Redesigning the Photo Album

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Problem/Motivation

Advancements in digital photo technology have allowed users to take an increasing number of photos. As the quantity of photos taken has risen, the means of organization has stayed relatively the same: the photo album.
Problem/Motivation

- Finding photos can be overwhelming due to:
  - Folder hierarchy with arbitrary ordinal labels
  - Photos scanned in batches of thumbnails at a time

- Only works provided users are familiar with their albums
- As data storage gets cheaper, organizational problems will only grow
Project Goals

• Minimize amount of time to find a photo
• Allow interesting patterns to emerge through photo organization
• Minimize reliance on data preparation
• Create an experience that users rate:
  – Efficient
  – Enjoyable
  – Intuitive
Related Interfaces

Unfortunately the method many rely on
Related Interfaces
Related Interfaces
References

• Zooming Graphical Interface: http://portal.acm.org/citation.cfm?doid=192426.192435
• Dynamic Space Management: http://monet.cs.columbia.edu/publications/uist00.pdf
• Adaptive Grid Based Layout: http://portal.acm.org/citation.cfm?id=882353&coll=GUIDE&dl=GUIDE&CFID=64288392&CFTOKEN=3178345
• Small Multiples: Tufte Chapter 4
• Gestalt Studies on Grouping
Challenges

• **Primary Challenge:** Use adaptive layout techniques to make browsing an efficient intuitive experience

• Use metadata to selectively group and display photos

• Display information in a interesting way that allows holistic patterns of user to emerge
  – Geographical behavior
  – Historical behavior
Approach

• **User Research:** In a problem so intimately tied to the user’s personal life, it is crucial to first perform a needs and usability analysis.

• **Exploration of Grouping:** The next step is to find an efficient way to create a relationship between images using metadata.

• **Layout Techniques:** The final step would be to prototype a variety of layout and receive user feedback as to which meets initial design goals.
Initial Concepts

- **Tag Search**: Provide ability to input multiple tags e.g. time + keyword
  - Search results in relevance value
  - Relevance value correlated to thumbnail size and position
- **Related Pictures Search**: Each picture links to a variety of other pictures based on specified attribute e.g. person, time, location
Milestones

- **Phase I**: User research conducted to find root needs
- **Phase II**: Photo metadata and data prepping is explored
- **Phase III**: Effective grouping relationship determined
- **Phase IV**: Layout techniques prototyped in Flare
- **Phase V**: User feedback gathered; optimizations made