



Flights With Friends

Trip Planning meets Social Media

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Project Scope

- Form a team with 3 other students.
- Imagine that the creators of the “Flights With Friends” website has asked the team to help evaluate the usability of their website.
- Focusing on **evaluation methods**, perform the following phases:
 1. Perform a detailed evaluation of the site.
 2. Identify top areas of concern.
 3. Implement a usability test with sample users.

Phase 1: Detailed Evaluation

What is (was) “Flights With Friends?”

The (now defunct) “Flights With Friends” website allowed any number of travellers to plan trips by collaborating online. Friends look up flight and hotel information, while chatting instantly with each other about the plans.

The screenshot displays the "Our New York City Trip" interface. At the top, it shows the user "Todd Astroth" and navigation links for "My Trips", "Contact Us", and "Sign Out".

Left Sidebar:

- To Do List:** A checklist with items: "Start planning your trip" (checked), "Decide who's coming", "Invite friends", "Vote on the best flights", "Vote for hotels you like", and "Book flights & hotels". Below the list is a text input field "We should..." and an "Add" button.
- Multiple Cities?:** A section with the text "Add as many searches as you need to round out your trip." and two buttons: "Add Flight Search" and "Add Hotel Search".

Main Content Area:

- New York flights:** A card showing "MDW → JFK ROUNDTRIP" for "10 MON FEB" to "17 MON FEB". It includes a map of the flight path and a profile picture for "Todd Astroth".
- Saint Louis hotels:** A card showing "Saint Louis" for "13 TUE JAN" to "16 FRI JAN" with a "Show hotels" button and the text "Add friend to search".

Right Sidebar:

- Friends:** A list of friends including "Todd Astroth MDW" and "Sally Benson MDW" with a "Reinvite" button and an "Add Friend" button.
- Messages:** A chat area with a prompt "Have a question? We'd love to help. invite us to chat anytime." and a "Chat with Kyle and Arthur" button.
- Flights With Friends:** A log of activities such as "Todd A. added a hotel search New York, NY, US, Feb 10 - Feb 17", "Todd A. added a roundtrip flight search MDW-JFK, Feb 10 - Feb 17", "Todd A. added Angus to the trip", "Todd A. added a roundtrip flight search BOS-JFK, Feb 10 - Feb 17", "Todd A. added a hotel search in Saint Louis, MO, US, Jan 13 - Jan 16", "Todd A. added Sally Benson to the trip", and "Todd A. removed Angus from the trip".

Phase 1: Detailed Evaluation

Heuristic Evaluation

Each team member tested the basic functionality of the *Flights With Friends* website, with the following 10 heuristics (guidelines) in mind:

1. Visibility of system status
2. Match between system and real world
3. User control and freedom
4. Consistency and standards
5. Error prevention
6. Recognition rather than recall
7. Flexibility and efficiency of use
8. Aesthetic and minimalist design
9. Help with errors
10. Provide help if needed

Phase 1: Detailed Evaluation

Cognitive Walkthrough

The team also performed an in-depth cognitive walkthrough of 5 basic tasks within *Flights With Friends*.

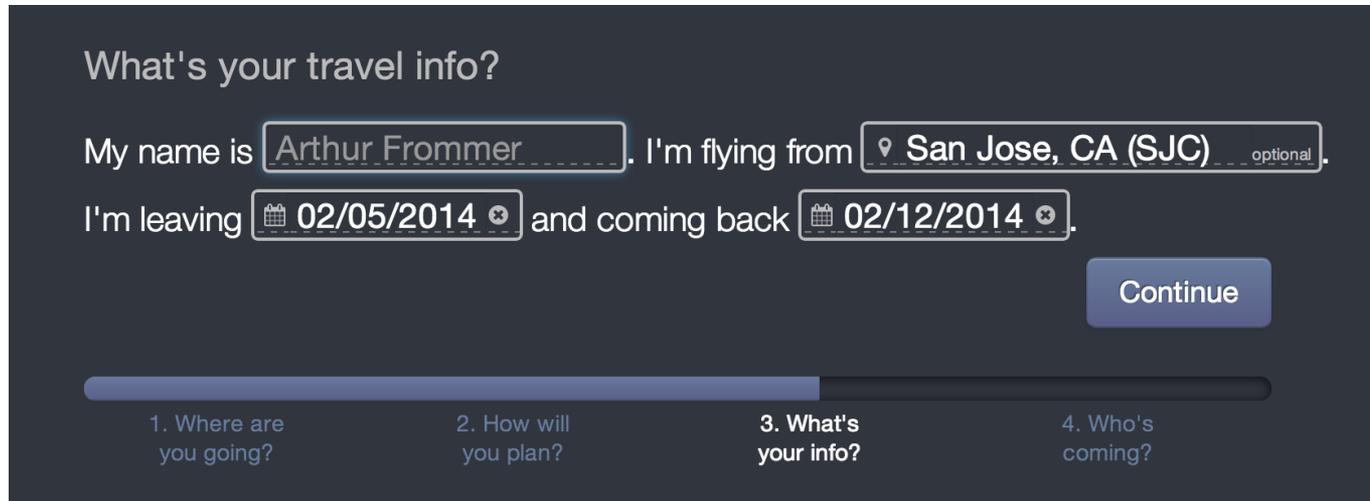
On each step of the task, the following 4 questions were asked:

