



## Basic HTML Coding

### What the workshop covers:

- Accessing and using your u.arizona account (if applicable)
- Creating Web pages with HTML tags, or source code
- Adding colors to your pages using a free Web program called Colormaker
- Creating tables using a free Web program called Tablemaker
- Putting images on your pages
- Publishing your pages and images to your u.arizona account

### Introduction

The language of the World Wide Web is **HTML**, *HyperText Markup Language*. To create Web documents you use commands called **tags**. These tags provide the formatting and the extra features of HTML in a document. Tags usually have two parts, the first which indicates the beginning and the second which indicates the end of a tag.

### Creating a Web Page Exercise

#### If you have a u.arizona account:

1. Start **SSH Secure Shell Client** by double-clicking on the icon.
2. Click "quick connect" at the top left.
3. Type "**u.arizona.edu**" after host name, your **user name**, and make sure **password** is selected as the authentication method. Click the connect button.
4. Type in your password in the box provided and click OK. Choose "M" for menu.
5. Arrow down to **File**, select **DirEd**, then **public\_html**. (If you do not yet have a public\_html directory, back up to the main menu, then arrow down to **Misc**, select **Home Page**, then **Home Page** again. Your home page address (URL) will appear highlighted in the middle of the screen. This process only needs to be done once to activate your public\_html directory.)
6. To create a new file see menu at bottom of your screen for the **Create** command (**C**).



7. Choose **F** for **File** and type in a filename (for example, **test.html**). There must be **NO spaces** in your filename; underlines "\_" or hyphens "-" are ok, however! Also note that filenames in your u.arizona public\_html directory are **case-sensitive**!
8. Highlight this new file and choose **E** for **Edit** (see menu at bottom).

**Note:** To move between your SSH window and Netscape you may click on the description bar at the bottom of the computer screen or you may also switch between any programs that are currently running by simultaneously pressing the **Alt** and **Tab** keys.

### **If you do not have a u.arizona account:**

1. You will need to use a program that allows you to type and edit text. In this case we will use the Windows program, **Notepad**. Click on the **Start** button at the lower left of the screen, then click on **Programs** and then **Accessories**. Open **Notepad** under "Accessories."
2. Now open **Netscape Communicator**.

To begin to create a test Web page, type into **Notepad** or your new **u.arizona** file the following commands. Type everything as you see it, except where "YourName" or "Your e-mail address" occurs. Enter your own name or your own e-mail address. Though the HTML commands do not necessarily need to be in uppercase, the URLs must be entered exactly as they are written. Do not enter any of the words in **Bold** type.

```
<HTML>
<HEAD>
<TITLE>YourName's Practice Web Page</TITLE>
</HEAD>
<BODY BGCOLOR="#FFFFFF">
<P><H1>Welcome to YourName's Practice Web Page!</H1>
<P><HR>
<P>Check out the <A HREF="http://www.sausage.com"> The HotDog Web Editor </A> for
an easy program to help you author Web pages.
<P>You can find more information about HTML at this site:<A
HREF="http://www.Arizona.EDU/uainfo/resources.shtml"> World Wide Web Providers
Information</A>
```

```
<P>You can add an image to your page using the following command:
<IMG SRC="smiling.gif"> (people with u.arizona accounts will not see the image until
they upload the image later in the workshop)
<P><HR NOSHADE>
<P><i> Email YourName at <A HREF="mailto:Your e-mail address">Your e-mail address
again</A> </i>
<P><CENTER>Last updated: today's date </CENTER>
</BODY>
</HTML>
```

### For u.arizona users:

1. When you are done save your changes (**Control O**).
2. Then use the **Alt** and **Tab** keys simultaneously to return to Netscape.
3. Open up your page using the file name you just saved it as.  
(ex. <http://www.u.arizona.edu/~jones/test.html>)

### For Notepad users:

1. When you are done, save the file by clicking on **File, Save**, and typing the filename **test.htm** in the filename box. Save the file in the **temporary directory on the C drive** (c:\temp).
2. Then use the **Alt** and **Tab** keys simultaneously to return to Netscape
3. Once in Netscape, click on **File**, then on **Open Page, Choose File** and open your test.htm file.
  - Do you see any problems? If so, go back to Notepad or u.arizona and try to fix them (remember to SAVE your changes!).
  - If not, you have just created a simple web page. Now go to **Creating a Web Page Exercise -- Explanation of Tags Used** to see what the tags you used do.

