

Digital Loom 1100 Massachusetts Avenue Cambridge, MA 02138 (617) 395-7698 www.digital-loom.com

Proposal for Website Design and Development Services: Digital Library Federation

Overview

The Digital Library Federation (DLF) is an association of libraries and institutions whose mission is to develop an international network of digital libraries. They seek to develop a new website that, in addition to providing general information about DLF, would also promote DLF's semi-annual forums, foster collaboration among members by providing wikis, workgroups, and blogs. The site must also house a large searchable document repository with content in a wide variety of file formats.

DLF prefers to use an open-source content management system that enables in-house staff and members to easily upload and tag content, collaboratively create and edit documents, share resources and opinions, and archive old materials. The site would allow several classes of users and permissions to ensure that all participants are limited to accessing appropriate sections and content.

Project Goals

The goals of this project are to:

- **Design information architecture** to ensure that all content and functionality are easy to use and navigate.
- Design website look and feel to create a more modern, visually appealing and engaging design, that supports DLF's mission and brand identity.
- Develop new functionality based on the Drupal content management system, using a
 combination of core Drupal functionality, Drupal modules, and custom PHP/MySQL
 development. DLF's desired functionality includes a searchable document repository,
 wikis, workgroups, blogs, a flexible permissions system and user management,
 webforms, and link checking.
- Migrate content, or at least ensure that DLF's existing content is permanently reachable at its current URL.
- Provide site administration services, including website hosting and site statistics.

Information Architecture

We work with DLF to reorganize their content and design the user interface for dynamic content in order to maximize usability and improve access to information.

- The homepage is revised to include dynamic content and clear calls to action, including a
 prominent link to information on the Forum.
- All static pages in the site are reorganized using clear main and subnavigation links that
 enable visitors to quickly access any page or section without having to follow text links in
 the content.
- Dynamic content is easy to search and browse.

Wireframe Diagrams. The first step in the process of developing the new website is to develop a series of wireframe diagrams that demonstrate the layout and user interface for key pages in the site. These diagrams ultimately serve as the blueprints in the Design and Development phases, which take place concurrently.

Initial concept. In the initial Kickoff Meeting, we present an initial site map (an outline of all pages in the site) and wireframe diagrams for the following pages:

- Homepage
- Static text page (with comments)
- Document repository
 - Landing page showing multiple document headings and teasers
 - Search results
 - Individual document page
 - Document upload page
- Wiki page
- · Opinions section
- User creation and permissions
- Group management

Revisions. After the initial concept, we provide up to 2 revisions in order to develop the site map and wireframes to DLF's satisfaction.

Graphic Design

We work closely with DLF to create a clean, sophisticated, and visually engaging design that supports their brand identity and appeals to their target audiences of libraries, scholars, academic institutions, and the general public.

Graphic assets. DLF provides any graphics or photography they want to use in the site design at

or before the Kickoff Meeting. In addition, we ask them to provide 2-4 sample website designs that we can discuss in order to establish a design direction for the site.

Initial concepts. Two varying concepts are provided initially. Each concept includes design mockups of the following pages.

- Homepage
- Static text page (with comments)
- Document repository
 - o Landing page showing multiple document headings and teasers
 - Individual document page

Revisions. The preferred design is revised in up to 2 design revision cycles.

Development

Drupal Setup. We set up and configure the site using Drupal, an open-source Content Management System (CMS) that we have chosen for its ease of use; high degree of flexibility, modularity, and customization; and active community of developers. (Learn more under Technical Specifications below.)

Drupal provides the following features for any document type (a static page, document, news item, blog entry, etc.):

- WYSIWYG editor. Ability to create and edit HTML content from any web browser, using a WYSIWYG editor.
- Comments. Site administrators can enable, disable, or make comments read-only.
- File uploads. Images and files can be uploaded either as a separate field or into the body of the HTML content.
- Authoring information. The authoring information shows the date, time, and user who
 last edited each page.
- RSS feeds. Visitors can subscribe to updates of pages or content areas.

Content Types. Drupal allows site builders to specify that certain kinds of content will have unique fields. Following are explanations of each of the content types we propose for DLF's site.

