This paper describes how librarians at the University of Southern Mississippi teach faculty, staff and students the basics of making a World Wide Web home page in a one-hour classroom setting. Following a brief description of the background to the class, three distinct parts of the class are discussed. Each class begins with a PowerPoint presentation that allows the presenter to introduce himself or herself and the topic, and to provide basic information that can be repeated during the demonstration part of the presentation. The PowerPoint presentation can be divided into four sections: Introductory Material, Definition of HTML, Basic HTML Tags, and Explanation of HTML Editors. After the PowerPoint presentation is finished, a real-time demonstration of basic home page construction is provided. The demonstration can be done in at least two ways: a hands-on demonstration where all attendees are seated at individual PCs, or a hands-off demonstration where the presenter creates a page while attendees watch and ask questions. The third part of the class consists of a handout of supplemental information given to all class attendees. The handout is divided into three sections: Basics, Extras, and For More Help. A sample handout is included in the appendix. (AEF)
How to Teach Basic HTML in One Hour

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Abstract:

Describes how librarians at the University of Southern Mississippi teach faculty, staff and students the basics of making a World Wide Web home page in a one-hour classroom setting. Three distinct parts of the class are discussed: 1. A PowerPoint presentation is given at the beginning of the class; 2. A hands-on demonstration is provided after the PowerPoint presentation; and 3. A handout is given to all class attendees. The origins of the class are also discussed.

Keywords:
Library Instruction, Bibliographic Instruction, HTML, Interactive Instruction, Active Learning, PowerPoint
HOW TO TEACH BASIC HTML in One Hour

INTRODUCTION

Knowledge of HyperText Markup Language, or HTML, has quickly become a very sought-after skill. There are literally hundreds of books devoted to learning the ins and outs of HTML, and numerous articles appear every month touting the wonders of things like Dynamic HTML, Cascading Style Sheets, or JavaScript. Given all this fairly advanced reading, where can one go to learn the basics of HTML, and learn those basics in a timely fashion?

Librarians at the University of Southern Mississippi (the author's former employer) teach faculty, staff and students the basics of making a World Wide Web home page, in a one-hour class. This article will provide the background as to why this class is provided and describe how the class is structured.

Background

In 1995-6, librarians at the University of Southern Mississippi (USM) noticed that few computer-intensive seminars, like how to use email, how to use USENET newsgroups, and how to create a basic home page, were being ought on campus. Also, questions at the reference desk started to focus more on technology (i.e., “How do I send an email message?” or “How do I make a home page?”). So, the Information Services librarians decided to include classes focused on technology in their library instruction program.
The classes began in August 1996. The basic HTML class was offered four times in 1996, twenty-four times in 1997, sixteen times in 1998, and ten times by July 1999. The size of the classes usually ranged widely, from one to forty attendees.

**Literature Review**

There is an abundance of articles focusing on general teaching techniques, and there are numerous articles devoted to basic and advanced HTML. However, there are relatively few articles describing the process of teaching others home page creation, and even fewer that focus on librarians teaching this skill to others in a library instruction setting.

Probably the most pertinent article I found was by Rebecca Jackson 1. Jackson explains how she helped train subject specialist librarians at her institution to use HTML to create subject specific web pages for their library's web site. She discussed selecting web authoring software, and what topics she and a colleague covered during the training session.

Cochenour and Tusa 2 describe a workshop on the Internet designed specifically for serial librarians. Their workshop was given to users with little or no experience using Internet browsers, and focused on concepts and functions of browsers, Netscape Navigator commands, basic HTML tags, and creating a basic home page.

Kipp 3 describes how she incorporated teaching HTML to students in order for those students to create an HTML document for a class project. She first
taught her students to use the web to find information, in order to familiarize themselves with the web, and then taught them how to publish their documents on the web.

Three Basics

The HTML Basics class developed at USM was designed to do one thing – teach attendees how to create a basic home page. Attendees were from many walks of life – college freshmen required to attend library classes for a grade, interested professors and staff of the university, and people from the surrounding community.

