

# User Evaluation of the low-fidelity prototype

Midnight Masterminds

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# Prototype



Search for Flights :

From  To

Date

- One-Way ▾ Airline
- Travelers

Autofill from filter

My Trip to New York  
Christmas Trip  
Hawaii Vacation

Naveen, Sanjit

Search for Flights :

From  To

Date

- Round Trip ▾ Airline
- Travelers

Autofill from filter

My Trip to New York  
Christmas Trip  
Hawaii Vacation

## Date Picker & Advanced filters

SELECT DATE

Mon, Oct 19

October 2022 ▾ < >

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Cancel OK

Advanced Filters

Stops

Bags

Price  -

Duration

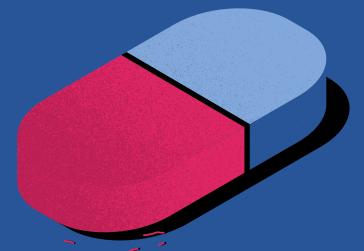
Adults - 1 +

Children - 0 +

Infants - 0 +

Here are some pages that we used for doing user evalution

# Prototype-contd.

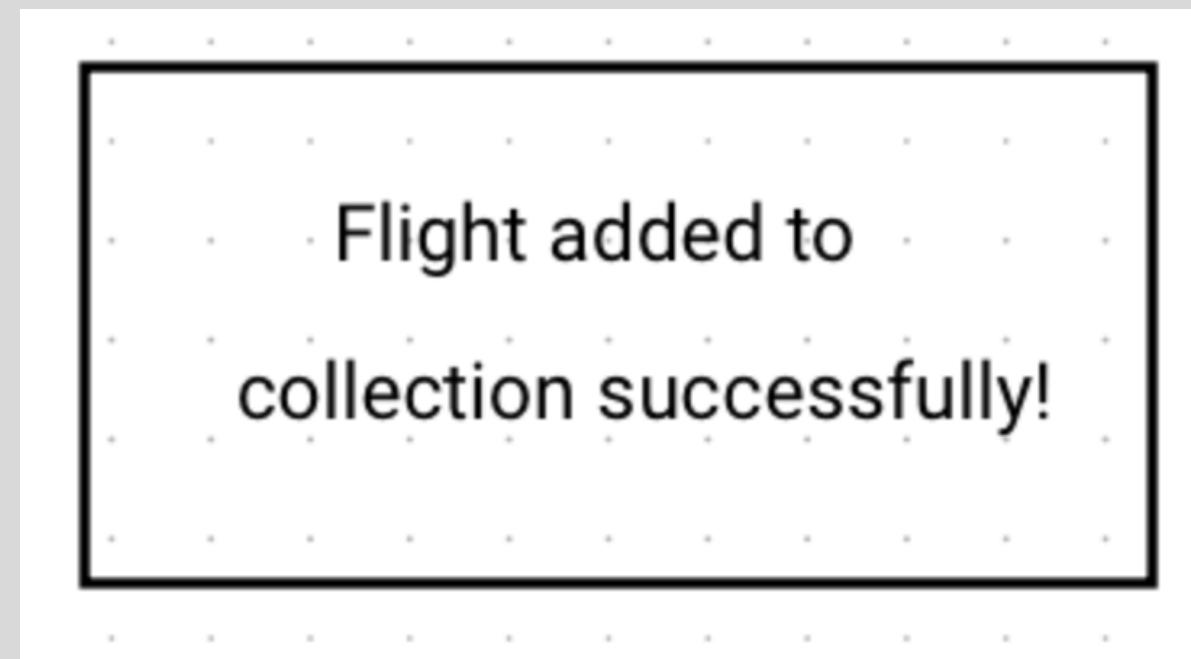
A wireframe prototype of a flight search interface. It includes fields for 'From' (CMI) and 'To' (JFK), date pickers for 'Oct 22' and 'Oct 24', and trip type selection ('Round Trip'). Below these are three flight results: one from AA at \$427, another from UA at \$531, and a third from UA at \$378. A footer bar contains icons for search, bag, trash, and user profile.

