

Web Design: A New Era Skill for Librarians

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ABSTRACT

The exponential growth of Internet and world wide web in recent years had an influence on every profession of human society. Library, being the part of human society, is no exception to it. Since time immemorial, libraries are acting as the institution of information acquisition, processing and disseminating. Librarians, being the information collectors, processors, and disseminators, can effectively utilize the potential of web design techniques for improvement of the library system. A library web page enhances the visibility of a library information system - its resources, various activities, and range of services-in an effective way to its clientele. This paper intends to mention several guidelines for effective web site development and method of creating a web page using HTML tags. Discussion regarding how the page could be published in the network environment is beyond the scope of this paper. The examples illustrated in the paper are implemented in the library website of Hindalco Industries Ltd.

Keywords: Web authoring; Web design; Web page; HTML code; HTML tag; Hypertext Markup language.

INTRODUCTION

Internet needs no introduction to present day information society. Its emergence has deeply influenced human activities; its impact is everywhere, be it a service provider or a service receiver. Marketing, advertising, publishing, finance, business, education, whatever be the field of human activities, the influence of Internet is everywhere. Present statistics shows that approximately two billion people from all over the world use Internet. The pace at which new technologies are now growing is of concern to library professionals, as they have to organize and manage the information in the changing environment. If the librarians of today have to survive, they must keep in mind the changing need of today's information seeker - their changing information-seeking behaviour, the changing

information format/media, and the changing pattern of service expectation by users. Libraries, being service-oriented institutions, must accept this change and strive to align their work with this changing environment. It should be a professional commitment of a librarian to organize, retrieve, and disseminate information generated in any form. If we are successful in doing this, we will receive wider popularity and also enhance the visibility of our library.

WWW, with its suite of standards and respective technologies, made significant strides in the field of information transfer and knowledge management by liberating the basic static nature of the ordinary text, making it dynamic and powerful, and enabling billions of people to communicate and share on a global scale. The art of creating and launching a web page is becoming more and more friendlier nowadays. With a little bit of knowledge of web publishing technology, a librarian can design a web page for his library and market his resources and services to his clientele. In India library systems are not well developed, So the question arises that what types of libraries should have their web pages? A library having all modern facilities will have

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no problem in deciding about its web page. But should a library having a single PC and no Internet connection go for it? It should, Web site of a library with or without network environment acts as a document or bulletin of the various events that the library organizes, the host of services it offers to its clientele, an interactive catalogue – books collection, periodical list of additions, an array of pointers to other useful sites / links. Its scope is unlimited. It can prove to be very effective tool in providing services or solving user's queries to the librarian / reference desk. Therefore a library web page is an essential requirement of today's libraries as it facilitates the user to have access to its resources and services within the library and outside it. If a library has a network environment, a web page can provide library services round-the-clock. It is a useful tool that updates about library activities and new services. It saves time of the user which is more important. Libraries of any kind and any size must maintain a web page.

Creating a web page for a library is quite exciting and at the same time challenging. Today's librarians are well aware of the importance of a web page for their libraries. They recognize the importance of developing library web sites that are easy to navigate, so users can find quickly their way to e-resources. So, how to start with and from where to begin?

Guidelines for Web Design

A library web page is the need of the hour for modern librarians. Designing a successful library web page requires a well-formulated strategy. We can design a simple web page if we know a little bit of HTML. Any library of today, be it a small or large, public or academic or special, if a well-planned web page is created, it will be worth for its clientele.

Features of Library Website

A good library website should have the following features: -

Provide a Help link

Place a Help link in the fixed position of every page so that the user does not have a problem in locating it. This way, when users need help, they know where to find it.

Use consistent design elements

Use fonts and colors consistently across all pages of the web site. This will give it a uniform and professional appearance. Also, strive to be consistent in other areas like layout of pages, use of terminology or wording, and how your site allows users to interact with it.

Use one navigation bar

Navigation bar is very helpful to orient users to the site's resources. Try to use one navigation bar, use it consistently, and use it well. Usually, a navigation bar appears at the top of every page as a series of buttons or tabs. By highlighting the tab or button correlating with the user's current location on your library Web site, you provide a visual clue and keep the user from getting lost. To give another clue to the user's location on your site, you might also include a "breadcrumb" trail, indicating the location of the page the user is currently visiting relative to the home page, e.g., Home > Resources > e-Journals.

