Media galleries in mobile devices – Guidelines for aiding future product decisions

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Presentation outline

- Background
- Research questions
- Research methods
- Leading media gallery products
- Usability evaluations of focus products
- Guidelines
Background

- Thesis written at Nokia Multimedia in Jyväskylä

- Supervisor: Timo O. Korhonen (HUT Comlab)

- Instructor: Tuomo Sippola (Nokia)
Media galleries in mobile devices

- Memory capacity is increasing
- Mobile devices can more often capture and play media files, e.g. camera phones

➤ Amount of media in mobile devices is growing
Research questions

- What features should a media gallery in a mobile device have?

- How to achieve good usability in a media gallery?
  - What are the most common usability problems in current media galleries?
Method – Literature review

- Related research
  - How people use digital images? What recommendations and guidelines exist?
- Magazine reviews
  - What is hot and what is not?
- Usability evaluation methods
  - What method is most suitable in this study for evaluating usability of focus products?
Leading media gallery products

- Computer
  - Adobe Photoshop Album, ACDSSee, Apple iPhoto, Windows Media Player, Windows XP Media Center Edition etc.

- Mobile
  - Windows Portable Media Center, SplashPhoto, Nokia Lifeblog, Apple iPod Photo etc.
Some common and popular features

- Files can have unlimited amount of tags
- View mode can be personalized
- Files can be rated, e.g. on a one-to-five scale
- Images can be edited and viewed with a fancy slideshow
- Co-operation with computer and mobile software
Focus products

- Resco Photo Viewer
- SplashPhoto
- Nokia 6630 media gallery
- Nokia Lifeblog
Method – Heuristic evaluation

- Finds lot of usability problems
- Easy set-up enables many evaluations
- Carried out in three phases
  - Familiarization
  - Walkthrough based on typical tasks
  - Walkthrough based on heuristics (Nielsen’s 10 heuristics)
Jakob Nielsen’s 10 heuristics

- Visibility of system status
- Match between system and the real world
- User control and freedom
- Consistency and standards
- Error prevention
- Recognition rather than recall
- Flexibility and efficiency of use
- Aesthetic and minimalist design
- Help users recognize, diagnose, and recover from errors
- Help and documentation
Findings from heuristic evaluations

- Some basic functions were hidden
- Help and searching were generally poor
- Managing large amount of files difficult without a marking tool
- Editing of file properties sometimes difficult or even impossible (mp3 files)
- Violating of Series 60 standards caused errors
- Image editing can be simple and suitable for mobile phone use
Guidelines 1/4

- Navigation
  - changeable views (list, grid, timeline)
  - hide the folder structure

- Annotating
  - name, date, event, people etc.
  - (semi-)automatic and easy to edit
Guidelines 2/4

- Thumbnail previews
  - also for videos and music (album art)

- Sorting
  - by any detail

- Searching
  - simple and quick search
Guidelines 3/4

- Sending and sharing
  - support to sending and publishing files, e.g. blogging

- Basic editing
  - rotating, cropping and adjusting of images

- Resetting changes
Guidelines 4/4

- Printing
- Synchronizing with computer software
- Context sensitive help
- Slideshow with effects
- Fun
Thank you!

Questions?

Comments?