Interactive Prototype & Field User Test

Title   PicBuy

Team Jing, Julie, Xiaoyang & Yanjing

Introduction

1. Product introduction

   PicBuy leads a new shopping process. We ease the searching process by using images, find best deals for customers and build a channel to receive opinions from friends.

2. Purpose & rationale

   The goal of the field user test is to learn about users experience and collect feedback of our interactive prototype through interviews. We would like to collect users' opinions about the logic of our app. By observing them performing the three main tasks, we will be able to see whether the designed workflow of each task can be realized by our users. Users' suggestions on the interface design especially the interaction between screens are also needed. The test results will help us identify the problems with our current design and suggest necessary changes.

Method

1. Participants

   The test participants are target users of our app who enjoy shopping and are familiar with online shopping services. We expect that they have encountered the scenarios or problems relevant to our app in real life. Also we carefully choose 3 female and 2 male participants in order to get insights from both genders.

   ○ **Maggie:** around 25 years old, a master's graduate in Statistics originally from China. She uses online shopping services a lot primarily for clothing. When we approached her, she expressed her interest in technologies that help her to find items. So we think that our product will provide her with a solution in searching for items.
   ○ **Teja:** around 25 years old, studying computer science and originally from India. She said she had encountered the scenario that she found something she liked in a store but too expensive. She hoped to know where to find similar items.
   ○ **Lilian:** around 23 years old, from New Zealand, a master's graduate with engineering background. She loves online shopping and has a great passion for fashion. She usually browses fashion blogs online during spare time and tries to find similar items recommended in the blogs which usually cost her too much efforts.

○ **Cary:** around 25 years old, a master student with a background in computer science. He usually shops online, cares about the price and would like to know if there is any good deals with the items that he is interested in.

○ **Yanfeng:** around 23 years old, currently a master student with engineering background. He often goes to local stores for shopping rather than shops online. While shopping in local stores, he often uses chatting apps to ask for his friends' advice before buying the item.

2. Apparatus

Equipment: We implement our prototype using proto.io and allow users to test on an iphone.

Location: We did the interview at Newport mall with Lilian and Maggie
We did the interview at Cornell Tech campus with Teja, Cary, Yanfeng. But we asked them to read a fashion magazine or browse blogs before the experiment began.

3. Tasks

○ **Task 1: Image searching** *(medium)*

When a customer comes across an item, he can take a photo in our app. PicBuy will return the results matching the photo. The customer can select the searching criteria (e.g.: to find best deal, to find other items that can match up with this item, to find the nearest store that sell the item, etc.) There are links to detailed pages for customers to further compare and purchase.

○ **Task 2: Find the best deal/ best match/ same style** *(complex)*

When a customer finds an item online or in store, he may want to see which store or website provides better deals. He can take a photo and the results are sorted by best deals by default. Customers can sort the results by their preferred options.

○ **Task 3: Asking for comments and advices from friends** *(simple)*

Users can connect with their friends in our app. Users can check the posts from their friends and post questions to ask for friends' opinions.

4. Procedure

First, we introduced our app in general and what we were doing and asked them to sign the informed consent form. We asked about their backgrounds and their

online/offline shopping experience. Our application and prototype is very intuitive so we didn't present any demo and let them directly interact with our app.

To begin with the first task, we asked them to read a fashion blog or browse online shopping website for a while. We then let them imagine that they have encountered a blouse that they would like to buy. After they finished with the first task, we made them think of a situation when they find some expensive clothings and wish to find the best deal for the item or similar items. After they accomplished the second task, we told them that there is a social aspect of our app which can used to ask friends' opinions when you couldn't make up decision by yourself. While they are performing the tasks, we took notes and filmed the whole process for data collection and analysis.

Finally, we asked what they thought about our app, what pages or interactions confused them during the process, how they felt about our idea, and in which kind of situations they might use our app.

Test Measure

Variables that we measured:

1. Time used for completing each task
2. Error times before they complete each task
3. The number of questions they ask about the meanings of an element (e.g.: button, icon)
4. Time to discover the home page
5. Whether or not they were comfortable with the launching page
6. In which way they completed the third task

We choose the first two measures in order to see whether the interactions are designed well enough to guide users to perform tasks smoothly. We also want to spot if any confusing UI elements are used in our design through the 3rd measure. The 4th and 5th aim to test whether users will get confused about the launching page and the homepage. The last one is used to test if two ways of adding a post are discoverable to the users.

