

# Design, Intellectual Property, Preservation, and Other Things to Think About when Getting Something Built

Doing Digital History NYC  
January 2008

Design

# Intellectual Property

# Intellectual Property\*

\* Note: I am not a lawyer.

# Using other people's stuff

- 95 years OR (Life of author + 70 years)
- Orphan Works
- Fair Use
  - Chilling Effects
- Digital Rights Management (DRM)
  - DMCA

# Protecting your own stuff

- Copyright = Automatic
- Creative Commons
  - Attribution
  - Commercial / Non-commercial
  - Derivative / No Derivative Works
  - Share Alike
  - Public Domain

# Access and Preservation

# Metadata

- Raw text / images / audio / video are stupid
- Metadata makes them smart

# Database or Markup?

- What types of objects do you have?
- How flexible do you need your metadata to be?

# Internal Markup

- Raw ASCII text is flat, inert
- Markup languages allow you to layer metadata on top of chunks of raw text
  - Formatting
  - Categorization
  - Structure

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pariatur. Excepteur sint occaecat  
cupidatat non proident, sunt in  
culpa qui officia deserunt mollit  
anim id est laborum.

← “Lorem Ipsum” =  
dummy text used by  
printers since the  
16th century

## Lorem Ipsum

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titleLorem Ipsumtitle

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- Markup indicates boundaries of marked text

```
<title>Lorem Ipsum</title>
```

```
Lorem ipsum dolor sit amet,  
consectetur adipisicing elit, sed  
do eiusmod tempor incididunt ut  
labore et dolore magna aliqua. Ut  
enim ad minim veniam, quis nostrud  
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anim id est laborum.
```

- Markup indicates boundaries of marked text
- Delimiters ( < and > ) separate markup from “content”

```
<title>Lorem Ipsum</title>
```

```
Lorem ipsum dolor sit amet,  
consectetur adipisicing elit, sed  
do eiusmod tempor incididunt ut  
labore et dolore magna aliqua. Ut  
enim ad minim veniam, quis nostrud  
exercitation ullamco laboris nisi  
ut aliquip ex ea commodo consequat.
```

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cupidatat non proident, sunt in  
culpa qui officia deserunt mollit  
anim id est laborum.
```

- Markup indicates boundaries of marked text
- Delimiters ( **<** and **>** ) separate markup from “content”
- **/** indicates closing tag

# Standard General Markup Language (SGML)

Descriptive markup language,  
around since the 1960's:

```
<h1>Lorem Ipsum</h1>
```

```
<p>Lorem ipsum dolor sit amet,  
consectetur adipisicing elit, sed  
do eiusmod tempor incididunt ut  
labore et dolore magna aliqua. Ut  
enim ad minim veniam, quis nostrud  
exercitation ullamco laboris nisi  
ut aliquip ex ea commodo  
consequat.</p>
```

```
<ul>
```

```
  <li>Duis aute irure dolor in  
reprehenderit in voluptate velit  
esse cillum dolore eu fugiat nulla  
pariatur.</li>
```

```
  <li>Excepteur sint occaecat  
cupidatat non proident, sunt in  
culpa qui officia deserunt mollit  
anim id est laborum.</li>  
</ul>
```

h1 to h6 = heading

p = paragraph

ul = unordered list

ol = ordered list

li = list element

# XML

```
<person>  
  <name>John</name>  
  <phone>555-1212</phone>  
  <city>Washington</city>  
</person>  
<person>  
  <name>Betty</name>  
  <phone>555-3434</phone>  
  <city>Baltimore</city>  
</person>
```

# XML

```
<person>
  <name>John</name>
  <phone>555-1212</phone>
  <city>Washington</city>
  <color>purple</color>
</person>
<person>
  <name>Betty</name>
  <phone>555-3434</phone>
  <city>Baltimore</city>
</person>
```

# Database

| Name  | Phone    | City       |
|-------|----------|------------|
| John  | 555-1212 | Washington |
| Betty | 555-3434 | Baltimore  |

# Database

| Name  | Phone    | City       | Favorite Color |
|-------|----------|------------|----------------|
| John  | 555-1212 | Washington | Purple         |
| Betty | 555-3434 | Baltimore  |                |

# Dublin Core

|             |            |
|-------------|------------|
| Title       | Type       |
| Creator     | Format     |
| Subject     | Identifier |
| Description | Source     |
| Publisher   | Language   |
| Contributor | Relation   |
| Date        | Coverage   |

# Why Metadata?

- Searchability
- Indexing
- Normalization
- Recombinance
- Semantic Web
  - Zotero demo

# Preservation

- Thinking for the now vs. thinking for the (now + 100 years)
- A little work up front saves a lot of work down the road
- Preservation = Storage + Findability
- Finding Aid :: Metadata

# Long-Term Preservation

- Make backups
- Stay with the herd
- Choose basic, generic formats
- Backup, backup, backup
  - Multiple sites
  - Multiple media

# Expected Media Lives

- Burned CD / DVD = 2-5 years
- Pressed CD/DVD = 7 years (possibly up to 20)
- Hard Drive = maybe 5 years
- Magnetic Tape = 30 - 100 years

# Other options...

- Find a partner who already has a repository
  - D-Space - great at storing things, not so good at making them available
  - LOCKSS (Lots of Copies Keep Stuff Safe)
  - OAI / Autodiscovery
- Use pre-built software
  - Archives: Greenstone / Streetprint / SB

Getting Things Built

# Design Process

- Be an architect, not a plumber
  - Define genre and scale
  - Survey comparable sites
  - Develop feature set
  - Figure out how to implement

# Types of labor to produce a site

- Content
- Design
- HTML coding
- Database design
- Scripting/Programming

# Logistics

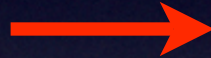
- Domain registration

# How DNS Works

Domain  
Registrar

# How DNS Works

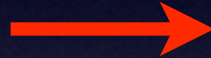
Domain  
Registrar



Domain  
Name Server

# How DNS Works

Domain  
Registrar



Domain  
Name Server



Web host  
(where site lives)

# URL Forwarding

Domain  
Registrar

~~Domain~~  
~~Name Server~~



Web host  
(where site lives)

# Logistics

- Domain registration
  - ~ \$15/year
- Web hosting
  - Through institution
  - ~ \$10/month (w/ scripting and mySQL)

# Tools for building a site

- Word
  - Ugly, ugly code
  - HTMLTidy
- Dreamweaver
  - What-you-see-is-what-you-get (WYSIWIG)
- Text Editor
  - BBEdit, etc...

# Content management system

- Blogging system like Wordpress
- Archive-building system like Streetprint
- CHNM Tools

# Firefox Design Toolbar

- Incredibly powerful design tool
- [Demo](#)

If you build it...

If you build it...  
...they won't necessarily  
come.

# Once it's built...

- Findability
- Publicize
  - Quality rather than quantity
  - Tap into particularly interested communities
  - Be entrepreneurial
- Make it work for you
  - What do \*you\* want to get out of the site?

# Follow your audience

- Server logs
- “Visits” vs. “Hits”
- Most requested pages
- Search engine queries

[http://echo.gmu.edu/  
workshops/oct2006/](http://echo.gmu.edu/workshops/oct2006/)