LEVERAGING THE TECHNOLOGY EDGE
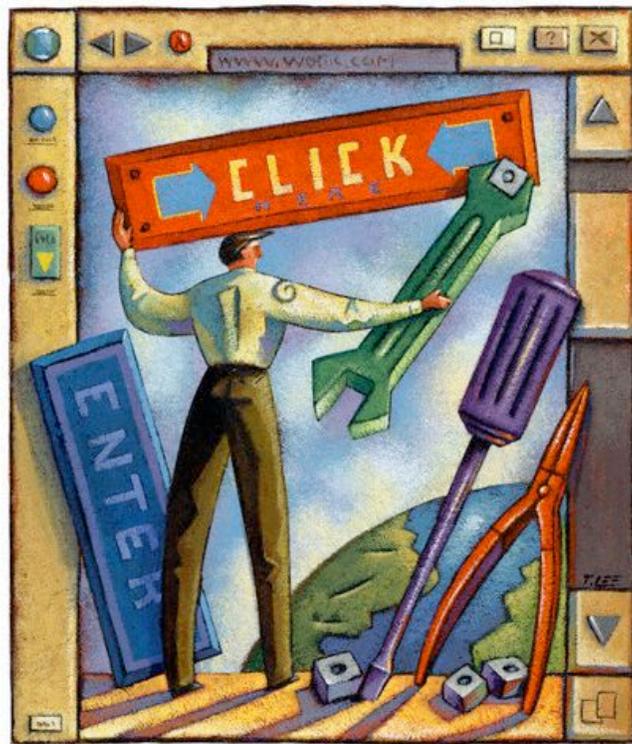
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TABLE OF CONTENTS

Over the Edge

INTRODUCTION

Enabling Information Access with Information Technology

Leveraging the Technology Edge

This workshop provides an introduction to a basic set of tools that allow anyone with access to a standard web server to create, distribute and maintain information resources and services. It is intended for library and information workers, but can be used by anyone who has the requirement to work with information and customers in a digital context.
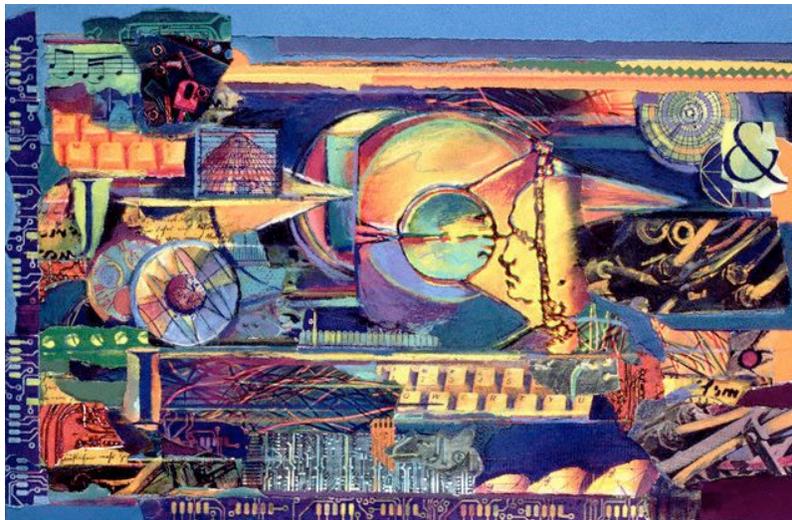
Resources and Creative Commons

All the resources needed to perform this workshop are available from the TechEdge webpage at *http://libdemo.uwinnipeg.ca/resources.shtml*.

Additional documents may be available to workshop participants. The material in this document is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike license

[*http://creativecommons.org/licenses/by-nc-sa/2.0/ca*] .

ECOMMUNICATIONS

This sections provides a basic introduction to creating your own listservs and blogs. The listserv uses a free system called **Yahoo Groups** and the blog uses an open source system called **WordPress**, that can either be installed at your institution, or used via the community blog at the University of Winnipeg.

Listservs

In this exercise you will create your own listserv via **Yahoo Groups**. You can continue to use the group you create after the training session (in which case you may want to give it an appropriate name) or you may choose to delete the group when you are done.

