



Website 101

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Covered Topics

- Introduction to HTML
 - What is it and how it works
 - Main HTML tags
- How to Use Macromedia Dreamweaver
 - Creating a simple web page using Dreamweaver
- Servers, Files and Websites
 - Local and server files
 - Transferring files to/from a web server using SSH
 - Viewing the new website

Announcements

- (Optional) Practice session after the presentation
- Dreamweaver more in depth session tomorrow
 - 3.15pm Thursday, June 30, same room
- Reserve Dreamweaver time on our lab PC
 - Email to sdalhelp@hawaii.edu to reserve time
- Presentation available online at:
<http://www.uhh.hawaii.edu/~sdalhelp/help.php>

HTML?

- What is HTML?
 - Abbreviation for Hypertext Markup Language
 - Platform independent styles that define the various components of a web document
- Why HTML?
- Who needs HTML?

How does HTML work?

- HTML files are plain text files containing markup tags
- Markup tags tell web browsers how to display the page (page formatting and layout)
- Text enclosed in opening and closing HTML tags is affected by those tags
- HTML files can be created using a simple text editor or WYSIWYG applications/editors
- WYSIWYG = What You See Is What You Get

From HTML Source Code to a Web Page

- HTML files contain HTML source code that is used by browsers to format web page contents
- HTML files have .html or .htm extension
- HTML source code is read by web browsers and transformed to formatted pages (rendering)
- The HTML file that contains a site's first (home) page is usually named index.html

HTML Editors

- Simplest editors:
 - Notepad in Windows
 - Emacs or vi in UNIX
 - SimpleText for Macintosh
- Alternatives:
 - Macromedia Dreamweaver
 - Microsoft FrontPage
 - Macromedia Contribute
 - etc...

Basic HTML Tags

- HTML tags have the form:

```
<html> ... </html>  
<strong> ... </strong>  
<p> ... </p>
```

- Usually come in pairs: opening and closing
- Not case sensitive
- Usually created from intuitive abbreviations
- Can be nested

HTML Code: <P>Hey, I can use <i>italics</i> in HTML.</P>

Browser View: Hey, I can use *italics* in HTML.

Sample HTML Code

```
<html>  
  
  <head>  
    <title>My First Web Page</title>  
  </head>  
  
  <body>  
    <h1>This Is My First Web Page</h1>  
    <p>The first paragraph comes here.  
      <strong>And this text is bold.</strong>  
    </p>  
  </body>  
  
</html>
```

Try it out:

http://www.w3schools.com/html/tryit.asp?filename=tryhtml_basic

This Is My First Web Page

The first paragraph comes here. **And this text is bold.**

Basic HTML Tags

- Heading: `<h1>...</h1>` ; `<h6>...</h6>`
 - Paragraph: `<p>...</p>`
 - Line Break: `
`
 - Bold: `...` ; `...`
 - Italic: `<i>...</i>`
 - Underline: `<u>...</u>`
 - Alignment: `<left>...</left>`
`<center>...</center>`
`<right>...</right>`
 - Comment: `<!-- ... -->`
-
- HTML tag reference is available at: http://www.w3schools.com/html/html_reference.asp

Web Page Background

- Solid color background

```
<body bgcolor="blue"> ... </body>
```

```
<body bgcolor="white"> ... </body>
```

```
<body bgcolor="#00BBDD"> ... </body>
```

- Image background

```
<body background="img.gif"> ... </body>
```

```
<body background="img.jpg"> ... </body>
```

HTML Links

- Web pages have links to other pages or sites (hyperlinks)

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

```
<a href="www.yahoo.com">Yahoo Website</a>
```

- Opening a link in a new browser window

```
<a href="..." target="_blank"> ... </a>
```

```
<a href="www.yahoo.com" target="_blank">Yahoo Website</a>
```

- Relative vs. Absolute address links

Images

- Images are represented by a link to a file:

```

```

- Image attributes

- Height
- Width
- Border
- Alternate text (tooltip)

```

```

Tables

- Used for presenting data, as well as page layout
- Defined by the `<table>...</table>` tags
- Consist of table rows, defined by `<tr>...</tr>`
- Rows consist of data cells, defined by `<td>...</td>`
- Data cells can contain text, images, tables, etc...
- The trick:
 - The number of data cells in every single table row has to be the same for the whole table.
 - One exception: the `colspan` attribute

Tables: Example

```
<table width="200" border="1" cellspacing="0" cellpadding="5">
```

```
<tr>
```

```
<td>This is the first row</td> <td>Still first row</td>
```

```
</tr>
```

```
<tr>
```

```
<td>This is the second row</td> <td>Still second row</td>
```

```
</tr>
```

```
<tr>
```

```
<td colspan="2">This is the third row, only 1 cell here</td>
```

```
</tr>
```

```
</table>
```

This is the first row	Still first row
This is the second row	Still second row
This is the third row, only 1 cell here	

Viewing HTML Web Pages

- HTML files on your computer can be opened using a web browser
- Often used to preview a website before posting it to the web
- Open your browser, select File -> Open, navigate to the desired html file



Macromedia Dreamweaver

What is it?

