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, ACDSee, Apple iPhoto, Windows Media Player, Windows XP Media Center Edition etc.

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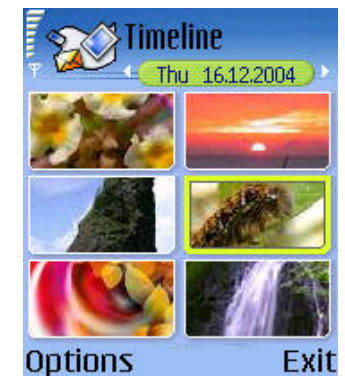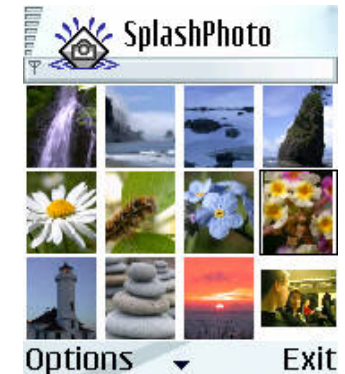 - Windows Portable Media Center, SplashPhoto, Nokia Lifeblog, Apple iPod Photo etc.
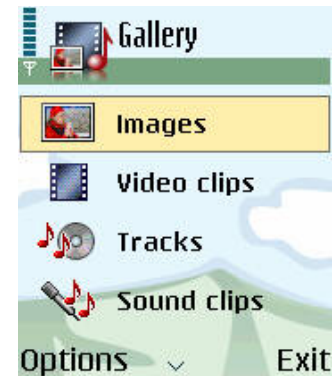
Some common and popular features

- 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 standars 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?