1. Create a Yahoo account. [If you already have one you do not need to perform this step.]

    1. Goto *www.yahoo.ca*

    2. Create a new account by choosing `Sign Up` under the Search box.

2. Create a test (or real) Yahoo Group.

    1. Goto *groups.yahoo.com*

    2. Choose the `Start a Group Now` link.

Weblogs (Blogs) Using WordPress

You will now access the blog that has been partially setup for you. We will use an open source system called WordPress. You will learn how to modify the basic preferences for your blog and create a few postings to learn how to write to your blog. In a later exercise you will learn how to integrate these postings into your website.

1. Create you new blog.

    1. Goto *libdemo.uwinnipeg.ca/blogs/*`username/` where `username` is the account name given to you at the start of the class. You will have to enable you blog so that it can be used.

    2. Select the `create a wp-config.php file through a web interface` link.

    3. Start the process by clicking on the `let's go` link and fill in the fields as described below:

        1. for the database name enter `blog_username` (for example, mine would be `blog_mleggott`)

        2. for the mysql username enter `[see Instructor]`

        3. for the mysql password enter `[see Instructor]`

        4. leave the database host as `localhost`

        5. leave the table prefix as is - `wp_`

    4. Click the `Select` button at the bottom when you are done.

    5. Click the `run the install!` link on the next page then the `First Step >>` link on the next page.

        1. Give your weblog a title: choose something that you will want to keep in case you use this one!

        2. Enter your e-mail address and click the `Continue to Second Step >>` button.

        3. Write down the password listed on the next page - this is your admin login.

4. Click on the `wp-login.php` link at the bottom to use the admin functions. Note: You will want to view you default blog in another tab at the same time using the link syntax: *http://libdemo.uwinnipeg.ca/blogs/username/*]

2. Access the blog administration page and change the default settings. Once logged in you will be able to access all admin functions for your blog. Changes you make will not affect your colleagues.

    1. The main admin functions are summarized below.

        1. **Dashboard** - provides the latest news and information about Wordpress.

        2. **Write** - allows to: create a new blog entry, or post; create a new page in your blog (for example, a contact or about page).

        3. **Manage** - allows you to: manage existing posts and pages; manage categories; review and manage comments; edit files in the system.

        4. **Links** - allows you to: manage links on your main page.

        5. **Presentation** - allows you to change the look of your blog.

        6. **Plugins** - allows you to control additional features of your blog.

        7. **Users** - allows you to maintain your own profile and also add and manage other users you want to be able to post to your blog.

        8. **Options** - allows you set the title of your blog as well as other key settings.

    2. Change your blog's basic preferences.

        1. Access the **Options** tab and check the settings. Check the title and e-mail and change the `Tagline` to reflect what your blog is about, as well as how you want comments to be added. Note: to reduce SPAM on your blog you should always set the membership option to `Users must be registered and logged in to comment.`

    3. Add some categories to arrange your postings in groups.

        1. Access the **Manage** tab and then **Categories**.

        2. Add 2-3 new categories. These can correspond to functional groupings, like **News** and **Events**, or to subject groupings, like **Library Technology** and **Book Reviews**.

    4. Add 2-3 postings to your new blog.

1. Access the **Write** tab and then **Write Post**.

2. Fill in the `Title` and `Post` boxes and select a `Category` for each posting. The other fields are not required. As you add each new post, go to the browser tab where you have your blog displayed and click reload to see how your new posting is displayed.

3. You can use HTML in your posting if you are familiar with HTML.

4. For one of your tabs click the `Advanced Editing` button so you can see some of the advanced posting options.

5. Your blog is now ready for use. You can return to this address at any time to continue to explore your blog. We will maintain your blog for a short time for you to experiment. If you would like to maintain a blog for a longer period, please let us know so we can accommodate you outside the training server.

In addition to systems like WordPress at the University of Winnipeg you can also create your own blog at hosts like **Blogger** [*http://www.blogger.com/*], which as a large community of blogs. The **MLA** blog [*http://mla.blogspot.com/*] is hosted by **Blogger**, which is also an example of a hosted blog environment that does not charge you for the standard account.

