

Web Development Guidelines for DMS

The guidelines below should be followed by external vendors developing static sites for UMDNJ organizations.

Web Environment

The University's web environment is made up of HP/UNIX and Sun Solaris servers running Apache. Developers will need to work in this environment.

Shared Web Accounts

Web sites development occurs on specified UMDNJ development servers in a reserved space called a shared web account. Developers must have ACS computer accounts to access these servers. Computer accounts can be obtained from lab monitors in the ACS computer labs deployed across all of the campuses. Once the developer has an ACS computer account, an ACS representative must activate privileges for accessing the shared web account. Please request activation by contacting Ms. Julia Bush [ext. 2 5488 or bushjm@umdnj.edu]. Developer will receive an e-mail notification when the privileges have been set up. This process takes a few days.

Domain Names

All UMDNJ domain names must conform to the UMDNJ Domain Name policy as articulated in http://www.umdnj.edu/opmweb/Policies/HTML/Admin/00-01-10-132_00.HTML

Minimum Site Components

Every web page must have, at minimum,

- An appropriate unit logo (preferably at the left side of the screen) that links to the appropriate site home page. Developers can obtain copies of the logo at www.umdnj.edu/logoweb
- Text navigation on the left hand of the page (graphical navigation buttons are discouraged)
- Appropriate internal site search feature; for more details consult Mr. Jamil Rahman [ext. 2 8673 or rahmansj@umdnj.edu]
- a consistent UMDNJ home link that connects to www.umdnj.edu/homeweb

The top level landing page must have:

- © symbol with an appropriate date to insure minimum copyright protection of UMDNJ assets

To increase potential for search engine indexing, pages should have:

- title tags
- appropriate metadata

Directory Structure / File Naming Scheme

Directory Structure

Every folder must have an **index.htm** page for security reasons and in order for our bread crumb trail code to work.

Each main section of the site will have its own folder containing associated files for the section. For example, the "About" section will only contain "About" pages. The developer will also be required to create individual index pages for each subsection to lock the open directory structure.

Each section may have its own associated "images" subfolder. Image files should follow the same file naming scheme (sectionprefix_topicsuffix#) as indicated for pages below. Of course image files will have either a .jpg or .gif extension.

Site pages will be developed and named according to the following guidelines.

Site Content naming scheme

Each page should have a section prefix, topic suffix and a number (#). The numbers for the first nine pages of the site should be 01 through 09.

So, for an "About Us" section of a site, the following files might first be developed in MS Word.

about_mission01.doc (mission statement page)
about_history02.doc (organization history page)

Web Development Guidelines for DMS

about_orgchart03.doc (organization chart page)
about_directions04.doc (directions page)
about_contact05.doc (contact information page)

These MS Word pages would then be converted to html. Note the change of file extension to html.

about_mission01.html (mission statement page)
about_history02.html (organization history page)
about_orgchart03.html (organization chart page)
about_directions04.html (directions page)
about_contact05.html (contact information page)

Preparing Text in MS Word for HTML Conversion

If developing content in MS Word, as much as possible, text should be left aligned. Extensive formatting and MS Word special effects should be avoided. Text should be set in Times Roman or Times New Roman. Headings and subheadings should be bolded and not underlined. Nested bulleted items (a list of bulleted items within another list of bulleted items) usually indicates an organizational problem. Avoid nested bulleted items. These guidelines will facilitate the conversion of text in MS Word to HTML.

Please note: if source of content is Word 2000, conversion process will generate unnecessary tags (XML) for static web pages. These XML tags need to be removed or they may result in redundant coding and/or performance degradation.

Flash Specifications

ACS has standardized on Flash 7.0 which is available on workstations in the ACS public computer labs.

Please note that ifsite assets include Flash elements, end user will need to download appropriate Flash plug-in's.

In general, the UMDNJ network can accommodate modestly sized flash files.

Web Display Format for Flash files

Width: 500 pixels

Height: 300 pixels

File size: approximately 10 MB

Recommended output: Flash player 6 (for compatibility within ACS labs). Player output must be evaluated based on the audience for the flash application.