**If you have questions at any time, please ask the instructor or an assistant for help.**

## Creating a Web Page Exercise: Explanation of Tags Used

**<HTML>** Identifies the document as being a Hypertext Mark Up Language document type.

**<HEAD>** Designates the part of the page which contains information about the document.

**<TITLE >Your Name's Practice Web Page</TITLE>** Title of document. Appears in the top window bar of the browser. Search engines often look for keyword matches here. Also what appears when someone bookmarks your page.

**</HEAD>** Indicates the end of the HEAD field.

**<BODY>** Designates the part of the page which contains the contents of the document.

**<BODY BGCOLOR="#xxxxx">** Designates a particular background color for the entire page and is used instead of the plain **<BODY>** tag.

**<BODY TEXT="#663300">** Designates a color for all text on page.

**<H1>Welcome to YourName's Practice Web Page!</H1>** Heading designations control the size of the type face and range from 1-6. Heading 1 is the largest and 6 is the smallest.

**<HR>** Horizontal rule. Draws a horizontal line across the page.

**<HR NOSHADE>** Horizontal rule is solid in appearance.

**<HR WIDTH=400>** Shortens width of horizontal rule.

**<P>** Paragraph break. Needed because HTML does not use hard returns to indicate paragraph separation.

**<A HREF="http://www.Arizona.EDU/uainfo/resources.shtml"> World Wide Web Providers Information</A>** An example of a link to a page on a remote server.

**<IMG SRC="smiling.gif">** Link to a graphic. Ideally you will be saving your images to your own server space (under your account where you keep your web pages) to speed downloading.

**<IMG SRC="map1.jpg" ALT="Map to my Home">** Gives message when cursor is placed over the image.

**<IMG SRC="house.jpg" WIDTH=300 HEIGHT=250>** Allows page text to load before image. Also allows you to change image size.

**<i> Your Name <A HREF="mailto:Your e-mail address"> Your e-mail address again</A></i>** Italic tag with mailto command. Usually placed at the end of the document. (Always sign your Web pages. If it's not good enough to sign, it's not good enough to be on display.) The mailto command provides a mail form which will allow users to send e-mail to the address provided.

**<CENTER>** Center text.

**</BODY>** Indicates the end of the BODY field.

**</HTML>** Indicates the end of the HTML document.

## Other HTML Tags

What follows is NOT an exhaustive list of HTML tags. It is a very short list to help you get started.

### ***Basic Tags***

**<B> </B>** Bold

**<I> </I>** Italic

**<BR>** Line break - start a new line

**<CENTER> </CENTER>** Center text

**<SUB> </SUB>** Subscript as in H<sub>2</sub>O

**<SUP> </SUP>** Superscript as in a<sup>2</sup>

## ***Font Tags***

**<FONT COLOR="#FF0066"> ..text.. </FONT>** Designates a color for text

**<FONT SIZE=4> ..text.. </FONT>** Designates a text size. 7 is largest

## ***Table Tags***

**<TABLE> </TABLE>** Designates a table

**<TABLE BORDER=0>** No border or lines in table

**<TABLE BORDER=1>** Table has lines; increase number and table border thickness increases

**<TABLE BORDER=5 BORDERCOLOR="#FF0000">** Designates a color for table border.

**<TABLE CELLPADDING=5>** Increases space around text or image in cell

**<TABLE BGCOLOR="#FFFFFF">** Changes background color within the table

**<TR> </TR>** Creates row in table

**<TR BGCOLOR="#CCFF00">** Designates a background color for a table row.

**<TH> </TH>** Creates bold centered text in each cell

**<TD> ..text.. </TD>** Creates cell of data in the table

**<TD BGCOLOR="#FFFFFF">** Changes background color within the cell

## ***Aligning Tags***

**<IMG ALIGN=left SRC="image.gif">** Image is aligned to left side and text raps around right side

**<IMG ALIGN=right SRC="image.gif">** Image is aligned to right side and text raps around left side

**<TABLE ALIGN=left> </TABLE>** Table aligns to the left and outside text wraps around right side

**<TABLE ALIGN=right> </TABLE>** Table aligns to the right and outside text wraps around left side

**<TR ALIGN=CENTER>** Centers text in a table row.

**<TD ALIGN=CENTER>** Centers text within a table cell.

## ***Internal Jumps***

Used to create an active table of contents for a page or to jump within the page:

