

# HTML Mapping, Frames and Local Options

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March 8, 2002

Visit the Computer Survival School's  
Online WWW Site at:  
<http://css.ait.iastate.edu/>

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## **Registering your Homepage**

To register your NetID with the Homepage Server, telnet to `isua.iastate.edu` and enter:

1. **% add www**
2. **% setup\_www**

and respond to the prompt. This process creates a WWW subdirectory in your home directory and puts a sample file named `homepage.html` in that WWW subdirectory. `Setup_www` also sets the protection on your NetID so that the Homepage Server can access your WWW subdirectory files.

Once you have successfully registered with the Homepage Server, move into your WWW subdirectory:

3. **% cd**
4. **% cd WWW**

Once you are in your WWW subdirectory, enter the following commands to copy in some sample files and create two more .html files:

```
% cp /home/www/html/gifs/quips.gif quips.gif
% cp /home/www/html/gifs/drivein.gif drivein.gif
% cp homepage.html a.html
% cp homepage.html b.html
```

Then return to your desktop and open up a Web browser in an additional window:

### **Double-click on Netscape on your Desktop**

In the 'Location:' or 'Address:' box on the top part of your browser, enter the following URL to link to your homepage:

**<http://www.public.iastate.edu/~NetID/>**

Then click back to your initial window.

## Basic HTML

HTML stands for Hypertext Markup Language. It is the markup language used to create a web page on the internet. HTML commands known as tags are enclosed in `< >` and mostly come in pairs `<H1>Topic</H1>` which surround the area where the effect is to take place with a `/` preceding the ending tag name.

Try out each of the examples that follow in your own `homepage.html` file by editing the file with `pico`. To use `pico` enter:

```
% pico homepage.html
```

Once you have changed your `homepage.html` file then save your file to disk with `^O` (hold down `ctrl` and press `O`) normally followed by a **RETURN** then click on the **RELOAD** button within Netscape. (Enter `^X` followed by a **RETURN** instead of `^O` to save and exit `pico` at end of session.)

Your initial homepage looks like this:

```
<HTML>
<HEAD>
<TITLE>
Personal Homepage -
Your Name Here</TITLE>
</HEAD>

<BODY>

<H1>Welcome!</H1>

This is a sample homepage.<P>

Text can be shown in <B>bold</B>
and <EM>emphasis</EM>.<P>

My electronic mail address is
<ADDRESS>somewhere@out.there</ADDRESS><P>

</BODY>
</HTML>
```

## HTML - Meta and Javascript

### Meta– Keywords for Search Engines:

You can use the <Meta> Tag inside of the <Head> Tag area to inform search engines about your WWW page so that your pages can be indexed according to the keywords and description that you choose. Just use NAME = "keywords" or NAME = "description" inside the META tag and follow that with CONTENT= and the terms that you want indexed:

```
<HEAD>  
<META NAME="keywords"  
CONTENT="travel, spain, rivers">  
<META NAME="description"  
CONTENT="Water Travel in Spain">  
</HEAD>
```

To **not** have a page indexed: NAME="ROBOTS"  
and CONTENT="NOINDEX,FOLLOW".

## **Meta– Auto-Advance:**

Sometimes you need to move a WWW page to a new location and want to inform people visiting your old WWW page that the location has changed. You can do this “auto-advance” using the Refresh feature of the <Meta> tag:

```
<HTML><HEAD>
```

```
<META HTTP-EQUIV="Refresh" CONTENT="7;URL=a.html">
```

```
</HEAD><BODY>
```

```
This page has moved to: <br>
```

```
<a href="a.html">a.html</a><br>
```

```
You will be automatically moved to this  
new WWW page in seven seconds.</BODY></HTML>
```

The number in front of ‘;URL=’ determines how many seconds to wait until advancing to the new WWW page.

## **Adv. HTML- Page Pops:**

To have a link pop a new client screen, simply add a Target=\_blank option to the Anchor Tag:

```
<A HREF="a.html" TARGET=_blank>Open Screen.</A>
```

## Javascript- A Link Message:

JavaScript (JS) is an easy way to add some simple, interactivity to your WWW page. JS is a lot closer to an actual programming language than HTML but in small doses it is easily manageable.

One unique effect you can do with Javascript is to change the bottom status bar message when the mouse passes over a link on your WWW page. Normally when the mouse passes over a link, the URL for that link appears in the status bar but a JS can change that:

```
<A HREF="a.html"  
onMouseOver="window.status='Click me!';  
return true;">  
Watch the status bar change...</a>
```

## Javascript- A Link Button:

Here's a little javascript that is used in the **BODY** of a page to create a button to click on as a link:

```
<FORM><INPUT TYPE="button" VALUE="Click me."
onClick="location.href='a.html'"></FORM>
```

## Javascript- A Simple Rollover:

This simple rollover uses the onMouseover and onMouseout JS event handlers to produce a rollover effect when the user rolls over the image. Try this out in the **BODY** part of your page:

```
<A HREF="a.html"
  onMouseover="document.bldg.src='quips.gif'"
  onMouseout="document.bldg.src='drivein.gif'">
<IMG SRC='drivein.gif' WIDTH=184 HEIGHT=119
  BORDER=0 NAME="bldg"></A>
```