Note: if a larger width and height is needed then site navigation might be lost. In most cases a back link should be sufficient.

Photo Specifications

Digital images are best optimized using Photoshop software.

Photos that need to be integrated with dynamic pages must be managed by ACS and should be delivered to Walter Frihart [ext. 2-8678 or firharwf@umdnj.edu] on a 100/250 mb. zip disk with file names that correspond directly with the specific image.

Images for Dynamic Profiles

1. Faculty Profile Photos

a. Original high resolution photos should be in .gif or .jpg format at a resolution of 72 dpi and ACS will maintain a digital archive of the original photos. The images in the archive should be 300 dpi at approximately 4"x5" inches.

b. arrangements can be made for faculty to have head shot photos taken at the Digital Media Studio

2. Research Images

Width: 550 pixels

Height: 260 pixels

Size of File: not to exceed 30kb

Web Development Guidelines for DMS

Client must supply image title for alt. tags

Scientific Characters

Techniques have been developed to accommodate commonly used (e.g. alpha, beta, delta, gamma, etc.) scientific characters on browsers. However, performance will vary depending upon the end user's choice of Internet browsers.

ACS has developed an HTML library of commonly used scientific characters. Each developer will be responsible for inputting appropriate HTML tags as needed to ensure that characters display properly in browsers

Accessibility for Static Pages

1. Become familiar with accessibility issues and techniques

<http://www.w3.org/WAI/>
<http://www.w3.org/WAI/References/QuickTips/>
<http://www.w3.org/TR/WAI-WEBCONTENT-TECHS/>
<http://www.w3.org/TR/WCAG10/full-checklist.html>

2. Configure Dreamweaver for accessibility coding:

Go to Edit/Preferences/Accessibility/Show Attributes When Inserting/ and select check boxes for: Form Objects, Frames, Media, Images, Tables

Dreamweaver will prompt for accessibility code during the construction of various elements on a page.

3. Test pages using the bobby/watchfire tool

<http://bobby.watchfire.com/bobby/html/en/index.jsp>

Browser Compatibility

We recommend that sites be designed for compatibility with Internet Explorer 5.5 and Netscape 7.1 or higher. The site should be functional and readable with earlier versions of Explorer and Netscape browsers which can be attained, at minimum, by providing a print friendly version as well as using appropriate ALT tags; however, some design features (text size and color, graphics layout, interactive features such as drop-down menus) degrade in earlier versions of Internet Explorer and Netscape.

ACS will monitor and evaluate the impact of new browsers that are introduced to the market. and notify community of impacts as they emerge.

Javascript and Javascript Menu Systems

We recommend minimal use of client side scripting such as Javascript since such scripts have to be constantly upgraded to keep up with changes in browser configurations. However, judicious use can be optimized by using plug-in's compatible with Dreamweaver MX 2004.

Software Tools

Photoshop 6.0, Image Ready, and Dreamweaver MX 2004 should be used to construct sites. Contribute2 will be used for content editing after the static pages have been developed. Contribute 2, currently the only UMDNJ-supported content editing software, can only be used if Dreamweaver MX 2004 has been used to construct the site. Sites built with other tools will not be supported.

Web Development Guidelines for DMS

Site Check List

Contact Jamil Rahmans (2-8673) for site review

Review site proposal and confirm that nothing is missing.

Assure pages use file naming scheme

Proof Read

Spell Check

Check links with Dreamweaver link checker and <http://validator.w3.org/checklink>

Test on multiple browsers

- Netscape 7.1+
- IE 5.5+
- Safari (MAC)

If there are roles in the application, have all roles been tested and the corner items isolated?

Check file size and download speed

Check title tags for searchability

Check alt tags for accessibility testing

Check accessibility in Dreamweaver

Bobby check <http://www.cast.org/bobby>

W3C validator <http://validator.w3.org>

Remove extra files not linked to site

Confirm site map is posted

Is the correct logo posted and does the logo link to the home page?

index pages must be in all directories

Add Metatag keywords - if necessary

Add .htaccess or .html redirects

Confirm status, if any, of site domain registration

Submit sites to search engines

Contact Jamil Rahmans (2-8673) for assistance

Archive site and project files