

HORIZON

I TESTING the USABILITY of a MOBILE IMAGE SEARCH TOOL

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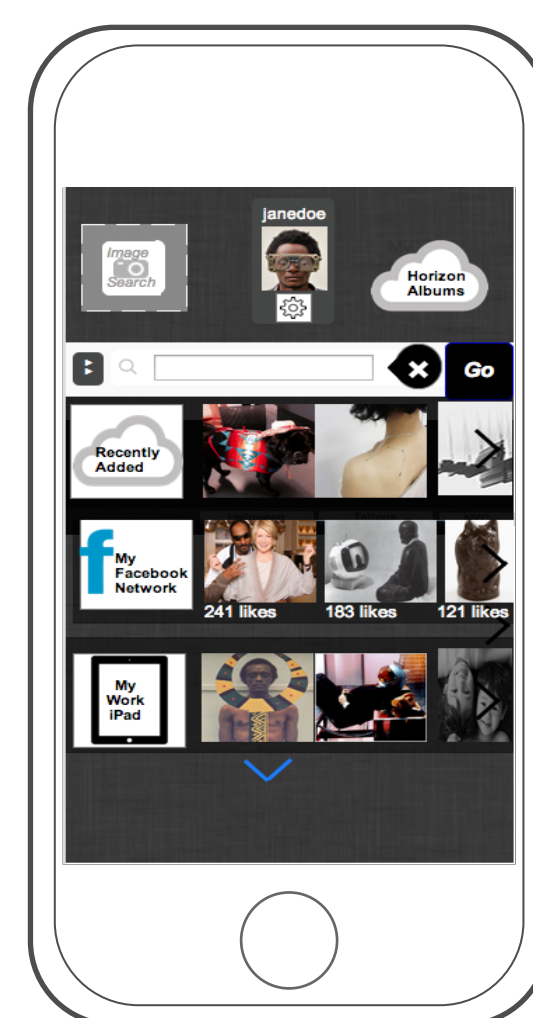
Introduction

Research Motivation

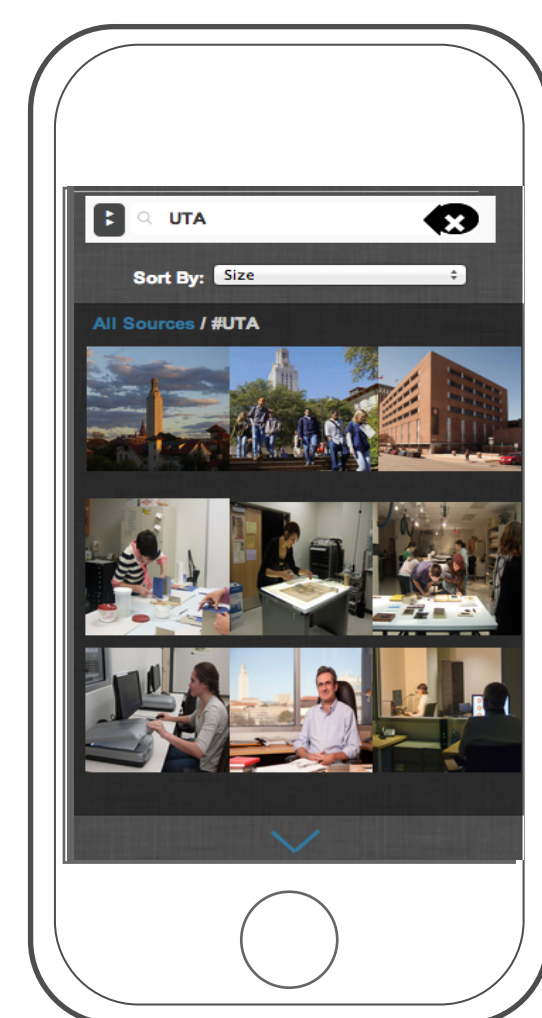
Evaluate the usability of a new image search mobile application called Horizon.

What is Horizon?

- Mobile, multi-platform image search engine
- Capable of searching for images across:
 1. Users' devices (desktop, mobile, peripheral)
 2. Online platforms (like iCloud or Flickr)
 3. Social media (Facebook and Instagram)



Home page



Search results



Metadata tags

Study Design

Six subjects completed multi-part usability testing centered on work tasks.

