Metadata Introduction

1. What is Metadata?
The simplest useful definition of *metadata* is "structured data about data." This very general definition includes an almost limitless spectrum of possibilities ranging from human-generated textual description of a resource to machine-generated data that may be useful only to software applications..
http://purl.org/dc/education/index.htm

2. Metadata Activity Statement
There is now a wealth of information on every subject available on the Net. For many, however, the true excitement of the Web is in the services that you can access from your home or office. Today's Web gives people access to news, to the weather and to financial services. Via the Web, users can purchase books, computers, clothes, and any number of other items; you can book seats on planes and rooms in hotels. **The possible uses of the Web seem endless, but there the technology is missing a crucial piece. Missing is a part of the Web which contains information about information - labeling, cataloging and descriptive information structured in such a way that allows web pages to be properly searched and processed in particular by computer**. In other words, what is now very much needed on the Web is metadata. W3C's Metadata Activity is concerned with ways to model and encode metadata. A particular priority of W3C is to use the Web to document the meaning of the metadata. Our strong interest in metadata has prompted development of the Resource Description Framework (RDF ™) and its relative PICS ™ (Platform for Internet Content Selection). PICS is now complete; work on RDF continues.
http://www.w3.org/Metadata/
http://www.w3.org/RDF/
http://www.w3.org/Metadata/Activity.html

3. What is the purpose of Dublin Core metadata?
Dublin Core metadata is specifically intended to support *resource discovery*. The elements represent a broad, interdisciplinary consensus about the core set of elements that are likely to be widely useful to support resource discovery.
Dublin Core Intro and FAQ...
http://purl.org/dc/education/index.htm

4. Dublin Core Metadata Element Set, Version 1.1: Reference Description

The Element Set:

1.	**Element:**	**Title**
2.	**Element:**	**Creator**
3.	**Element:**	**Subject**
4.	**Element:**	**Description**
5.	**Element:**	**Publisher**
6.	**Element:**	**Contributor**
7.	**Element:**	**Date**
8.	**Element:**	**Type**
9.	**Element:**	**Format**
10.	**Element:**	**Identifier**
11.	**Element:**	**Source**
12.	**Element:**	**Language**
13.	**Element:**	**Relation**
14.	**Element:**	**Coverage**
15.	**Element:**	**Rights**

The Element Set with Samples:

1. Element: Title
Sample: <meta name = "DC.Title" content = "Polycyclic aromatic hydrocarbon contamination">

2. Element: Creator
Sample: <meta name = "DC.Creator" content = "van Gogh, Vincent">

3. Element: Subject
Sample: <meta name = "DC.Subject" content = "heart attack">

4. Element: Description
Sample: <meta name = "DC.Description" content = "Seated family of five, coconut trees to the left, sailboats moored off sandy beach to the right, with volcano in the background.">

5. Element: Publisher
Sample: <meta name = "DC.Publisher" content = "Digital Equipment Corporation">

6. Element: Contributor
Sample: <meta name = "DC.Contributor" content = "Sendak, Maurice">

7. Element: Date
Sample: <meta name = "DC.Date" scheme = "WTN8601" content = "1998-05-14">

8. Element: Type
Sample: <meta name = "DC.Type" content = "interactive video game">

9. Element: Format
Sample: <meta name = "DC.Format" content = "video/mpeg; 14 minutes">

10. Element: Identifier
Sample: <meta name = "DC.Identifier" content = "http://foo.bar.org/zaf/">

11. Element: Source
Sample: <meta name = "DC.Source" content = "http://a.b.org/manon/">

12. Element: Language
Sample: <meta name = "DC.Language" content = "en">

13. Element: Relation
Sample: <meta name = "DC.Relation" content = "Shakespeare's Othello ">

14. Element: Coverage
Sample: <meta name = "DC.Coverage" content = "Columbus, Ohio, USA; Lat: 39 57 N Long: 082 59 W">

15. Element: Rights
Sample: <meta name = "DC.Rights" content = "Copyright Acme 1999 - All rights reserved.">

http://purl.org/dc/documents/rec-dces-19990702.htm

5. Who uses Dublin Core?

Anyone can use Dublin core elements as a convenient basis for descriptive systems. Web pages are one of the most common types of resources to have Dublin Core descriptions, often using HTML meta tags. But bulk conversions of descriptive information stored in older catalog systems and databases probably made up the largest number of Dublin Core descriptions in the early days of the initiative. Dublin Core metadata is being used as the basis for descriptive systems by several specialised communities and agencies: community based interest groups currently exist for education, libraries, government, and research. Also see the listing of Dublin Core based projects.
http://purl.org/dc/education/index.htm

6. What is the relationship between Dublin Core and other Internet standards groups?

The Dublin Core Metadata Initiative (DCMI) is a consensus building organization that has relationships in many standards activities. A number of people in the DCMI are active in the W3C (DC is the prototype application that drove the development of the Resource Description Framework, or RDF in the W3C). Our own standardization activities take place in the IETF (RFC 2413 is reference description of the initial version of the Dublin Core), and there are currently formal DC standardization activities underway in CEN (the European information industry standardization forum) and in NISO (the North American information standardization organization).

7. Practical uses of RDF

There are many practical uses of RDF. Here is a sampling of what is likely to be in the pipeline.