Naveen, Sanjit

A wireframe prototype of a flight keeper application titled 'Alternative Flights Keeper'. It lists trips: 'Trip to New York', 'Christmas Trip', and 'Hawaii Vacation'. At the bottom is a large 'Add New Trip' button with a plus sign icon.

Maggie, Ruby

## Successful Message



Here are some pages that we used for doing user evalution

# Prototype-contd.



A wireframe prototype of a flight search interface. It includes fields for 'From' (CMI) and 'To' (JFK), date selection (Oct 22 to Oct 24), trip type (Round Trip selected), and advanced options. Below these are three flight results: AA flight from CMI to JFK at 2:44pm for \$427, UA flight from CMI to JFK at 3:10pm for \$531, and another UA flight from CMI to JFK at 4:40pm for \$378. At the bottom are icons for search, folder, trash, and user profile.

### Successful Message & Add Page

Two wireframe prototypes. The top one shows a success message: 'Flight added to collection successfully!'. The bottom one is an 'Add New Collection' dialog with fields for 'Name' and 'Confirm', and a 'Cancel' button (marked with a red X).

Flight added to collection successfully!

Add New Collection

Name

Confirm

You Create xxx Collection!

Here are some pages that we used for doing user evalution

# Prototype-contd.



Alternative Flights Keeper

Trip to New York

3:01 pm – 8:00 pm  
CMJ JFK \$ 450 config

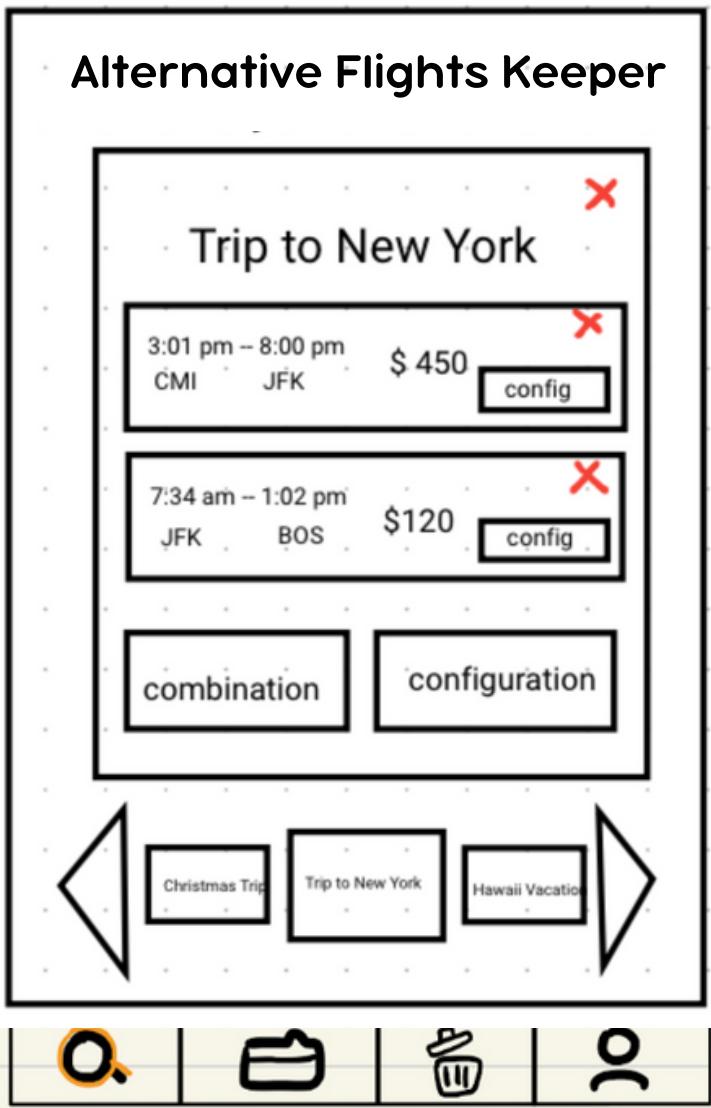
7:34 am – 1:02 pm  
JFK BOS \$120 config

