



Redesign of Web Albums Website

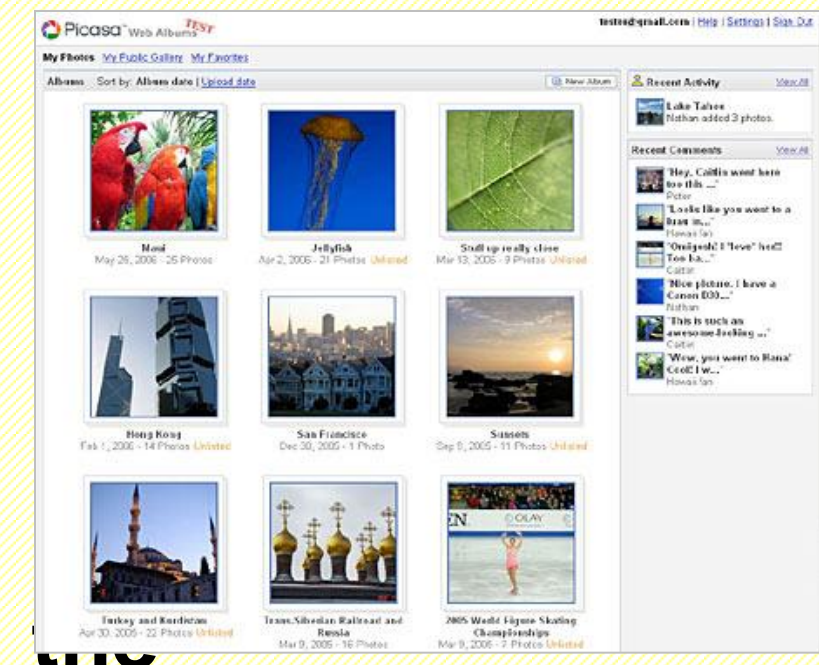


Introduction

As part of the Human Factors and Ergonomics curriculum at San Jose State University, a comparative evaluation of the Picasa web application was performed.

The objective of the evaluation was to define the principles that the application violates or ignores completely, to show examples of areas where the web applications could be improved by utilizing Human Computer Interaction concepts within the company's design, and suggest possible improvements to the applications where applicable.

Once the comprehensive evaluation was completed, we were then tasked with redesigning the interface with HCI best practices in mind. The final step of the evaluation and redesign was to conduct user studies of the new design. **This poster shows the progression of evaluation, redesign and user study.**



Task Breakdown of Issues

At the beginning of the process the web application was evaluated based on the some of the design principles shown below. During this process, **we assigned the application positive or negative ratings as well as an overall task rating.**

Uploading Photos	
Usability Design Principle	Picasa
Mapping	+ Buttons are mapped to user Mental Models
Feedback	- Poor feedback on upload status makes users wonder if program has hung
Visual Design	+ Sparse but follows gestalt principles of visual design.
Ease of Use	- Easy to use, some ambiguity to steps like creating an album. No mass photo uploading*
Overall Rating	Fair

Managing and Editing Photos	
Usability Design Principle	Picasa
Mapping	- Ambiguous labels often cause the user to experiment, clicking on objects to determine their functions.
Navigation	- Most navigation is provided at the third, local page, level through the use of "bread crumbs" or links, which are less salient than the less often used second level navigation.
Overall Rating	Fair

Once the issues were determined the next step was to define a user profile then redesign the website and develop an interactive prototype for demonstration.

Defining the Intended Audience and Users Profile

Because of the ease of access of Picasa Web Albums and the desire to post photos quickly and share them, the age range of the audience who actively use Picasa is quite large. For the purpose of this project the typical user was defined as a person (irrespective of gender) between the ages of 18-50.



Data collection

After users interacted with the original site, they were then given a chance to use the updated site design. Finally, they were given a survey to assess their ratings of "ease of use" and "satisfaction" with the redesign.