WEBSITE DESIGN

There are countless ways to create and maintain a website. Over the last few years the foundations on which the Web is based have progressed rapidly, providing a number of tools and environments with which to create a strong web presence. This workshop will focus on one that requires only a basic web environment running the standard Apache server. The pages and supporting documents will be created using simple editing tools found in most UNIX environments, which is what many websites run.

Modular Site Architecture and SSI

The site we will design is a standard 3-column design, which has proven very functional and adaptable for the delivery of an information-rich site. Our first task will be to create the main components of the overall site design, or template. In this case the page template will be divided into 4 parts:

1. **Header** - the title of the site.

2. **Navigation** - standard navigation menu for sub-sections of the site and/or links of relevance.

3. **News** - a section containing the latest news and/or links to news sites.

4. **Body** - the main content for the current page in a section.

Since each of these sections may be standard across many pages, we will use a technique called **server-side includes** (**SSI**) to make the content easier to manage. A SSI means that content common to many pages need only be created/edited once to update it in every page that incorporates it.

1. Create the **Header**

   1. Login to the web server: the instructor will lead you through it the first time.

      1. Access the SSH application via Start and the Programs Menu.

2. Choose `File-Connect` to open the session dialog box and enter the information as instructed.

3. Click `Yes` if you are presented with a **Host Identification** window.

2. Once you have connected you should be presented with a command prompt that looks like `[mleggott@bogomips ~]$`. The ~ character indicates that you are in your *home directory*.

3. Change to your web folder by typing `cd myweb` at the prompt. The new prompt should look like `[mleggott@bogomips myweb]$`. You are now ready to begin creating your website.

4. In order to understand how these HTML files work in creating your public website, but not waste time typing text, we will copy and paste the data from template files. You will then have the opportunity to edit the text. Your instructor will also provide you with an explanation of the HTML tags in the files.

5. Enter `nano header.txt` at the command prompt. [Note: it is not uncommon to name a file that will be included with the SSI directive with a TXT extension.]

6. Once in the `nano` program, press `Ctrl-R` and enter `../templates/header.txt` at the `File to insert [from ./] :` prompt, then press `Enter` to accept.

7. You can now use the `nano` editor to edit the text to reflect your own website.

8. Commons keystroke combinations when using `nano` are `Ctrl-D` (delete character in front of the cursor); `Backspace` (delete character after the cursor); `Ctrl-K` (delete entire line at the cursor); `Ctrl-O` (save file); `Ctrl-X + Y + Enter` (exit). Be sure not to remove or edit HTML `<tags>`, simply edit text that occurs between the `<tags>`. The text below shows what the original template looked like.

9. When you have finished editing the text , save the file by pressing `Ctrl-O` and then press `Enter`. You can also exit back to the command prompt by entering `Ctrl-X + Y + Enter`.

```
<div id="header">
<h1>The Leggott Library</h1>
</div>
```

2. Create the **Navigation Menu**

   1. Make sure you are at the command prompt: enter `nano navigation.txt`, press `Ctrl-R`, and enter `../templates/navigation.txt` at the `nano` prompt.

   2. Follow the same commands as above to edit and save your file. Remember to `Ctrl-X` when you are done. The text below shows what the original template looked like.

```
<div id="navsidebar">
<h4>Key Destinations</h4>
<a href="http://cybrary.uwinnipeg.ca/" target="_blank">Cybrary</a>
<a href="http://www.wikipedia.org/" target="_blank">Wikipedia</a>
<br>
<a name="contact" id="navcontact">
Contact The Leggott Library:<br><br>
204.786.9801<br>
204-783-8910 FAX<br>
The Leggott Library<br>
515 Portage Ave.<br>
Winnipeg, Manitoba<br>
Canada R3B 2E9<br>
</a>
</div>
```

3. Create the **News** section.

   1. Make sure you are back at the prompt: enter `nano news.txt`, press `Ctrl-R` and enter `../templates/news.txt` at the prompt.