- Application for beginning and advanced web development
- Provides support for many different web technologies like:
 - HTML
 - Different client and server scripting languages
 - Cascading Stylesheets (CSS)
 - etc...

Why Dreamweaver?

- Gives significant power in web development
- Provides great flexibility
- Numerous helpful features
 - Code view
 - Layout view
 - File manager
 - Code generator
 - Tag inspector, design help, code help
- Most importantly:
 - *You don't have to know much HTML to start creating impressive web pages*

Setting Up a Site in Dreamweaver

- Click Site from the menu list and select Manage Sites
- In the Manage Sites window click New... and select Site from the drop-down menu
- In the Site Definition window click on the Basic tab and follow the wizard selecting the following
 1. Type a name for your site
 2. Not using server technology
 3. Edit files locally; Browse to the location where you want your website files to be stored on your PC
 4. No connection to a remote server
 5. Click Next, verify your selections, then click Done, and Done again
- You just created a new site on your machine and now you can start using Dreamweaver

```

86 ss="feature"><script language="javascript" src="scripts/image_rnd.js"></script>
87 Purpose</h3>
88 The Spatial Data Analysis Labs (SDAL) at the University of Hawai`i at Hilo consist of two computer-based fac
89
90 DAL provides the infrastructure and initial training to achieve spatial and temporal data analysis. The labs
91 he Island of Hawai`i, with its array of microclimates and associated ecosystems, is frequently referred to a
92 Spatial Data Analysis Lab was established in 2001 with 11 computers. Since 2003, through an Experimental Pro
93 story">

```



Spatial Data Analysis Labs

Home Research Equipment Imagery Events Links Help Search Google

Purpose

The Spatial Data Analysis Labs (SDAL) at the University of Hawai`i at Hilo consist of two computer-based facilities: an instructional lab and a research lab. The purpose of the labs is to enable University of Hawai`i faculty and students to develop and conduct advanced spatial and temporal analysis techniques when addressing research questions.

SDAL provides the infrastructure and initial training to achieve spatial and temporal data analysis. The labs accommodate state-of-the-art geographic information systems, digital image processing, model building and simulation, statistical analysis, and global positioning system technologies. SDAL also offers University of Hawai`i researchers access to aerial photography and satellite imagery of the Hawaiian Islands.

Design
Code
Application
Tag Inspector
Files

Files Assets

sdalhelp Local view

- Site - sdalhelp (C:\Documents)
 - cal
 - cal_equipment
 - cal_lab
 - docs
 - equipment
 - images
 - old_cal
 - old_cal2
 - scripts
 - calendar.php
 - calendar_old.php
 - checkoutforms.php
 - contacts.php
 - conversion_math.html
 - convert_exl_to_arcgis_te
 - equipment.php
 - esrisoftware.php
 - footer.php
 - forms.php
 - genlinks.php
 - hardware.php
 - header.php
 - help.php
 - imagery.php
 - index.html
 - index.php
 - jobs.php



Let's Try It Out



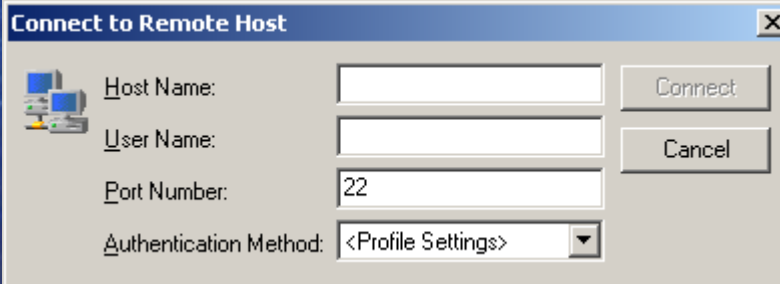
Uploading Files to a Web Server

SSH Secure Shell

- Secure file transfer manager
- Transfers file between a local machine and a web server
- Easy drag-and-drop file management
- Download from:
<http://www.hawaii.edu/help/software/pc/ssh.html>

Getting Started with SSH

- Start the SSH File Transfer Client
- Click "Quick Connect"
 - An error message might show up, click OK
- In the connection window enter the **Host Name** and **User Name**:



The screenshot shows a dialog box titled "Connect to Remote Host" with a close button (X) in the top right corner. On the left side, there is a small icon of a computer. The dialog contains four input fields and two buttons:

- Host Name:** An empty text input field.
- User Name:** An empty text input field.
- Port Number:** A text input field containing the number "22".
- Authentication Method:** A dropdown menu with the text "<Profile Settings>" and a downward arrow.
- Buttons:** "Connect" and "Cancel" buttons are located on the right side of the dialog.

