CHIP Project

Cultural Heritage Information Personalization

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CHIP: Information Personalization

- CATCH program

- Cultural Partner
  - Rijksmuseum Amsterdam

- Cultural Goal
  - Personally engaging Website

- Scientific Goal
  - Personalization of Presentation & Navigation
  - Interactive User Modelling
  - Semantic-based User Interaction & Data Access
Personalization of RMA Web Site

- E-ticketing
- E-shop
- News
- Courses
- Virtual tours
- Collection browse

RMA Website

My Rijksmuseum

User Model

Uses / Updates

visits

Staff DB

Clients DB

Metadata

Data Model

RMA Collection

Uses / Updates
Interactive User Profile Building

- **Unobtrusive & User-friendly way to collect user data:**
  - Personal preferences
  - Art & history interests
  - Emotional characteristics
  - etc.

- **Semantic enriched data for efficient:**
  - Navigation and browsing of Rijksmuseum collection
  - Feedback to the user
  - User profile conceptualization
  - Recommendation generation

- **Personalized Services on the Rijksmuseum Web site:**
  - Personalized tours of the museum
  - Surprise tour of the museum
  - Art & history tour of the museum
Find out what you like in the Rijksmuseum collection

Artefact to rate

Profile

Like topics

Artists (3)
- Rembrandt Harmensz. van Rijn
- Gerard Dou
- Raffaello Sanzio

Places (60)

Themes (6)
- Woman
- Rembrandt's circle
- Female portraits
- Amsterdam views
- The Glory of the Golden Age

Dislike topics

Artists (1)
- Willem Witsen

Places (0)

Themes (0)
- Netherlands and the Water
- Chalk drawings
- Landscape painting
- Water, ice and snow
- Riverscapes

Like artefacts

Dislike artefacts

Recommended topics

Artists (4)
- Judith Leyster Why?
- Willem Claesz. Heda Why?
- Gerard ter Borch II Why?
- Gabriel Metsu Why?

Places (0)

Themes (53)
- Expressions, Poses and Gestures (theme) Why?
- Artists and their Studios (theme) Why?
- Figures (women) (term) Why?
- Brush technique (encyclopedia) Why?
- Love and Sex (theme) Why?

Recommended Art objects (548)
Recommendations

- Content-based
- Statistical analysis of the collection
  - Top artists
  - Most occurring themes

- Recommend **domain topics** related to the user profile:
  - Artists
  - Themes
  - Periods and locations

- Recommend **artefacts** related to the user profile
RMA Data

- **ARIA**
  - 750 artefacts
  - Website targeted
  - Current focus

- **Adlib**
  - 50,000 artefacts
  - Curator targeted

- **Flash formats**
  - Focus on document/interface structure
  - Website targeted
External Ontologies to Integrate

- AAT
  - Styles
  - Periods
- ULAN: artists
- TGN: locations
- Iconclass
  - Topics and Themes
Demonstrator Evolution

- Explored several concepts for:
  - Interaction
  - Information visualization
  - Content-based recommendations
  - User profile presentation

- Analyzed the RMA data:
  - Introducing structure to existing ARIA vocabularies
  - Add styles information
  - Add use of external domain ontologies
Evaluation plans

- On-line user studies:
  - Users: Rijksmuseum visitors
  - Test procedure:
    - Online, without examiner
    - Questionnaire

- Off-line Test Sessions:
  - Users:
    - Rijksmuseum experts
    - Art lovers
    - General users (of different age groups)
  - Test procedure:
    - With examiner
    - Video, walkthrough, think-aloud, task-centered, etc.
    - Questionnaires
Evaluation plans (2)

- Evaluation criteria:
  - Requirements
    - User Interface
    - Functional
  - Success factors
  - Golden standards for various tasks
  - Statistical criteria
    - Precision, recall
    - Time
Links

- Demo URL: http://www.chip-project.org:8091/devDemo/

- CHIP Web Site: http://www.chip-project.org/
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