**<A NAME="destination1"> ..text.. </A>** Place at site you want to jump to

**<A HREF="#destination1"> ..text.. </A>** Place at table of contents or site you want to jump from

To jump to a site within another page:

**<A HREF="page.html#destination2"> ..text.. </A>**

## ***Single Space***

**&nbsp;** Creates one character-width space; repeat for additional spaces; for example; **&nbsp;**; **&nbsp;**; **&nbsp;**; **&nbsp;** gives four spaces

## ***Definition Lists & Indenting***

**<DL>** definition list

**<DT>** definition term

**<DD>** ..text.. Definition definition

**</DL>**

## ***Linking an Image***

**<A HREF="page.html"><IMG SRC="image.gif"></A>**

**<A HREF="page.html"><IMG SRC="image.gif" BORDER=0></A>** Blocks a "link border"

## Lists

### *Ordered Lists*

*Inserts numbers before each element on the list.*

#### The HTML Tags:

TOP 3 VACATION SPOTS  
<OL>  
<LI>Gunnison, Colorado  
<LI>San Diego, California  
<LI>Flagstaff, Arizona  
</OL>

#### What it looks like using a Web browser:

TOP 3 VACATION SPOTS

1. Gunnison, Colorado
2. San Diego, California
3. Flagstaff, Arizona

### *Unordered Lists*

*Inserts a bullet before each item on the list.*

#### The HTML Tags:

EXHIBIT  
<UL>  
<LI>Sixteenth Century Maps  
<LI>Seventeenth Century Maps  
<LI>Eighteenth Century Maps  
</UL>

#### What it looks like using a Web browser:

EXHIBIT

- Sixteenth Century Maps
- Seventeenth Century Maps
- Eighteenth Century Maps

## Where to find more information:

For listings of HTML tags and how to use them, you may wish to consult one of the many books or online sources on HTML. One online source is the HTTP/HTML World Wide Web Providers Information page at <http://www.Arizona.EDU/uainfo/resources.shtml>.

## Using Colors

### Colormaker exercise

- Experiment with Colormaker at <http://www.bagism.com/colormaker/>
- Try the [RGB Hexadecimal Color Chart](http://www.hypersolutions.org/rgb.html) or [Dougie's Color Picker](http://www.hypersolutions.org/rgb.html) at <http://www.hypersolutions.org/rgb.html>

## Adding colors into your HTML document

- Replace in your document the <BODY BGCOLOR="#FFFFFF"> tag with the new color tags from Colormaker (hint - you can copy and paste the new tag by highlighting the tag and using **Control C** for copy. Then go into your HTML document and position the cursor where you want to drop in your new tag. Press **Control V** for paste).

## Images

- If the image is not already online in a format the web can read you can scan the picture, use a graphics program to create the image, or capture the image with a digital camera or video still. The most common format to save the image in is the gif format. Some scanning and image processing resources are available at the Prototype Information Commons in the Main Library and at the Multimedia and Visualization Lab in CCIT.
- Adobe PhotoShop / PaintShop Pro are among the programs which help create or transform images.
- Using images that are already on the Web is fairly easy. First find a site that has copyright-free images (Yahoo is a good source for clip art sites: [http://www.yahoo.com/Computers\\_and\\_Internet/Graphics/Clip\\_Art/](http://www.yahoo.com/Computers_and_Internet/Graphics/Clip_Art/) ) Once you've found an image you want to use, click on the right button of your mouse and save the image to the hard drive (for this class please save it in **Netscape directory on the C drive**). To insert into your Web page use <IMG SRC="location of the image">.
  - For **Notepad users**: As long as you have saved the image in the SAME directory as you have saved your HTML page your tag should read <IMG SRC="ImageName.gif". Later you will need to move the image (along with your HTML page to the Web account you are using). For **u.arizona users**: You need to move the image from the hard drive to your u.arizona account into your public\_html directory.
- Transparent GIFs - see [http://members.aol.com/htmlguru/transparent\\_images.html](http://members.aol.com/htmlguru/transparent_images.html)
- Animated GIFs - see the Web Developer's Virtual Library at <http://www.wdvl.com/>
- Sources of Graphics and Images and Other Aids for Web Page Design - see <http://www.library.arizona.edu/library/teams/set/graphics.html>
- UA Logos - see <http://www.arizona.edu/uainfo/webid/logos.shtml> - Use of these is restricted! Permission must be obtained.