combination configuration

← Christmas Trip Trip to New York Hawaii Vacation →

🔍 🗂️ 🗑️ 🙁

Maggie, Ruby



Multi Flight Planner

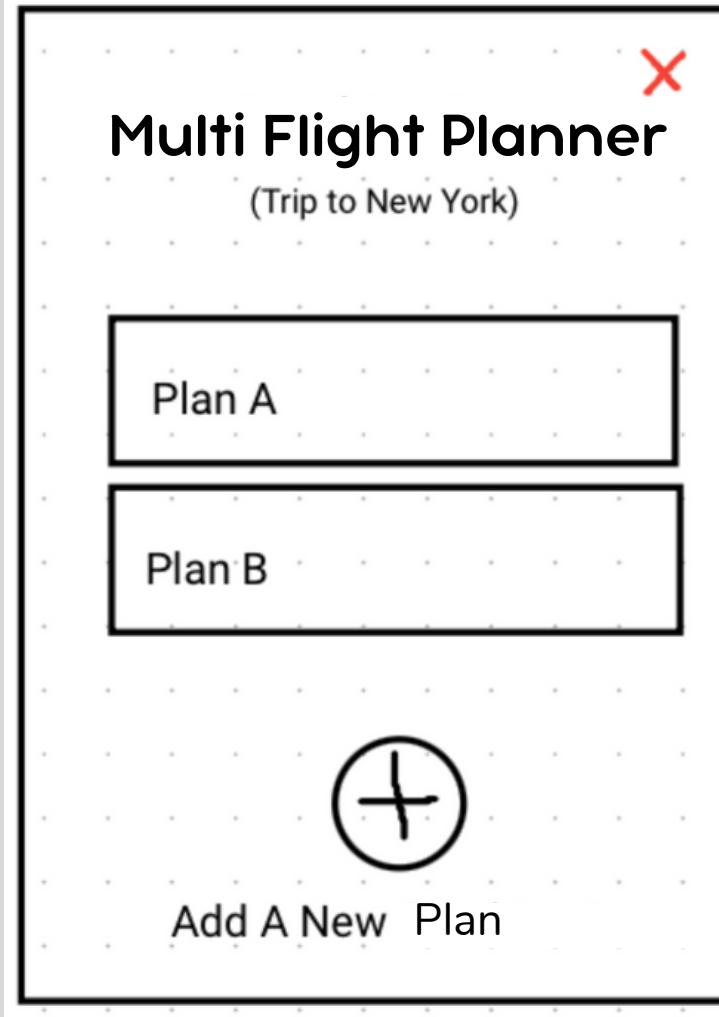
(Trip to New York)