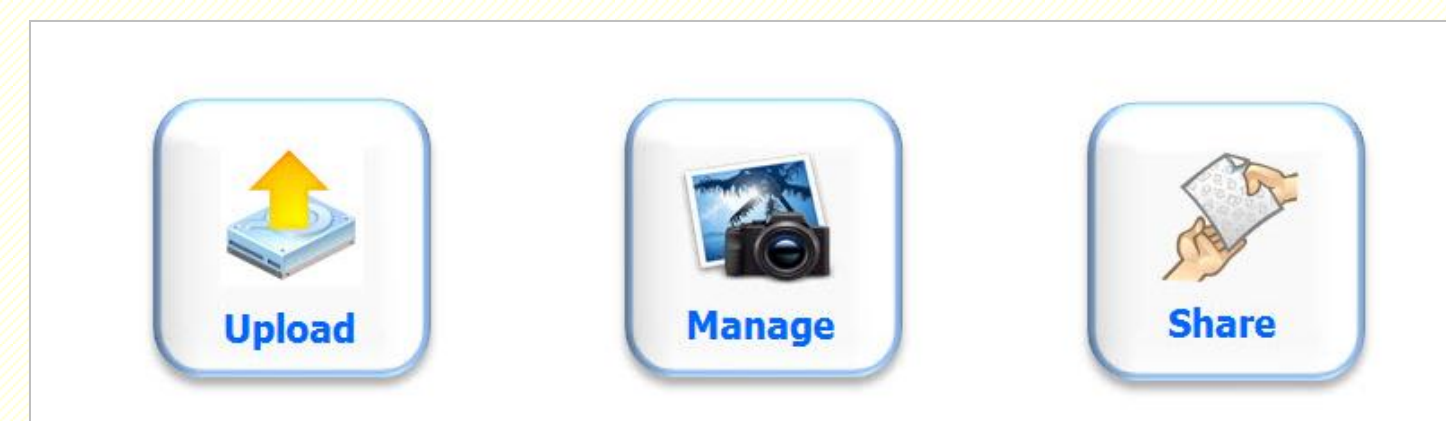
Designing the Prototype

The design of the prototype took place over several weeks using the prototyping software: **Axure**. With Axure, we were able to rapidly prototype the interface and develop interactivity with ease. Screenshots of the interface were taken with Snagit.

