

# HOPPER

*Hopper Flight App Proposal*

# TEAM TASKS

## ANH MAI

- RESEARCH
- CONTENT STRATEGY
- COMPETITIVE ANALYSIS
- PERSONA
- UI DESIGN
- PAPER PROTOTYPE - FLIGHT PAGE
- WIREFRAME - FLIGHT PAGE
- PROTOTYPING
- USABILITY TESTING
- STYLE GUIDE
- CASE STUDY DOCUMENTATION
- LAYOUT DESIGN
- UX DESIGN

## ELIZABETH GANGSTAD

- RESEARCH
- CONTENT STRATEGY
- COMPETITIVE ANALYSIS
- USER PERSONA
- PAPER PROTOTYPE - HOME PAGE
- WIREFRAME - HOME PAGE
- PROTOTYPING
- USABILITY TESTING
- INTRODUCTION PARAGRAPH

## CARLOS AVILA

- RESEARCH
- COMPETITIVE ANALYSIS
- USER SCENARIO
- PAPER PROTOTYPE - PAYMENT PAGE
- WIREFRAME - PAYMENT PAGE
- USABILITY TESTING
- FLOW CHART
- XD PROTOTYPING

# CLIENT & PRODUCTS

## Who is our client?

Hopper is based in Cambridge, MA. Hopper is a new kind of travel company that is reinventing the way people plan to travel and books flights by leveraging the power of mobile conversation and big data in the form of trillions of flight prices.

Today, Hopper is one of the fastest growing travel apps ever, with over 10 million installs since 2015.

## Why did we choose Hopper?

Their existing mobile site app is good but it is missing some of the basic information that is should be given immediately.

A more user-friendly revision of their app will serve as a demonstration of Hopper's excellent ticket options and care about their customers.



# CLIENT & PRODUCTS

## What type of mobile experience?

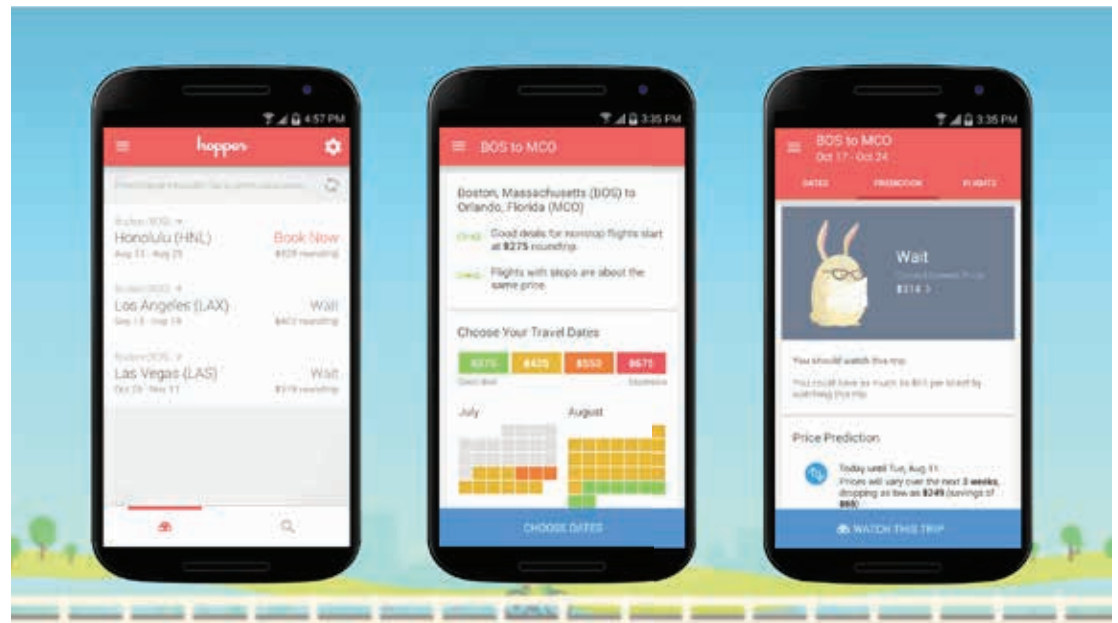
We decided to design around Android's capabilities and conventions to give users the best experience.

Our team decided to improve some features that will help their customers access the app anywhere and anytime.

Having this app re-design would not only allow customers search for the future flight, it also allows customers to keep track on every step they make without any confusion.

## Target Audiences

Aged 19 - 55  
Traveler  
Students  
Businessman



## Our Task and Goals

Our goal is to design an app version including multiple features that will help either existing and potential customer who are not have much time to spend on flight shopping.

# CONTENT STRATEGY

This mobile app will focus on purchasing flight by entering customer information. Included in the first page, the customer will enter their departure and destination, round or one-way trip, date and time of flight, and number of travelers. The second page will contain tabs to aid in the search of the flight by price, departure times, arrival times, and the number of stops.

The customer will add their personal information, such as if any assistance is required, legal name, birthday, gender, or known traveler number. The customer then will go to the forth page and enter their card information to purchase their flight.

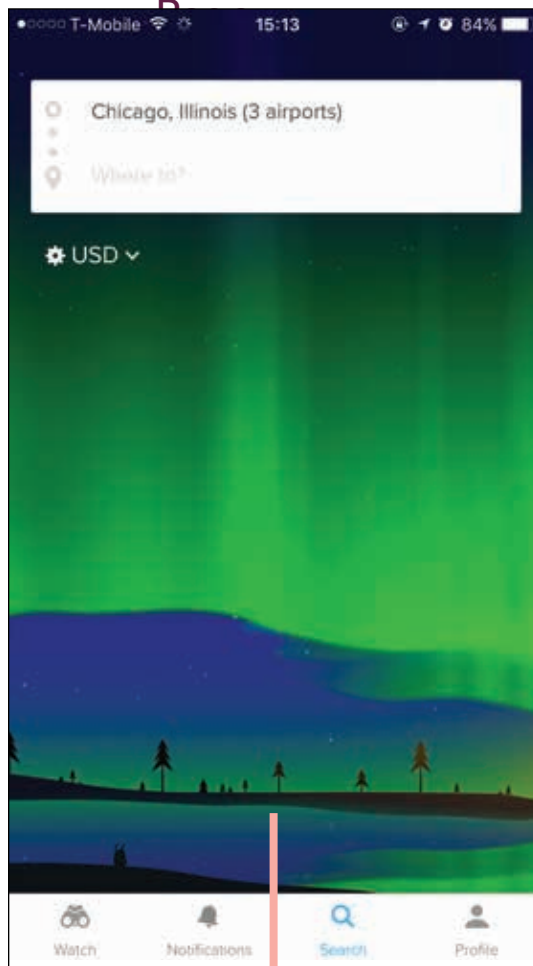
In order to enhance the Hopper app, we researched competitor apps, such as Skiplagged, Kayak, Orbit, and Skyscanner, comparing each to adapt features that would work best for the updated app. We will focus on simplifying and containing the sections of information to one page each.



That will help the user navigate through the app without overwhelming the customer with too much information. Equally important, simplifying the information will make time spent searching for the right flight effortless and straightforward. We are eliminating the clutter of information throughout the flight and payment pages, creating the tabs on the flight page to better the search experience.

