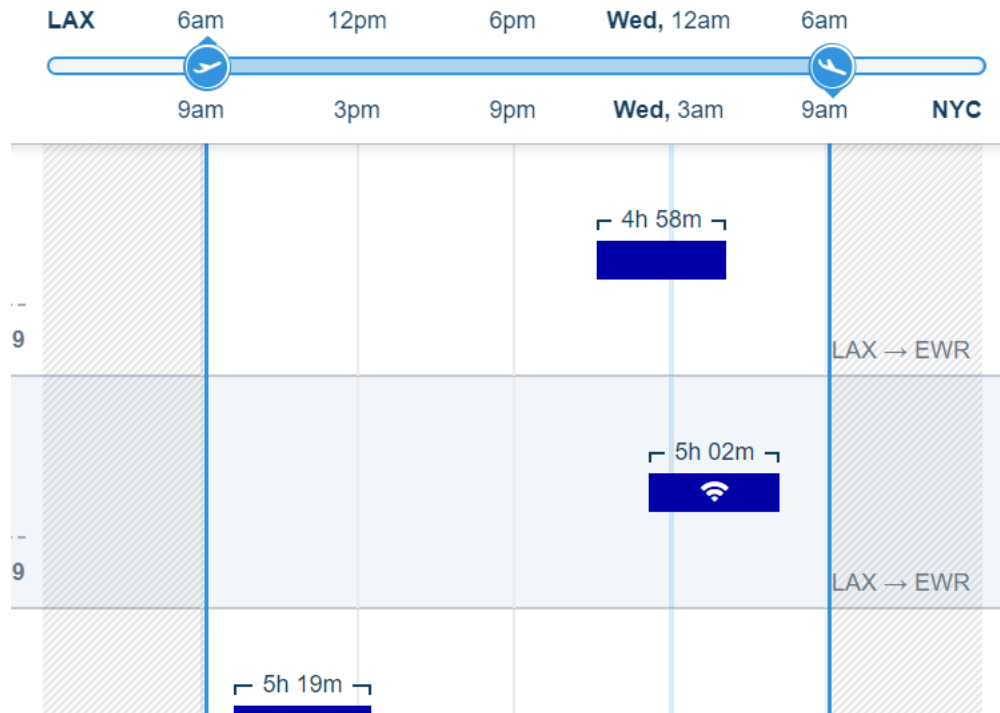


Recommendation: The date should start from the date of the previous city as you can't travel back in time anyway.

Finding 4: The time cropping icons are not intuitive, it took the users a significant amount of time to figure it out. Also, they weren't aware which day they were travelling, only the dates, therefore they had to look back into a calendar to see which day it was.

Severity: 3

This was one of the most time consuming tasks for both of the users. They took time to figure out how to include the time constraints and then to check which day they were travelling.

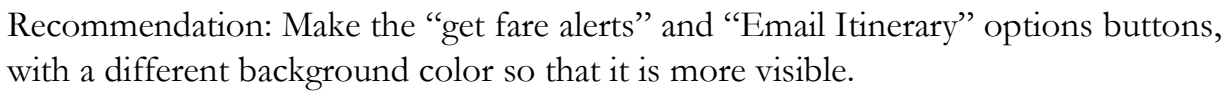


Recommendation: Larger, more intuitive icons can be used for cropping time, or a simple input of after what time and before what time can be included. The day option can also include the date to make it easier for users.

Finding 5: A user accidentally closed pop-up, get fare alert option wasn't very visible after that. Email Itinerary option also isn't very visible.

Severity: 3

Participant P01 accidentally closed the Get Fare pop-up, and then couldn't see the option anywhere else. The white font gets camouflaged. After looking for a while, she found the option and successfully completed the task.



Recommendation: Make the “get fare alerts” and “Email Itinerary” options buttons, with a different background color so that it is more visible.

Limitations

This study only included participants that are frequent online travelers who were experienced with online bookings. This category of users generally do well with these tasks, therefore this is a limitation.