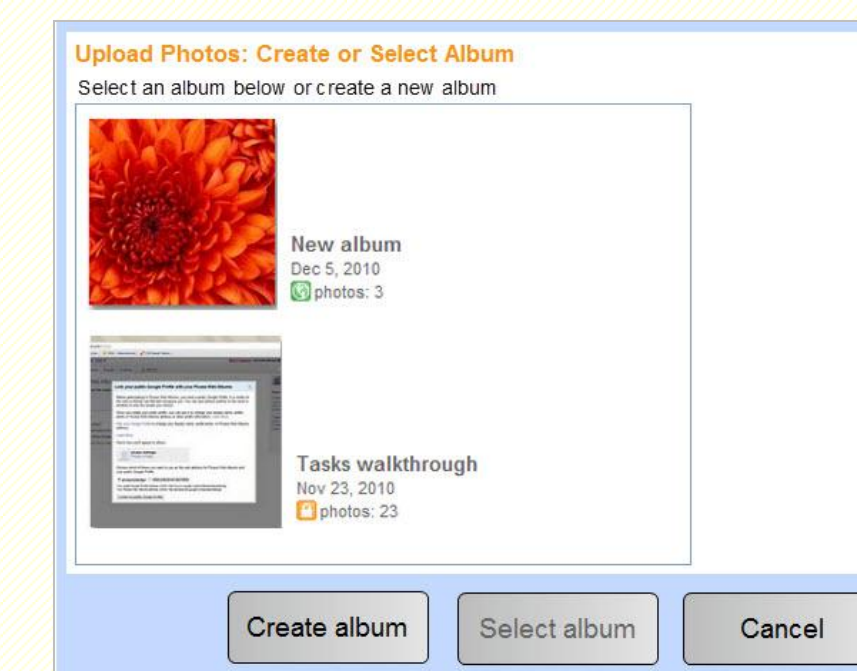


The Prototype - New Design Elements

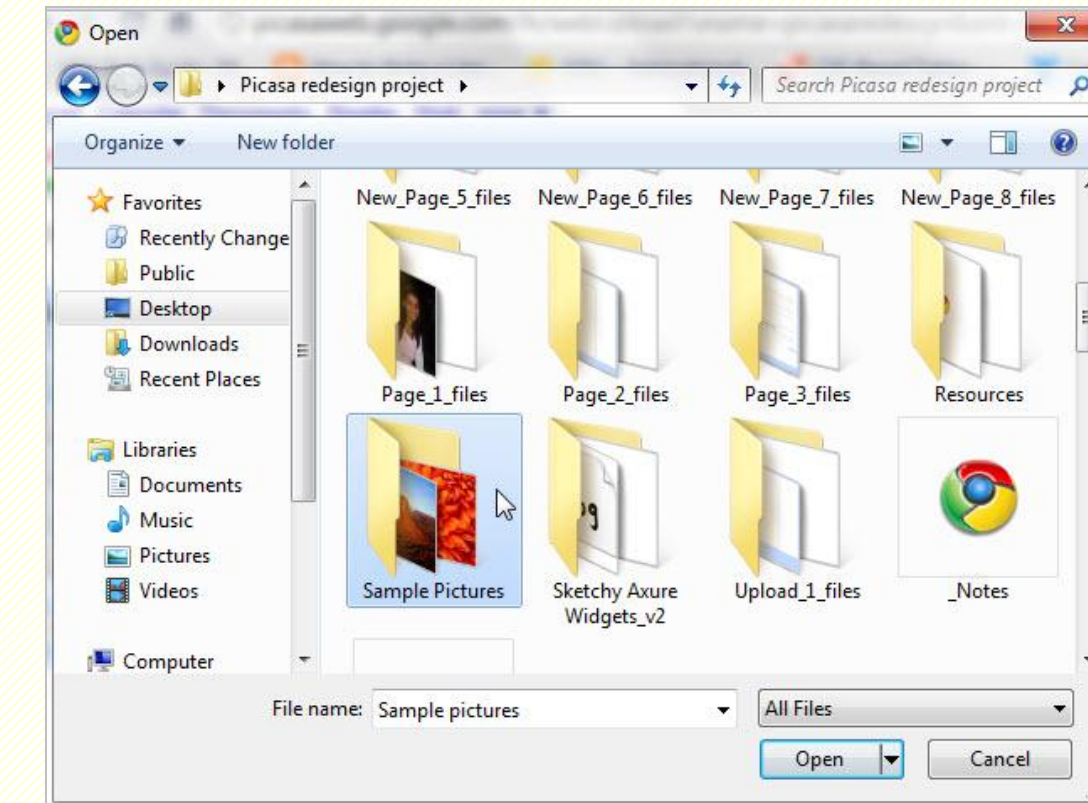
Simplified Landing Page



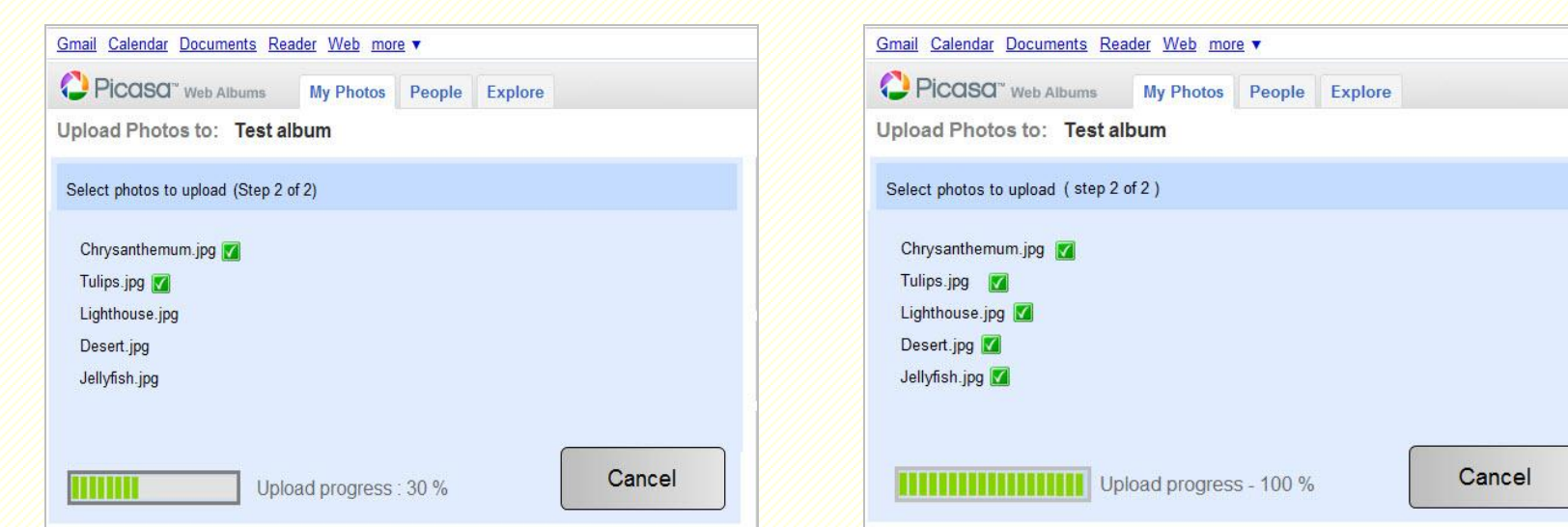
Fitts' Law Redesigns



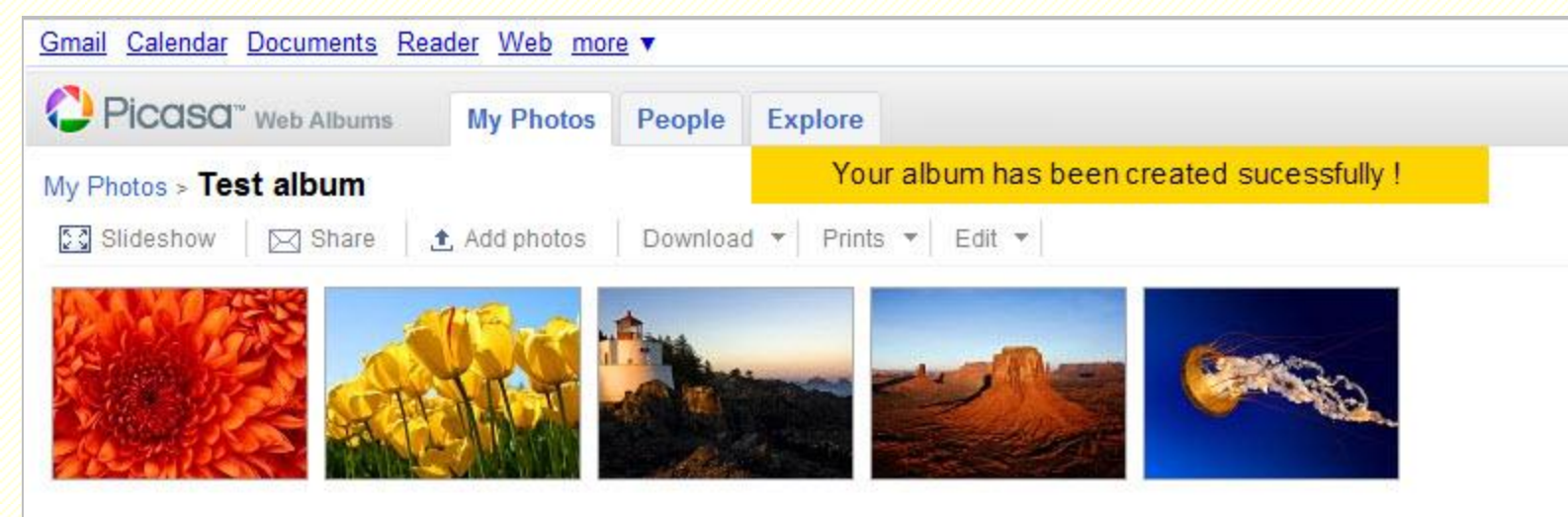
Mass Uploading



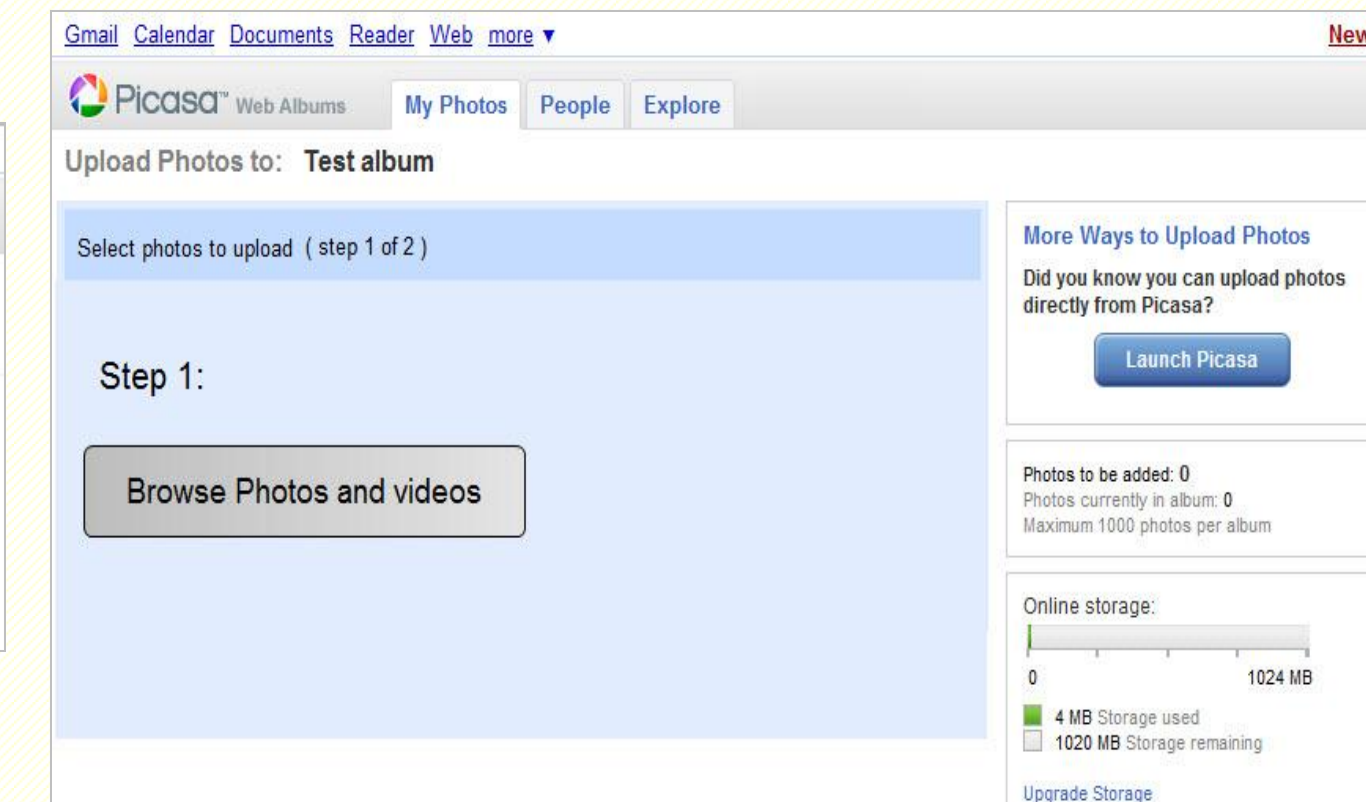
Animated Status Displays



Salient Feedback



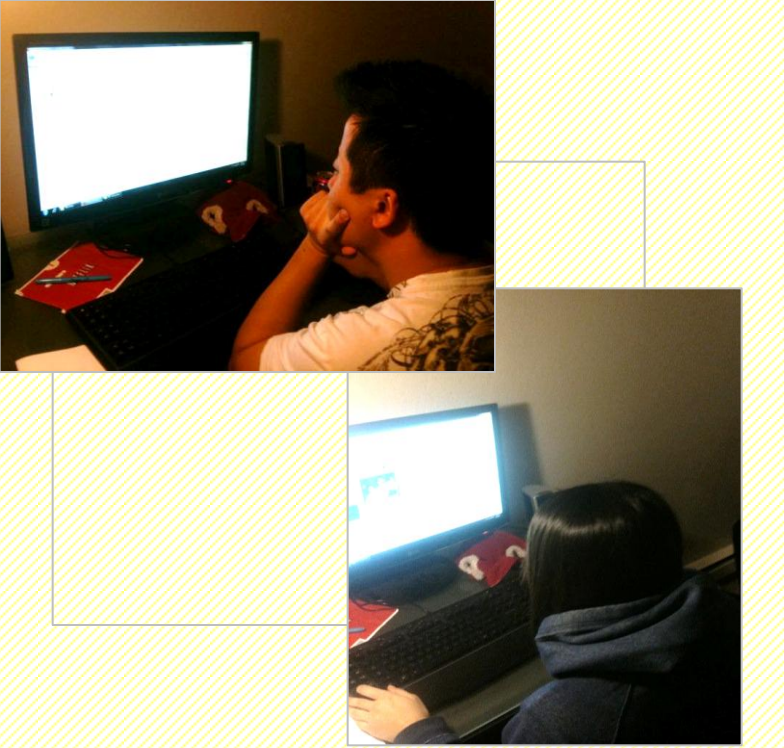
Hick-Hyman Law Redesigns



User Evaluations of the Redesigned Site

We evaluated the prototype by testing it with 5 participants.

We also asked our participants to fill out a survey. The survey and results are shown below.



The Survey

Picasa prototype - usability survey

* Required

1. How easy did you find the task - Uploading photos ? *

- ☐ Very difficult
☐ Difficult
☐ Moderate
☐ Easy
☐ Very easy

2. How easy did you find the task - Editing and managing photos ? *