# CONTENT STRATEGY

Landing

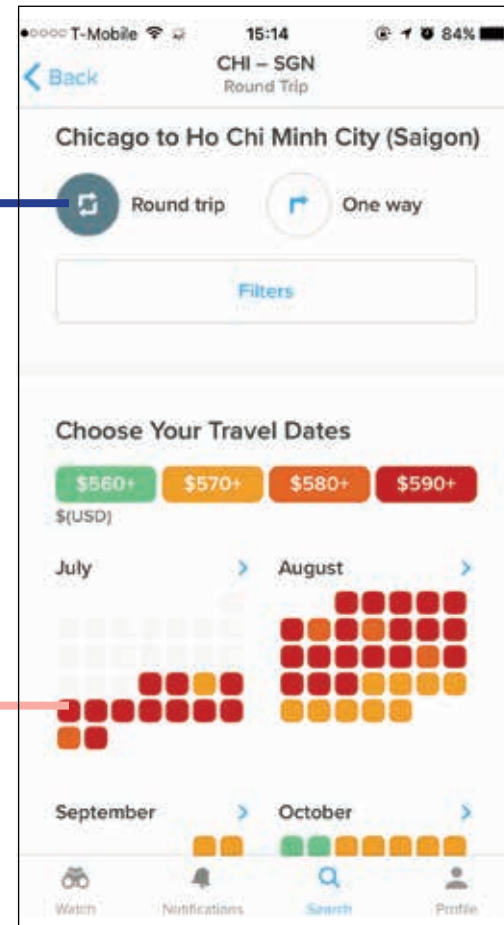


First opening page

Flight Page

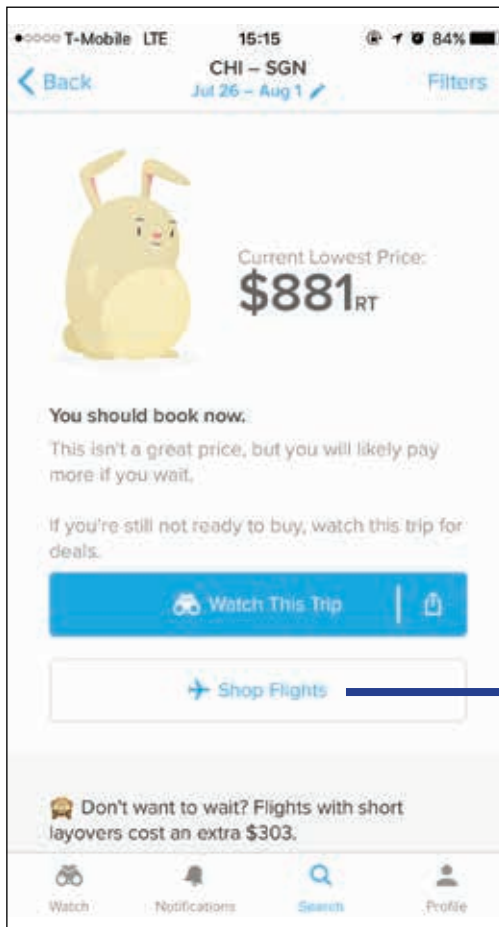
Flight form

Date travel

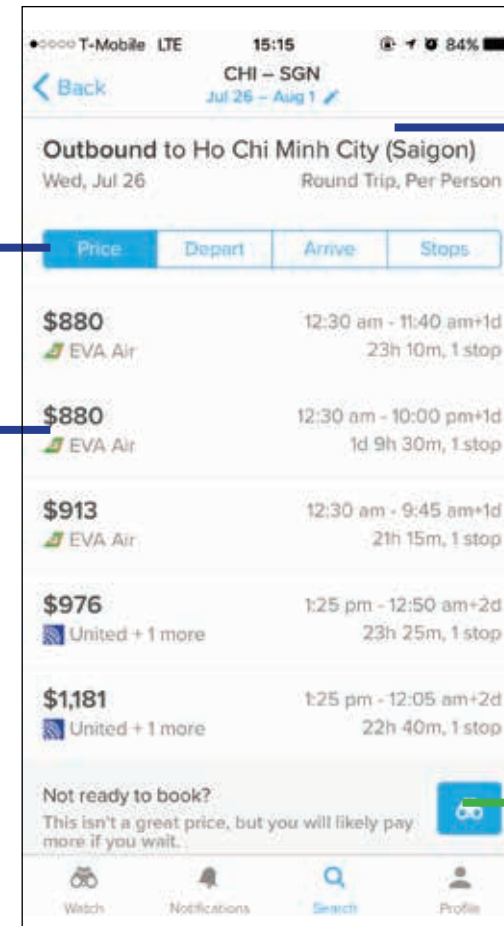


# CONTENT STRATEGY

Price Page



Result Page



Multi page results

Price details

Trip summary

Interactive button

Extra icons

- Included ( with change needed)
- Included
- Excluded

# PROPOSED MOBILE APPROACH

Hopper app has plenty of potential to develop as well as improving interoperability with customers. Due to the customer feedback we collected, we realize there are many functions that need to be changed as well as a few that can be kept.

For instance, simplifying the “call to action” button and flight information would be a good idea to improve the app and removing the cluttered financial information makes the customer less confused.

We would like to simplify how new customers find information about the flights by adding different tabs, such as searching by price, departure time, destination time, and the number of stops a flight will have.

Since a successful user experience is our goal, we will focus on helping loyal customers look for flight information or review their information before obtaining the final results.



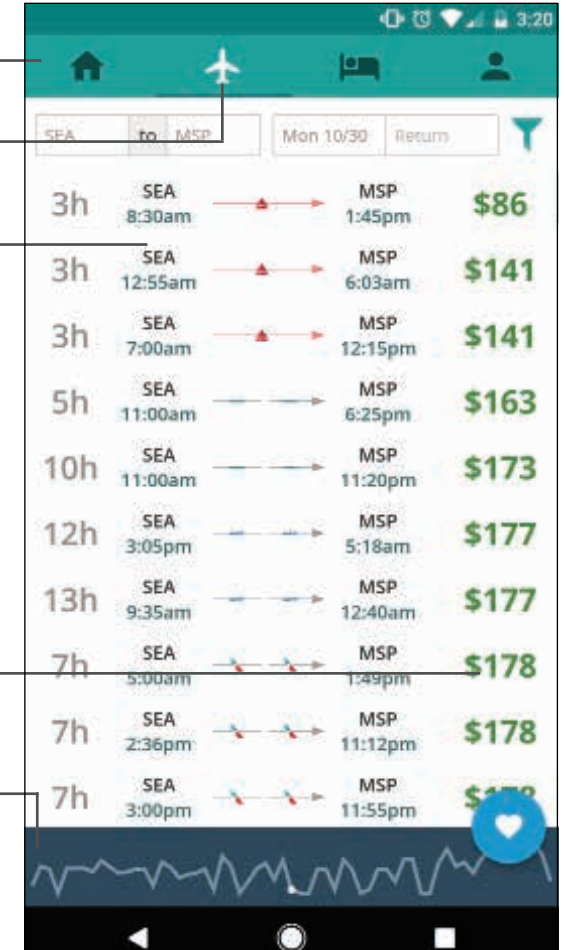


# COMPETITIVE ANALYSIS

## Skiplagged



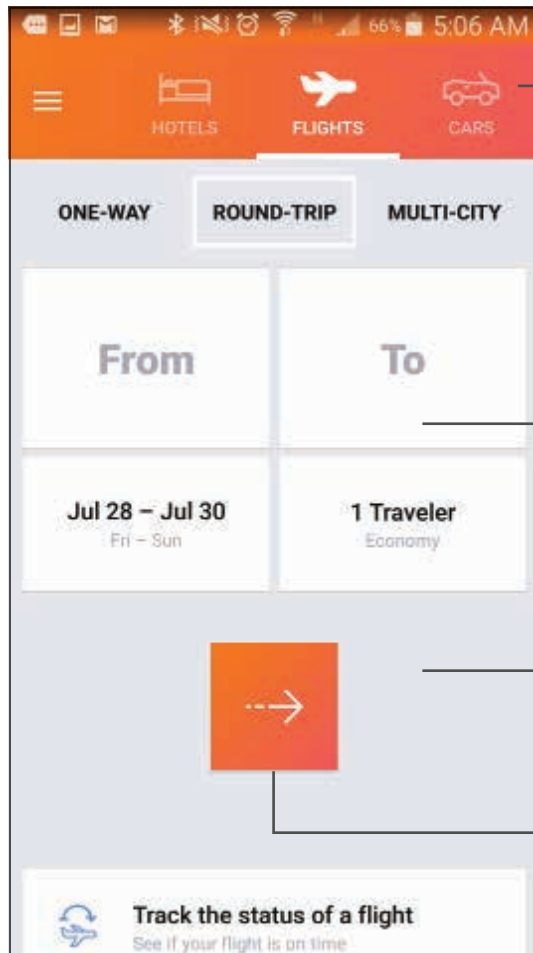
Navigation Bar On Top  
Highlighted Current Section  
Information Filter