Link to your library web site directly from your institute's home page

Direct link of a library's home page from your institute's home page can be very important and beneficial to users. Never underestimate this importance.

Treat links according to conventions

Underline links, and use a different color to indicate links users have visited. Following these conventions, users are helped to identify clickable links and already visited links.

Use page space wisely

Keep your site's navigation area comparatively small and allow more space for each page's main content. Make sure the main content of each page on your web site gets as much space as possible. Try to minimize the amount of space the site's logo and navigation bar occupy on the top of the page, so users can see more of the page's main content without scrolling.

Use few colors and minimal graphics

Use only three or four matched colors in the design of your web site to make it more aesthetically pleasing and prevent a circus-like appearance. Avoid or minimize use of animated or flashing or scrolling text, as many users find it annoying and distracting. By using complementary colors and few graphics, a library web site can enhance its appeal.

Organize information in multiple ways

Make it possible for users to find information by following a few clear paths. This increases the likelihood your users will be successful when using your library web pages.

Organize information by type of material

Providing subject-specific pages can guide users to diverse sources relevant to their searches. Providing a subject guide to your e-journals can add to your library web site's usability. Many users come to library sites knowing the type of content they are looking for. For example, research scholars and faculty often want to search only for journal articles due to their importance in high-level research than books or reference materials. Labeling resources by content type, such as "journals, databases and indexes, books, links," guides users to materials they want.

Cross-link information when possible

Cross-linking different types of information helps users to find what they are looking for. Sometimes users enter an Online Public Access

Catalog or OPAC, thinking it searches journal or magazine articles. By including in your OPAC a link to your library's main e-journal page, you can help users find what they want.

Minimize the number of clicks users must make

Place links to different types of research materials and sources (such as electronic journals, abstracting and indexing databases, or OPACs) right on the home page of your library web site. Most users come to a library site wanting to do research, and, hence, shorter their paths, happier they are.

Explain details to help users select and access resources

Offering brief but excellent descriptions can help users on their way and keep them happy with your library's site. Users like to know how they can access materials. Is the full text available electronically? If so, is it from home or campus only? Is a password needed? Explain upfront the most critical details about access, and you help users obtain needed content.

Most users are not aware of exactly what type of content a specific database contains. Hampered by lack of knowledge, users experience difficulty quickly deciding which databases are good resources to meet particular research needs.

Organize your site based on users' requirements

Organize your library web site to meet users' needs and not to reflect the administrative structure of the library. Too often, library web sites are organized from the perspective of librarians, who know the structure of their libraries' sites in great detail.

Make search facility clear

Be sure users can easily see and understand what materials or content your search facility searches. If your search facility only searches pages of your library web site and does not

cover other sources, like journal articles or the Web, explicitly indicate this is the case.

Do not use librarian terminology

Try to use terms meaningful to users and clearly distinguishable from other terms. For example, you might want to use the term “online catalog” versus “OPAC.” Another strategy is to offer a short description of a term, e.g., “Electronic Journals – electronic full text of journal articles.”

Normally, users do not understand simple library terms and concepts like catalog, resources, online databases, citation, reserves, reference or special collections.

Ensure good performance

To increase the likelihood of your library web site not suffering from poor performance, regardless of the power or reliability of your hardware, keep an eye on good page design. Don't place too much content on pages, making them excessively large and slow to download. For example, you might steer clear of listing your whole e-journals collection on one page, because it might contain hundreds or thousands of journals.

To help users access your library web site from their homes or via dial-up connections, avoid overloading individual pages.

While you're designing your library's web site pages, you may have at your fingertips very fast connections. But keep your users' perspectives in mind.

Make your site accessible

Follow the W3C's recommendations for making web sites accessible.

Test your site for usability

Usability study is of utmost importance. Conduct a usability study preferably through a structured questionnaire or one-to-one interview to make sure your library site is satisfying your users' needs.

Minimum hardware requirements

- Pentium Core or higher
- 2 Ghz Processor or more
- 512 MB RAM or more
- 100 MB free hard disk (minimum)
- STD Colour monitor
- Modem

Minimum software requirements

- Windows 98 or later versions
- A Web browser like Internet Explorer or Google Chrome
- An editor like Microsoft Front Page or Notepad etc.

Language used in design

HTML

A web page is created using a language called Hypertext Markup Language, better known as HTML Code. It is the predominant markup language for web pages. It provides a means to create structured documents by denoting structural semantics for text, such as headings, paragraphs, lists, links, quotes and other items. It allows images and objects to be embedded and can be used to create interactive forms.