X

Plan A

Plan B

+ Add A New Plan



Yang

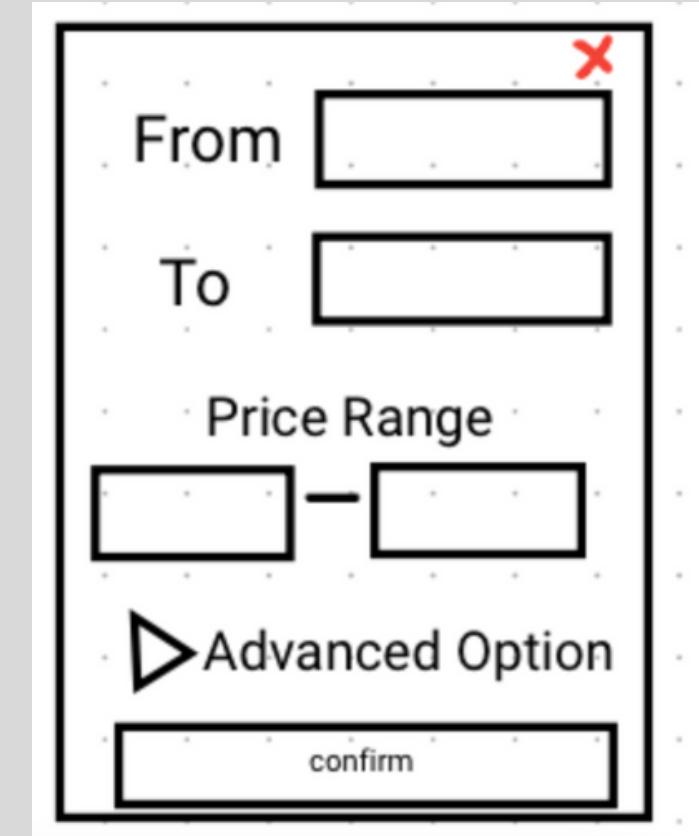
## Configuration

From To

Price Range

— Advanced Option

confirm



Here are some pages that we used for doing user evalution

# User 1. An international student

User reactions- users' perceptions/strengths, weaknesses

Usability problems- 3~5 non-trivial usability problems

Evaluation method- users/tasks /testing location/procedure

Design ideas- Non-trivial design ideas

## Strengths

- The app has a lot of features that I would find useful and that's not in other apps.
- There's lots of menus and options to choose from, again different from existing apps.
- **Flight searching** and **autofill** from filter app is cool
- **Alarm feature** is nice, would help me **remember booking tickets**

## Weaknesses

- All the **menus and options** feel a little **unorganized**, I think a “**flow**” between them that makes everything feel connected would help.

# User 1. An international student

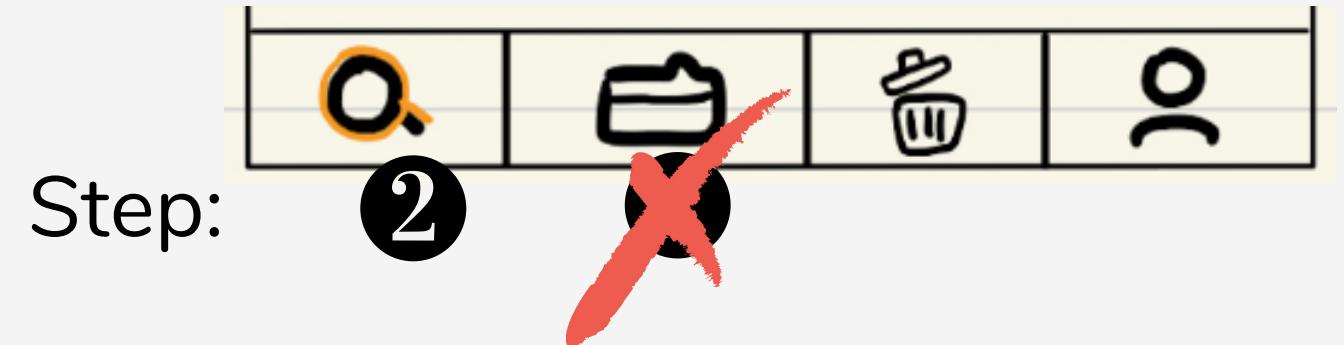
User reactions- users' perceptions/strengths, weaknesses

Usability problems- 3~5 non-trivial usability problems

Evaluation method- users/tasks /testing location/procedure

Design ideas- Non-trivial design ideas

What if user navigate himself to alternative flight planner when first using the application? That's a problem!



Step:

## Usability problems

(\*Red lines means the modification based on feedback we got from class)

- The user said that just by looking at the prototype, it was difficult for him to distinguish which function to start with. For example, he clicks directly into the alternative flight planner tab without browsing flight tickets at the search tab first, then when he saw the empty alternative flight planner interface, which causes him losing direction.
- Not sure what every button does (there's lots of “add a new x” buttons). Sometimes he does not know that the x button means delete the plan or just close the page. He suggest adding descriptions for buttons or a help section.

