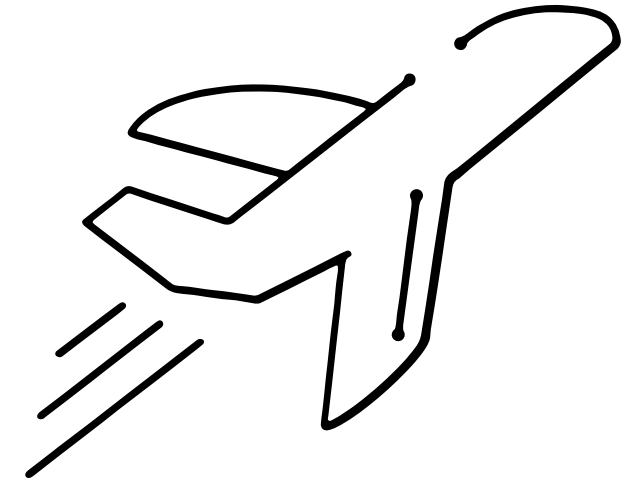


Midnight Masterminds



USER RESEARCH

FLIGHT TICKETS HELPER



<https://docs.google.com/document/d/1njwEPaXVy2aYxdYZjIHRm8ZcM-e0HongCrN4D0UmLz0/edit>

PROJECT IDEAS

- Allows users to configure filters and autofill search information using filters
- Allows users to create collections / folders to manage tickets
- Set alarm when the price falls into certain range



New York



San Francisco

3/

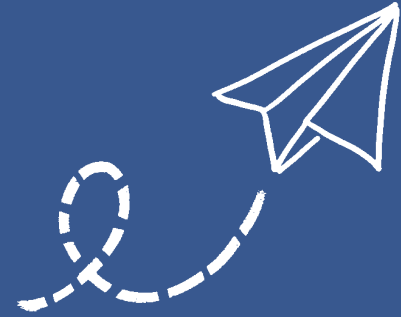
TASKS



1. What steps will you take to book a flight ticket of economy class on the website from the airport of Champaign to the airport of New York, on October 15th, within 500 dollars.
(Auto Filter)
2. What if you are now booking multi-city tickets, for example you would like to travel to Texas, and then visit New York later. How will you manage these multi-city tickets that you will potentially buy? (Collection)
3. There are 3 tickets from Champaign to LA and 2 tickets from LA to New York which perfectly match your trip schedule. If you want to confirm the tickets of the 2 trips at the same time with only 1000 dollars, what will you do? (Combination)

3/

NOTE:



The three tasks are different parts of our application and all together define the new features we are trying to design (though we approach the discussion from a more general perspective without relating them to our interface). Therefore, we would like to perform all these three tasks for each of our persona in the following sections. This will help us to gain more comprehensive / unrestricted responses and insights from the interviewees regarding how they might potentially use our application.

1/

USERS

**WHO HAVE DEMANDS OF
FLIGHT TICKETS**



1. International students who usually buy flight tickets
2. Professionals who have frequent business trips
3. People who love traveling



Travel Lover

Age: 18 - 40

Location: Earth

Occupation: Free Occupation

Salary: Varies

BIO

A travel lover is a student or a freelance who has enough spare time to travel. He/She loves life, enjoys the journey and improves self through what is heard and seen during the trip.

PERSONAL CHARACTERISTICS

- Enthusiastic to new things
- Independent
- A strong heart

HOBBIES AND INTERESTS

- Visiting different sceneries
- Playing sports
- Taking pictures
- Collecting souvenirs

GOALS

- To schedule multiple flights
- To buy tickets with a limited budget
- To track the status of target flights

CHALLENGES

- Frequent changes in air ticket prices
- Tough choices on multiple flights
- Intensive schedule

PAIN POINTS

- Hard to schedule the flight plan
- Hard to track the total price of multiple flights
- Hard to search target flights with specific filters every time

NEEDS

- Flights plan tools
- Price tracker on multiple flights



International College Student

Age: 18 - 25
Location: Champaign, IL
Occupation: Student
Salary: Unemployed

BIO

A International student is a student who chose to undertake a part of their college education in a country other than their own and move to that country for the purpose of studying.