Like most other web-related standards, HTML has undergone a dramatic evolution. Until 2004, HTML was developed by W3C group; after 2004 a new group called WHATWG (Web Hypertext Application Technology Working Group) started working on a new specification of HTML, i.e. HTML 5. It is a new version of HTML 4.01 and XHTML 1.0, focusing on the needs of web application developers as well as evolving HTML and addressing issues found in the current specifications. While the HTML 5 specification (also on the W3C as a Working Draft) is not finalized yet, you can use it with any browser that supports it or any part of it.

By using HTML code you can write your coding within a plain text editor, such as Note

Pad, or use an HTML editor, Microsoft FrontPage etc.

HTML codes, also referred to as HTML tags, are enclosed by the lesser than (<) and greater than (>) brackets and may be written in capital or lower case letters.

The opening bracket is followed by an "element", which is a browser command, and ends with the closing bracket, e.g.

An element may also be followed by "attributes", which are words describing the properties of the element, and further instruct the browser,

Attributes are only contained in the opening HTML tags to the right of the element and are separated by a space and followed by an equal (=) sign.

The "value" follows the equal sign and is enclosed in quotes,

Basic HTML Document Code Structure

Begin writing your HTML tags by creating your document's basic layout into your text or HTML editor.

```
<html>
<head>
<title>Your Page Title</title>
</head>
<body>
```

This area will contain everything that will be visible through a web browser, such as text and graphics. All of the information will be HTML coded.

```
</body>
</html>
```

<html> - Begins your HTML document.

<head> - Contains information about the page such as the TITLE, META tags for proper Search Engine indexing, STYLE tags which determine the page layout, and JavaScript coding for special effects.

<title> - The TITLE of your page. This will be visible in the title bar of the viewers' browser.

</title> - Closes the HTML <title> tag.

</head> - Closes the HTML <head> tag.

<body> - This is where you will begin writing your document and placing your HTML codes.

</body> - Closes the HTML <body> tag.

</html> - Closes the <html> tag.

HTML Tags Chart

Given below are some of the useful tags widely used in creating pages.

To make the web page more attractive, interactive and dynamic, one can load scripts in language such as JavaScript, which affect the behaviour of HTML web pages. HTML can also include Cascading Style Sheets (CSS) to define the appearance and layout of text and other materials. VRML (Virtual Reality modeling Language), ActiveX Control, Shockwave etc. can also make a web page more interactive and aesthetic in appearance.

After designing the HTML document, the next step is to load it on to a computer from where it can be accessed by a common user. Following are some of the options to be considered for launching of a site.

1. To have a computer fully configured to work as web server located within the library premises or within the parent organization..

2. There are many servers available where one can launch the web site on payment basis. These servers provide a fixed amount of hard disk space for storing HTML and other related files with file transfer permission to the user for uploading the files to the server using FTP,

Tag	Name	Code Example	Browser View	Comment
!--	comment	<!--This can be viewed in the HTML part of a document-->	Nothing will show	The comment tag is used to display text within HTML document that will not be viewable on web page.
a -	anchor	Visit Our Site	Visit Our Site	This code is used to create a link. To link to a page within the same directory of a website, you only need to include the page name within the HTML code.
b>	bold	Example	Example	Encloses bold text.
big>	big (text)	<big>Example</big>	Example	To increase the size of a word even further, one can add two BIG tags side by side
br>	line break	The contents of your page The contents of your page	The contents of your web page The contents of your web page	Preserves a line break
center>	center	<center>This will center your contents</center>	This will center your contents	Contents will be aligned centrally
font>	font	Example	Example	You can change the font style to whatever you like. Try to select a common font. To find the fonts you have on your computer, open your word processing program and click on the font drop down menu.
h1>	heading 1	<h1>Heading Example</h1>	1	1 being the largest and 6 the smallest
h2>	heading 2	<h2>Heading Example</h2>	2	
h3>	heading 3	<h3>Heading Example</h3>	3	
h4>	heading 4	<h4>Heading Example</h4>	4	
h5>	heading 5	<h5>Heading Example</h5>	5	
h6>	heading 6	<h6>Heading Example</h6>	6	
hr>	horizontal rule	<hr />	Contents of your	The HR tag is used to divide subjects on your web page. You