# User 1. An international student

User reactions- users' perceptions/strengths, weaknesses

Usability problems- 3~5 non-trivial usability problems

Evaluation method- users/tasks /testing location/procedure

Design ideas- Non-trivial design ideas

## Evaluation method

Tasks -

1. Regularly booking flight tickets with some filters
2. Compare different tickets and then choose the best plan
3. Book  $\geq 2$  tickets at the same time

Testing location - Discord (with sharing screen)

Procedure - Showed the person I was interviewing the **paper prototype**, as well as the slides used from last week, and **walked them through how the app is meant to be used**. Then **showed them a few tasks and asked how they would perform them**.

# User 1. An international student

User reactions- users' perceptions/strengths, weaknesses

Usability problems- 3~5 non-trivial usability problems

Evaluation method- users/tasks /testing location/procedure

Design ideas- Non-trivial design ideas

(e.g., add the explanation button)



Multi-  
Flights  
Planner

Alternative  
Flights  
Keeper

## Design Ideas

- Add a **tutorial/help section** or maybe a tutorial for each page of the app
- **Make each section a different color** to differentiate as the user was getting confused between all the features (for example **make the combination page blue** and **collection page orange**); or maybe **differentiate the pages** some other way.

# User 2. Travel lover

User reactions- users' perceptions/strengths, weaknesses

Usability problems- 3~5 non-trivial usability problems

Evaluation method- users/tasks /testing location/procedure

Design ideas- Non-trivial design ideas

## Strengths

- There's lots of features which help him select flights to his level of convenience. He especially likes the price tracker. Since he travels a lot, finding a way to book tickets at the cheapest rates possible saves quite a bit in the long run
- Autofill feature is nice considering he likes to travel a lot, helps him save some time
- Alarm feature is a good way of reminding him to book tickets on an otherwise busy day.

## Weaknesses

- It feels a little difficult to understand some functions, a tutorial of some sort would help a lot

# User 2. Travel lover

User reactions- users' perceptions/strengths, weaknesses

Usability problems- 3~5 non-trivial usability problems

Evaluation method- users/tasks /testing location/procedure

Design ideas- Non-trivial design ideas

## Usability problems

(\*Red lines means the modification based on feedback we got from class)

- Menu bar could maybe be placed on the top instead. (We assumed that this is user's own preference, but still take this into account)
- Lot of 'x' buttons that make the layout less appealing, maybe we can switch the having the delete button appear after clicking on a collection

# User 2. Travel lover

User reactions- users' perceptions/strengths, weaknesses

Usability problems- 3~5 non-trivial usability problems

Evaluation method- users/tasks /testing location/procedure

Design ideas- Non-trivial design ideas

## Evaluation method

Tasks -

- Regular booking of flight tickets with some filters
- Compare different tickets and then choose the best plan
- Book 2 tickets at the same time to travel to different places one after the other

Testing location -

- Google meet (with screen showing prototype being shared)

Procedure -

- Showed the person I was interviewing the paper prototype, as well as the slides used from last week, and walked them through how the app is meant to be used. I also gave sample tasks and asked the person to walk me through on how he would go about it

# User 2. Travel lover

User reactions- users' perceptions/strengths, weaknesses

Usability problems- 3~5 non-trivial usability problems

Evaluation method- users/tasks /testing location/procedure

Design ideas- Non-trivial design ideas

## Design Ideas

- Adding a tutorial or a walkthrough for the entire app when opening for the first time. This should also be accessible later from the settings page

# User 3. Business traveler

User reactions- users' perceptions/strengths, weaknesses

Usability problems- 3~5 non-trivial usability problems

Evaluation method- users/tasks /testing location/procedure

Design ideas- Non-trivial design ideas

## Strengths

- Many useful features that provide additional functionalities regarding ticket management and tracking
- New functionalities make convenience for some specific groups of people to book flight ticker. For example, old people who are not familiar with a traditional booking system.
- The design of the interface is pretty straight forward and easy to follow

# User 3. Business traveler

User reactions- users' perceptions/strengths, weaknesses

Usability problems- 3~5 non-trivial usability problems

Evaluation method- users/tasks /testing location/procedure

Design ideas- Non-trivial design ideas

## Weaknesses

- Currently does not have a purchase button next to each flight. Should still keep this feature in case users want to purchase the ticket immediately.
- For the multi-trip planner feature, system can be more intelligent by recommending some combinations of flights to the users according to the total price.
- Text notification for price change