PERSONAL CHARACTERISTICS

- Enthusiastic to new things
- Learning to be Independent
- Curious mind

HOBBIES AND INTERESTS

- Visiting new places around the country
- Playing sports
- Taking pictures
- Joining clubs

GOALS

- To schedule flights to and from his own country at the end/beginning of a new semester
- To buy tickets at the best price possible
- To save the flights as he/she would be on the same flight path multiple times

CHALLENGES

- Frequent changes in air ticket prices
- Limited budget on buying flight tickets

PAIN POINTS

- Difficult/Annoying to schedule the same flight multiple times
- Hard to track the total price of connecting flights
- Hard to search target flights with specific filters every time

NEEDS

- Flights plan tools
- Price tracker on multiple flights
- Past saved flights recorded to make it easier to select a flight



Business Travelers

Age: 25+

Location: Earth

Occupation: Any occupation

Salary: Varies

BIO

A professional who tends to travel frequently for business purpose. He/She usually has good time management skill and a well-defined plan for the trip.

PERSONAL CHARACTERISTICS

- Professional
- Independent
- Time sensitive

HOBBIES AND INTERESTS

- Work
- Travel (may be)

GOALS

- To book rounded flight / multiple flights tickets with appropriate schedule and budget.
- To track the status of target flights.

CHALLENGES

- Pick the tickets with optimal schedule and price
- Plan the trip that may include multiple stops

PAIN POINTS

- Hard to pick a best option among the list of tickets
- Hard to track the total price of multiple flights
- Hard to search target flights with specific filters every time

NEEDS

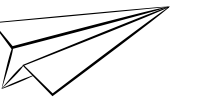
- Flights plan tools
- Price tracker on single / multiple flights

2/

INTERVIEW QUESTIONS



- How often do you buy the flight tickets (answer in average, approximately)
- Occupations?
- Salary, range (optional)
- What are some platforms you usually use to book flight tickets?
- Have you ever met some problems when you want to book a flight
- What do you like / dislike the most about the experience using the platforms you mentioned above?
- What factors may have an influence on your decision of buying tickets





Who was interviewed: Wenqing

Where the interview took place: Zoom Interview

Interview duration: 32 minutes

Occupation: Student

***Frequency for business trip: 5-6 times a month
(during vacation)***

INTERVIEW NOTES – TRAVEL LOVER

T1:

Step1: choose the airport of Champaign and airport of New York

Step2: choose the flight date: October 15th.

Step3: choose one way or round-trip

Step4: click the “next” button

Step5: add some filters on the search results, like prices should be under 500 dollars (usually the tickets will be shown by the sorted price from low to high)

T2:

Step1: search for tickets for different trips one by one

Step2: record the potential flights tickets by the notes app

T3:

Step1: repeat the operations in task2

Step2: list the potential combinations of tickets and compare their prices

Step3: choose one flight for each trip to buy (search again)

INTERVIEW NOTES – TRAVEL LOVER (CONT.)

Interview Questions:

1.5-6 times every month during vacations

2.Student

3.0 (sponsored by parents)

4.Google Flight (most), Kiwi, Skyscanner

5. Kiwi: sometimes after buying the tickets, can not check in on the Internet, must check-in manually.

6.

Google:

Pros:

*Google Map supports users to choose your destination on the map(you browse the map and click the destination you want to travel to, then you can switch to the Google flights to buy the corresponding tickets)

*Google supports fuzzy search

Cons:

* Users can not buy tickets through Google directly. After the users choose the destination, the page will switch to a third-party website to buy the tickets. It is very inconvenient for mobile users.

* Fuzzy search in Google is not as accurate as skyscanner

Kiwi:

Cons:

* Some settings of ticket combinations are unreasonable. The transit time is very short (considering various factors, like baggage transportation at the airport, flight delay ...)

7.

* safety: flight time (too early or too late) / airport location (remote?)

* price: for one destination, the prices of different departure airports may differ significantly. Sometimes it will be much cheaper to depart from a nearby city's airport.

Q: What is your platform for purchasing flight tickets?

A:Google Flight, Kiwi, Skyscanner

Q: What are something you like / dislike about the above platform?

A: Google:

Pros: Map browsing function / Fuzzy search

Cons: Third-party website purchase / Fuzzy search accuracy

Kiwi:

Cons: Unreasonable settings of tickets combination

Q: What are some factors that influence the tickets you pick?

Safety (Flight time / Airport Location) / Price

Who was interviewed: Wenqing

Where the interview took place: Zoom Interview

Interview duration: 32 minutes

Occupation: Student

***Frequency for business trip: 5-6 times a month
(during vacation)***



Who was interviewed: Dharani

Where the interview took place: Phone Interview

Interview duration: About 25 minutes

Occupation: Student

Frequency for business trip: Once a year

INTERVIEW NOTES – INTERNATIONAL STUDENT

Q: What steps will you take to book a flight ticket of economy class on the website from the airport of Champaign to the airport of New York, on October 15th, within 500 dollars?