Highlighted Important Information  
Photo Display With Statistic

# COMPETITIVE ANALYSIS

## Kayak

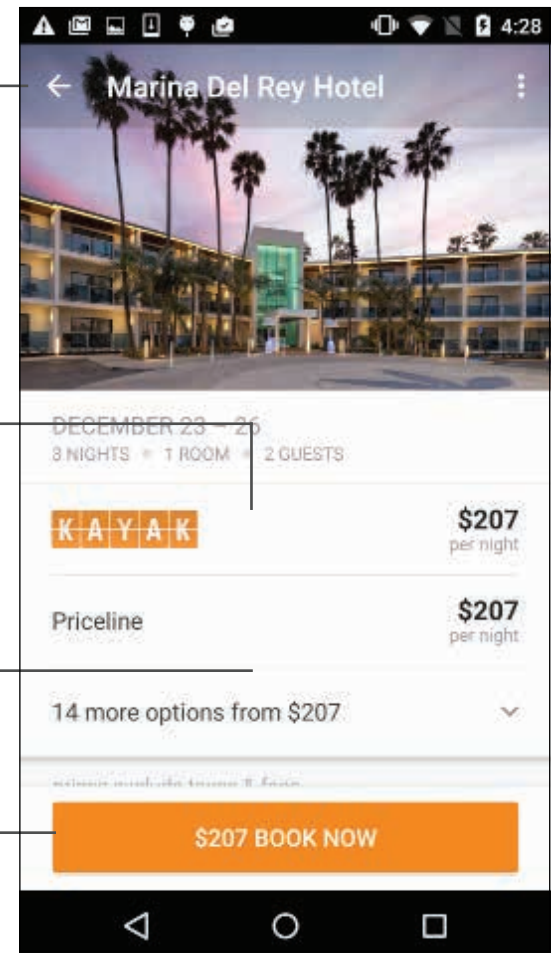


Gradient To Create Contrast  
Between Information And  
Images

Grid System

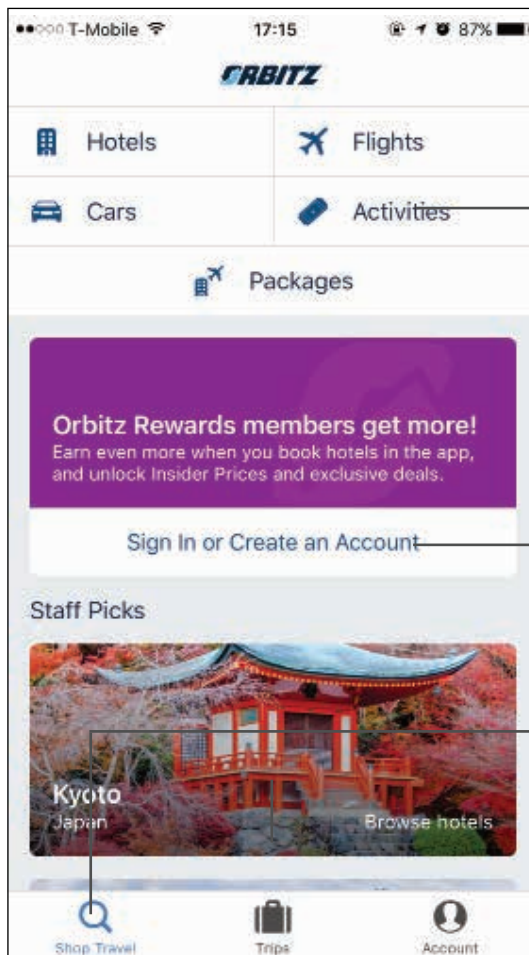
Clean Design

Highlighted Button



# COMPETITIVE ANALYSIS

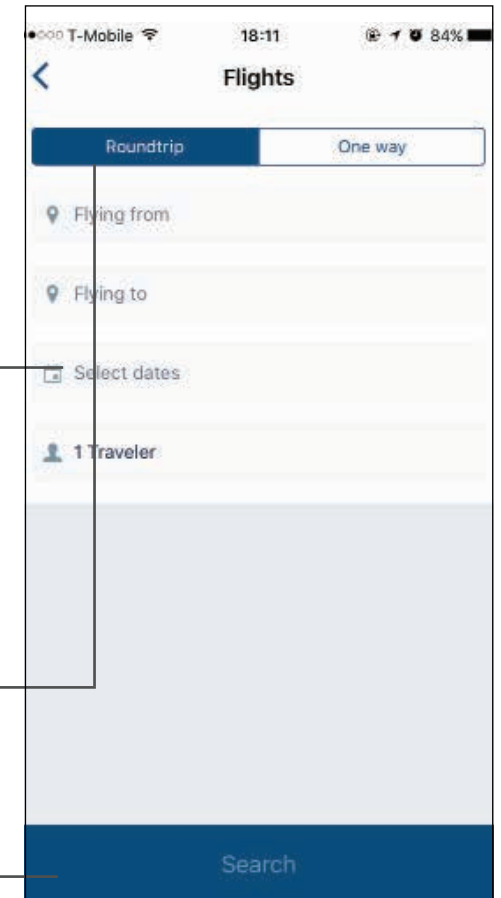
## Orbitz



Clear Information Filter

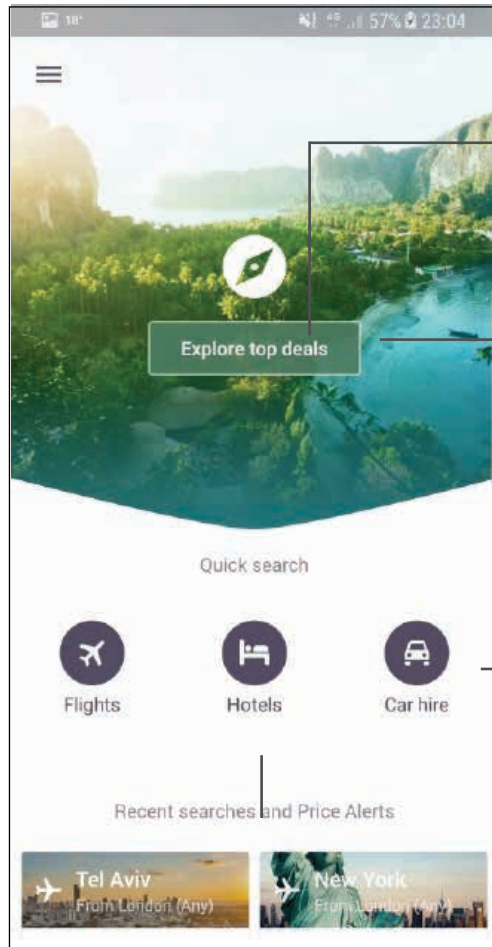
Call To Action Button

Highlighted Current Section



# COMPETITIVE ANALYSIS

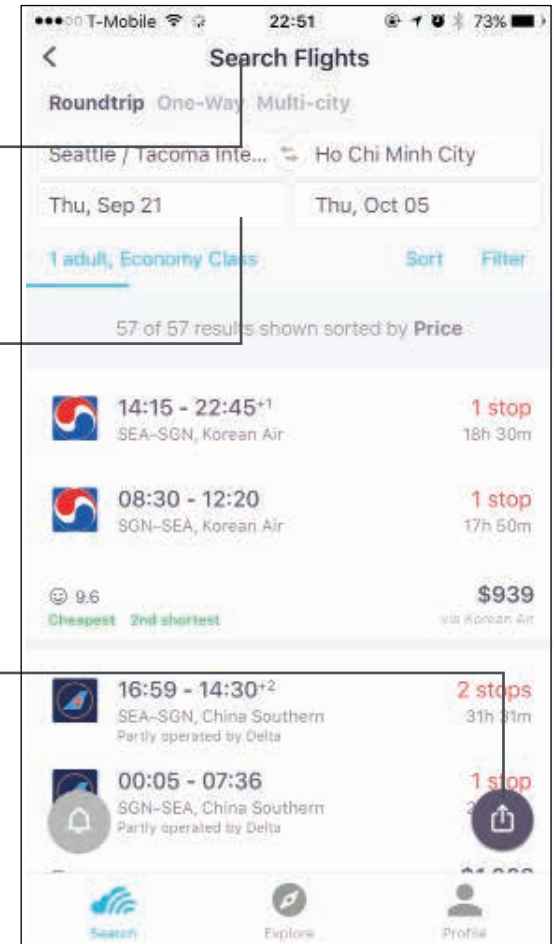
## Skyscanner



Bold Text

Rectangle Box For Information Display

Big Circle Icon



# COMPETITIVE ANALYSIS

## FEATURES TO ADOPT

- **Icon Hierarchy**

To adapt from text to icons buttons will draw the user in with a cleaner and easier the look.

- **Multiflight result**

Incorporating tabs to make searching easier based on the user's need, such as by lowest price, time, and whether the flight is non-stop.

- **Review pages**

To have user fully understand what they are purchasing before buying to prevent future issues.

- **Highlight color**

Highlighting the color of tabs, or icon in use will make the user understand where they are in the app making usability easier

- **Call to action button**

Enhance the look of the button and interface to get the user to understand what the next step is going to be.

- **Simple navigation bar**

Cleaner navigation bar for the user to be aware of where they are in the app.

## FEATURES TO AVOID

- **Long description**

Long descriptions in small areas cause confusion and lead to errors and frustration with the user.

- **Contrasting Background color**

The background needs to compliment the icons and features we will highlight.

- **Complex filters system**

Too much information compiled into a small area without proper padding will overwhelm the user

# COMPETITIVE ANALYSIS

## PAGE HIERARCHY

### Navigation Bar

- Watch
- Notification
- Search
- Trip

### Flight option

- Price
- Depart
- Arrive
- Stop
- Checked Bag

### New User

- Add new traveler
- New User Form

### Flight Search

- Departure
- Destination
- Flight form ( One way/  
Roundtrip)
- Date
- Traveler
- Search

### Existing User

- Sign in

### Payment

- Add / Update Card
- Card Type
- Payment Summary
- Submit Payment
- Confirmation

# HEURISTIC ASSESSMENT

## Visibility of system status

- Highlighted "call action buttons" such as shop flight.
- Clean and Simple navigation bar for each category to guide customer throughout the app

## User control and freedom

- Refining control buttons such as back and search ticket
- Refining flight results
- Providing sub-category for extra information

## Match between system and the real world

- On the homepage, the information provided lacks of essential information that makes hard to search for the ticket.
- The text hierarchy need to improve to create a consistency

## Consistency and standards

- Design style is inconsistency
- Inconsistency buttons style
- Inconsistency statistic display
- Inconsistency color scheme between title and text

# HEURISTIC ASSESSMENT

## Error prevention

- On the homepage, there is no review button
- Confirmation message pop-up before purchasing

## Recognition rather than recall

- When searching for flight, includes "trip summary" on the top for reviewing

## Flexibility and efficiency of use

- Providing features to review and edit entered information
- Add pop up window
- Minimal searching steps

## Aesthetic and minimalist design

- Linking result page
- Reduce useless data and placed them inside sub-category

## Help users recognize, diagnose and recover from errors

- Error message along with help link
- Warning color scheme if needed

## Help and documentation

- Help" link with "?" sign
- Providing contact information to search for help



# PERSONA



## Mia Wilson

**20, Female**  
**Student**  
**Single**  
**Portland, OR**

Mia studies Asian and Middle Eastern Studies at Dartmouth College. Being a student, Mia doesn't have a big budget but is looking forward to studying abroad.

Mia is looking for the cheapest flight to her current foreign study program in Hyderabad, India. While shopping around online and the best app, she came across Hopper and found the best and cheapest deal.

### Goals:

- Looking for the best deal for her student budget
- To gain knowledge of the world around her to grow in her Degree.

# PERSONA



## Vu Pham

**26, Male**  
**Software Engineer**  
**Redmond, WA**  
**In a relationship**

Vu has been working in the software engineer industry for six years. As a key member of a team, Vu is responsible for attending the company conferences in various places and go on for a business trip to build a teamwork with his colleagues.

He usually looks online and buy his flight tickets through Hopper app for its affordable prices although the app sometimes is a bit complicated to navigate.

### **Goals:**

- Wants to buy a ticket more efficiently
- Introducing a good flight shopping experience to his colleagues

# PERSONA



## Grant Harrison

**56, Male**

**Life Coach, Entrepreneur**

**Newly Divorced (Single)**

**NewYork**

He loves travels around the world as a motivational speaker. His beginning was a humbling one that taught him the importance of saving your money. In continuing to live frugal in some cases, saving a money on a plane ticket is necessary.

### **Goals:**

- Looking for an app that helps find the best plane ticket deals.
- Updated in and when tickets may go on sale, as well as when they rise.

# USER SCENARIO



Mia is looking for a foreign study program in Hyderabad, India.



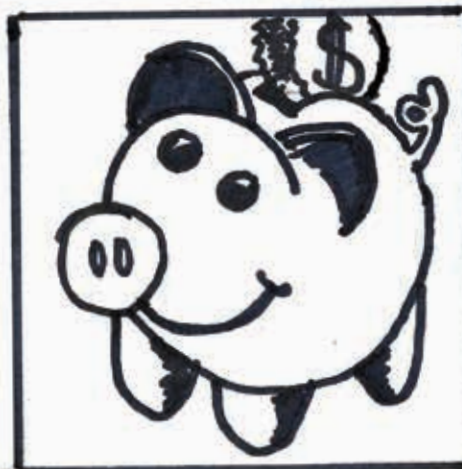
She has a pounding headache because her finances don't support her and she must spend money wisely.



She found "Hopper" app by searching "cheap flight ticket" on google.



Hopper gives her a deal that nearly saves her \$100 compared to other flight apps.