There are three distinct parts to this class:

1. PowerPoint presentation
2. Demonstration of creating a basic homepage
3. Handout provided to all attendees

PowerPoint Presentation

Each class begins with a PowerPoint presentation. This allows the presenter to introduce him/herself and the topic, and to provide basic information that can be repeated during the demonstration part of the presentation. This section lasts about twenty minutes.

The PowerPoint presentation can be divided into four sections:

1. Introductory material
2. Definition of HTML
3. Basic HTML tags
4. Explanation of HTML editors
Introductory Material

In the introduction, three things are accomplished. First, the presenter gives introductions. Next, the workshop is summarized, so attendees know what to expect. Finally, attendees are told where they can get web space to make their own web site. This will be different for each institution. At USM, all students, faculty and staff who have an email account are also given space in that account for a web page. This is similar at many institutions. If attendees can’t get a home page through their company of school, they can purchase web space through an Internet Service Provider (ISP) like America Online or CompuServe, or they can get space through any number of free web space providers if access to the web isn’t a problem.

Definition of HTML

Next, a definition of HTML is provided. First, the full phrase for the acronym “HTML” is given (HyperText Markup Language). Then, a basic definition of HTML is provided. This helps give attendees an overall view of what HTML really means.

Basic HTML Tags

Basic HTML tags are discussed next. First, the beginning section of an individual tag is defined and separated into individual components (left bracket, name of tag, right bracket). Next, the ending tag is described, and the differences between the beginning and ending tags are shown (a forward slash is included in the ending tag). Finally, an example of text that is usually placed between the beginning and ending tags is shown, and attendees are told that this text is what usually appears on the actual home page. Although this part of the presentation
seems rather tedious, it's important for attendees to understand the different parts of a tag.

Basic HTML tags are described next. A definition is given for HTML, HEAD, TITLE, and BODY tags. Then, descriptions of basic text tags are given, including Bold, Italic, Header, and Paragraph tags. A basic image tag (IMG SRC) is also described.

Last, Anchor tags are described. They are broken into individual components in order for the attendee to see where the URL is placed within the Anchor tag, and where the text describing the link should be placed.

**Explanation of HTML editors**

Finally, a brief introduction to HTML editors is given. Three types of editors are described: Text-based, Interactive text-based, and WYSIWYG style editors. The attendees are given examples of each type of editor. If most of the attendees have access to an editor, like PICO or Netscape Composer, this is mentioned.

**Demonstration**

After the *PowerPoint* presentation is finished, a real-time demonstration of basic home page construction is provided. This helps reinforce the information learned during the *PowerPoint* presentation, and allows attendees to ask questions as they might arise. This part lasts about forty minutes, and can last longer, if there are lots of questions.
The demonstration can be done in at least two ways: it can be a hands-on demonstration, where all attendees are seated at individual PCs, or it can be a hands-off demonstration, where the presenter creates a page while attendees watch and ask questions.

For the demonstration section of USM's basic HTML class, a basic HTML text editor is used. This is done to provide attendees with the basic building blocks to home page construction. This will vary depending on whom the class is designed for, and what tools are readily available. At USM, all attendees had easy access to text editors, so these were used for the demonstration.

**Hands-On Demonstration**

Complete hands-on demonstrations can be fun, if a computer lab is available, and the attendees are fairly familiar with basic computer operation. A hands-on demonstration also gives the presenter the ability to either have attendees work in real time in their own web space accounts, or work on a sample page stored in a computer's local hard drive. The latter option has some advantages: the class isn't dependent on network connections, and the presenter doesn't have to worry about attendees knowing how to log in to their computer accounts. Also, in some instances, attendees might have different types of computer accounts that require using different types of HTML editors, which would be hard to teach in a cohesive fashion.