Another limitation of this report is that only 2 people were involved in the study, which is a very small number of users. The study should be conducted with more people of more diverse demographics (senior citizens, differently abled, low technical skills).

Conclusion

This User Report shows that there are quite a few areas of usability that Hipmunk can improve. They can make their options more visible and improve feedback. This is supported by the System Usability Scores, Post Test Questionnaires. With these improvements, Hipmunk can greatly increase their usability and in turn, their customer satisfaction.

References

Nielsen, J. (1994) Heuristic Evaluation. In J. Nielsen. & R. L. Mack (Eds.) Usability Inspection Methods. New York, NY: John Wiley & Sons

Appendices-User Test Script

Pretest Checklist

- Clear cookies
- Login with email: (See Note** Below) password: (See Note** Below)
- Remove login saved memory
- Double check success criteria
- Print task instructions, one per page
- Print post-test questionnaire
- Print logging sheet
- Print this Test Script
- Start screen recording

Note**: You need to create a new test email account to provide to the user. See User Test Plan for details.

Posttest Checklist

- Stop recording, save audio and video to backup drive
- File informed consent form
- File logging sheet

Introduction to demo

Moderator (with a big smile!): Thanks for coming in today! We're constantly trying to improve our product, and getting your frank feedback is a really important part of that.

The goal for today's session is test the website - Hipmunk. I'm here to learn from you so I'll ask a lot of questions, **but I'm not testing you**. There are no right or wrong answers.

I'll start this session by asking some background questions. Then I'll show you some things we're working on, and ask you to do some tasks. As you work on the tasks, please **think aloud**. This means that you should try to give a running commentary on what you're doing as you work through the tasks. Tell me what you're trying to do and how you think you can do it. If you get confused or don't understand something, please tell me. If you see things you like, tell me that too. I want to emphasize that, **you won't hurt my feelings** by telling me what you think. In fact, frank, candid feedback is the most helpful.

If you do get stuck, I'm going to try not to answer your questions or tell you what to do. I'm just trying to see what you would do if you were using it on your own. But don't worry--I'll help you if you get completely stuck.

Do you have **any questions** before we begin?

Consent Form

Present Consent form, summarize it, and obtain signature

Pre-test Questionnaire

1. Have you used Hipmunk before?
2. Tell me about the last trip you planned.
 - a. What do you usually use to plan your trip?
 - b. What is your primary purpose for travelling?
 - c. What is your primary concern?
 - d. What is your budget?
3. What information is the most important when you are planning your trip?
4. How often do you travel?

Task Instructions

Print tasks and present them, one at a time. Read each task aloud and give the printed sheet to the participant.

Debrief

1. **Review parts of the test where the user struggled:** What difficulties did you have on ____? I noticed you struggled with____, can you tell me what happened? You paused here, tell me more about that.
2. **Preferences:** What did you think of the site? What did you like/dislike?Which parts of this page are most/least important to you?
3. **Changes:** If you had 3 wishes to make this better for you, what would they be? Why?
4. **Understanding:** How would you describe this to a friend?
5. **Use Cases:** Under what circumstances would you use this? Why?

Conclusion

This has been incredibly helpful. Today, you mentioned...[Moderator: Try to briefly summarize some key parts of the discussion or issues.] Your input is really valuable for

Consent Form

Consent Form

I agree to participate in the study of Hipmunk.com being conducted as part of the Coursera course: Evaluating Designs with Users.

I consent to the recording of this test. This recording will be used for research and product improvements only.

I understand that participation in this usability study is voluntary and I agree to immediately raise any concerns or areas of discomfort during the session with the study administrator.

Please sign below to indicate that you have read and you understand the information on this form and that any questions you might have about the session have been answered.

Date: _____

Please print your name: _____

Please sign your name: _____

Thank you!

We appreciate your participation.