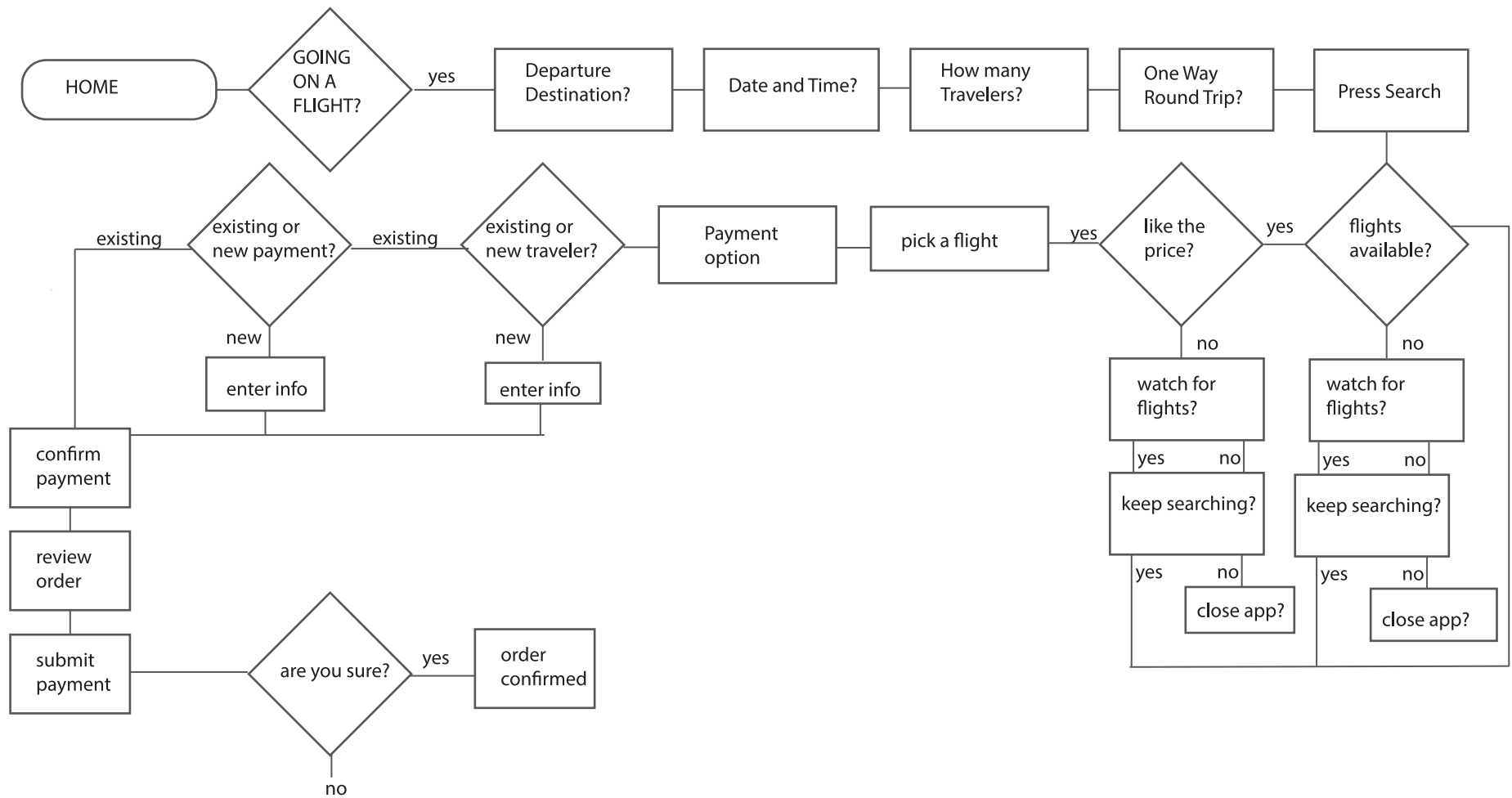


She loves it because now she has extra money to spend on other things she may want/need.



Being able to find a cheap plane ticket, she now gets to go to India and maybe even meet the love of her life.

# FLOW CHART #1

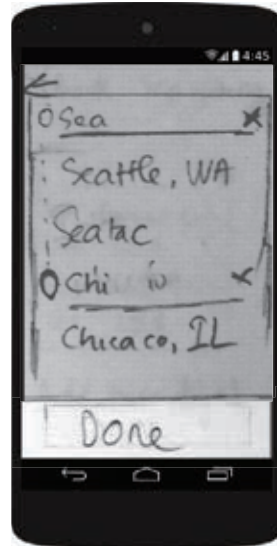


# PAPER PROTOTYPING AND LOW FIDELITY

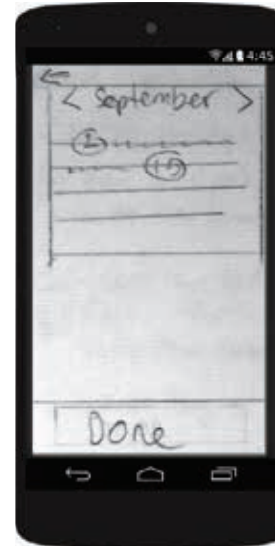
## Concept Sketches HOME PAGE



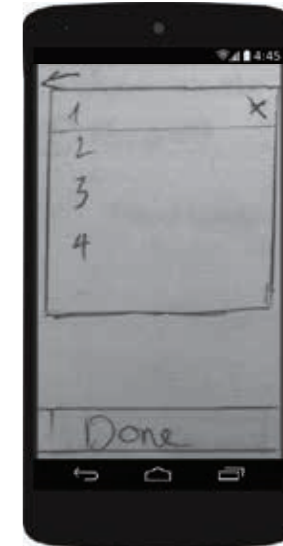
First Page (Home)



Departure and  
Destination page



Date Option Page



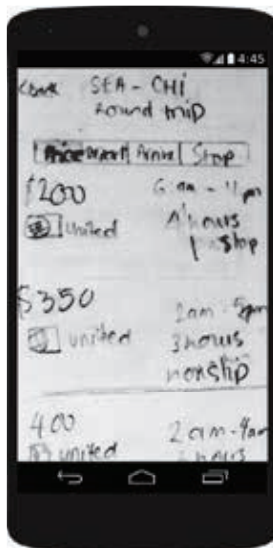
Traveler Option Page

- Flight searching filter



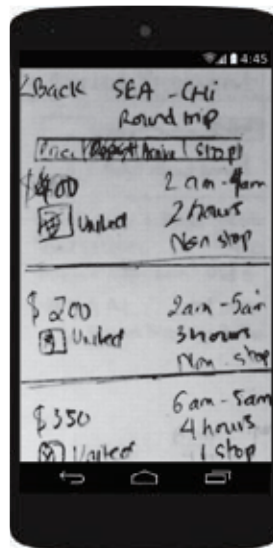
# PAPER PROTOTYPING AND LOW FIDELITY

## Concept Sketches FLIGHT PAGE



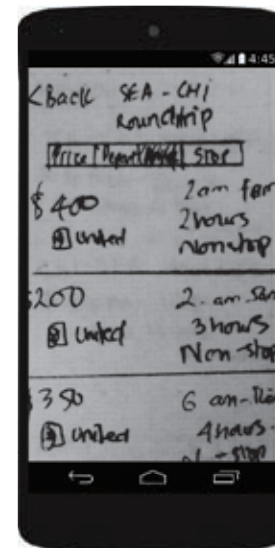
Price Category

- Price displays from Low to High



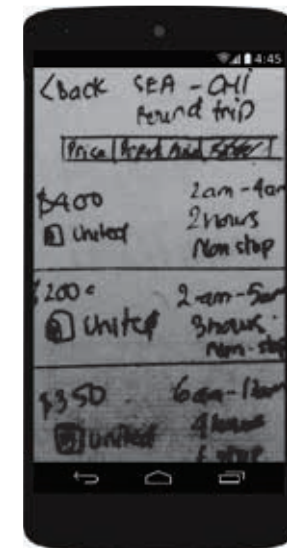
Depart Category

- Departure time option



Arrive Category

- Arrive time option

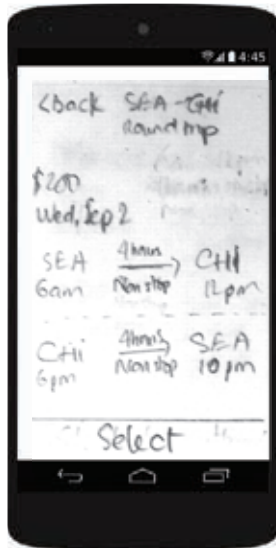


Stop Category

- Stops option

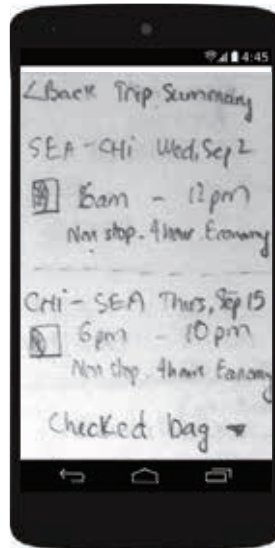
# PAPER PROTOTYPING AND LOW FIDELITY

## Concept Sketches FLIGHT PAGE



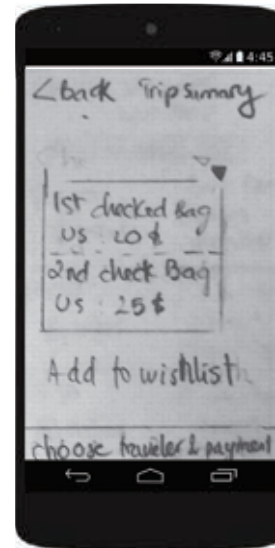
Flight Selected Page

- Flight details (when selected)