- ☐ Very difficult
☐ Difficult
☐ Moderate
☐ Easy
☐ Very easy

3. How easy did you find the task - exploring photos ? *

- ☐ Very difficult
☐ Difficult
☐ Moderate
☐ Easy
☐ Very easy

4. How would you describe the overall ease of use ? *

- ☐ Very difficult
☐ Difficult
☐ Moderate
☐ Easy
☐ Very easy

5. How satisfied are you with the redesigned version of Picasa ? *

- ☐ Very dissatisfied
☐ Dissatisfied
☐ Neutral
☐ Satisfied
☐ Very satisfied

Survey Results

	A	B	C	D	E	F
1. How easy did you find the task - Uploading photos ?	Participant #	1	2	3	4	5
2. How easy did you find the task - Editing and managing photos ?	P1	Very easy	Very easy	Very easy	Very easy	Very satisfied
3. How easy did you find the task - exploring photos ?	P2	Easy	Easy	Very easy	Easy	Satisfied
4. How would you describe the overall ease of use ?	P3	Easy	Very easy	Moderate	Moderate	Satisfied
5. How satisfied are you with the redesigned version of Picasa ?	P4	Easy	Moderate	Very easy	Easy	Very satisfied
	P5	Very easy	Easy	Very easy	Easy	Very satisfied

User Comments

- P1 - "I think this is a very nicely designed interface."
- P5 - "You mean it didn't have that before?"
- P2 - "That was really easy. Uploading was a breeze."
- P4 - "This change probably made Fitts very happy"
- P3 - "I didn't like how I had to read every single button to figure out what I wanted to do, the Icons make it easier to navigate."

Conclusions – Picasa Should:

- Improve the **feedback** during the upload process with more animated status displays and flyover text.
- Improve on some the **affordances** by presenting users with recognizable icons on buttons instead of text that links to features.
- Improve the **visual design** of its navigational structure by adding breadcrumbs and making local level navigation features more salient.
- Provide more descriptive labels for many of the on-screen elements. This would allow users to **recognize** functionality (**rather than recall** it) and also help assimilate the site's functions into previously existing schemata while users develop a mental model of the site.
- Work on their mapping elements because of their undersized and varied use of symbols this would improve **consistency**.
- Improve their **navigation** structure by adding an option of switching between different albums instantly, when the user is in viewing images on one album.
- Increase the amount of **cross-pollination** within the site to allow users to go forward and back through their site without using browser buttons