- Page. A basic informational page consisting only of a title and a body. Pages are
 intended for core information on the site that won't change much, like (hypothetically)
 "About Us" and "Mission". The sub-pages mentioned below will all use this type.
- **Document.** A document uploaded to the document repository. In addition to title, taxonomy and description fields, this will have obviously have a file-upload field.

- Blog entry. This will have title and body fields, as well as taxonomy and "author" fields.
- News Item (optional) This type will have the standard title and body fields but also an
 "expiration date" field that tells the system when to stop showing a link to the item under
 the current news page. (The item will still exist after this, but will be visible only to
 administrators.)

Home Page. The homepage features the following items.

- Brief welcome text
- Forum box. Contains information about the upcoming forum, with a link to more details.
- News & Announcements box
- Login form
- Prominent links to highlight important tools or areas of interest, as determined in the Information Architecture phase.

Sub-pages. The main architecture of the site has up to 100 pages with links in the main navigation. (This number does not include additional files in the document repository). DLF may add and remove new pages any time using the CMS.

Document Repository & Faceted Search. Each document loaded into the system may include HTML content, a file, or both. Each document may be tagged and searched according to a taxonomy system that categorizes each document by type, subject area, etc. **Faceted search** will allow searchers to progressively narrow searches, if they choose, by "searching within results" of a search they have already performed. Note: full-text or tag-based searching will be available for HTML pages, while non-HTML documents will permit only tag-based searching.

Document Workflow & Archiving. All static pages and documents have workflow tools to pass content through multiple approval stages (create, approve, publish) and allow staff to roll back to previous versions. Documents can also be archived so that all content and comments are frozen and may not be edited (unless the document is unarchived).

Groups. Drupal's Organic Groups module allows DLF to create groups and assign group permissions. Digital Loom will use these permissions to allow any page on the site to be set with one of three access levels: public, site-member-only and group-member-only. Page creators will be able to control the ability to create and see comments on their pages with the same three access levels.

User Roles & Management. We create a variety of user roles (such as site administrator, member, staff, etc.). Each role is granted specific permissions according to DLF's specifications. Individual users can be assigned multiple roles if desired.

Anonymous users will be able to sign up for site membership freely (subject to passing a CAPTCHA test and submitting a valid email address). DLF staff will be able to easily see lists of users and "block" (disable) or delete users if necessary.

Wiki. Drupal has the ability to make any page a wiki, essentially, out of the box. Digital Loom willl configure the system so that when a user has permission (assigned as described above in **Groups)** to edit a given page, s/he sees a simple set of word-processing tools above the text of the page s/he is editing. Submitting his/her changes creates a new revision of the page, which group or site administrators can review and choose to roll back if necessary.

Blog Aggregation. Through the use of the blog

Webforms. We work with DLF to create up to three one-page webforms to collect information from site visitors. Each webform generates an email message to one or more addresses. In addition, form submissions are stored in a web database and may be exported as a spreadsheet. DLF can create additional webforms themselves using the CMS.

Site Utilities. The following site utilities are available on every content page in the site.

- Site-wide search box
- Site map (Automatically updated whenever DLF adds or removes pages)
- · Email this page to a friend
- Print this page

Link Checking. We implement a Drupal link-checking module which makes a nightly run through the site, checking for hyperlinks on the site which lead to broken or moved web pages.

Production. The chosen design is encoded and added to the testing site.

Beta testing. After the development and production are complete, a 4 week period of beta testing allows both DLF and Digital Loom to review the finished site, log and fix bugs, and make minor design revisions such as typography and color adjustments.

Training & Support

Our goal is for DLF to gain the expertise and confidence to perform all site edits while the site is still in development.

Training. We provide a one-day in-person training session to teach DLF to use the CMS, along with supporting documentation for all site tasks.

Support. In addition, we provide unlimited tech support for 90 days after the site launch in order to assist DLF should they have questions or run into technical difficulties. Beyond that period, please see the description of our technical support in **Server tech support** and **CMS tech**

Content Migration

DLF currently has over 25,000 documents in a variety of formats including HTML, PDF, Word, PPT, etc. They would like to migrate as much of this content as possible to the new CMS, or at the very least allow legacy content to co-exist at its current URL with the new CMS. We propose three possible solutions to the content migration portion of the project, to be decided depending on DLF's budget, staff availability, and the nature of the content.