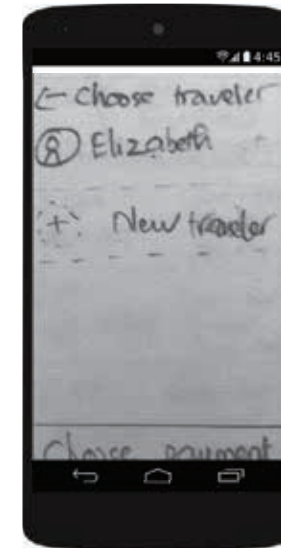
Trip Summary Page

- Trip summary shows outboard information
- Checked bag



Arrive Category

- Checked bag
- Add to wishlist
- Traveler



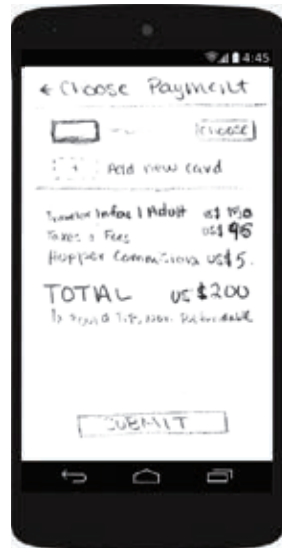
Stop Category

- Choose traveler
- Existing and new customer sign up
- Choose payment



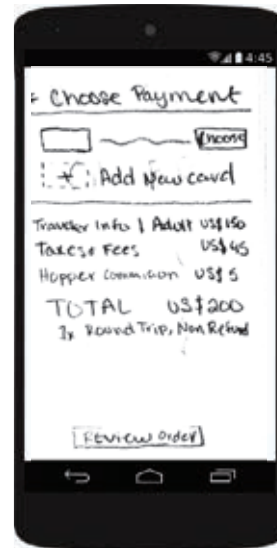
# PAPER PROTOTYPING AND LOW FIDELITY

## Concept Sketches PAYMENT PAGE



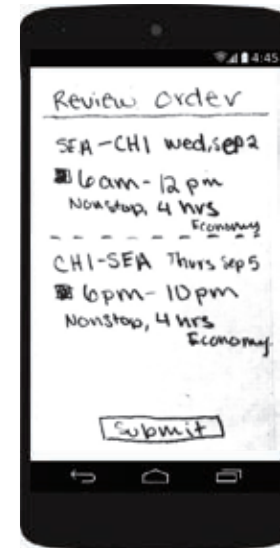
Payment Page

- Existing card
- Add a new card
- Submit button



Payment Summary

- Review window



Review Order

- Flight information
- Payment review

# PAPER PROTOTYPING AND LOW FIDELITY

## Paper Prototype Notes

### Testing Script

1. You are a new user
2. You are going on a study abroad trip and need to find the cheapest flight to get you to Chicago to catch another flight out of the country.
3. Open the Hopper app and land on the homepage.



# PAPER PROTOTYPING AND LOW FIDELITY

## Paper Prototype Notes

### Problem # 1

- When the customer landed on the FIRST LOADING PAGE, there was not enough information to have an accurate flight search.

### Solution # 1

- The new LANDING PAGE will have date and time, number of travelers, as well as round trip and one-way trip added to the search.

### Problem # 2

- The LANDING PAGE has too many buttons to click

### Solution # 2

- We will minimize the amount of buttons by adding a pop-up subpage that will disappear when an item is selected.

### Problem # 3

- PAYMENT PAGE doesn't have confirmation for example " did we purchase the flight?"

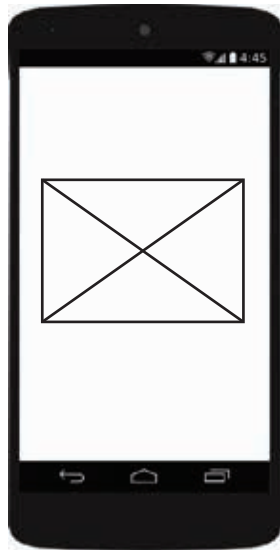
### Solution # 3

- Adding a review & submit order page and then a confirmation page will be added to diffuse any confusion.

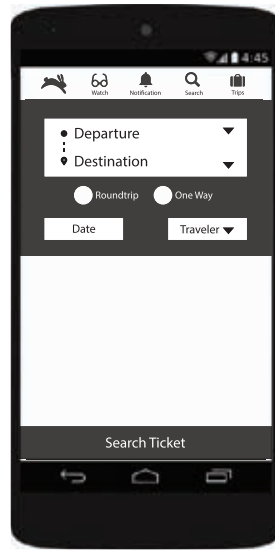
# WIREFRAME

## Wireframe concept HOME PAGE

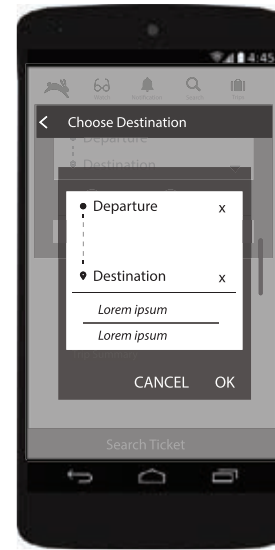
The Home screens establish the guideline for the beginning of the flight searching process.



Loading Screen



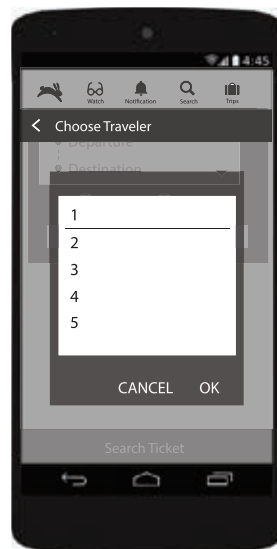
Landing Page



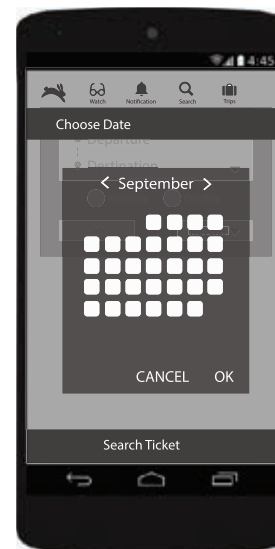
Departure Window

# WIREFRAME

Wireframe concept HOME PAGE



Date Window

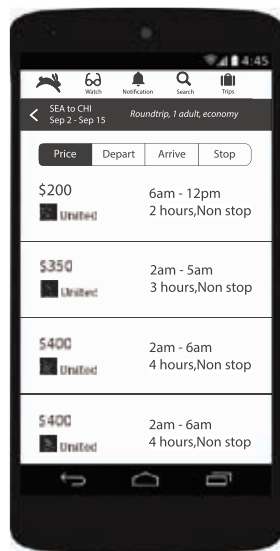


Traveler Window

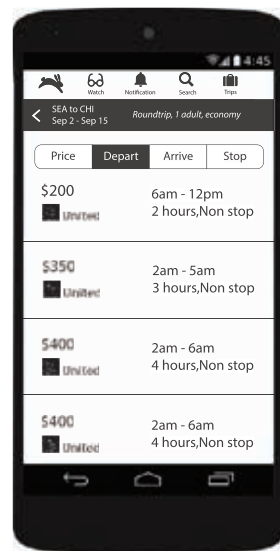
# WIREFRAME

## Wireframe concept FLIGHT PAGE

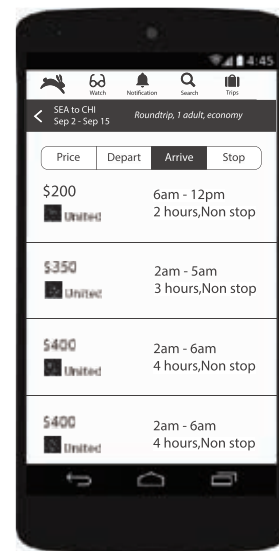
The Flight screens categorize the flight searching into different tabs based on what the user is looking for, how many bags needed and who is flying.



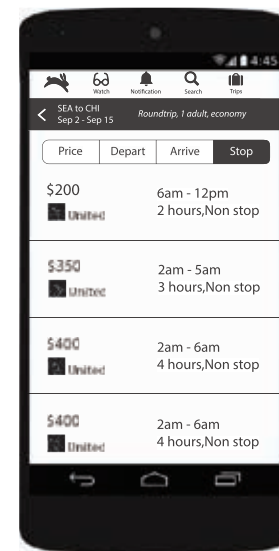
Price Category



Depart Category



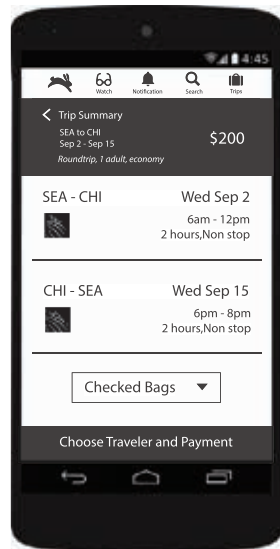
Arrive Category



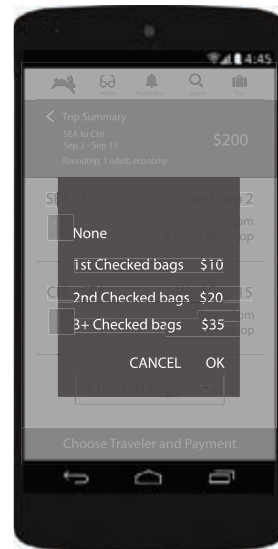
Stop Category

# WIREFRAME

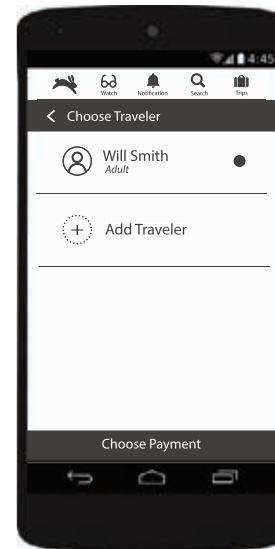
## Wireframe concept FLIGHT PAGE



Trip Summary



Checked Bag

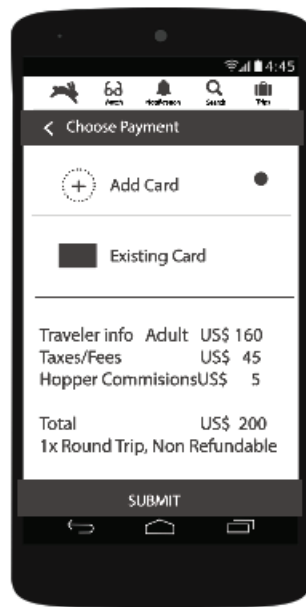


Traveler Page

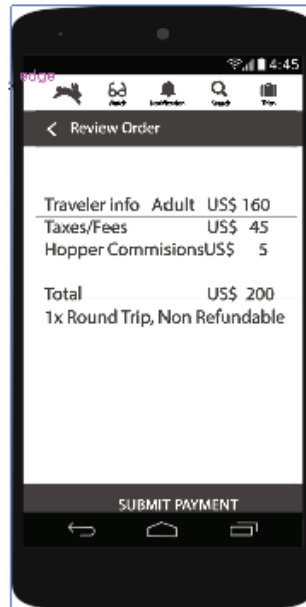
# WIREFRAME

## Wireframe concept PAYMENT PAGE

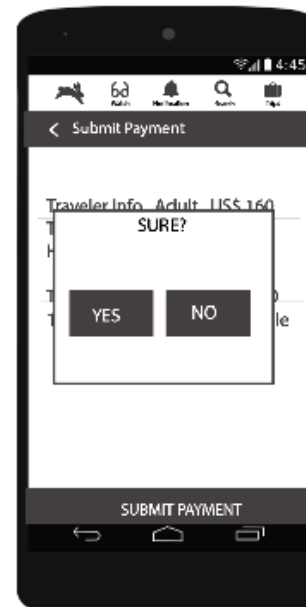
The Payment screens help the user finalize their transaction and purchase their ticket with an engaging confirmation page.