## More Javascript Information

More info on Javascript can be found at the CSS Simple Javascript class example page:

<http://www.public.iastate.edu/~jastruss/js.html>

## HTML Mapping

### Mapping- Image Maps Links:

**Image maps** allow you to link to different locations from different parts of a graphic. Here is an example of an image map link:

```
<MAP NAME="net">
<AREA SHAPE="rect" COORDS="16,81 176,110"
  HREF="a.html">
<AREA SHAPE="rect" COORDS="29,12 172,72"
  HREF="drivein.gif">
<AREA SHAPE="default" HREF="b.html">
</MAP>
<IMG SRC="drivein.gif" USEMAP="#net">
```

In the above example, you get the a.html link from the drive-in marquee, a repeat of the drivein image from the drive-in screen and a default b.html link if anything else is clicked on. Note the use of **net** as a map name. Other shapes you can use are: circle, poly and point. The MAP tag can go in the HTML **HEAD** or **BODY** area of your WWW page.

You can use **Photoshop** on a PC or Macintosh to help as an image map tool. From your homepage that has the drivein.gif image on it. Save the drivein.gif image from your WWW page to your desktop by clicking on it with the right mouse button (Windows) or clicking and holding down on the drivein.gif image (Macintosh). Start up **Photoshop** on your Desktop and pull down under **File** to **Open** the drivein.gif image. Next pull down under **Edit** to **Preferences- Units & Rulers** and change your unit and ruler type to **Pixels** and examine the image.

The **Info** window tells you the coordinates of what you are pointing at within the graphic. See if you can find where each AREA tag is mapping to on the image using the **net** map. Next see if you can add another AREA tag that would have the person go to ebay ([www.ebay.com](http://www.ebay.com)) if the user clicked on the blue sky next to the screen.

## HTML Frames

Frames divide up the browser screen into separate viewing areas with each part being its own separate HTML file. To use frames, you just need to define what the frame area looks like and then define what goes into each frame. Here's a basic frame setup- create a new file called c.html and put in the following lines then view it via the WWW:

```
<HTML> <HEAD>
<TITLE>Framed Page</TITLE></HEAD>
<FRAMESET ROWS=22%,*>
  <FRAME SRC="a.html">
  <FRAMESET COLS=30%,*>
    <FRAME SRC="homepage.html">
    <FRAME SRC="b.html" name=road>
  </FRAMESET> </FRAMESET> </HTML>
```

ROWS= defines next row % used or pixel width

COLS= defines next col % used or pixel width

**Note** that the starting frame has no <BODY> and defines the FRAME area with b.html as its SRC by the name of **road**.

To have one frame update another frame area, use TARGET in a hypertext link to name the area that you want to update. Put the following lines into your homepage.html file:

```
<A HREF="a.html" target=road>
  To the A-Page</A><P>
<A HREF="http://css.ait.iastate.edu/"
  target=road>CSS</A><P>
```

Next reload your homepage.html file then go and try the c.html file.

Frames will stay in their own area until released. You can release a frame by targeting \_top. Put this into your homepage.html file and reload it then look at your c.html file from the WWW:

```
<A HREF="http://www.ebay.com/"
target=_top>Ebay</a><P>
```

Frames take a little getting used to but most people end up really like them or absolutely hating them.

## HTML Local Options

### Local Options- Creating a Guestbook:

A guestbook is a place for people who access your page to leave notes and information directly on a WWW page. There are 2 ways to create a guestbook on the Homepage server.

#### Guestbook: Easy Method

The easiest way to create a guestbook is to let Acropolis do it for you. Exit pico and enter the following UNIX command:

```
% mv homepage.html backup.html
```

then do the following:

1. Go to the Acropolis login screen at: **asw.iastate.edu** and login.
2. Choose "Manage User *NET-ID*".
3. Choose "View/Edit your personal webpage setting".
4. Choose "Create Default Web Page" and click the *Guestbook* option for your page then click "Create".

## Guestbook: Standard Method

A more standard method to create a guestbook or multiple guestbooks is as follows:

```
% fs sa . www rlw
% cp ~www/templates/guestbook.html .
% cp ~www/templates/addguest.html .
% pwd
```

This creates a guestbook and addguest file for you. Next you need to modify all references to “*username*” in guestbook.html and addguest.html to your *Net-id* except for the line in addguest.html that reads:

```
E-Mail:<input type=text name=username size=40><br>
```

Finally, replace the “XX/XX/*username*” string in addguest.html with your AFS path data as given in the pwd command. Try this out. You will have to reload your guestbook after entering data.