A: Go to the first website, enter airport information and date, then search. View prices and other info of all flights, note down this information, and repeat with other websites.

Q: How will you manage these multi-flight tickets that you will potentially buy?

A: Use the multi-stop option on existing websites to add more than 2 stops. Afterwards, check prices of single stop flights individually. Repeat this process.

Q: There are 3 tickets from Champaign to LA and 2 tickets from LA to New York which perfectly match your trip schedule. If you want to confirm the tickets of the 2 trips at the same time with only 1000 dollars, what will you do?

A: Repeat the previous process and compare every combination of flights to see the best match.

User 1:
Task 1:
Step 1: Go to Expedia and enter from and to airports, then search.
Step 2: View the prices of all flights that show up, along with information about the flights(things like non-stop/with stops, allowed number of carry baggage, time).
Step 3: Note down the prices of 2 or 3 flights, and check prices on other websites similarly to compare all options.

Task 2:
Step 1: Use the multi-stop feature on websites to add more than 2 stops(Ex: Champaign to Texas, then Texas to New York).
Step 2: Check prices of single stop flights individually and see if their total price is less than that of using the multi-flight feature.
Step 3: Repeat the process on different websites again.

Task 3:
Step 1: Repeat the previous process.
Step 2: Compare every combination of flights to see the best match.

Interview Questions:

1. Once every 1 year.
2. Student
3. Unemployed
4. Expedia, Cheapflights
5. Not really
6. Like: Information about the flights are all neatly listed next to the price
Dislike: Have to add too many filters manually every time you search something
Extra charges are always manually added and the user needs to untick the selected options every time.
7. Cost, travel time, travel duration

Who was interviewed: Dharani

Where the interview took place: Phone Interview

Interview duration: About 25 minutes

Occupation: Student

Frequency for business trip: Once a year

INTERVIEW NOTES – INTERNATIONAL STUDENT (CONT.)

Q: What is your platform for purchasing flight tickets?

A: Expedia, CheapFlights

Q: What are something you like / dislike about the above platform?

A:

Like: Information is all neatly listed for each flight.

Dislike: Every time you search for a flight, you have to manually add filters.

Extra charges/options are always manually added and you need to unselect those options every time.

Q: What are some factors that influence the tickets you pick?

A: Cost, travel time, travel duration



INTERVIEW NOTES – BUSINESS TRAVELLER

Q: What is your platform for purchasing flight tickets?

A: Ctrip

Q: What are something you like / dislike about the above platform?

**A: Like: Manual recommendation provided by the platform
Dislike: 1) inconvenient to book tickets for multiple trips at the same time. Have to pick the ticket for each trip separately. Would like the system to provide some recommended combination. 2) is aware of the notification feature but does not like to use it because those message usually looks like ads.**

Q: What are some factors that influence the tickets you pick?

Schedule, model / size of the airplane, airline. Budget is less important.

Who was interviewed: Lisa Gu

Where the interview took place: Phone Interview

Interview duration: Around 20 minutes

Occupation: In House Legal Counsel

Frequency for business trip: Once a month

Task 1:

Step 1: Go to the search bar.

Step 2: Enter departure and destination, date

Step 3: browse through the list of returned result

Step 4: repeat the process each time

Task 2:

Step 1: search for each individual flight

Step 2: browse through the list and get some sense regarding the price / schedule / length of each trip

Step: repeat the search and browsing process each time

Task 3:

Step 1: search for each individual trip and pick the optimal one for each trip

Interview Questions:

1. Once a month
2. In house lawyer
3. /
4. Ctrip
5. dislike : can search and combine at most two trips. The order of the results displayed is purely based on price (no difference from search and purchase for the two trips separately). Would be nice the system can recommend some combination not only based on price, but also based on airline / schedule
6. Factors that influence the decision: schedule, plane model, size of the plane (larger one is usually more comfortable), airline. Price is less important.

INTERVIEW NOTES – BUSINESS TRAVELLER (CONT.)

Q: What steps will you take to book a flight ticket of economy class on the website from the airport of Champaign to the airport of New York, on October 15th, within 500 dollars?

A: Go to the search bar, enter destination information and select the date for the trip, then browse the result. Repeat the process if revisit the website.

Q: How will you manage these multi-flight tickets that you will potentially buy?