   2. Follow the same commands as above to edit and save your file. Remember to `Ctrl-X` when you are done. The text below shows what the original template looked like.

```
<div id="newsbar">
  <a href="http://www.cnn.com">Leggott Library News</a>
  <a href="http://www.cbc.ca">CBC</a>
</div>
```

4. You will now create the master file, which will contain the body section as well as links to the components you just created. It is also the default file that is loaded if someone enters the URL of your website without a filename at the end.

   1. Make sure you are back at the prompt: enter `nano index.shtml`, press `Ctrl-R` and enter `../templates/index.shtml` at the prompt.

2. Follow the same commands as above to edit and save your file. Remember to `Ctrl-X` when you are done. The text below shows what the original template looked like.

```
<html>
<head>
<title>The Leggott Library</title>

<link rel="stylesheet" type="text/css" href="style.css" title="default">

</head>
<body>

<!--#include file="navigation.txt" -->

<!--#include file="header.txt" -->

<!--#include file="news.txt" -->

<div id="entry">
<p>Welcome to the Leggott Library. We have one of the greatest
collections of books about dragonflies in the world. We would love to
provide you with service. Please explore our system by choosing a tab
at the top, or a link from the sides.</p>

</div>

</body>
</html>
```

5. When you have finished editing the text for all 4 files, open the `index.shtml` page in a browser window to see the fruits of your labours.

    1. Open a new Tab in Internet Explorer and enter *http://libdemo.uwinnipeg.ca/***username**, where username is the username you used to login to the server.

    2. The page will not look very good until we create the CSS file in the next section! However, you can use this opportunity to correct any mistakes or broken tags before proceeding.

The lines that start with `<!--` are the `SSI` commands that tell the server to insert the contents of the named files. The result is that when the browser displays the contents, all the components are integrated and displayed as though they were all in one file.

The line that starts with `<link` is how we will incorporate the CSS file explained in the next section. For now this line will simply be ignored and will not affect the display of the page. When this file does not exist, older browsers may generate an error message and not display the page. If this is the case, you can always delete this line until the style sheet has been created.

Flexible Design and CSS

Once you have created a flexible site architecture, you can provide even greater flexibility by applying a *Cascading Style Sheet* (**CSS**) to your content. A CSS allows you to specify where elements in your HTML files will be placed, what they will look like, even how they will respond to actions, such as the movement of the mouse cursor. This flexibility is critical to designing a site that you can change whenever you want and do so with a minimum of effort. You can go to *http://www.csszengarden.com/* to see how simply changing a style sheet can generate a completely different look using the exact same HTML content.

We will create a CSS that applies a variety of styles and positioning to the 4 main components of our site.

1. Enter `nano style.css`, press `Ctrl-R` and enter `../templates/style1.txt` at the prompt.

2. This first set of style sheet entries sets the default style of the page and the primary tags, as well as the **Header** component. As you insert separate style sheet templates you should move back and forth between your SSH and Explorer windows. [`Ctrl-O + Enter` to save in SSH and then click `Reload` to view those changes in your browser window]. Note: The lines that start with `/*` are *comments* and are ignored when the page is displayed. Your instructor will review the various elements with you before going to the next section.

```
/* begin styles for Main Page Elements */

html, body {
     margin: 0; padding: 0;
     color: #000; background: #FFF;
     font-family: Verdana, Arial, sans-serif;
     }


h1, h2, h3, h4 {
     line-height: 1em;
     }
```

```
p       {
        line-height: 1.66; margin: 0.5em 0 1em 3em;
        }


h1      {
        color: #003366; background: #FFFFFF; clear: none;
        font: bold 200%/1em Arial, Verdana, sans-serif;
        margin: 0 40px 0 0;
        padding: 0.2em 0 0.2em 80px;
        }


h4      {
        font-size: 100%; margin: 0; padding: 0.33em 0 0;
        border-bottom: 1px solid gray; color: gray;
        }
/* begin styles for Header */

div#header {
        color: #990000; background: #FFFFFF; clear: none;
        font: bold italic 100%/1em Arial, Verdana, sans-serif;
        margin: 0 0 0 0;
        padding: 1.0em 0 0.2em 85px;
        border: 1px solid #2E2E2E;
        }
```