1. Will users try to produce whatever effect the action has?
2. Will users see the control (button, switch, etc) for the action?
3. Once users find the control, will they recognize that it produces the desired effect?
4. After the action is taken, will users understand the feedback they get so that they can proceed to the next action with confidence?

Phase 2: Identify Areas of Concern

Issue #1: Pre-filled form assumes too much

When creating a new trip, the website automatically fills “dummy data” into the fields, as shown in the screenshot below. This may lead users to skip this step, mistakenly thinking the data is correct and ready to go.



The screenshot shows a dark-themed form titled "What's your travel info?". The form contains the following fields and text:

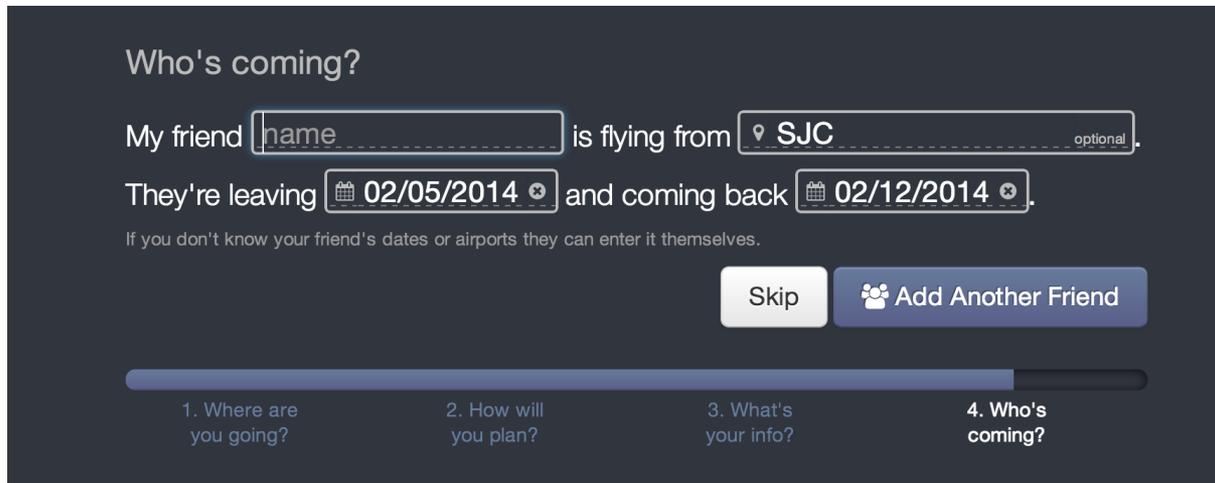
- "My name is" followed by a text input field containing "Arthur Frommer".
- "I'm flying from" followed by a location dropdown menu showing "San Jose, CA (SJC)" with a location pin icon and the word "optional" to the right.
- "I'm leaving" followed by a date picker showing "02/05/2014" with a calendar icon and a close icon.
- "and coming back" followed by a date picker showing "02/12/2014" with a calendar icon and a close icon.
- A "Continue" button in the bottom right corner.
- A progress bar at the bottom with four steps: "1. Where are you going?", "2. How will you plan?", "3. What's your info?", and "4. Who's coming?". Step 3 is currently active and highlighted.

Recommendation: leave the fields blank, or insert gray “helper text” in the fields such as “Your name here” and “Departure date.”

Phase 2: Identify Areas of Concern

Issue #2: Unclear navigation to add friends

When creating a trip, it is unclear how to proceed when the user only has one friend to add to the trip. As you can see in the screenshot below, the two options are “Skip” and “Add Another Friend.” If one is to click “Skip”, does that mean that this entire step will be skipped?