Task Success:

[illegible]

Post Test Questionnaire – P01

Post-test questionnaire

Answer the following questions based on the scale of 1 -5 where 1 is strongly disagree and 5 is strongly agree

1. I think that I would like to use this system frequently
1 2 3 4 5
2. I found the system unnecessarily complex
1 2 3 4 5
3. I thought the system was easy to use
1 2 3 4 5
4. I think that I would need the support of a technical person to be able to use this system
1 2 3 4 5
5. I found the various functions in this system were well integrated
1 2 3 4 5
6. I thought there was too much inconsistency in this system
1 2 3 4 5
7. I would imagine that most people would learn to use this system very quickly
1 2 3 4 5
8. I found the system very cumbersome to use
1 2 3 4 5
9. I felt confident using the system
1 2 3 4 5
10. I needed to learn a lot of things before I could get going with this system.
1 2 3 4 5

Post Test Questionnaire – P02

Post-test questionnaire

Answer the following questions based on the scale of 1 -5 where 1 is strongly disagree and 5 is strongly agree

1. I think that I would like to use this system frequently
1 2 3 4 5
2. I found the system unnecessarily complex
1 2 3 4 5
3. I thought the system was easy to use
1 2 3 4 5
4. I think that I would need the support of a technical person to be able to use this system
1 2 3 4 5
5. I found the various functions in this system were well integrated
1 2 3 4 5
6. I thought there was too much inconsistency in this system
1 2 3 4 5
7. I would imagine that most people would learn to use this system very quickly
1 2 3 4 5
8. I found the system very cumbersome to use
1 2 3 4 5
9. I felt confident using the system
1 2 3 4 5
10. I needed to learn a lot of things before I could get going with this system.
1 2 3 4 5

Complete List of Usability Issues

Sl no.	Issue and Description	Severity
1	<p>User was not sure if clicking the X on the search popup would cancel the search, or just close the dialog box.</p> <p>The Users wanted to close the dialog box as they did not want fare alerts, but they weren't sure what clicking the X would do.</p> <p>Recommendation: The X icon can be put above the dialog box instead of at the end of the searching tab.</p>	2
2	<p>When the user clicks on the amenities icon, the entire page refreshes and is different, which confused both users.</p> <p>The user clicked on the WiFi icon out of curiosity and suddenly, the page refreshed.</p> <p>Recommendation: When the user clicks on the icon, a hover message can show up indicating what action will be performed. Or a more intuitive icon to the action can be included.</p>	3
3	<p>In Multi city trip, every time you add a date, you have to go to the year.</p> <p>While booking a multi city trip, if you are planning a trip in the distant future, it can be irritating to keep going to the date.</p> <p>Recommendation: The date should start from the date of the previous city as you can't travel back in time anyway.</p>	2
4	<p>The time cropping icons are not intuitive, it took the users a significant amount of time to figure it out. Also, they weren't aware which day they were travelling, only the dates, therefore they had to look back into a calendar to see which day it was.</p> <p>This was one of the most time consuming tasks for both of the users. They took time to figure out how to include the time constraints and then to check which day they were travelling.</p>	3

	<p>Recommendation: Larger, more intuitive icons can be used for cropping time, or a simple input of after what time and before what time can be included. The day option can also include the date to make it easier for users.</p>	
5	<p>A user accidentally closed pop-up, get fare alert option wasn't very visible after that. Email Itinerary option also isn't very visible.</p> <p>Participant P01 accidentally closed the Get Fare pop-up, and then couldn't see the option anywhere else. The white font gets camouflaged. After looking for a while, she found the option and successfully completed the task.</p> <p>Recommendation: Make the "get fare alerts" and "Email Itinerary" options buttons, with a different background color so that it is more visible.</p>	3

Preference Test- Hipmunk

Study Design


Hipmunk is an online trip planner that helps you plan your trip- from flights and hotels to cars and other deals. They offer a comprehensive travel search, from commercial flights, trains, and charter flights to hotels and vacation rentals through Airbnb. Their website, mobile app, and AI-powered bots aim to help save time and money by comparing top travel sites to show the perfect flight or hotel at the cheapest price. You can visually compare results to choose the best option. You can also get fare alerts.


This study is designed to compare two versions of the “Get Fare Alerts” button, (A) being the treatment and (B) being the original site. A and B were shown in different orders so as to avoid the effect of question order.