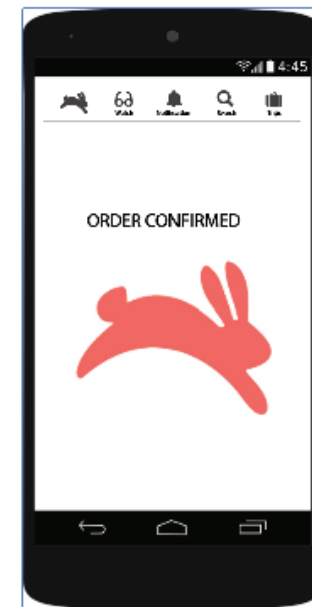
Choose Payment



Review Order



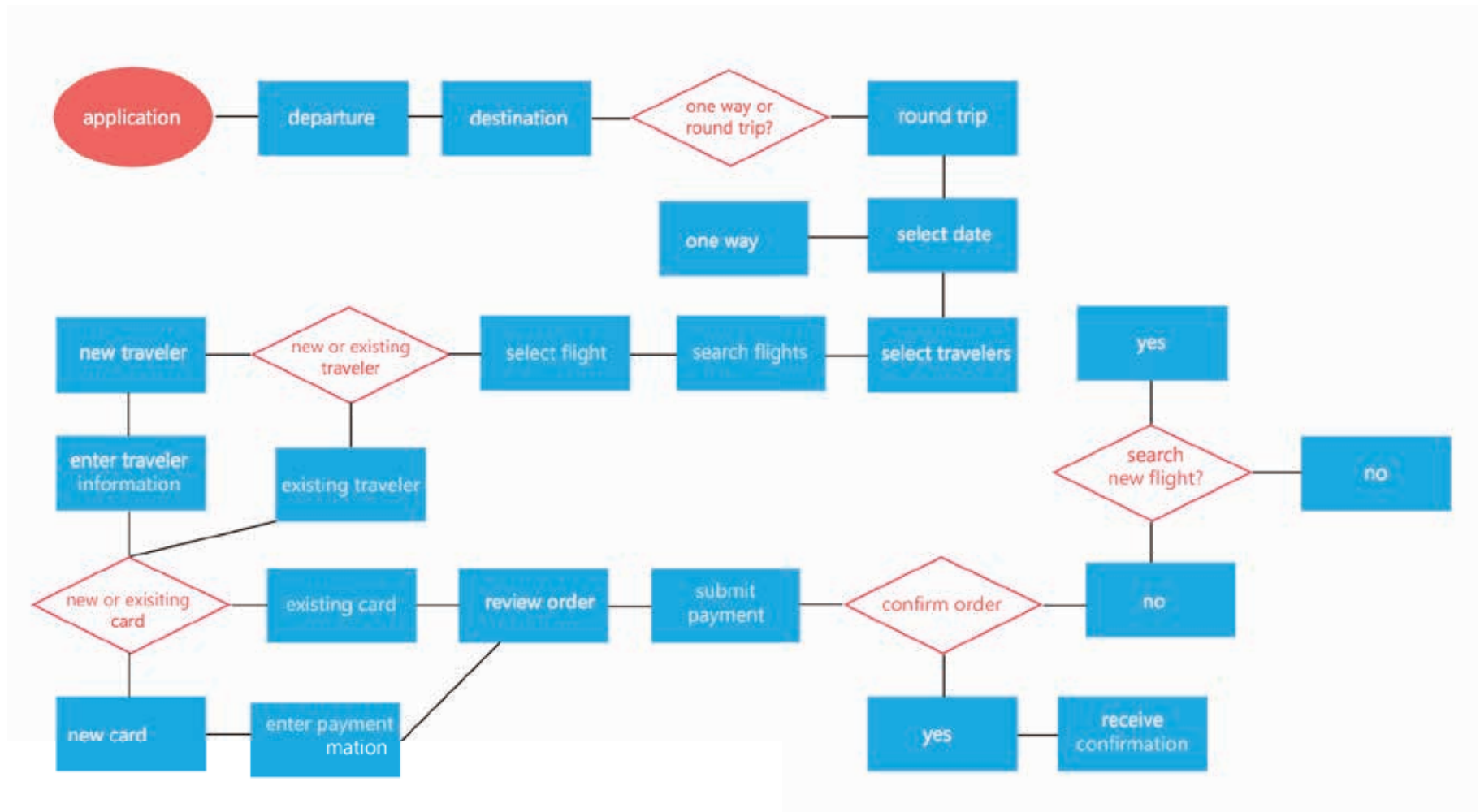
Confirmation



Final window



# FLOW CHART #2



# PAPER SKETCH TO WIREFRAME

## How Sketches Helped Wireframe?

**Sketches helped create a basic understanding of:**

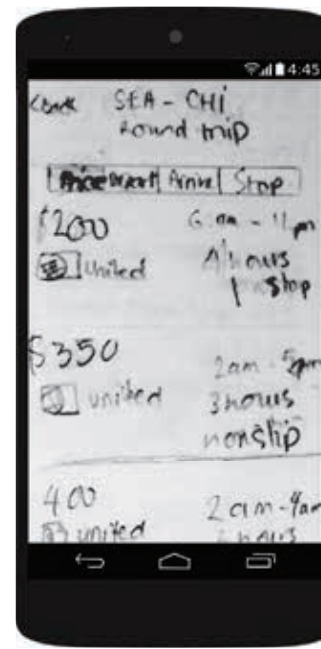
- Get a basic concept of how the app will work in user interface form
- Helped build confidence in conceptual detail and refinement
- What flight features should and should not be on the page
- Helped gather the necessary information

## Intention and Arrival

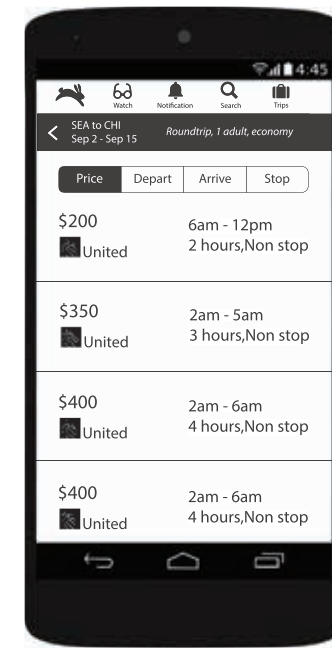
Sketches intention was to get a basic concept of what user needed while the wireframe intention refined the concept further to get the visual about how users interact with the elements and how the flow feels.

Arrival for set of wireframes was based off user interaction which forces us to think in higher detail changed such as:

- Order of elements
- Size of elements
- Feature placement
- Time consumption



PAPER SKETCH



WIREFRAME

# USABILITY TESTING

**Usability testing refers to evaluating a new website layout by testing it with representative users to make sure that the design is for the users**

## **Participant Qualifications**

- College students
- Existing Hopper users for updating testing and new potential customers
- Shopping for flight twice a year

## **Testing Scenario**

- The resident of Seattle looking out of state for college to Chicago University.

## **Tasks**

1. You are a new customer who are searching for round trip flight from SEA to CHI from Sep 2 to Sep 15
2. Select the cheapest flight
3. Choose the flight and review your trip , then adding your card to make a payment

# USABILITY TESTING

## Tasks # 1

You are a new customer who are searching for round trip flight from SEA to CHI from Sep 2 to Sep 15

### Testing Steps

- Open the app and land on the landing page
- Please enter the departure and destination to Seattle and Chicago
- Select round trip option
- Pick departure date as September 25th and 15th for returning
- Selecting one traveler
- Press search for the ticket

## Tasks # 2

Select the cheapest flight

### Testing Steps

- Looking for the cheapest ticket and search under price tab
- Choose 6am-12pm nonstop flight with United airline for \$ 200

Under trip summary:

- Enter number on bags checked in: None
- Click "Select traveler and payment" button

## Tasks 3

Choose the flight and review your trip , then adding your card to make a payment

### Testing Steps

- Select " Add new user" to create a new account under " Jane Cruz"
- Fill the sign up form
- Add new payment card
- Select review payment button
- Review and press submit payment button
- To finalize purchase press "yes " to confirm
- Logo and "payment confirmed" page will appear

# USABILITY TESTING

We asked four users if they are willing to test our app. Here are the results:

- Two users suggested a button that leads to the next step.
- Two users didn't understand why their information wasn't entered.
- Three users were confused on which area they had clicked on.
- Four users were confused when the app didn't go anywhere after they had received confirmation for their order.

Changes from User Testing:

- Added a "next" button
- The filled out information's icon will change to a different color.
- Made "hit boxes" bigger for clicking.
- On confirmation page, added a "home" button to guide them back to the beginning.

