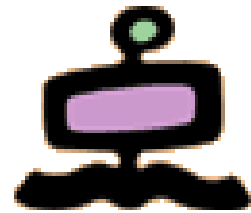


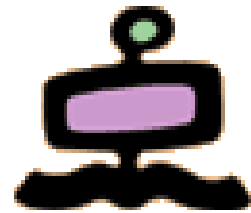
- Vittore Casarosa
 - casarosa@isti.cnr.it
 - Office: 050 621 3115
 - Mobile: 348 397 2168
 - Skype: vittore1201
- “Ricevimento” at the end of the lessons or by appointment
- Final assessment
 - 70% oral examination
 - 30% project (development of a small digital library))
- Reference material:
 - Ian 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



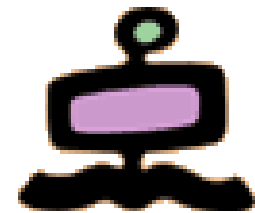
Libraries

- 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)

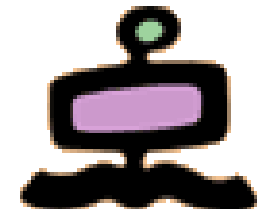
Recurring question



Will the Web become the ultimate (digital) library ?



Traditional role of libraries

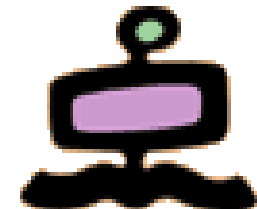


Mediators between information and users

digital

- 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 — a) forever
b) the next five years
whichever comes first
 - Controlled environment

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

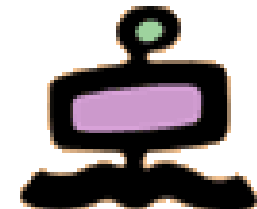
- Information (including data) generated by the community
- That can be reached through the web
- That can be licensed (or purchased)

(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

Universally accessible

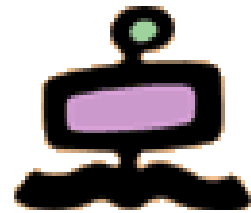
- Via internet
- Internationalized and localized

Useful: focussing on and meeting our users' needs

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

*** put here your favourite
search engine**

Major Differences in Missions

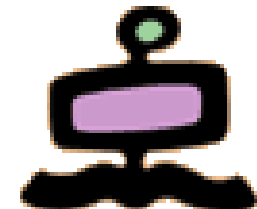


- Scale
- Information: broad versus deep coverage
- General versus specific communities (and therefore needs)
- Organizing principles (can be very different)
- Services provided: how we “add value” to information/data

Other considerations

- Profit
- Quality, conservation and preservation
- Authority

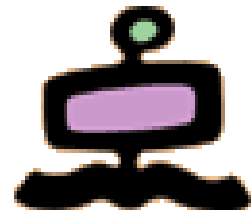
Conclusions



- 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



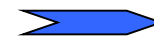
~~Digital Library~~

people

librarians,
curators,
etc



“digital librarians”,
“digital curators”,
etc

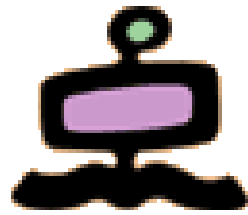


???????

You are the
answer



That's the end, folks



Many thanks for your attention
(and your patience)

casarosa@isti.cnr.it