Results

	Maggie	Teja	Lilin	Cary	Yanfeng
Time for 1st task	35 secs	2 mins	22 secs	20 secs	2 mins 30secs
Error times before finishing 1st task	0	5	0	0	10
Time for 2nd task	10 secs	10 secs	2 mins	10 secs	15 secs

Error times before finishing 2nd task	0	0	3	0	2
Time for 3rd task	45 secs	40 secs	10 secs	1 min	15 secs
Error times before finishing 3rd task	2	5	0	5	3
Number of questions raised	1 ("post" button)	3 ("post" button, "Discover" page, icons on home page)	2 ("post" button, "like" button)	2 (icons on home page, "Discover" page)	4 ("post" button, "like" button, icons on the home page)
When discovered the home page	after 2nd task	during 1st task	never	after 2nd task	during 1st task
Whether feel comfortable with the launching page	ok	a bit confused	ok	ok	ok
Completing 3rd task in which way	both	both	post from detailed page	post from the discover page	post from the discover page

Opinions & Suggestions:

- Maggie:

  She was a bit confused when she saw the "post" button in the detailed page.
  When she was working on the third task, she was confused by the four icons on the homepage. She made a guess and entered the "Discover" page and easily found the "add" button and completed the third task.
  In general, she's fine with the design and workflow of our app.

- Teja:

  She was confused by the "Discover" page and asked whether those posts were from her friends or the public. She also felt confused about the four icons and the search bar on the homepage.
  However, she likes our image searching idea and the pin style of the "Discover" page. She said she would be the first user of our app.

- Lilian

When she was working on the second task, she was confused about post and like button. Also, she felt that filtering/sorting icon was not noticeable enough when she worked on the 2nd task. She didn't enter our homepage at all, and after we told her she was still confused by all four icons on the homepage.
In general, she thought the app is easy to understand and use.

- Cary

He felt that launching with photo taking page was a good idea because all functionalities were based on pictures, but it would be better if there was an option that he could create a new post right after taking a picture. Also, he was confused about Home page and "Discover" page, he didn't know what the four icons stand for and what the "Discover" page contains.The third problem he mentioned was about the add button, he suggested that it would be better if we put it on the top-right corner of the page.

- Yanfeng

He began search the whole functionalities of the app when we told him the first task. He thought the logic of some interactions were problematic, such as how to make a new post and he did not get the meanings of the icons on the homepage. However, he thought the forum in the app is great and it would be nice if we could include search results from local stores.

Discussion & Appendices

After a pilot run, we

- fixed some broken interactions in our previous prototype;
- decided to provide the interviewers with more specific scenario when asking them to perform each task;
- figure out a more reasonable procedure to conduct the interview

Design changes based on the experiment results:

- The four icons on the homepage seem to be very confusing to the users. The page did not help users to better understand the structure of our app. After discussion, we think that a standalone homepage is not necessary. A side menu attached to each screen will be more helpful in terms of navigation. (see Figure 1.)
- As suggested by an interviewer, some users would like to post right after taking a photo to ask their friends' opinion. So instead of directly searching image after taking a photo, we let the users choose whether to do an image search or make a post to friends asking for their opinions. (see Figure 2.)

- As for the social functionality, we change the "Discover" page to "News Feed" because the page only shows the posts by user's friends and "Discover" might not be a suitable name for this function. (see Figure 3.)
- Previously, the three buttons (Post, Like, Buy) on the detailed page seem to distract users from buying items. The size and structure of the buttons tend to bring users to other pages and may confuse the users. After discussion, we decided to redesign the Like and Post button and make the Buy button more noticeable to users. (see Figure 4.)

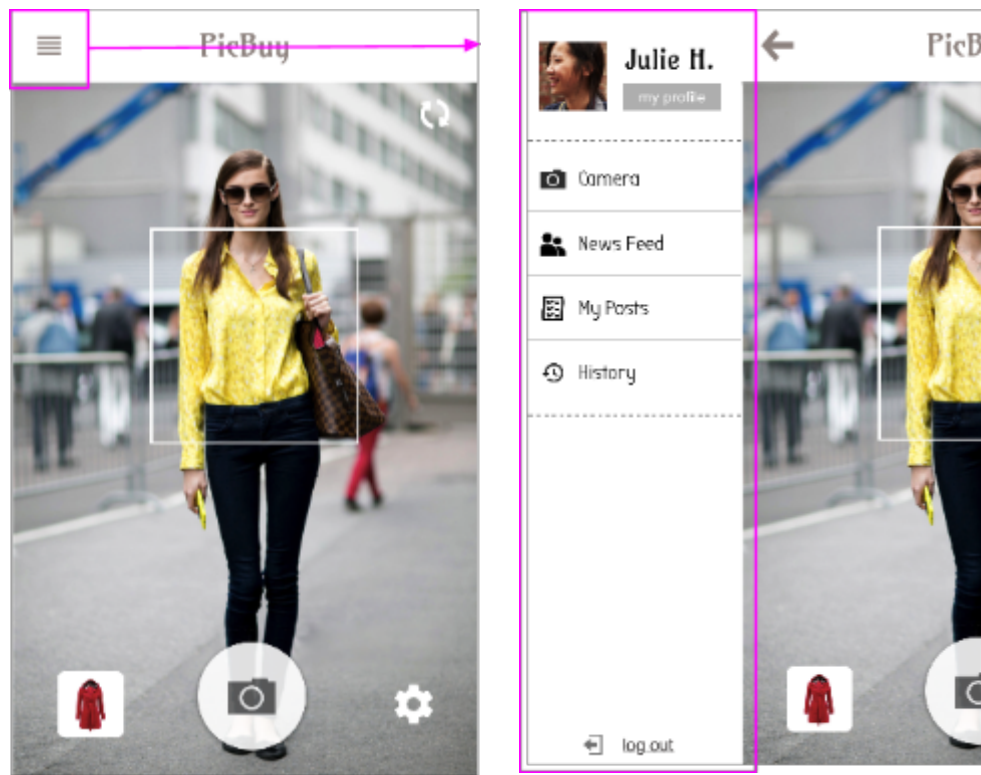Screenshots of the design changes:

