SongWords

Final presentation of project thesis
Outline

• Motivation
• User interface
• Implementation
• Evaluation
Motivation

- Personal digital music collections can now easily contain tens of thousands of songs
- Usual solution for exploration: Endless lists of text
- Related research: use of musical similarity information
- Goal of SongWords: To provide a casual interface for music exploration, based on similarity of lyrics
Why lyrics?

- Lyrics can be acquired easily from online databases
- Lyrics are objective
- Lyrics possess high descriptive value
Goals

• Aid exploration of music collection and discovery of new songs
• Casual, intuitive user interface
• Support for desktop and tabletop interaction
• Provide unified user interface
User interface

- Individual songs displayed as icons
- Zoomable user interface
- Arrangement of icons by text (see image), genre or alphabet
- Animated transitions between views
User interface (cont.)

• Display of own collection and songs from Web

• Song icons use semantic zoom (see image)

• Text can be selected and used for searching

• Interaction using only mouse (desktop) or fingers (tabletop)
Arrangement

• Arrangement using self-organizing map
• Feature vectors for all songs
• Color coding represents variety
• Genres based on tags from last.fm
Multi-touch interaction

• Entire user interface can be rotated
• Multi-touch interaction on tabletops
• Can process arbitrary amount of contacts
• Simulates real-world metaphor
Video
Evaluation

• Qualitative user study
• Six participants
• Higher satisfaction with tabletop, discovery failed
• Performance bottleneck: Item download
Thank you for your time!