## Adding Backgrounds

- A background is just an image. As with an image, you should save the background in the same directory as your HTML page is placed (or at least somewhere in your account). Use the right button on the mouse and choose to save as a background file. We'll discuss moving the background image from the hard drive to your account a little later.
- Netscape's Background Sampler at [http://www.netscape.com/assist/net\\_sites/bg/backgrounds.html](http://www.netscape.com/assist/net_sites/bg/backgrounds.html) has backgrounds for you to use and also explains how to add them to your page.
- Ender's Realm Workshop at <http://www.ender-design.com/rg/backidx.html>.
- In the <BODY> tag, replace your background color tag with the background tag by replacing BGCOLOR="#numbers" with BACKGROUND="name of new background".

## Tables

- An Example of a Table may be found at <http://www.library.arizona.edu/libresources/referen.html>. View the document source to see the HTML tags used.
- **Tablemaker exercise:** Create a simple table using at <http://www.bagism.com/tablemaker/>
- Information on Basic Tags may be found at [http://home.netscape.com/assist/net\\_sites/tables.html](http://home.netscape.com/assist/net_sites/tables.html).
- What happens to tables on non-table browsers may be found at <http://ppewww.ph.gla.ac.uk/~flavell/tablejob.html>

## Publishing your pages to your U.Arizona web account

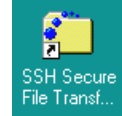
If you have been creating your web page directly in your u.arizona account, your web page, with the exception of any images you may want to add, is already available for viewing by the world. For those of you using Notepad and those who wish to upload images to your account, you need to transfer the HTML and/or image files to your computer account. In order to do this, you must use the **SSH Secure Shell FTP** software available on campus computers. **FTP** stands for *File Transfer Protocol*. FTP allows a user to transfer files from one *networked* computer to and from another *networked* computer.

**Note:** As of August 2001, the *only* way to transfer files to and from a **u.arizona** account is by using **Secure Shell FTP** software. (You can also do this from home by downloading and installing the Secure Shell software from <http://www.u.arizona.edu/ssh>.)

Secure Shell software may not work with other campus or non-UA servers, in which case, another FTP program, such as WS-FTP, may need to be used.

For more information, see <http://w3.arizona.edu/~consult/ssh-start.html>

## Uploading from your computer to u.arizona:



1. Open the **SSH Secure Shell File Transfer Client** (Double click on the icon)
2. At the blank screen, press ENTER or click on File, then Connect.
3. At the prompt, enter **u.arizona.edu** as the HOST NAME, enter your u.arizona USER NAME, and click on CONNECT.
4. At the prompt, enter your u.arizona PASSWORD. Click on OK.
5. Double click on the public\_html folder on the right side of the screen.
6. Click on OPERATION, then on UPLOAD.
7. Click in the "look in" box, and select the directory containing your web page file to upload. (On library computers, this is usually the C:\TEMP\ directory.)
8. Highlight the file to upload.
9. Click on UPLOAD.
10. For each image you added on the web page, repeat steps 6 - 9 to upload the image files (.jpg or .gif) to your account.  
(*Tip:* In step 8, you can also upload multiple files at the same time by holding down the CTRL key while you click on and highlight each file.)

**The new files should now appear in the public\_html directory on the right side of the screen. To make them visible to others on the Web, the "*permissions*" now need to be changed for *each* file. (This procedure must be repeated each time you upload a revised version of the same file as well.)**

11. Right-click on your web page file in the public\_html directory and scroll down to PROPERTIES
12. The READ and WRITE boxes should already be checked for the OWNER. Also check the READ boxes for GROUP and OTHERS, then click OK.
13. To exit the SSH Secure Shell File Transfer Client, go to FILE, then DISCONNECT; Then go to FILE, EXIT.

## Downloading from u.arizona to your computer:

1. Follow steps 1 - 5 above.
2. Then, highlight the file in the public\_html directory to be downloaded.
3. Click on OPERATION, then on DOWNLOAD. In the window that appears, select the drive and directory on your computer where you want to put the file.
4. Click on DOWNLOAD.
5. To exit the SSH Secure Shell File Transfer Client, go to FILE, then DISCONNECT; Then go to FILE, EXIT.