The README file on the standard method of creating a guestbook can be found at:

[css.ait.iastate.edu/Midland/Docs/guestbook.html](http://css.ait.iastate.edu/Midland/Docs/guestbook.html)

## Local Options- Feedback Links:

The Homepage Server also has a general feedback utility so that any WWW user can send you e-mail and you can have the user fill out some pre-defined fields. The easiest way to create a feedback.conf file for use with the feedback utility is to enter:

```
% setup_feedback
```

After you create a feedback file, you then just need to link it to one of your web pages. Here is a sample feedback link:

```
<A HREF="http://www.public.iastate.edu/cgi-bin  
/feedback/~NETID/feedback.conf">
```

```
Click here to leave comments.</a><p>
```

See the public server homepage for more information on the feedback utility, restricting access and other local html information:

```
http://www.public.iastate.edu
```

## Local Options- Restricting Access:

You can restrict access in a WWW subdirectory by creating an .htaccess file in that subdirectory.

```
% pico .htaccess
```

### Restricting Access via IP

To restrict access to a particular IP number the .htaccess file should contain:

```
AuthUserFile /dev/null  
AuthGroupFile /dev/null  
AuthName ExampleAllowFromISU  
AuthType Basic
```

```
<LIMIT GET>  
order deny,allow  
deny from all  
allow from 129.186  
</LIMIT>
```

## Restricting Access via a Password File

To restrict access via a password file, the `.htaccess` file should contain:

```
AuthUserFile /afs/iastate.edu/users/XX/XX/NETID/WWW/.htpasswd
AuthGroupFile /dev/null
AuthName ByPasswd
AuthType Basic
```

```
<LIMIT GET>
require user JNick
</LIMIT>
```

The `AuthUserFile` line contains directory information that can be obtained from the **pwd** command.

You can create a password file (`.htpasswd`) with:

```
% htpasswd -c .htpasswd JNick
```

Enter `% htpasswd -h` for more information on `htpasswd`.

## Restricting Access via Password Example

```
% mkdir It
```

```
% cd It
```

```
% cp ../homepage.html hi.html
```

```
% pwd – need info for AuthUserFile line
```

```
% pico .htaccess
```

```
AuthUserFile /afs/iastate.edu/users/04/09/jastruss/WWW/It/.htpasswd
```

```
AuthGroupFile /dev/null
```

```
AuthName ByPasswd
```

```
AuthType Basic
```

```
<LIMIT GET>
```

```
require user Joe
```

```
require user Jane
```

```
</LIMIT>
```

```
% add www
```

```
% htpasswd -c .htpasswd Joe
```

```
New password: enter-a-password
```

```
% htpasswd .htpasswd Jane
```

```
New password: enter-a-password
```

```
% cd ..
```

When linking to the It subdirectory you must enter the userid **Jane** or **Joe** and a password:

**www.public.iastate.edu/~username/It/hi.html**

## Using the Scanner in Durham 139

One or more scanners are normally available in Durham 139. Information on using a Durham lab scanner is available at the main desk in 139. Once you have scanned in your graphic, save it as a **JPG** or **GIF** file with the proper suffix of **.jpg** or **.gif**. Then to use that graphic on your Web page, you need to upload the file using FTP and place it in your WWW subdirectory.

The two main FTP programs in the labs are Fetch (Macintosh) and WSFTP (Windows). You can also use the FTP mechanism in a Web browser to upload a file by entering the following in the browser's 'Location:' or 'Address:' box:

**ftp://netid@isua.iastate.edu**

where *netid* is your ISU NetID.

## **A Final Note to HTML users**

While you are in Netscape or IE under 'View' pull down to 'Source'— to see the internal html workings of any page on the internet. So find an internet page that you like and 'View' that page to see how it is constructed.

To access your homepage next time you login to Project Vincent enter:

1. **% cd**
2. **% cd WWW**
3. **% pico homepage.html**

Examples from this class are available in the jastruss user directory of the Public Homepage Server:

**<http://www.public.iastate.edu/~jastruss/>**

## Restoring Std. Homepage File

After class, to restore your homepage file back to how it originally started enter:

```
% cp a.html homepage.html
```

## Creating A New HTML File

Using the copy (cp) command, you can also make new HTML files in your WWW subdirectory. For instance, if you would like to create a new HTML file named **fire.html** that is a copy of your homepage.html file you would enter:

```
% cp homepage.html fire.html
```

or if you wanted a new file named water.html that was a copy of fire.html, you would enter:

```
% cp fire.html water.html
```

You could then link to the new water.html file by using the following URL:

```
www.public.iastate.edu/~netid/water.html
```

## References

The CSS currently offers two classes on Simple Javascript (WWW page interactivity) and two classes on GoLive (HTML editor that will help you do frames). See the CSS WWW site for more information: <http://css.ait.iastate.edu>

*The Bare Bones Guides to HTML* is a great online source for HTML information:  
<http://werbach.com/barebones/>

*The Cool Nerds Site* has some very good javascript examples: <http://www.coolnerds.com/jscript/>

Doctor HTML: Examines and prescribes HTML changes for your webpages. Check the good doctor out at: <http://imagiware.com/RxHTML/>

See the public server homepage for more information on image maps and for other local html information: <http://www.public.iastate.edu>