The four Demographic questions included age, country, field of study and gender that they identify with. For a travel website, age is a very important factor as users across many ages need to plan their travels. Country of residence gives geographical context, along with insight into income and religion as well. Field of study is important as people from all kinds of backgrounds want to travel for business reasons or for pleasure. The study also aims to see if there is any correlation between the demographic factors and the results.

Here are the two mockups:

(A) Treatment





Roundtrip

From
BLR - Bengal...

To
Chennai, India

Depart
Fri, May 17

Return
Sun, May 19

Seats
1 person, Ec...

Search

Log In

1

Select Departure
BLR → Chennai · Fri, May 17

2

Select Return
Chennai → BLR · Sun, May 19

Get Fare Alerts

24 of 25 Departure flights

Stops

Airlines

Classes

Airports

Provider

Cheapest trip from **\$53**
Roundtrip price/person, taxes/fees included.

Sort by: Agony

BLR

6am

12pm

6pm

Sat, 12am

6am

12pm

6pmChenn...

Select

\$53+

 AirAsia (India)
Economy
Fri, 5:30 pm – 6:30 pm

1h 00m


    


Basic — Economy \$53 Premium — Biz/First —

hipmunk

INTRODUCING
**CAR
RENTAL**

(B) Original





Roundtrip

From
BLR - Bengal...

To
Chennai, India

Depart
Fri, May 17

Return
Sun, May 19

Seats
1 person, Ec...

Search

Log In

1

Select Departure
BLR → Chennai · Fri, May 17

2

Select Return
Chennai → BLR · Sun, May 19

Get Fare Alerts

24 of 25 Departure flights

Stops

Airlines

Classes

Airports

Provider

Cheapest trip from **\$53**
Roundtrip price/person, taxes/fees included.

Sort by: Agony

BLR

6am

12pm

6pm

Sat, 12am

6am

12pm

6pmChenn...