Figure 1. A side menu for navigation is added to each page to replace the home page.
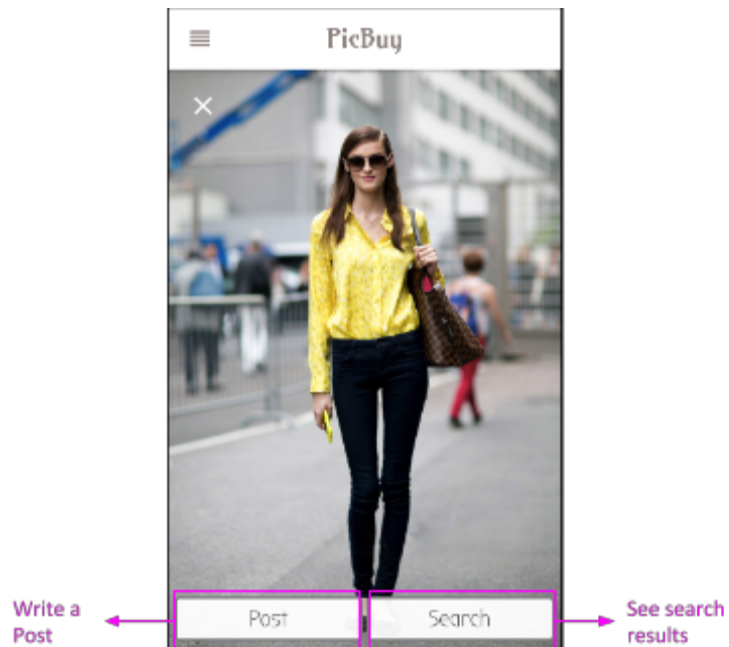
Figure 2. A post option is added when user finish taking a photo.

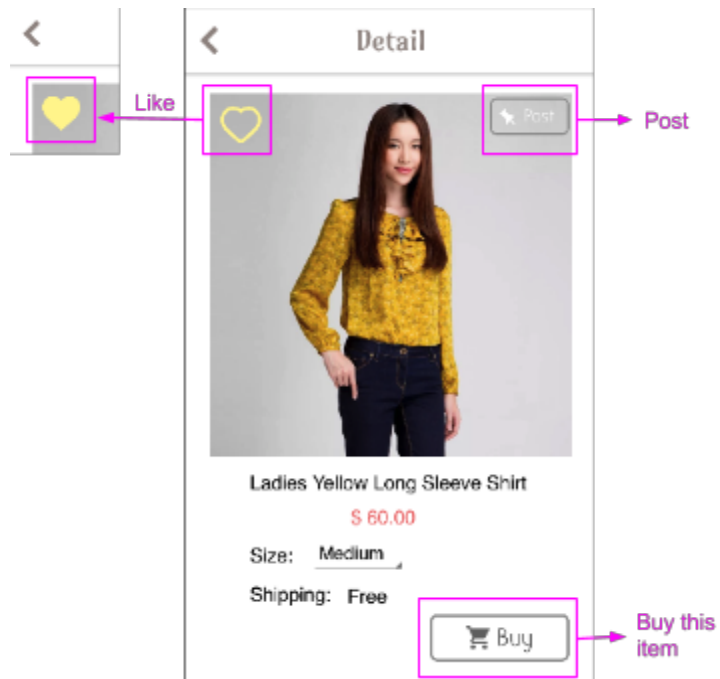Figure 3. The name of the page is changed from "Discover" to "News Feed".

Figure 4. We redesign the "Post", "Like" and "Buy" buttons making the "Buy" option more visible.