Corso di Biblioteche Digitali

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- "Ricevimento" at the end of the lessons or by appointment
- Final assessment
  - 70% oral examination
  - 30% project (development of a small digital library))
- Reference material:
  - Ian Witten, David Bainbridge, David Nichols, How to build a Digital Library, Morgan Kaufmann, 2010, ISBN 978-0-12-374857-7 (Second edition)
  - Material provided by the teacher
- **http://cloudone.isti.cnr.it/casarosa/BDG/**

Modules

- Computer Fundamentals and Networking
- A conceptual model for Digital Libraries
- Bibliographic records and metadata
- Information Retrieval and Search Engines
- Knowledge representation
- Digital Libraries and the Web
- Hands-on laboratory: the Greenstone system
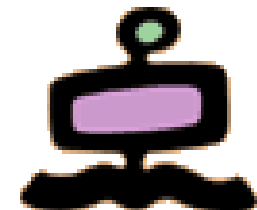
Parallel evolution

Libraries

- Description (documents)
  - Bibliographic records
  - MARC
- Interoperability
  - Z39-50
- Conceptual model (classes)
  - FRBR – LRM for Works, Expr., Manif.
- Information Retrieval
  - Full text (catalogue and documents)

The Web

- Description (instances)
  - Metadata
  - Dublin Core
- Interoperability
  - OAI-PMH
- Conceptual model (classes)
  - RDF and RDF Schema for all resources (ontologies)
- Information Retrieval
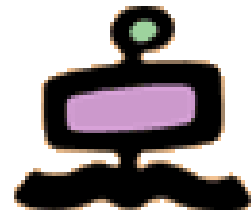 - Full text (web pages and resources)

Will the Web become the ultimate (digital) library ?

The Web

Traditional role of libraries

Mediators between information and users

- Selection [Google]
  - Definition of collections
- Acquisition [crawlers, spiders, bots, etc.]
  - Physical objects
- Description [Dublin Core and metadata]
  - Catalogs
- Access [Internet and the Web]
  - Shelves
- Preservation
  - Controlled enviroment

[digital]

a) forever
 b) the next five years
    whichever comes first

A Digital Library's Mission

A Digital Library 's mission is, for a selected user community, to organize that community's information and make it universally accessible and useful to that community.

Organize
- According to the needs of the user community (art, photographs, scientific data, ...)

Community's information
- Information (including data) generated by the community
- That can be reached through the web
- That can be licensed (or purchased)

(Universally) accessible
- Via internet (including via web search)
- Internationalized and localized

Useful: focussing on and meeting users' needs within the selected user community

Google's Mission

Google's mission is to organize the world's information and make it universally accessible and useful.

Organize
- By vertical/property: Scholar, Book Search, Product Search, News, Maps, etc
- By search

World's information
- What we can reach through the web
- What we license

Is Google(*) the world's Digital Library?

* put here your favourite search engine

Universally accessible
- Via internet
- Internationalized and localized

Useful: focussing on and meeting our users' needs

Major Differences in Missions

- Scale

- Information: broad versus deep coverage

- General versus specific communities (and therefore needs)

- Organizing principles (can be very different)

- Services provided: how we "add value" to information/data

Other considerations

- Profit

- Quality, conservation and preservation

- Authority

Conclusions

- Web Search (Google) and Digital Libraries share similar but complementary missions

- Celebrate the diversity of missions, and concentrate on strengths whether as web search engine or digital library
  - Web search engines: scale, universal delivery, universal services
  - Digital libraries: specialized collections, specialized services, "library" services

- Focus on delivering value to users through useful and relevant (web) services ("Focus on the user and all else will follow")

- Web search is a service that Digital Libraries should exploit to ensure universal access to information and services

The evolution of "libraries" (and "librarians")

contents

clay tablets, papyrus, paper ➡ paper, pictures, audio, video ➡ digital "surrogates" born digital objects

institutions

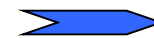libraries, museums, archives, ... ➡ Digital Library ➡ ~~Digital~~ Library
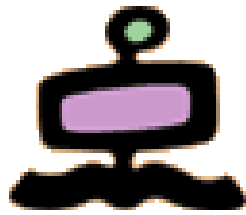
people

librarians, curators, etc ➡ "digital librarians", "digital curators", etc ➡ ??????? You, the Internet generation, are the answer

That's the end, folks

Many thanks for your attention (and your patience)

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