# User 3. Business traveler

User reactions- users' perceptions/strengths, weaknesses

Usability problems- 3~5 non-trivial usability problems

Evaluation method- users/tasks /testing location/procedure

Design ideas- Non-trivial design ideas

Flight 1	Flight 2	Flight 3
2:44pm → 9:30pm CMI → JFK	3:10pm → 10pm CMI → JFK	4:40pm → 10:30pm CMI → JFK
AA \$427	UA \$531	UA \$378

## Usability problems

- **Naming of the buttons are confusing.** Should put more descriptive text on the buttons that help users to understand what does each button do.
- Navigation can be more user friendly. For example, right now we don't have any back button / search button on the prototype.
- Too many fields require user to type in values.

# User 3. Business traveler

User reactions- users' perceptions/strengths, weaknesses

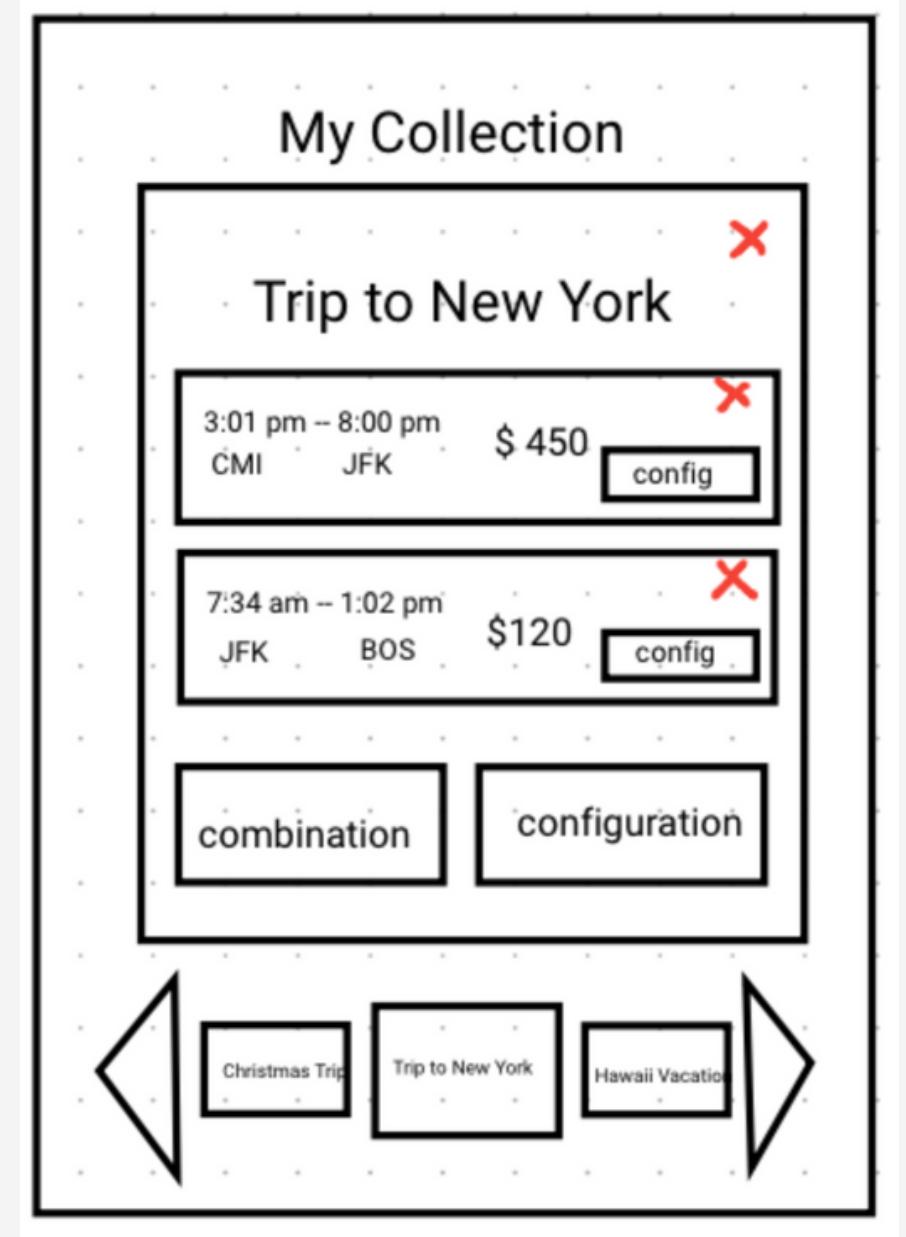
Usability problems- 3~5 non-trivial usability problems