Either way, a complete hands-on demonstration will take longer. More questions will be asked, and the presenter will need to allow more time to figure out all the odd little quirks that an attendee might accidentally create while working on his/her sample home page. The presenter will also need to balance
time between the advanced attendee who has started asking questions about JavaScript and the slower-to-understand attendee who is struggling to make the mouse move correctly.

**Hands-off Demonstration**

In a hands-off demonstration, the presenter does the actual typing of HTML code. The attendees can be asked questions about how to build the page, like “what’s the first HTML tag that needs to be added?” (HTML tag), or “what goes within the HEAD tag?” (TITLE tag). This type of question/answer demonstration is fairly successful, because attendees have to review information given during the *PowerPoint* presentation. This is also good for classes where only some attendees have easy access to web space, or where space for the class is tight.

**Demonstration Content**

The content of the demonstration can be the same for both the hands-on and the hands-off types of demonstrations. The presenter should help attendees build a skeleton home page, using the four basic tags discussed earlier (HTML, HEAD, TITLE, BODY). This helps reinforce the basic building blocks of a home page, and helps attendees see the logical flow of a web page.

The presenter should make sure all attendees can see both the HTML code they’re working on and the graphical version of their sample web page. This can easily be accomplished by having attendees save their work, then open the HTML file using a web browser. Bouncing back and forth between the HTML code and the actual web page should be done often, in order for attendees to get a visual idea of what specific HTML codes do. For example, the presenter might first type
in the skeleton tags, add text in the TITLE tag, and then move to a web browser to show where the TITLE tag displays text (in the window bar of most graphical web browsers). Next, the presenter can type a paragraph of text, add some basic text tags, paragraph tags, and line breaks, and show attendees what those tags change on the web page. This process should be continued throughout the demonstration.

*Wrap-up Time*

Although the class is designed so attendees can ask questions throughout the presentation, make sure to leave room towards the end of the demonstration for a question and answer time. This time can be invaluable for answering individual questions that arise during the demonstration, and for clearing up anything that wasn't understood the first time around.

*Handout*

A handout was created as a supplement to the information given during the class. This handout reinforces everything mentioned in the presentation, and provides some extra information, like URLs pointing to free image web sites.

An example of a handout is included in Appendix 1. The handout is broken into three sections: Basic, Extras, and For More Help:

*Basic Section:*

- This section introduces the four sets of HTML tags needed in any basic web page (HTML, HEAD, TITLE, and BODY tags),
and is called the home page Skeleton. HTML for a simple home page is given, using only those four basic tags.

- Basic text commands are also introduced. Six basic text commands are described: bold text, italic text, underlined text, text Heading 1-6, the Paragraph tag, and a Line Break tag.

- A description of an Anchor, or link tag, is given. The Anchor tag is broken into individual components (beginning tag, text between the tags, and ending tag). Horizontal Rule tags are also described.

**Extras Section:**

- Scanning and surfing/downloading images is discussed, and the Image tag is described. The URL of a free graphics web site is given.

- Directions on how to add a background color or image are provided. Two URLs are listed that provide colors and decipher their RGB (Red, Green, Blue) codes.

- Colored text is described last. An example is given of the HTML tag extension required to change text colors.

**For More Help:**

- Links are provided to web sites devoted to HTML tags and to web style guides, like A Beginner’s Guide to HTML 4 and the Yale C/AIM WWW Style Manual 5.
- The presenter's email address or phone number can be provided in this section, too – a familiar person to contact with specific questions can be a valuable resource.

Conclusions

This type of presentation seems to work sell for the basic HTML classes offered by USM Libraries. The class really can be finished in about one hour, give or take ten minutes – depending mainly on the knowledge and interest level of attendees.

This type of class can be easily expanded. One expansion would be to teach attendees how to scan an image into a computer, and then to FTP a file from a PC to the attendee's web space account. Using a Window's based FTP program, like WS-FTP, could easily extend the class twenty or more minutes. Another way to extend the class would be to use this model for basic HTML, and then to provide a more advanced class that introduced Table, Forms, and basic style considerations.