Variables

- Effectiveness (error rate)
- Efficiency (response time)
- User satisfaction (interview)
- Results (end product)

Data collection methods

- Pre-test survey
- Morae screen-tracking software
- Post-test interview

Tasks

1. Observing the home page and navigating
2. Search for images using text and add to the album
3. Search using camera and images; filter results using tags, text, and size; add to the album
4. Search and receive no results; use alternative suggestions

Results

Overall

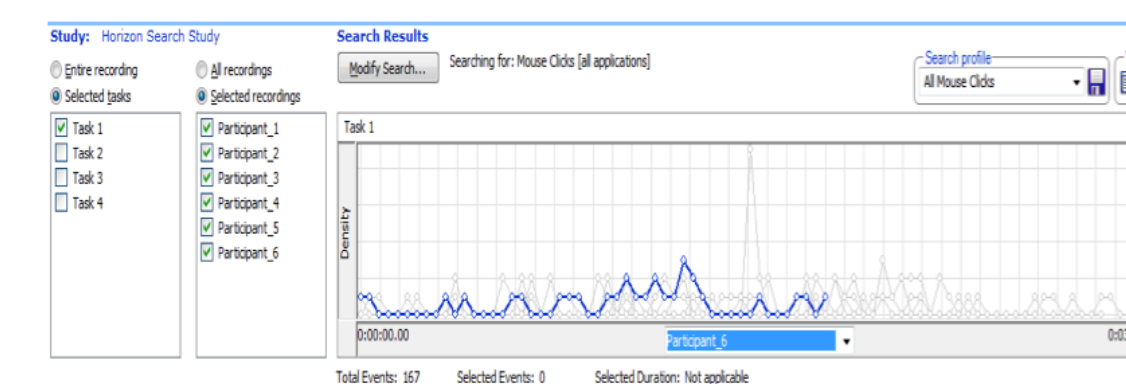
- 4 out of 6 participants reported a positive experience
- Two participants reported mixed feelings; while the application was initially easy to navigate, midway during task #3 they grew "frustrated."
- Both participants cited an inability to locate search filters and return to the home screen as the source of frustration.

Mental Model

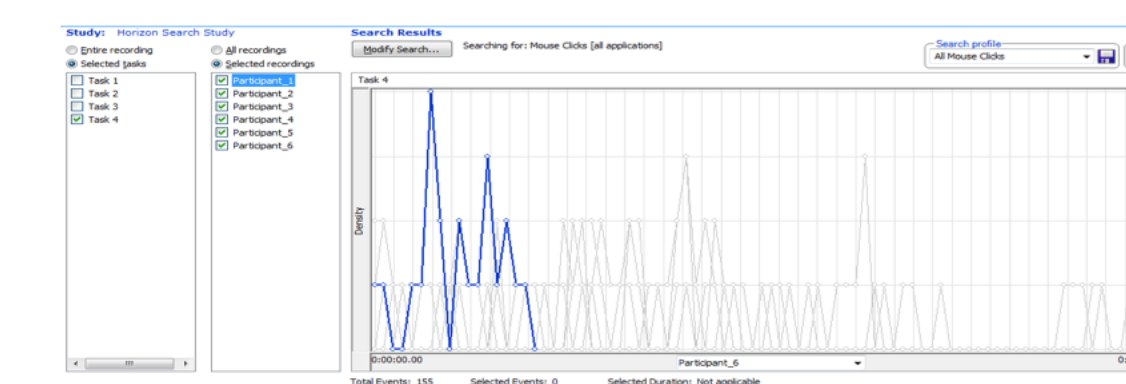
All participants were able to correctly describe the application's use and could accurately recall how search queries were constructed (tags, images, text).

Search Experience

Users described the interface as simple and intuitive. The clear icons aided in navigation. Morae results - clicks, time spent, end results - from tasks #1 reflect this success.



Task #1 - Activity report



Task #4 - Activity report

Filters and Query Reformulation

4 of 6 users reported problems with filter design. 2 failed to locate filters. Only one subject completed all filter tasks. Query reformulation was also unsuccessful. Morae results for task #4 illustrate the user drop-off.

Discussion

- Horizon satisfied needs for image search and organization.
- Users varied in subject and technical skills. Morae and survey results show that filtering and query reformulation created difficulty for less skilled users.
- Improvements to navigation-static home icon, back button-will help Horizon hit the sweet spot between excess functionality and over-simplicity.

Further Research

Do redesigned filters and added navigation improve query reformulation?

Can accessibility be improved for low-vision users?