3. Make sure your cursor is at the end of the file (`Ctrl-V` and `Ctrl-Y` move you down
    and up a screen in nano) and then press `Ctrl-R` and enter
    `../templates/style2.txt` at the prompt. Your instructor will review the various
    elements with you before going to the next section.

```
/* begin styles for Navigation Sidebar */

div#navsidebar {
        position: absolute; top: 6em; left: 0; width: 20%;
        font-size: 11px;
        background-color: #F1D992; border: 1px solid #003366;
        }


div#navsidebar a {
        display: block; padding: 4px 8px; margin: 0;
        text-decoration: none; text-align: right;
        }
```

```
div#navsidebar p#navcontact {
      display: block; padding: 4px 8px; margin: 0;
      text-decoration: none; text-align: left;
      font-size: 9px;
      line-height: 1;
      }


div#navsidebar a:hover {
      background: #990000; color: white;
      }


div#navsidebar h4 {
      background: #003366; color: white; font-weight: bold;
      text-align: center; margin: 0; padding: 0.5em;
      }
```

4. Make sure your cursor is at the end of the file (`Ctrl-V` and `Ctrl-Y` move you down and up a screen in nano) and then press `Ctrl-R` and enter `../templates/style3.txt` at the prompt. Your instructor will review the various elements with you before going to the next section.

```
/* begin styles for News Sidebar */

div#newsbar {
      position: absolute; top: 6em; right:0 ; width: 20%;
      font-size: 11px;
      background-color: #CCCCFF;
      border: 1px solid black;
      }


div#newsbar a {
      display: block; padding: 4px 8px; margin: 0;
      text-decoration: none; text-align: right;
      border-top: 1px solid gray;
      }


div#newsbar a:hover {
      background: #990000; color: white;
      }


div#newsbar h4 {
      background: #2E2E2E; color: white;
      text-align: center; margin: 0; padding: 0.25em 0 0.125em 0;
```

```
        }
```

5. Make sure your cursor is at the end of the file (`Ctrl-V` and `Ctrl-Y` move you down and up a screen in nano) and then press `Ctrl-R` and enter `../templates/style4.txt` at the prompt. Your instructor will review the various elements with you before going to the next section. Review the look of your site in the Browser now that the complete style sheet is loaded.

```
/* begin styles for Main Entry */

div#entry {
      margin: 0 21% 0 21%; padding: 0;
      font: 11px Verdana, Arial, Helvetica, sans-serif;
      }
```

Integrating RSS Feeds

While the **News** component we created is useful, especially since we placed it in a separate SSI, we can make this even better. Rather than editing the `news.txt` file every time we want to add a news item, all we should have to do is add a new post to our Blog. The advantage to this technique is the provision of a powerful data entry tool with the WordPress blog and all the advantages of RSS feeds (or syndication as they are generally known).

In order to integrate our blog posts we will use a common tool (called a **script**) for converting blog output to HTML, available for free from a number of web sites. The version we will use is called **Feed2JS** and was created by Alan Levine *<http://jade.mcli.dist.maricopa.edu/feed/>* What **Feed2JS** does is take the **XML** output that an RSS feed generates and converts it into HTML code that can be easily integrated into any regular website. It also provides a range of styles that can be incorporated into an existing CSS file.

You can also get scripts that will take each new post from your blog and e-mail it to a specified list of e-mail accounts. For example, you could e-mail each new post to a listserv, such as the Yahoo Groups you created in the earlier exercise. You can start to see how powerful blogs and RSS feeds can be: just post once and suddenly it is everywhere!

1. Make sure you are in the SSH window and enter `nano news.txt`.

2. Delete all the lines between the `<div id="newsbar">` and `</div>` tags. Insert the new text by pressing `Ctrl-R` and entering `../templates/rss.txt` at the prompt.