Select

\$53+

 AirAsia (India)
Economy
Fri, 5:30 pm – 6:30 pm

1h 00m

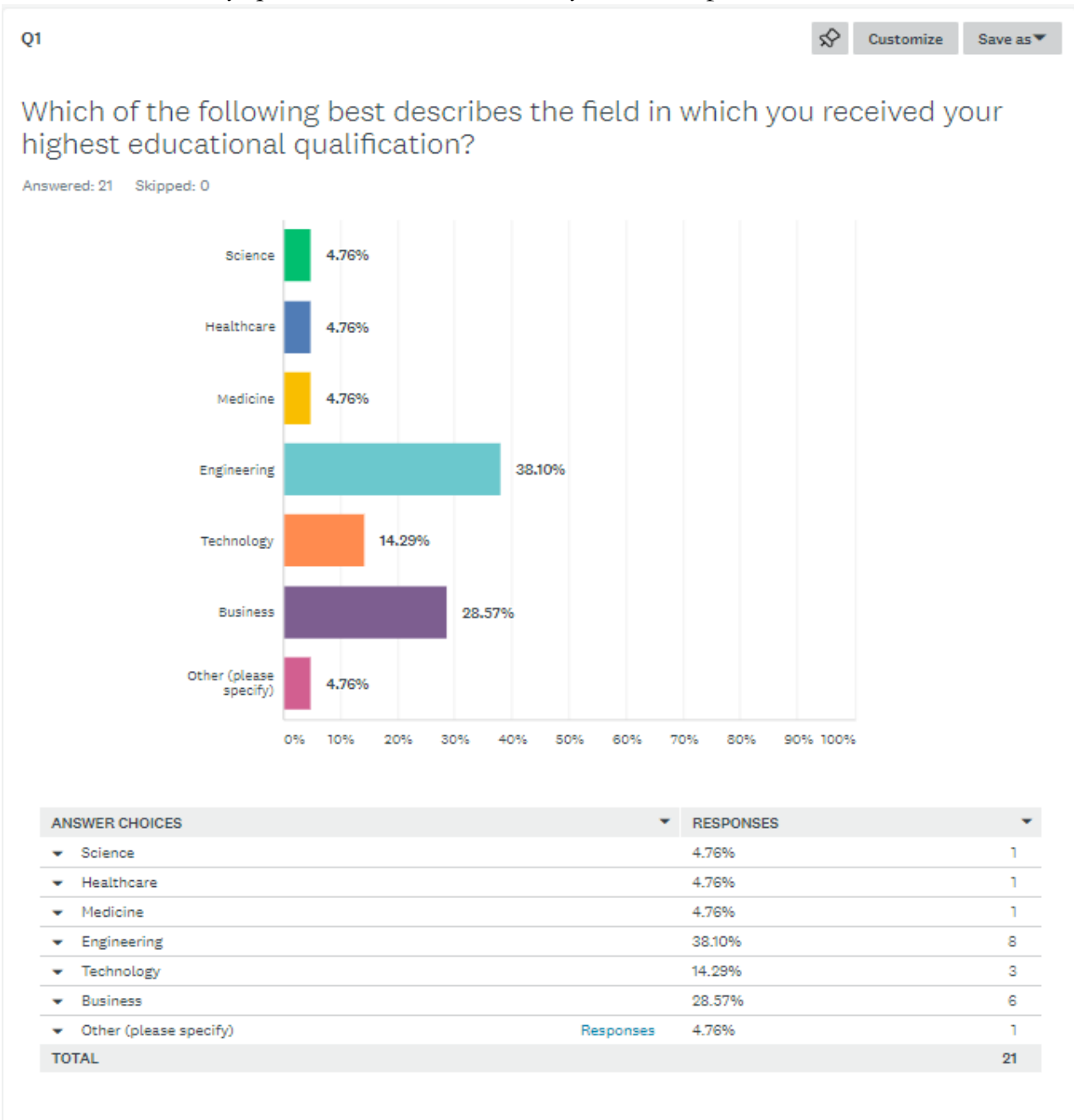
    

Basic — Economy \$53 Premium — Biz/First —

hipmunk

INTRODUCING
**CAR
RENTAL**

Here are the survey questions and the summary of the responses:



Q2

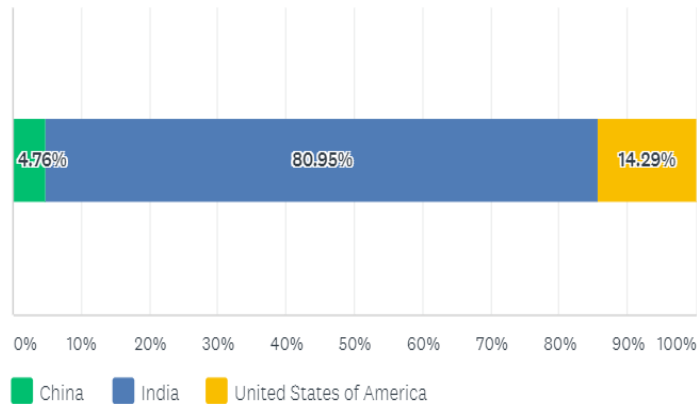


Customize

Save as

In what country do you live?

Answered: 21 Skipped: 0



ANSWER CHOICES	RESPONSES	
▼ China	4.76%	1
▼ India	80.95%	17
▼ United States of America	14.29%	3
TOTAL		21

Q3

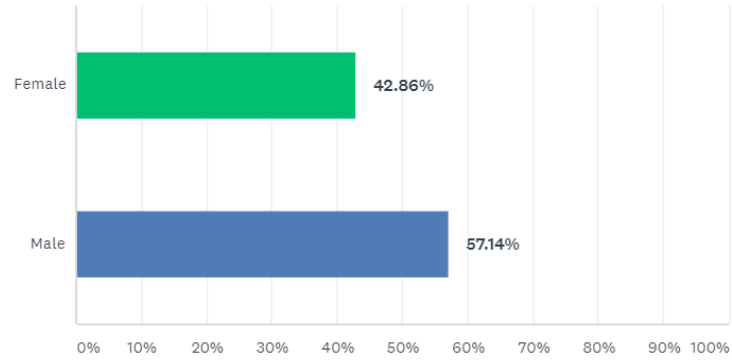


Customize

Save as ▼

What gender do you identify with?