A: Search and browse the results to get a sense of the price level, memorize some potential option and may revisit the page in the next few days to make the purchase

Q: There are 3 tickets from Champaign to LA and 2 tickets from LA to New York which perfectly match your trip schedule. If you want to confirm the tickets of the 2 trips at the same time with only 1000 dollars, what will you do?

A: First pick the best ticket from Champaign to LA and then pick the best ticket from LA to New York

Who was interviewed: Lisa Gu

Where the interview took place: Phone Interview

Interview duration: Around 20 minutes

Occupation: In House Legal Counsel

Frequency for business trip: Once a month



Wenqing (Revised)

Age: 23

Location: Netherlands

Occupation: Student

Salary: Unemployed

BIO

A travel lover is a student or a freelance who has enough spare time to travel. He/She loves life, enjoys the journey and improves self through what is heard and seen during the trip. Be able to skillfully use a variety of ticket booking software to get the best experience, and understand the advantages and disadvantages of each software

PERSONAL CHARACTERISTICS

- Enthusiastic to new things
- Independent
- A strong heart

HOBBIES AND INTERESTS

- Visiting different sceneries
- Taking pictures
- Collecting souvenirs
- Slow pace life

GOALS

- To schedule multiple flights
- To buy tickets with a limited budget
- To find/explore potential destinations
- To find a safe and convenient airport

CHALLENGES

- Tough choices on multiple flights
- Unreasonable combination of flights

PAIN POINTS

- Hard to manage multi-city flights
- Hard to track the total price of multiple flights
- Hard to search target flights with specific filters every time

NEEDS

- Flights plan tools
- Price tracker on multiple flights
- Airport safety and convenience



Dharani (Revised)

Age: 18 - 25

Location: Champaign, IL

Occupation: Student

Salary: Unemployed

BIO

A International student is a student who chose to undertake a part of their college education in a country other than their own and move to that country for the purpose of studying.

PERSONAL CHARACTERISTICS

- Enthusiastic to new things
- Learning to be Independent
- Curious mind

HOBBIES AND INTERESTS

- Visiting new places around the country
- Playing sports
- Taking pictures
- Joining clubs

GOALS

- To schedule flights to and from his own country at the end/beginning of a new semester
- To buy tickets at the best price possible
- To save the flights as he/she would be on the same flight path multiple times

CHALLENGES

- Frequent changes in air ticket prices
- Manually selecting options every time is time consuming
- Have to check multiple websites to get the best prices

PAIN POINTS

- Difficult/Annoying to schedule the same flight multiple times
- Have to add filters every time
- Annoying to search target flights with specific filters every time on every website

NEEDS

- Flights plan tools
- Price tracker on multiple flights
- Past saved flights recorded to make it easier to select a flight
- Aggregation tool to not have to check every website



BIO

A professional who tends to travel frequently for business purpose. He/She usually has good time management skill and a well-defined plan for the trip.

PERSONAL CHARACTERISTICS

- Professional
- Independent
- Time sensitive

HOBBIES AND INTERESTS

- Work
- Travel

Lisa Gu (Revised)

Age: 40+

Location: Beijing

Occupation: In House Legal Counsel

GOALS

- To book rounded flight / multiple flights tickets with appropriate schedule
- To track the status of target flights.

CHALLENGES

- Multiple factors to consider when selecting tickets
- Plan the trip that may include multiple stops
- Better way of being notified

PAIN POINTS

- Hard to pick a best option among the list of tickets
- Hard to plan and manage multiple trips at the same time

NEEDS

- Flights plan tools
- Price tracker on single / multiple flights

INTERVIEW MATERIALS

Search for Flights

From

To

Date

<Oct 14>

<Oct 18>

Roundtrip

One-Way

Multi-city

Autofill from filter

My Trip to New York

Christmas Trip

Hawaii Vacation

.

.

.

Choose Your Combinations

7:34am → 1:02pm ✖

CMI JFK \$470

9:00am → 10:30am ✖

JFK BOS \$120

+ Add More

Notify when total price

is between

~

Notes:

My Collections

Trip to New York

3:01pm → 8:00pm ✖

CMI JFK \$450

configuration

7:34am → 1:02pm ✖

CMI EWR \$470

configuration

9:00am → 10:30am ✖

JFK BOS \$120

configuration

+ Create Combination

Configuration:

<<

Trip to New York

Christmas Trip

Hawaii Vacation

>>

for single flight

Expected Price

~

ON/OFF

From

To

price range

~

Save

THANK YOU