3. Replace the highlighted **username** with your own blog username. [Note: the 2 long lines will wrap in nano as you type - this is normal. You will need to use the cursor navigation keys to move to the right spot.]

```
<script
     language="JavaScript"

src="http://jade.mcli.dist.maricopa.edu/feed/feed2js.php?src=http%3A%2F%2Flib
demo.uwinnipeg.ca%2Fblogs%2Fusername%2Fwp-rss2.php&chan=title&num=5&date=y&ht
ml=a"

     type="text/javascript">
</script>


<noscript>
     <a
href="http://jade.mcli.dist.maricopa.edu/feed/feed2js.php?src=http%3A%2F%2Fli
bdemo.uwinnipeg.ca%2Fblogs%2Fusername%2Fwp-rss2.php&chan=title&num=5&date=y&h
tml=y"
     >View RSS feed</a>
</noscript>
```

4. Goto your browser window and reload your homepage - you should see the posts from your blog in your **News** sidebar!

5. Now we will change the look of this section by editing the CSS file.

6. Exit the `news.txt` file and enter `pico style.css` to start editing the CSS file. Delete the sections for the **Newsbar** (under the `/* begin styles for News Sidebar */` line. The easiest way to do this is to press `Ctrl-k` for each line you want to delete. Insert the new text by pressing `Ctrl-R` and entering `../templates/style5.txt` at the prompt.

```
/* begin styles for RSS Feed */

.rss_box {
     position: absolute; top: 6em; right:0 ; width: 20%;
   font-size: 11px;
     background-color: #F1D992; border: 1px solid #003366;
}


.rss_items {
     margin-top:1px; padding:0.5em; 0.5em;
     margin-left:1px; color:#003366;
}
```

```
.rss_title {
     text-decoration: none;
     background-color:#003366;
     color: white; font-weight: bold;
     margin: 0px; padding:0em; text-align: center;
}

.rss_item  {
     font-family: verdana; font-size: 85%; font-weight : normal;
     list-style:none; padding-bottom:1em;
}

.rss_item a {
     text-decoration: underline; color:006699;
     font-size: 105%; font-weight: bold; font-family: verdana;
     }

.rss_item a:visited {
     color:330033;
}

.rss_date {
     font-size: 85%; font-weight: normal;
     color: white;
     }
```

You could also retain the combination of blog posts and the **News** items that we had initially. This is a matter of preference and what your specific requirements may be.

Your web site is now complete. If you have time, try changing some aspects of the Style Sheet, or maybe modify the text or add some new posts. [Note: the RSS integration script we are using only refreshes every 60 minutes, so if you are not seeing new WordPress posts in your web page, you will have to be patient!]

Adding Pages to Your Site

The one other thing you will probably want to do with your website is create new HTML pages that you can link to from this main page. For example, you could create a `contacts.shtml` page if you have a number of people at your Library and you want to list them. The directions below describe how to create a new page.

1. You will create a new page by using the existing `index.shtml` as the template. Make sure you are at the `[username@bogomips myweb]$` command prompt in your SSH window, enter `cp index.shtml contacts.shtml`.

2. Then enter `nano contacts.shtml` at the prompt. You will be editing an exact **copy** of the `index.shtml` file, which will will remain untouched.

3. Edit the `<title>The Leggott Library</title>` tag to reflect the title for your new page: for example, `<title>The Leggott Library: Contacts</title>`

4. Edit the text after the `<div id="entry">` tag to reflect the content you want on this page.

5. Save and exit this file.

6. Enter `nano navigation.txt` at the prompt so you can add a link to your new page in the **Navigation** Menu.

   1. Add a link to your new page somewhere in the list of links. It should look like this: `<a href="contacts.shtml">Leggott Library Contacts</a>`

   2. You should also add a link to return you to the `index.shtml` page. It should like like this: `<a href="index.shtml">Leggott Library Home</a>`

   3. Save and exit the file.

7. Goto your browser and reload your website homepage: you should now have a new link in the **Navigation** Menu on the left. Try clicking the new links to see how they work.