Basic knowledge in HTML can be a real asset for a wide variety of library clients. Since this type of informational class fits in so well in a library instruction/technology setting, it behooves instruction librarians to seriously consider adding this type of class to their roster.
Appendix 1: Handout Example

HTML Basics, or How to Make a Home Page

Basics:

Home Page Skeleton:
Web pages are built using four basic HTML tags as their primary structure, or skeleton. These four tags are:

1. <HTML> </HTML> This tag tells browsers that the file contains HTML-coded information.
2. <HEAD> </HEAD> Identifies the part of a document containing the Title tag.
3. <TITLE> </TITLE> Lists the page’s title, which is usually displayed in the title bar at the top of the browser window. The title is also displayed in the bookmark lists, and is used in search engines.
4. <BODY> </BODY> Contains the content of a home page.

A basic, “skeleton” page can be constructed using only these four tags:

<HTML>
<HEAD>
<TITLE>My Home Page</TITLE>
</HEAD>
<BODY>
Your information goes here.
</BODY>
</HTML>

Text Commands:
There are six basic tags one can use with text:

1. <B>Bold Text</B> This makes text bold.
2. <I>Italic Text</I> This makes text italicized.
3. <U>Underlined Text</U> This underlines text.
4. <H1>Largest Heading (use H1 to H6)</H1> This tag does a number of things. It enlarges text (H1=largest text; H6=smallest text), it makes the text bold, and it places a paragraph space below the text. As the tag’s name suggests, it is useful for headings and sub-headings.
5. <P></P> This tag creates a paragraph between sections of text.
6. <BR> This tag creates a line break in the text (no ending tag needed).

Link Commands:
To create a hypertext link that points to another page, use the anchor tag. There are three parts to an anchor tag:

1. Beginning tag – includes the URL of the linked page: <A HREF=http://the.url.goes.here/>
2. Text describing the link
3. Ending tag: </A>
The complete tag looks like this:

\[ \text{<A HREF=http://the.url.goes.here/>Text describing the link</A>} \]

Divider Lines:
To create a divider line, use the Horizontal Rule, or \(<HR>\) tag.

Extras:

Image Commands:
There are two ways to include images in a home page:

1. **Scan them**: If you know how to use a computer scanner, you can scan photographs, original artwork, etc. into a digital format (.jpg or .gif file formats). If you decide to use a scanned image on your home page, you'll need to FTP (File Transfer Protocol) the digital image to your home page account.

2. **Surf for them**: You can also find images while browsing the web. In fact, some web sites provide artwork for free that other web page developers can use. One example is COOLGraphics.com, at http://www.coolgraphics.com/.

Background Colors and Images:
To add zest to the background of your home page, use an extension to the \(<\text{BODY}>\) tag:

1. Add a single color: \(<\text{BODY BGCOLOR=f5r64b}>\) The six letters and numbers represent different colors. You can either guess at the colors (which can be fun if you have extra time), or you can find a home page dedicated to background color codes. So you want to see some color do ya? (http://www.Missouri.edu/~c639692/colors.html) provides this useful service.

2. Add a background image: \(<\text{BODY BACKGROUND=bgimage.jpg}>\) Add the name and location of the background image file to the \(<\text{BODY}>\) tag, and save the image file in the same place HTML files are saved. COOLGraphics.com provides some free background images.

Colored Text:
To add color to any text within the home page, use the \(<\text{FONT}>\) tag, like this:

\[ \text{<FONT COLOR=00ff00>Text will be green</FONT>} \]

For More Help:
A Beginner's Guide to HTML
(http://www.ncsa.uiuc.edu/General/Internet/WWW/): This resource provides an easy-to-use guide to basic HTML commands.

Yale C/AIM WWW Style Manual (http://info.med.yale.edu/caim/manual/): This is a guide to good web page style and design.
References:

Title: How to Teach Basic HTML in One Hour

Author(s): David King

Publication Date: 1/1/99

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