Heading 1


Heading 2

Heading 3

Heading 4

Heading 5

Heading 6

img>	image	<pre></pre>		<p>You can resize your image simply by changing the height and width within your HTML document. In addition, you can add the ALT element to assist you in ranking higher in the search engines. Place a short sentence about your website, filled with your most important keywords. The text will only be displayed on your website while your image loads or when you place your mouse over it.</p>
li>	list item	<p>Example 1:</p> <pre><menu> <li type="disc">List item 1 <li type="circle">List item 2 <li type="square">List item 3 </MENU></pre> <p>Example 2:</p> <pre><ol type="i"> List item 1 List item 2 List item 3 List item 4 </pre>	<p>Example 1:</p> <ul style="list-style-type: none"> List item 1 ○ List item 2 List item 3 <p>Example 2:</p> <ul style="list-style-type: none"> i. List item 1 ii. List item 2 iii. List item 3 iv. List item 4 	<p>You can change the style of your bullets by adding TYPE= disc, circle or square right after LI between the lesser than and greater than symbols.</p>
marquee>	scrolling text	<pre><marquee bgcolor="#cccccc" loop="-1" scrollamount="2" width="100%"> Example Marquee</marquee></pre>	<p>Marquees tag allow one to place scrolling text on a web page.</p>	
p>	paragraph	<p>Example 1:
</p> <pre>
 <p align="left"> This is an example
 displaying the use
</pre>	<p>Example 1:</p> <p>This is an example displaying the use of the paragraph</p>	<p>This is an example displaying the use of the paragraph tag <p> This will create a line break and a space between lines</p>

small>	small (text)	<pre><small>Example</small></pre>	Example	To decrease the size of your word even further, you can add two SMALL tags side by side.					
strike>	deleted text	<pre>Example</pre>	Example						
strong>	strong emphasis	<pre>Example</pre>	Example						
		<p>Example 1:</p> <pre><table border="4" cellpadding="2" cellspacing="2" width="100%"> <tr> <td>Column 1</td> <td>Column 2</td> </tr> </table></pre>							
		<p>Example 2:</p> <pre><table border="2" bordercolor="#336699" cellpadding="2" cellspacing="2" width="100%"> <tr> <td>Column 1</td> <td>Column 2</td> </tr> </table></pre>	<p>Example 1:</p> <table border="1"> <tr> <td>Column 1</td> <td>Column 2</td> </tr> </table> <p>Example 2:</p> <table border="1"> <tr> <td>Column 1</td> <td>Column 2</td> </tr> </table>	Column 1	Column 2	Column 1	Column 2	To add additional columns to your table, simply add another TD tag. To add an additional row, add another TR tag followed by your TD tags. You can display your table with no border or change the width by changing the border= to whatever number you would like.	
Column 1	Column 2								
Column 1	Column 2								
table>	table	<pre><table> <tr> <td>Column 1</td> <td>Column 2</td> </tr> </table></pre>	<p>Example 3:</p> <pre><table cellpadding="2" cellspacing="2" width="100%"> <tr> <td bgcolor="#cccccc">Column 1</td> <td bgcolor="#cccccc">Column 2</td> </tr> <tr> <td>Row 2</td> <td>Row 2</td> </tr> </table></pre>	<p>Example 3:</p> <table border="1"> <tr> <td>Column 1</td> <td>Column 2</td> </tr> <tr> <td>Row 2</td> <td>Row 2</td> </tr> </table>	Column 1	Column 2	Row 2	Row 2	You can change the color of your tables border by adding, BORDERCOLOR=#COLORCODE in the TABLE tag.
Column 1	Column 2								
Row 2	Row 2								
tt>	teletype	<pre><tt>Example</tt></pre>	Example						
u>	underline	<pre><u>Example</u></pre>	Example						

as and when needed, on predetermined payment terms.

3. Many web servers are also available on Internet where one can launch the web site free of cost. A couple of such are www.rediff.com or www.angelfire.com

CONCLUSION

It is often said that designing a web page is easier than maintaining it. Efforts should be made on the part of librarian to make it current by adding and updating it on a regular basis. Also, attempts should be made to improve and enhance its capability by learning and unlearning on the part of the librarian. Now-a-days there exist a number of tools available on Internet to help us improve our skills on web technology. Many tutorials on HTML and other web design tools are also available free of cost. At the present time when libraries of all kinds are facing economic hardships, learning HTML code and designing your own library page not only helps you with the freedom to update your own HTML

documents, but also saves a great deal of money, as you will avoid hiring a professional web designer.

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