You are now free to create a more complex set of pages using this basic structure. You can even arrange them into groupings. Try adding a new `<h4>` tag to the `navigation.txt` file so you have one section of links to pages on your site and another to external links. The site for this workshop does that [*http://libdemo.uwinnipeg.ca/techedge.shtml*]

VIRTUAL REFERENCE

Virtual reference is often considered a newcomer on the library scene, but in the rapidly evolving digital world it is a relative oldie. Libraries have been using virtual reference services (in the form of interactive chat) for over 5 years now and experienced institutions have developed a good sense of how these services can be deployed. Like many such services, there is more than one way to go. In this workshop we will consider two ways of providing virtual reference services using free tools.

vRef with RAKIM

In this activity you will work with one of your classmates to provide vRef service as a staff member and also ask questions as a patron. You will use an open source application called **RAKIM**, developed by Rob Casson.

1. Follow the directions from the instructor to divide into teams and login to the RAKIM server. The system has been setup with 8 staff logins, so you will need to form teams of two and make sure you are logging in with the **Librarian** account you were given.

2. Goto the *TechEdge Resources* page and click on the appropriate **RAKIM** link.

    1. One of you will login as a **Librarian** and the other as a **Patron**. Only the **Librarian** login requires a specific username. The first pair must login to the **Librarian** station first so the **Patron** can login successfully.

    2. Once you are both logged in you can proceed to chat. You instructor will have each team do it in turns to reduce confusion with multiple logins all at the same time.

    3. You should try various actions, such as sending simple text and selecting from the `Shared Bookmarks` and `Shared Messages`.

4. You may also want to try adding your own **Bookmarks** and **Messages**, which are restricted to the staff account you are logged into when you created them. The **Admin** account has the ability to create entries shared across all **Librarian** accounts.

5. Try **Pushing** a page so you can see what the **Patron** sees.

3. Once one member of the pair has had an opportunity to try the **Librarian** interface, both of you should quit your sessions and change roles.

    1. After the session ends, both the **Librarian** and the **Patron** will be presented with a survey to fill out. This provides qualitative data which can enhance the statistical data generated by the system.

    2. After filling out the forms, log back in with different roles.

    3. You would normally receive the transcripts of your sessions (**Librarian** and **Patron**) in your e-mail account. You will only see these for the **Patron**, as all the **Librarian** accounts have non-personal e-mails for this workshop.

vRef with IM

If a system like RAKIM is not available to you, you could use the **Yahoo Group** you created in the previous exercise to provide a chat service with a user population that you control. As the creator of the group you can determine who receives an invitation. For example, if you have a list of **Yahoo** usernames for your patrons, you can import these into your group so they all receive an invitation. The one downside to using **Yahoo Groups** in this way is that every user must have a **Yahoo** account to take advantage of the advanced features, such as Chat.

1. Everyone in the class should have received an invitation to the **TechEdge** group in their regular e-mail account prior to the workshop. If you did not get one, or did not activate it as per the instructions, you can simply follow the demo on the screen.

2. If you did activate your invitation, login to the **TechEdge** Yahoo Group by going to *http://groups.yahoo.com* and entering your **Yahoo** username and password. Once logged in click on the `techedge` link on the left under **MyGroups**.

3. Once in the **TechEdge** Group, click on the `Chat` function on the left hand side. This may take a few minutes as the computer loads the Java chat application in your browser window.

4. Feel free to explore the Chat environment as your classmates come online.

5. You can also explore the other options above and below the chat function, such as **Files** and **Photos**.

The **Yahoo Groups** environment can be a quick and easy way to create an online support community without having to have any infrastructure at your local institution. It can also make for additional work, especially if you have a large user population. You will need to manage the group yourself and ensure that the accounts and files are maintained.

DIGITAL ARCHIVES

Digital archives and repositories have developed a great deal of momentum over the last few years. The increasing inefficiencies and high costs of the traditional vendor publishing model have driven academia in general, and libraries in particular, to the development of innovative digital archiving and repository software. **EPrints** and **DSpace** are just two examples of such applications. In this section you will explore an **ePrint** repository and also submit an item to a **DSpace** community.

ePrints at The University of Winnipeg

The University of Winnipeg currently uses the open source **ePrints** system to provide an institutional repository service. This repository is meant for the use of the University's academic community, including staff and students. It is also used to provide access to academic journals.