Who's coming?

My friend is flying from optional.

They're leaving and coming back .

If you don't know your friend's dates or airports they can enter it themselves.

1. Where are you going? 2. How will you plan? 3. What's your info? 4. Who's coming?

Recommendation: Change the options to “Add Another Friend” (creates more fields on the form) and “Continue” (go to next step).

Phase 2: Identify Areas of Concern

Issue #3: Unclear what to do after setting up a trip

After a controlled Wizard-like setup process, the user arrives at the screen below. Suddenly the user is “left to fend for themselves.”

The screenshot shows a web interface for planning a trip titled "Our New York City Trip". The user is logged in as "Todd Astroth". The interface is divided into several sections:

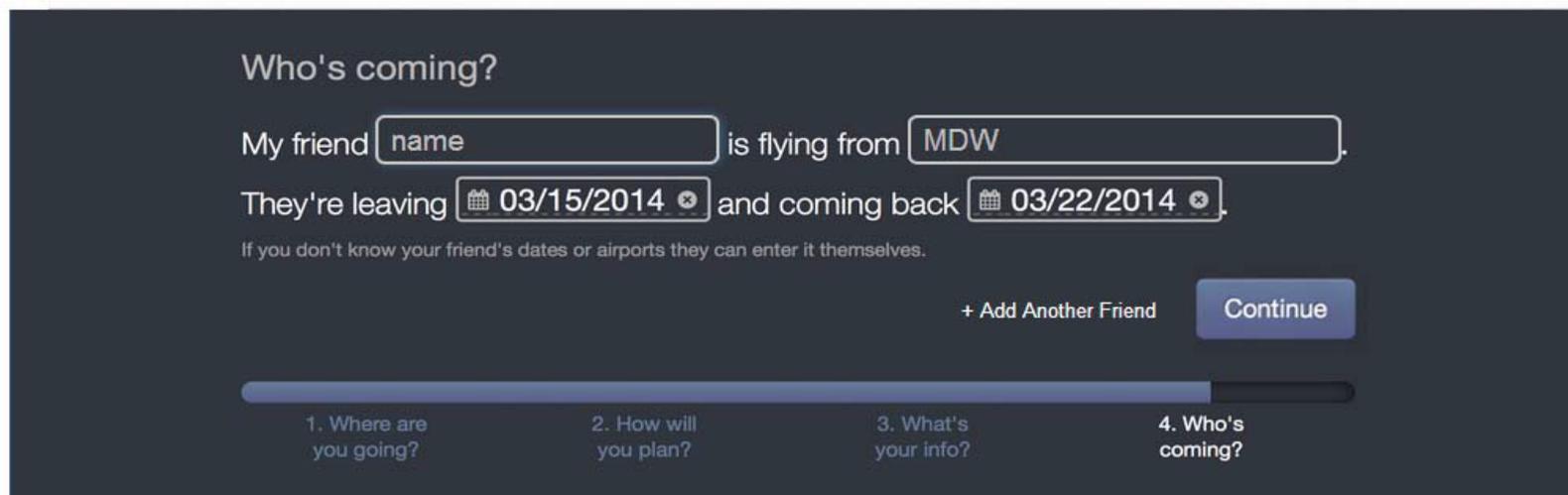
- To Do List:** A checklist with items like "Start planning your trip", "Decide who's coming", "Invite friends", "Vote on the best flights", "Vote for hotels you like", and "Book flights & hotels". There is a text input field "We should..." and an "Add" button.
- New York flights:** A section titled "New York flights" with a sub-header "Everyone should arrive by" and a dropdown menu set to "Anytime". It features a map showing a flight route from MDW to JFK, labeled "MDW → JFK ROUNDTrip" with dates "10 MON FEB" and "17 MON FEB". A user profile for "Todd Astroth" is shown below the map.
- Saint Louis hotels:** A section titled "Saint Louis hotels" with dates "13 TUE JAN" and "16 FRI JAN". It includes a "Show hotels" button and an "Add friend to search" button.
- Friends:** A list of friends including "Todd Astroth MDW" and "Sally Benson MDW". There is a "Reinvite" button for Sally Benson and an "Add Friend" button.
- Messages:** A section with a message from "Kyle and Arthur" asking for help. Below it is a "Flights With Friends" section showing a list of actions: "Todd A. added a hotel search New York, NY, US, Feb 10 - Feb 17", "Todd A. added a roundtrip flight search MDW-JFK, Feb 10 - Feb 17", "Todd A. added Angus to the trip", "Todd A. added a roundtrip flight search BOS-JFK, Feb 10 - Feb 17", "Todd A. added a hotel search in Saint Louis, MO, US, Jan 13 - Jan 16", "Todd A. added Sally Benson to the trip", and "Todd A. removed Angus from the trip".