# STYLING

## ICONS



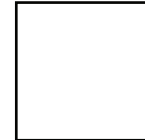
## BUTTONS STYLES

BUTTON

## COLORS



Hot Pink  
HEX # F16662  
R: 242  
G: 102  
B: 98



Pure White  
HEX # FFFFFFFF  
R: 255  
G: 255  
B: 255



Dark Gray  
HEX #4F504F  
R: 80  
G: 80  
B: 79

# STYLING

## TYPOGRAPHY

### **Title**

- 28pt
- Segoe UI / Regular

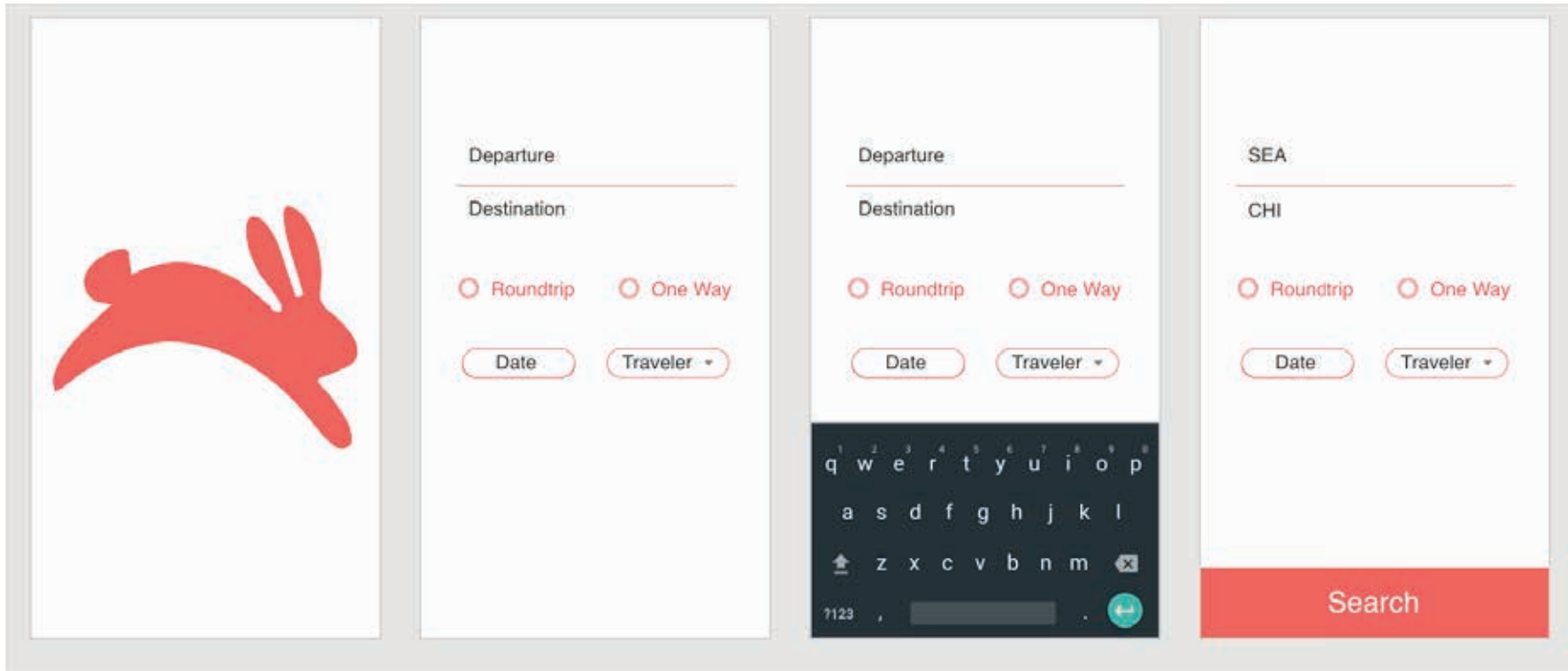
### **Body text**

- 20pt
- Segoe UI / Regular

### **Caption**

- 20pt
- Segoe UI / Regular

# FINAL DESIGN



Landing Page

Search Flight

Search Flight

Search Flight



# FINAL DESIGN

The image displays four sequential mobile app screens for a flight booking application. Each screen is a vertical rectangle with a light gray background and a red footer bar.

- Screen 1 (Search Flight):** Features a search form with two input fields labeled "SEA" and "CHI". Below these are two radio buttons: "Roundtrip" (selected) and "One Way". At the bottom of the form are two buttons: "Date" and "Traveler" with a dropdown arrow. The red footer bar contains the word "Search".
- Screen 2 (Choose Date):** Shows a calendar interface. At the top, a header "September" is flanked by up and down arrows. Below it is a grid of date boxes. The "Date" and "Traveler" buttons from the previous screen are visible below the calendar. The red footer bar contains the word "Search".
- Screen 3 (Choose Date):** Similar to Screen 2, but the header "September" is flanked by left and right arrows. The date grid shows several dates highlighted in red. Below the calendar, the word "October" is centered. The red footer bar contains the word "Select".
- Screen 4 (Choose Date):** Shows the final selection screen. It has the same search form as Screen 1. Below the form, the "Date" button is highlighted in red. Below that, there are two sections: "Depart" with the date "09/02/2018" and "Return" with the date "09/15/2018". The red footer bar contains the word "Search".