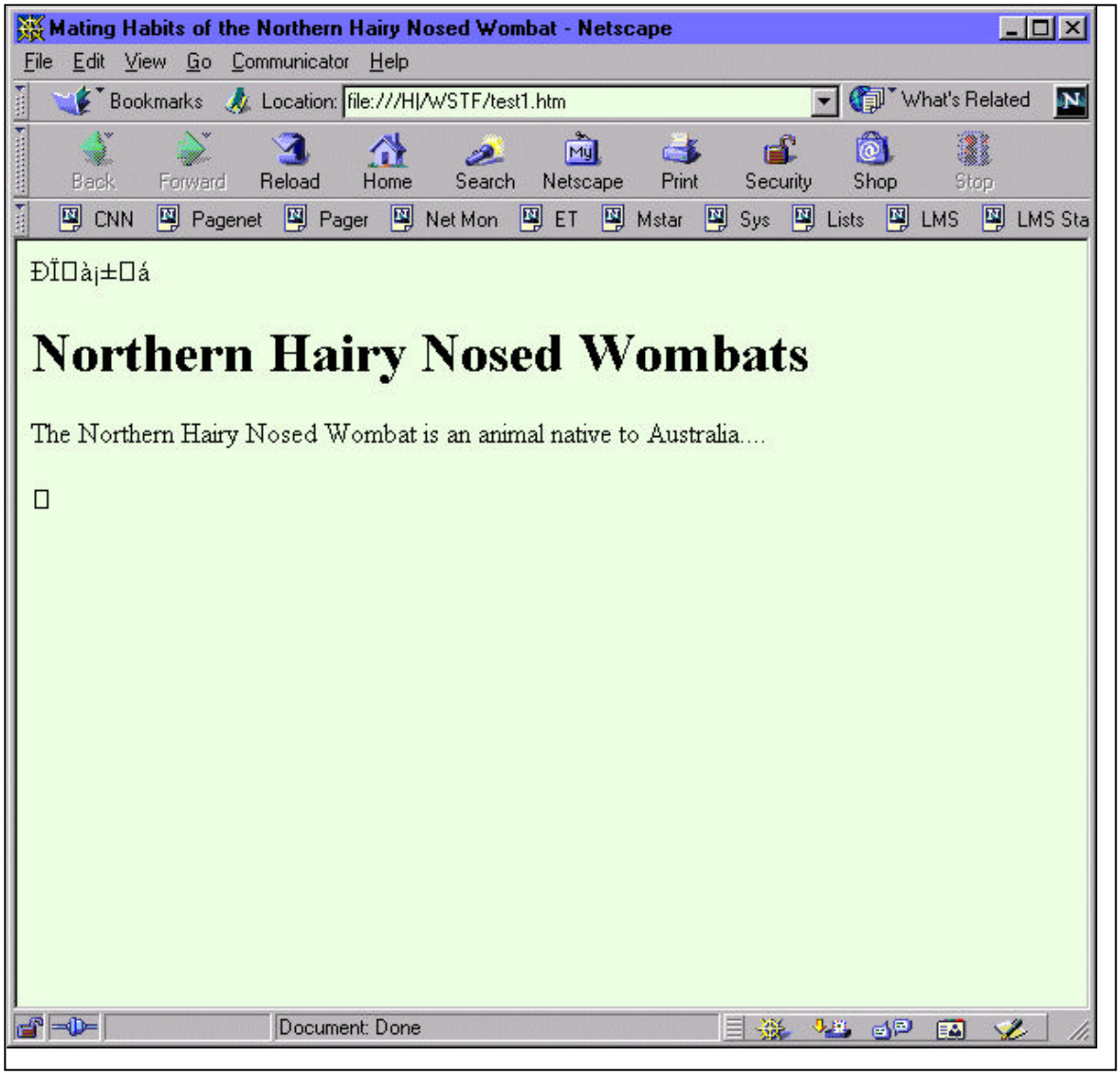
Thesauri and library classification schemes. These are well known examples of hierarchical systems for representing subject taxonomies in terms of the relationships between named concepts. The RDF Schema specification has exactly the features for creating RDF models that represent the logical structure of thesauri and other library classification systems.

Web sitemaps. **A sitemap can be seen "internally" as a description of a Web site**. The RDF Schema specification provides a mechanism for defining the vocabulary needed for this kind of application. With RDF **you can describe how one item is related to another, how one page is "a descendant" of another, and so on**.

Description of the contents of Web pages. This is one of the basic functions of the DublinCore initiative. The Dublin Core is a set of 15 properties associated with bibliographic information. These can be used to describe items on the Web sufficiently well that search engines and other software can work much more efficiently. The Dublin Core Workshop series has been a major influence on the development of RDF.

SAMPLE #1

<HTML>
<HEAD>
<TITLE>Mating Habits of the Northern Hairy Nosed Wombat</TITLE>
<META NAME= "DC.Creator" CONTENT="Smythe, Pearl">
</HEAD>
<BODY>
<H1>**Northern Hairy Nosed Wombats**</H1>
<P>**The Northern Hairy Nosed Wombat is an animal native to Australia....**</P>
</BODY>
</HTML>



Sample #2

<HTML>
<HEAD>
<TITLE>Song of the Open Road</TITLE>
<META NAME="DC.Title" CONTENT="Song of the Open Road">
<META NAME="DC.Creator" CONTENT="Nash, Ogden">
<META NAME="DC.Type" CONTENT="text">
<META NAME="DC.Date" CONTENT="1939">
<META NAME="DC.Format" CONTENT="text/html">
<META NAME="DC.Identifier" CONTENT="http://www.poetry.com/nash/open.html">
</HEAD>
<BODY><PRE>
I think that I shall never see
A billboard lovely as a tree.
Indeed, unless the billboards fall
I'll never see a tree at all.
</PRE></BODY>
</HTML>