Legacy Content Option. We leave all legacy content files at their current URLs on the server, co-existing with the Drupal installation.

Legacy Content + Updated Design Option. On top of the Legacy Content Option above, all legacy HTML documents that use the current DLF page layout are re-skinned using PHP header and footer includes in order to update their design.

Full Content Migration Option. We develop screen-scraping scripts to automatically pull HTML content and titles out of the approximately 11,000 HTML documents on the server and input each document into Drupal as a separate node. We also load every other file (PDF, PPT, Doc, etc.) into Drupal individual nodes. All nodes are marked "unpublished" during the initial import.

DLF staff would then review each document and add the appropriate taxonomy tags and metadata to each document. As they complete this task, they then publish the document.

Hosting

Hosting provider. We partner with Rackspace, the premiere web hosting provider, in order to offer our clients excellent hosting and support at affordable prices.

Daily backups. We use the Plesk web control panel system, which we configure to generate a daily backup of all site files and databases. The resulting file is available via FTP for easy download by administrative users.

Server capacity. We offer 10 Gb of disk space and 100 Gb/month of data transfer on a server with a dual-core AMD Opteron 1212 processor and 4 Gb of DDR2 memory, connected to the Internet by a 100 Mbps line. The machine's hard drives use RAID 1, which speeds seek times and ensures that if one drive fails, the other will take over seamlessly while Rackspace replaces the broken drive.

Server tech support. Digital Loom would field server-related tech support calls, such as issues with server connectivity or speed.

CMS tech support. For questions/problems with the CMS, beyond the support/fixes in **Training** and **Support** above and **Quality Assurance** below, we offer two support models. Both of these include phone or email support (whichever DLF prefers) as well as periodic upgrades to Drupal's core and contributed modules:

- Unlimited support: We offer unlimited support on the CMS. This model costs \$580/quarter.
- Retainer-based support: We offer support in blocks of 10 hours, at \$70/hour.

Security: Our server's security is maintained by Rackspace, which describes its security practices in this document. Drupal's security is constantly monitored by its large community of users and by its dedicated security team, which posts security updates as often as necessary: more information is available on the Drupal security announcement page and the Drupal security team's homepage. Please note that in order to take advantage of these security upgrades, DLF will have to use one of the tech support options above or hire another technology consultant to install security updates.

Site Statistics

We enable Google Analytics to allow DLF to monitor site visitors and traffic. Google Analytics provides detailed information on site visitors (geographic location, web browsers, screen resolutions, etc.), referring links, traffic on specific pages, points of entry, conversions, and more.

Optional Features

News. DLF can enter News items that include a headline, date, expiration date, and story. A selected number of News items automatically display in the News box on the homepage, and are automatically removed when the expiration date has passed.

Discussion Forum. In order to facilitate a strong community around DLF's website, we plan, implement and theme Drupal's forum module.

Pricing

Design & Development	Price
Information architecture	\$1680.00
Graphic Design	\$4560.00

Development	
- Drupal Setup	\$800.00
- Home page & sub-pages	\$3600.00
- Document Repository & Faceted Search	\$3680.00
- Document Workflow & Archiving	\$2960.00
- Groups	\$3440.00
- User Roles & Management	\$2080.00
- Wiki	\$1840.00
- Blog Aggregation	\$2080.00
- Webforms	\$960.00
- Site Utilities	\$320.00
- Link Checking	\$960.00
- Production	\$2560.00
- Beta testing	\$1920.00
Training & Support	\$2020.00
Site Administration	\$1120.00
Project Management	\$3320.00
Total	\$39,900.00
Deposit due on signing (33%)	\$13,300.00

Content Migration	Price
Legacy Content Option	\$800.00
Legacy Content + Updated Design Option	\$2240.00
Full Content Migration Option	\$4480.00

Optional Features	Price
Discussion Forums	\$2240.00
News	\$960.00
CMS Tech Support	varies

Additional expenses

DLF will be responsible for these expenses separate from above Price Quote.