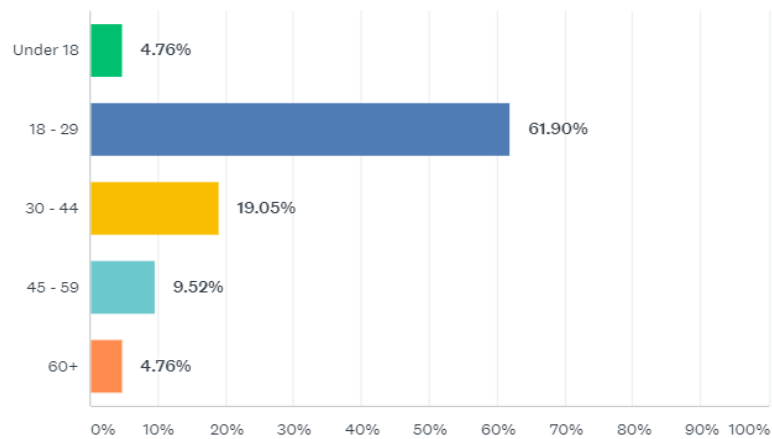
Answered: 21 Skipped: 0



ANSWER CHOICES	RESPONSES	
▼ Female	42.86%	9
▼ Male	57.14%	12
TOTAL		21

What is your age?

Answered: 21 Skipped: 0



ANSWER CHOICES	RESPONSES	
Under 18	4.76%	1
18 - 29	61.90%	13
30 - 44	19.05%	4
45 - 59	9.52%	2
60+	4.76%	1
TOTAL		21

Q5

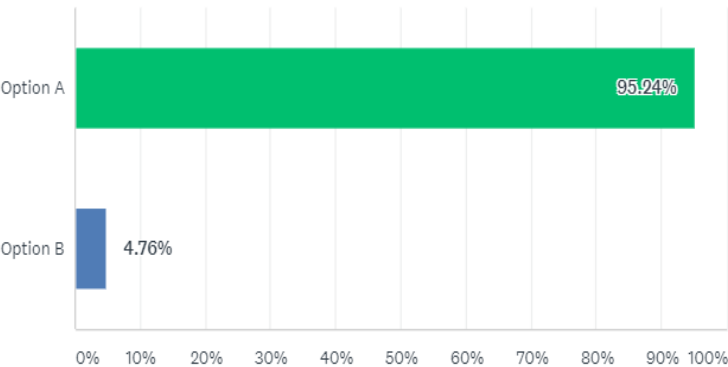


Customize

Save as ▾

The above two images show different versions of a travel website. Out of the two mockups, in which one was Get Fare Alert option easier to find?

Answered: 21 Skipped: 0



ANSWER CHOICES	RESPONSES	
▼ Option A	95.24%	20
▼ Option B	4.76%	1
TOTAL		21

Q6

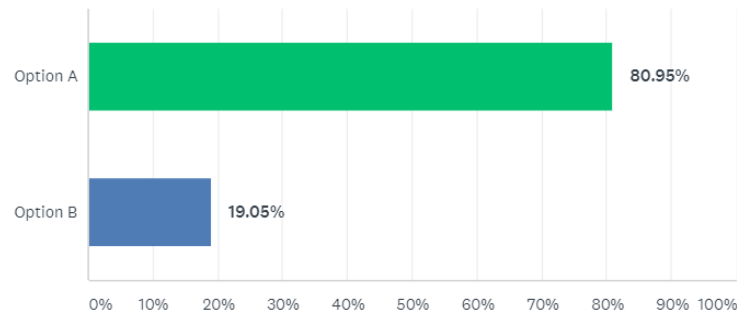


Customize

Save as ▾

Out of the two mockups, in which one was Get Fare Alert option easier more aesthetically pleasing?

