schema.org in the wild: libraries++

Schema.org, SchemaBibExtend - Structured Data on the Web
DCMI 2014

Dan Scott / +Dan Scott

Systems Librarian, Laurentian University
Library holdings as schema:Product + schema:Offer
Or maybe Eric Miller (Oct. 2012):

From eric miller to Everyone (04:28:44 PM)

i used products only to make the point that what schema.org is focused on really is about helping accelerate more effective discovery of things that can be bought / sold. We (in the library community) can recognize this and leverage this direction to support our (more content focused) requirements.
Time for a syllogism

1. Search engines want to connect people to products
2. Libraries want to provide useful resources to people
   ... ergo ...
3. Libraries should present their resources as products that search engines can offer to people
GoodRelations e-commerce vocabulary

1. An **agent** (e.g. a person or an organization),
2. An **object** (e.g. a camcorder, a house, a car,...) or service (e.g. a haircut),
3. A **promise** (offer) to transfer some rights (ownership, temporary usage, a certain license, ...) on the object or to provide the service for a certain compensation (e.g. an amount of money), made by the agent and related to the object or service, and
4. A **location** from which this offer is available (e.g. a store, a bus stop, a gas station,...).
Library holdings-as-schema.org vocabulary

1. A agent schema:Library that offers goods,
2. A object schema:Product (e.g. a book, DVD, vinyl record, map),
3. A promise schema:Offer to provide the product, usually for free, made by the library
4. A location schema:availableAtOrFrom from which this offer is available (e.g. a section of the library).
Hey, it turns out AbeBooks.com uses Product / Offer!
Tested against Karen Coyle’s holdings gallery

Some library holdings display examples

Public library - Encore catalog

<table>
<thead>
<tr>
<th>Location</th>
<th>Call No.</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Library</td>
<td>809c M497m</td>
<td>CHECK SHELF</td>
</tr>
<tr>
<td>Central Reference Desk</td>
<td>809c M497n</td>
<td>LIB USE ONLY</td>
</tr>
</tbody>
</table>

University library - using III

<table>
<thead>
<tr>
<th>Location</th>
<th>Call No.</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mark Twain Papers Project</td>
<td>PS2384 .M6 1991</td>
<td>AVAILABLE</td>
</tr>
<tr>
<td>Main (Gardner) Stacks</td>
<td>PS2384 .M6 2001b</td>
<td>AVAILABLE</td>
</tr>
</tbody>
</table>
Unstructured -> structured -> linked data

- Bibliographic records
  - Record types: Book, Map, MusicRecording, fallback to CreativeWork
- Holdings, using the schema:Product / schema:Offer model
- Libraries
  - Hours of operation
  - Web site
  - Location
  - Contact information
  - Branch relationships
The findability formula: the easy, non-technical approach to search engine marketing / Heather Lutze.

Lutze, Heather, 1969- (Author).

**Record details**

- **ISBN:** 9780470420904 (pbk.)
- **ISBN:** 0470420901 (pbk.)
- **Physical Description:** xxii, 255 p. : ill. ; 24 cm.
- **Publisher:** Hoboken, N.J. : Wiley, c2009.

**Content descriptions**

**Bibliography, etc. Note:** Includes bibliographical references and index.

**Available copies**

- 4 copies at Merrimack Valley Library Consortium. ([Show])
- 1 copy at Amesbury Public Library.

**Current holds**

0 current holds with 4 total copies.

<table>
<thead>
<tr>
<th>Location</th>
<th>Call Number / Copy Notes</th>
<th>Collection</th>
<th>Status</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amesbury Public Library</td>
<td>658.872 LUT (Text)</td>
<td>Stacks</td>
<td>Available</td>
<td>-</td>
</tr>
</tbody>
</table>
Amesbury Public Library

Library web site

Opening hours

Monday: 10:00 AM - 8:00 PM
Tuesday: 10:00 AM - 8:00 PM
Wednesday: 10:00 AM - 8:00 PM
Thursday: 10:00 AM - 5:00 PM
Friday: 10:00 AM - 5:00 PM
Saturday: 10:00 AM - 5:00 PM
Sunday: closed

Contact information

Telephone: 978-388-8148

Mailing address

149 Main St.
Amesbury
MA
US
01913

Branch relationship

Parent library: Amesbury