Recommendation: Include a quick tour of this screen after setup. Also, a “progress bar” could be added to the page to show the user’s place in the trip creation process.

Phase 3: Usability Testing

Prepare for Usability (A/B) Testing

The team re-created a clickable prototype of the “add a trip” wizard. However, we made one key difference, which is shown in the screen below: Step 4 now displays “Add Another Friend” and “Continue” instead of the existing buttons.



The screenshot shows a dark-themed user interface for a travel wizard. The title is "Who's coming?". Below it, there are input fields for "My friend" (with a placeholder "name"), "is flying from" (with "MDW"), "They're leaving" (with a calendar icon and "03/15/2014"), and "and coming back" (with a calendar icon and "03/22/2014"). A small note below the date fields says "If you don't know your friend's dates or airports they can enter it themselves." At the bottom right, there are two buttons: "+ Add Another Friend" and "Continue". At the bottom, a progress bar shows four steps: "1. Where are you going?", "2. How will you plan?", "3. What's your info?", and "4. Who's coming?". The fourth step is currently active and highlighted.

Phase 3: Usability Testing

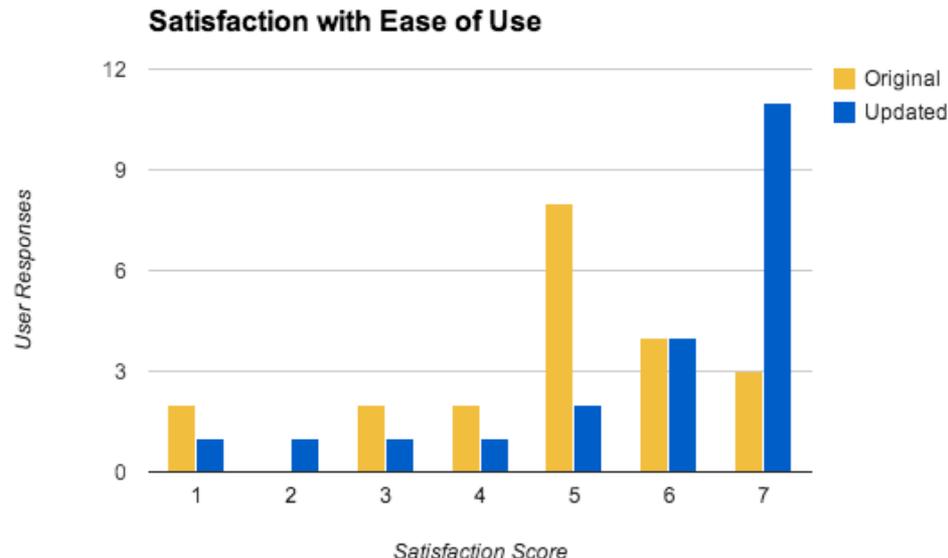
Format of the Usability Test

- The goal was to have participants run through the “add a new trip” wizard using BOTH the existing website and our revised prototype.
- We tested 21 participants. Half of the users were given the existing website first then the prototype, and vice versa (without divulging this information to the participants).
- The participants were then given a survey, comparing their experiences with both designs.
 - *Overall, I am satisfied with the ease of completing the tasks in this scenario.*
 - *Overall, I am satisfied with the amount of time it took to complete the tasks in this scenario.*
 - *Overall, I am satisfied with the support information (online-line help, messages, documentation) when completing the tasks.*

Phase 3: Usability Testing

Usability Test Results

Users were asked to rate their satisfaction with both the original and updated designs. Our results, shown in the graph below, indicate that 11 out of 20 users were “strongly satisfied” with the updated design. Meanwhile, 8 were only “moderately satisfied” with original design.



Conclusions

- Our team identified several areas of concern via heuristic evaluation and cognitive walkthrough, including:
 - A pre-filled form assumes too much.
 - The navigation to add friends to a trip is unclear.
 - It is unclear what to do after setting up a trip.
- We verified via Usability Testing that tweaking the navigation when adding friends to a trip would benefit the *Flights With Friends* website.