Answered: 21 Skipped: 0



ANSWER CHOICES	RESPONSES	
▼ Option A	80.95%	17
▼ Option B	19.05%	4
TOTAL		21

Q7

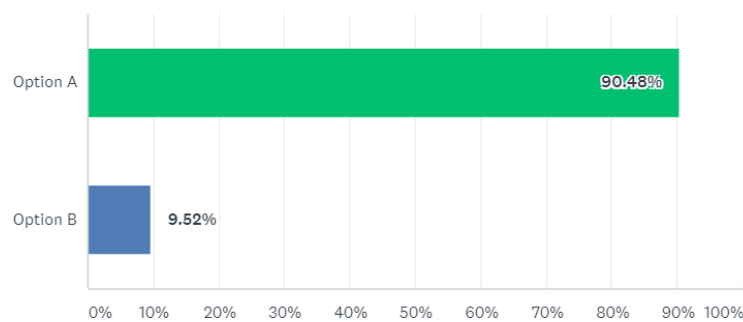


Customize

Save as ▾

Out of the two mockups, which one would you be more comfortable using?

Answered: 21 Skipped: 0



ANSWER CHOICES	RESPONSES	
▼ Option A	90.48%	19
▼ Option B	9.52%	2
TOTAL		21

Subjects of the study

For the study, I reached out to my followers on social media like Facebook, Instagram, Reddit and Twitter. I also put up a link to my survey on the Coursera Discussion Board to get responses from learners all over the world. Most of my respondents are from India, so that is a bias that can be found in my sample. I would have liked to conduct the survey with a more diverse sample in terms of geography with the help of SurveyMonkey respondents and other similar sources as well, but as those options were paid, I decided to take the help of social media. The respondents are from different educational backgrounds and ages, mostly from the age of 18-29 and some from the range of 30-44. 3 participants were above the age of 45 as well.

Findings from the study

95.24% (20/21) of the respondents found that the new mockup is easier to find than the old one.

80.95% (17/21) of the respondents found that the new mockup is more aesthetically pleasing. This shows room for further improvement of the look of the button.

90.48% (19/21) of the respondents found that they were more comfortable using the new mockup rather than the old one.

As a majority of the respondents preferred the treatment over the original, we can see that there is no correlation between geographic location, age and gender in the results. We find that the respondents almost unanimously agree that the original option is difficult to find, and hence they are more comfortable with the treatment. Ease of use and visibility are violated in the original “Get Fare Alerts” button, hence they are more comfortable with the new option. However, 4 respondents that form 20% of the respondents believed that the new treatment was not as aesthetically pleasing as the original mockup.

The best course of action that could be taken from these findings would be to improve the design of the button in the treatment and go ahead with that, as there is a clear dissatisfaction with the original button.

Here are the individual responses in the form of a table:

1.	Engineering	India	Female	18-29	A	B	B
2.	Technology	India	Female	18-29	A	A	A
3.	Engineering	India	Male	18-29	A	A	A
4.	Other: Social Science	USA	Male	30-44	A	A	A
5.	Business	India	Female	30-44	A	A	A
6.	Engineering	India	Male	45-59	A	A	A
7.	Science	India	Male	Under 18	A	B	A
8.	Business	India	Male	60+	A	A	A
9.	Engineering	India	Female	18-29	A	A	A
10.	Technology	India	Male	18-29	A	A	A
11.	Business	USA	Male	18-29	A	A	A
12.	Engineering	India	Male	18-29	A	A	A
13.	Technology	India	Male	30-44	A	A	A
14.	Business	India	Female	30-44	A	B	A
15.	Medicine	India	Female	18-29	A	A	A
16.	Healthcare	China	Male	18-29	A	A	A
17.	Engineering	India	Male	18-29	A	A	A
18.	Business	India	Female	45-59	A	A	A
19.	Business	India	Male	18-29	B	B	B
20.	Engineering	USA	Female	18-29	A	A	A
21.	Engineering	India	Female	18-29	A	A	A