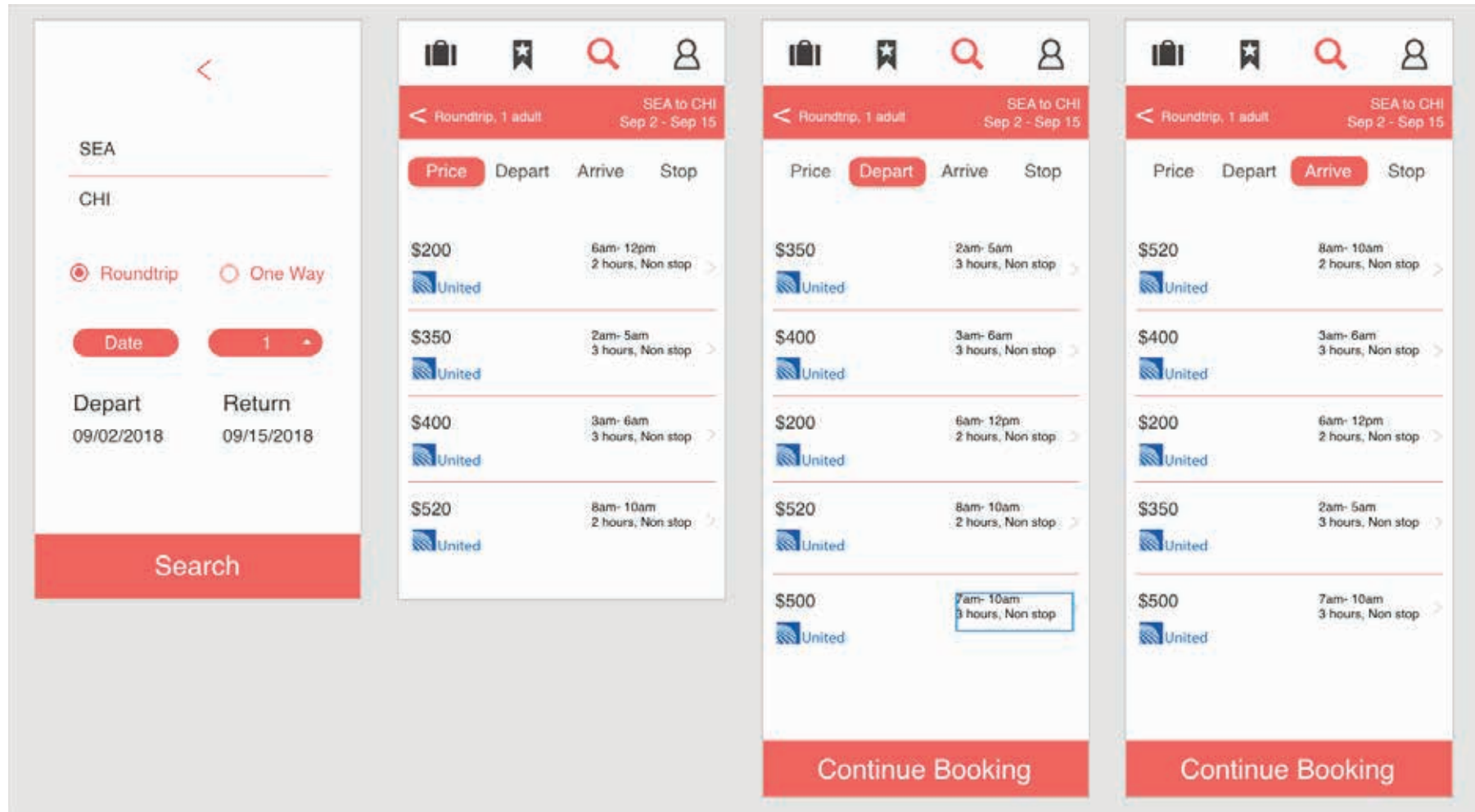
Search Flight

Choose Date

Choose Date

Choose Date

# FINAL DESIGN



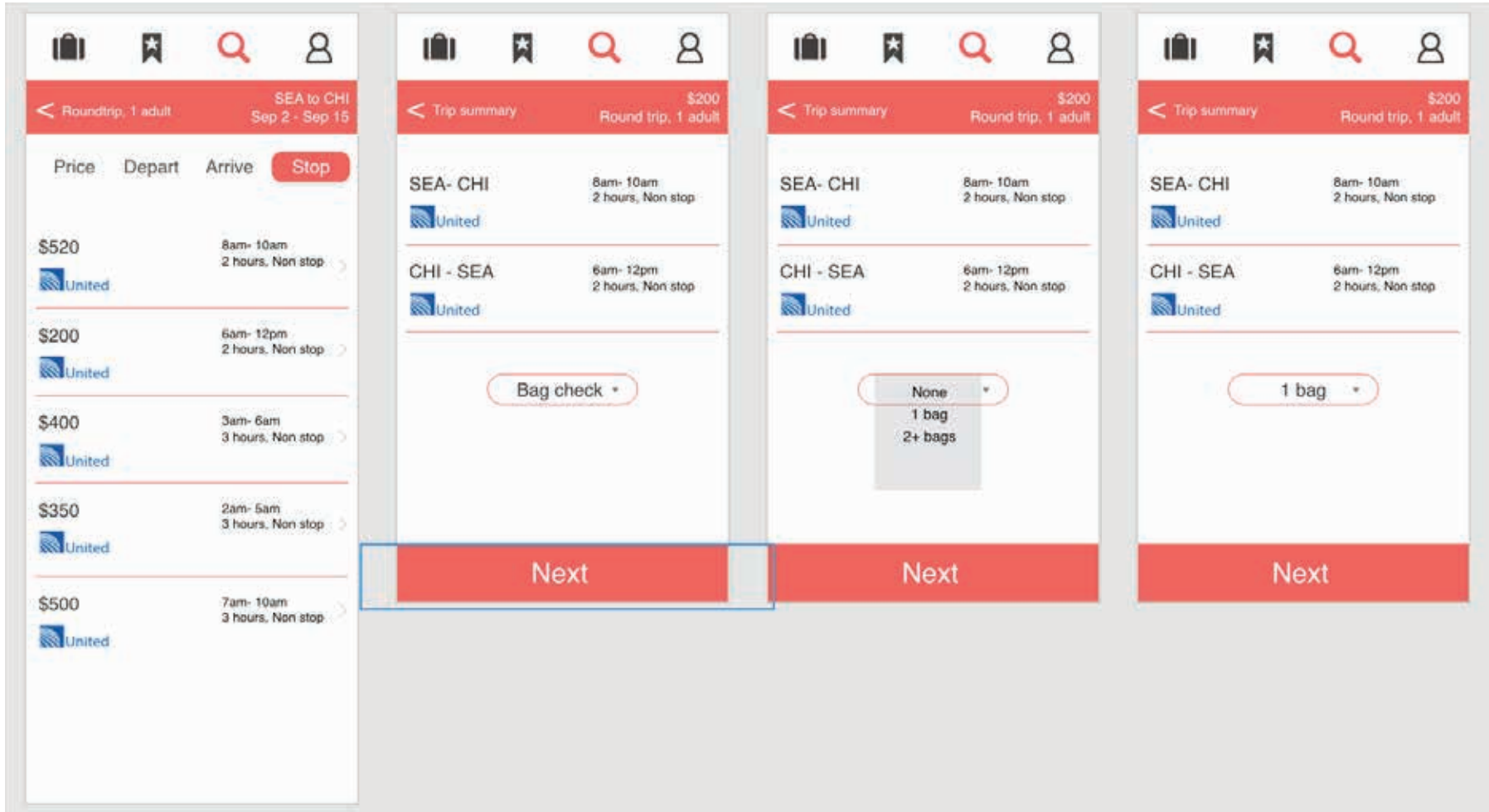
Date/Traveler

Flight Option

Flight Option

Flight Option

# FINAL DESIGN



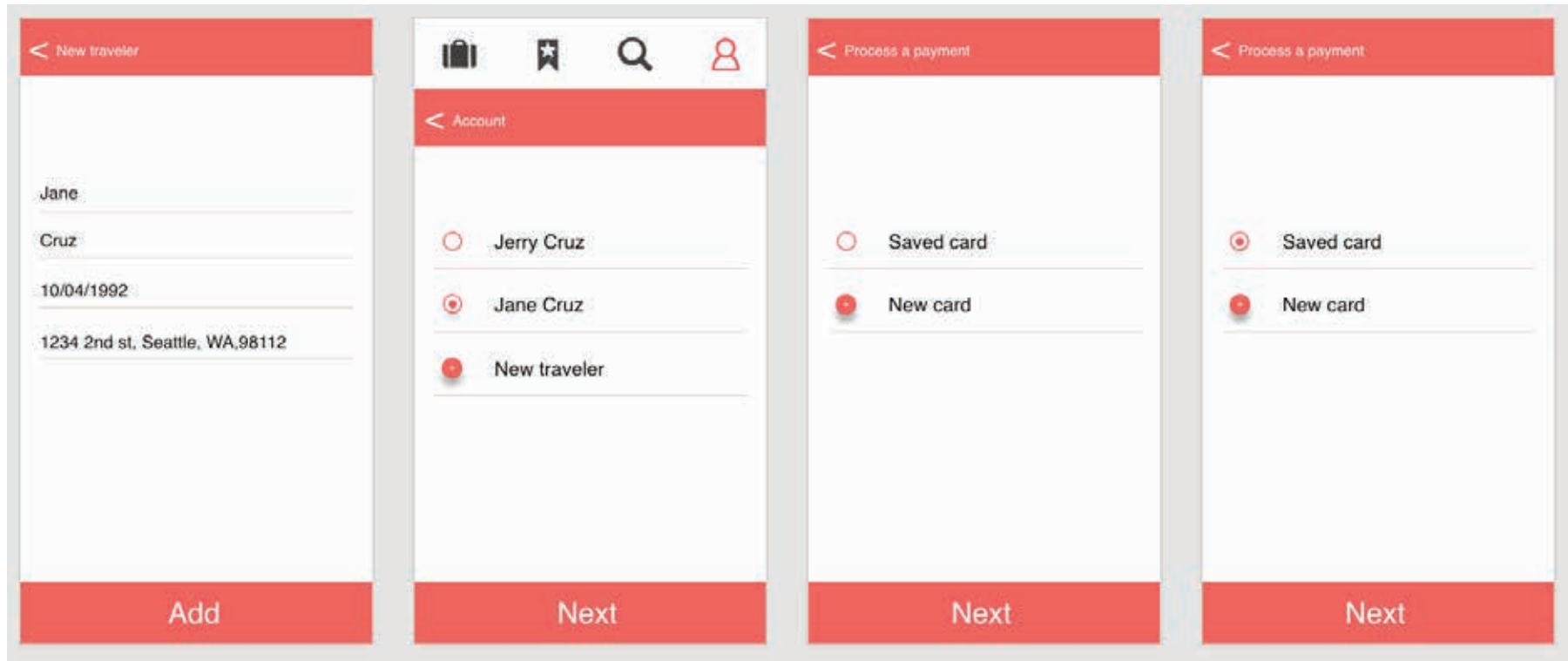
Date/Traveler

Trip summary

Trip summary

Trip summary

# FINAL DESIGN



Add Traveler

Account

Card Payment

Card Payment

# FINAL DESIGN

< Saved card

☐

\*\*\*\* \* 2345 VISA

☐

\*\*\*\* \* 0078 VISA

Next

< Confirm payment

Round trip  
1 adult, economy

Jane Cruz

\*\*\*\* \* 2345 VISA

Flight fee:

\$160

Tax fee:

\$35

Hopper commissions:

\$5

Total

\$200

Make a payment



Thank you for using Hopper.  
An email with confirmation will be  
sent to you shortly

[Back to homepage](#)

Card Payment

Payment

Confirmation

# IMPORTANCE OF PROCESS

## Client Research

Understanding clients help us go through each design step effectively.

## Content Strategy

That will help us decide which to include and exclude from our mobile experience.

## Competitive Analysis

Explore the design pattern and interaction features to meet user needs

## User Scannerio and Path

Think about the user to create a design path

## Paper Prototyping

Get a basic concept of how the app will work in user interface form before working on the wireframe.

## Wireframe

Low fidelity wireframe help us build the basic layout for the Hopper app

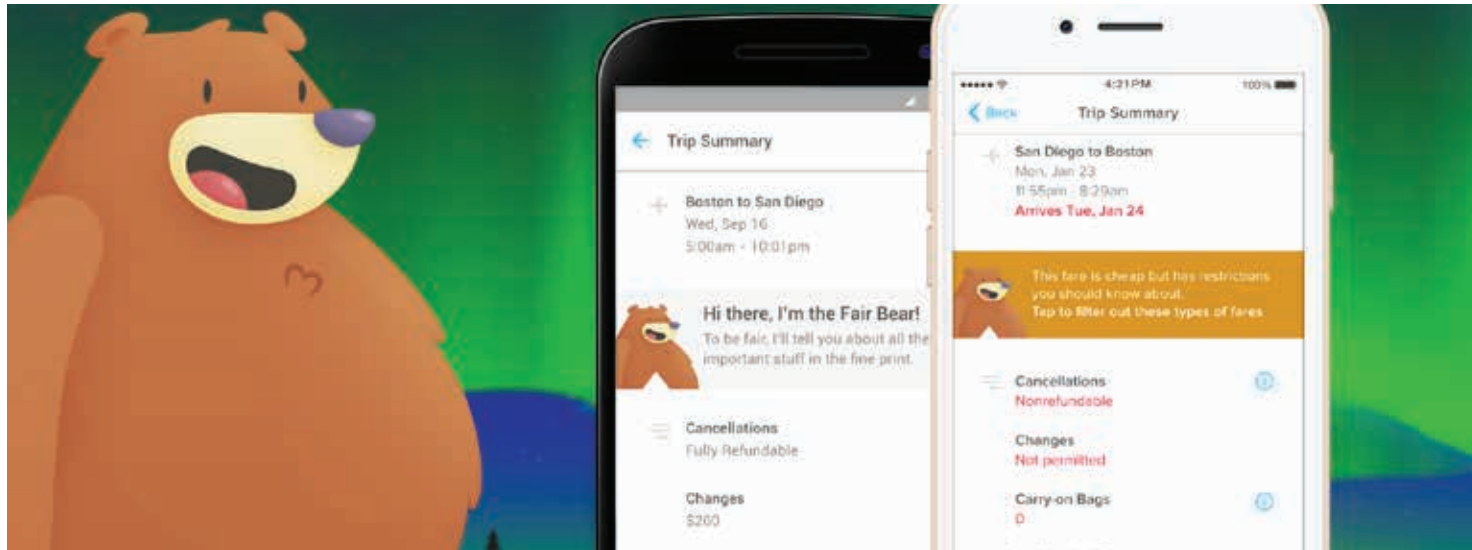
## Usability Testing

Identify the problems and solutions for the current design and collecting feedbacks from the users for the final design.

## Hi Fidelity Design

The visual designs bring to the users the hi fidelity the version that improves the user experience.

# PROTOTYPE



<https://xd.adobe.com/view/79d72545-f3d5-4ff1-5501-5adf82c4332c-0fe6/>