1. Access the **eCommons::Research** and **CBMH** repoisitories from the workshop website.

    1. Take a few minutes to explore the sites by using the `Browse` and `Search` and other functions.

Like most institutional repositories, **eCommons::Research** allows members of the community to submit their own documents and resources. This includes creating their own metadata. While this may drive some librarians, like cataloguers, mad, it is the way of the future.

DSpace at The University of Winnipeg

The University of Winnipeg is also exploring uses of the **DSpace** software. In this activity you will take a digital image file, examine the XML transcription/metadata to accompany it, and load the two files in the **MLC/CBM TechEdge Community**.

1. Copy the appropriate image (JPG) and metadata (XML) files from the workshop CD-ROM to your computer's desktop. Each of you should have a different set of files, so you want to make sure you copy the correct ones as per the instructions.

2. View the JPG and XML files in your Explorer Browser using the `File-Open` command. The instructor will review the tags in the XML file.

3. Access the **DSPace TechEdge Collection** via the workshop website.

4. Login using the username/password you received.

5. Make sure you have appropriate permissions by browsing the existing **Collection**: `Communities & Collections-MLC/CBM-Leveraging the Technology Edge`. You should be able to view any existing items in the Collection.

6. Submit your resources to the repository.

    1. Click the `Submit to This Collection` button on the **Collection** main page and follow the submission wizard. If you are unsure which metadata elements to place in the form fields check with the instructor. [Note: Be sure to indicate at the start of the submission that you have 2 items to deposit, as you will deposit both the JPG and related XML files.]

    2. The seven steps in the deposit process are summarized below.

        1. `Describe 1`: General characteristics of your submission, such as if it contains more than one component. This is necessary to provide the correct data in subsequent forms.

        2. `Describe 2`: Standard bibliographic metadata elements describing the item.

        3. `Describe 3`: Additional metadata elements, such as keywords and abstracts.

        4. `Upload`: Allows you to upload one or more items for this submission.

        5. `Verify`: Presents the metadata as it will be displayed and provides an opportunity to change elements before submission.

        6. `License`: Requires submitter to agree to a license specific to that repository.

        7. `Complete`: Allows you to return to the **Collection**. If there is no editorial process defined for acceptance, you will be able to view the item immediately.

7. Review you submission and those of your classmates.

OVER THE EDGE

Digital Library technologies continue to evolve at a rapid pace. In this section we will explore three examples of new applications that are changing the way digital library systems are designed.

Wikis

In this activity you will edit a Wiki page. We will edit a page at the University of Winnipeg's **What Would Batgirl Do?** site. This is an experimental Wiki that will be used for a variety of functions. We will access and edit the **Sandbox** training page.

1. Goto the TechEdge Resources page and click on the link for `Batgirl`.

2. From the main page click on the `Sandbox` link.

3. You can edit as a guest user, or create an account for yourself using the `Register` link in the upper-right.

    1. Click the `Edit This Page` button on the menu bar: after a few minutes an editing box should appear in your browser.

    2. When you have finished making your edits, click the `Save` button at the bottom of the main browser window.

    3. If the Edit functions do not work properly, you can open the same page in **Internet Explorer** and it will work better.

RedLightGreen

In this activity you will search **RedLightGreen** an experimental Union Catalogue from RLG.

1. Goto the TechEdge Resources page and click on the link for `RedLightGreen`.

2. Search **War Affected Children**.

3. Notice the advanced features, including the additional subjects on the left and when you view a record, the Google results that are included at the bottom. OPAC searching as it should be.

4. Open a second Tab in your browser and go to the `Cybrary` page (link is in the navigation menu). Click on `Find-Library Catalogue`, then do a search for **War Affected Children as well**.

    1. The first thing you will notice is that you have to decide which field to use for the search! You will also notice that the relevancy is very poor compared to `RedLight-Green`.

    2. Try doing the search by `keyword`, then as a `subject` search.

    3. You will no doubt see the difference between our old "dysfunctional" systems and the newer ones. Just think what out patrons go through!

MyCybrary

In this activity you will see the **MyCybrary** interface developed at the University of Winnipeg.

1. The system will be demonstrated by the instructor.

Delicious Library

In this activity you will see the **Delicious Library** application.

1. The system will be demonstrated by the instructor.