- Domain name registration expenses.
- Website hosting, \$65/month. We recommend using our hosting service in order to facilitate the development and future maintenance and upgrades of the site.
- Full-day in-person training will require travel expenses for one Digital Loom staff member. This will depend on market rates for air travel and car rental, but will not exceed \$600.00.
- CMS tech support & maintenance. Digital Loom offers these services separate from the initial build of the site – terms are described in the CMS Tech Support section.

Payments

Total project cost will be divided into **3 equal payments.** Payment may be made by check or credit card.

- Payment 1 due on signing of contract and acceptance of proposal.
- Payment 2 due upon completion of 50% of the project.
- Payment 3 due upon completion of the project.

Turnaround Time

Estimated turnaround time for the entire project is **16-20 weeks**. We set all project milestones and review meetings together in the initial Kickoff Meeting.

Changes to Project Scope

Any changes to the project scope described in this document may change the total cost and time of the project. In such cases, an Addendum to this proposal will be provided, detailing all changes to the project and costs.

Process

In order to maximize efficiency and deliver the project on time and to your satisfaction, frequent communication and time commitment is essential.

Kickoff meeting. We have an in-person meeting at our offices to kick off the project. At this meeting:

- We discuss and develop the site map and wireframes.
- DLF provides any graphic assets as well as sample site designs. Together we brainstorm ideas for design directions.
- We schedule all milestones and periodic review meetings over the course of the project.

- We show DLF how to log in and use BaseCamp, our project management tool.
- We review technical specifications and hosting.

Review meetings. Review meetings are held over the phone between DLF and the project manager in order to present current work on the design and development; collect all information, content, and feedback; and stay up-to-date on the project status. Review meetings are scheduled 1-2 days after each deliverable to give DLF time to review changes and gather feedback.

Technical Specifications

Our standard technical specifications for the web are designed to maximize the viewing experience for the greatest number of web users by supporting the most common web browsers, platforms, and screen sizes.

Platform. We build the site using Drupal, an open-source Content Management System (CMS) that we have chosen for its ease of use; high degree of flexibility, modularity, and customization; and compatibility with a wide range of hosting environments. Our sites are built in a flexible and modular fashion using open source standards-compliant code (XHTML, CSS, PHP, and JavaScript) and a MySQL database. All custom code and Drupal modules belong to DLF and may be released under the GNU Public License if DLF desires.

Flash. This site would not use Flash in the site architecture or the design template. However, Flash video and audio clips may be embedded in the page content if desired.

Target Browsers. We test site design and functionality in Windows Internet Explorer 7.0 and above, Windows/Mac Firefox 2.0 and above, Mac Safari 3.0 and above. Additional browsers may be tested upon request but are be considered outside project scope and will require additional service hours.

Drupal Theme. The look and feel of the website is separated from the content using a "theme" which is a collection of HTML and CSS templates. DLF may edit these files and/or develop a new theme at any point.

Screen Size. We design a fixed-width layout to look ideal on 1024x768 monitors, but fit in 800x600 monitors without horizontal scrolling.

Search Engines. Drupal is inherently search engine friendly due to the following characteristics.

- All content entered through the WYSIWYG editor is marked up with the appropriate HTML tags for headings, bulleted lists, etc.
- Titles of pages and documents are automatically added to the title tag for each page.
- It automatically creates sensible and persistent URLs based on the title of the page.

- The Site Map automatically updates as pages are edited, added, or removed.
- It enables ALT text to be entered for all images.

Accessibility. The site will conform in full to the <u>W3C Web Content Accessibility Guidelines</u> version 1.0.

Quality Assurance

We make every effort to thoroughly test the functionality and design on all target browsers prior to launch. If any errors on our part are found after the site launch, we fix them free of charge.

Thank You!

We thank you for the opportunity to submit this proposal, and we are excited at the prospect of working with you to launch your new website. Please get in touch should you have any questions about this proposal – we'd be happy to revise it as necessary to meet your needs!

Victoria Merriman Creative Director (617) 395-8925 victoria@digital-loom.com Ben Di Maggio Technical Director (617) 395-7720 ben@digital-loom.com

Proposal Acceptance

This proposal expires on **August 31, 2008**. Contract must be signed on or before this date in order to guarantee features and pricing. Please sign below and mail or fax back to us at (617) 577-1261.

Name	litle
Signed	Date