Evaluation method- users/tasks /testing location/procedure

Design ideas- Non-trivial design ideas

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# User 3. Business traveler

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Usability problems- 3~5 non-trivial usability problems

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## Usability problems

- Naming of the buttons are confusing. Should put more descriptive text on the buttons that help users to understand what does each button do.
- Navigation can be more user friendly. For example, right now we don't have any back button / search button on the prototype.
- **Too many fields require user to type in values.**

Advanced Filters

Stops  0  1  2  ≥3

Bags  0  1  2  ≥3

Price  -

Duration

Adults - 1 +

Children - 0 +

Infants - 0 +

# User 3. Business traveler

User reactions- users' perceptions/strengths, weaknesses

Usability problems- 3~5 non-trivial usability problems

Evaluation method- users/tasks /testing location/procedure

Design ideas- Non-trivial design ideas

- Tasks
  - Regular booking of flight tickets with some filters
  - Compare different tickets and then choose the best plan
  - Book 2 tickets at the same time to travel to different places one after the other
- Location: video chat with screen sharing
- Procedure: went through the prototype and ask questions:
  - 1) thoughts on the use of each button and icon.
  - 2) how to interact with the user interface given certain tasks needed to perform.
  - 3) strengths of the app and problems they have while interacting with the application.

# User 3. Business traveler

User reactions- users' perceptions/strengths, weaknesses

Usability problems- 3~5 non-trivial usability problems

Evaluation method- users/tasks /testing location/procedure

Design ideas- Non-trivial design ideas

## Design Ideas

- Rename buttons to make them more instructive and descriptive.
- Improve navigation and add back buttons.
- Modify the form of input fields. Make selection available instead of typing in values
- Potential improvement on features (eg: text notification, add purchase button)

# Summary

## Usability problems

Too many same buttons (like x or add) in different pages

The workflow is a little complex and confused

The many input box

## Future Improvement

Add brief illustration or follow cultural constraint to help users discriminate different functions

Simplify the flow, improve navigation function and add tutorial section to make the app user-friendly

provides automatic completion or dropdown choices for users



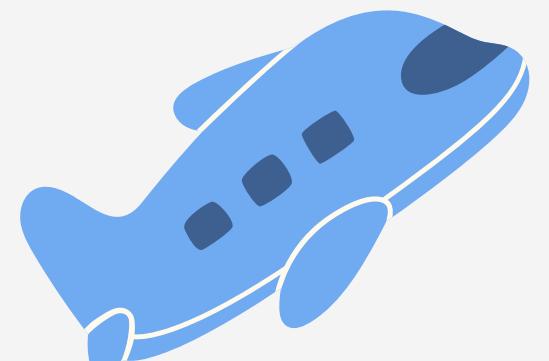
# Summary

## More Potential Improvements

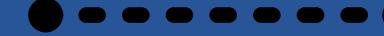
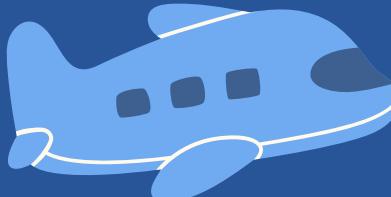
Add map for travel lovers to explore their potential next destination

Realize the purchase function that users can buy tickets immediately without switching apps

Recommendation system for different functions



# THANK YOU



Midnight Masterminds

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