- Click Connect

Connecting to UH Servers

- Host Name:
 - UH server: `uhunix2.its.hawaii.edu`
 - UHH server: `www.uhh.hawaii.edu`
- User Name:
 - Your UH account name:
`accountname` @hawaii.edu

Finding the Correct Folders

- Local Machine
 - Windows-like navigation
- Web Server
 - Navigate to the public_html folder
 - public_html contains the files and directories for your website

File Edit View Operation Window Help

Quick Connect Profiles

Z:\WEB\sdalhelp\ public_html

Local Name	Size	Type	Modified	Remote Name	Size	Type	Modified	Attributes
cal		File Folder	03/03/2005 07:28:00 AM	cal		Folder	02/02/2005 10:33:11 AM	drwxrwxr-x
cal_equipment		File Folder	03/03/2005 07:28:01 AM	cal_equipment		Folder	02/02/2005 10:32:41 AM	drwxrwxr-x
cal_lab		File Folder	03/03/2005 07:28:03 AM	cal_lab		Folder	02/02/2005 10:33:05 AM	drwxrwxr-x
docs		File Folder	03/03/2005 07:28:04 AM	docs		Folder	02/28/2005 12:31:57 AM	drwxr-xr-x
equipment		File Folder	06/17/2005 11:01:04 AM	equipment		Folder	08/19/2004 11:34:10 AM	drwxr-xr-x
images		File Folder	03/03/2005 07:28:05 AM	images		Folder	01/20/2005 03:28:21 PM	drwxr-xr-x
old_cal		File Folder	05/04/2005 02:20:41 PM	old_cal		Folder	01/06/2005 11:47:30 AM	drwxrwxr-x
old_cal2		File Folder	05/04/2005 02:20:44 PM	old_cal2		Folder	12/29/2004 07:53:02 PM	drwxrwxr-x
scripts		File Folder	06/17/2005 11:01:17 AM	scripts		Folder	02/22/2005 05:54:59 PM	drwxr-xr-x
calendar	2,064	PHP File	05/04/2005 02:28:41 PM	calendar.php	2,064	PHP File	05/04/2005 02:28:41 PM	-rw-rw-r--
calendar_old	2,985	PHP File	11/17/2004 01:20:28 AM	calendar_old.php	2,985	PHP File	11/17/2004 01:20:28 AM	-rw-r--r--
checkoutforms	1,029	PHP File	11/17/2004 01:33:01 AM	checkoutforms.php	1,029	PHP File	11/17/2004 01:33:01 AM	-rw-rw-r--
contacts	1,943	PHP File	11/17/2004 01:36:14 AM	contacts.php	1,943	PHP File	11/17/2004 01:36:14 AM	-rw-rw-r--
conversion_math	1,452	HTML Document	09/16/2004 01:34:46 AM	conversion_math.html	1,412	HTML Document	09/16/2004 01:34:46 AM	-rw-r--r--
convert_exl_to_arcgis_table	2,144	HTML Document	01/05/2005 11:04:27 AM	convert_exl_to_arcgis_table.html	2,096	HTML Document	01/05/2005 11:04:27 AM	-rw-r--r--
equipment	1,618	PHP File	01/21/2005 11:49:34 AM	equipment.php	1,618	PHP File	01/21/2005 11:49:34 AM	-rw-rw-r--
esrisoftware	883	PHP File	11/17/2004 08:04:25 PM	esrisoftware.php	883	PHP File	11/17/2004 08:04:25 PM	-rw-r--r--
footer	1,099	PHP File	02/22/2005 05:52:57 PM	footer.php	1,099	PHP File	02/22/2005 05:52:57 PM	-rw-rw-r--
forms	1,120	PHP File	11/17/2004 01:29:58 AM	forms.php	1,120	PHP File	11/17/2004 01:29:58 AM	-rw-r--r--
genlinks	809	PHP File	11/17/2004 07:36:30 PM	genlinks.php	809	PHP File	11/17/2004 07:36:30 PM	-rw-rw-r--
hardware	1,423	PHP File	11/17/2004 02:06:10 AM	hardware.php	1,423	PHP File	11/17/2004 02:06:10 AM	-rw-r--r--
header	5,920	PHP File	01/23/2005 01:04:01 PM	header.php	5,920	PHP File	01/23/2005 01:04:01 PM	-rw-rw-r--
help	1,448	PHP File	11/17/2004 07:56:53 PM	help.php	1,448	PHP File	11/17/2004 07:56:53 PM	-rw-rw-r--
imagery	1,296	PHP File	01/21/2005 11:14:19 AM	imagery.php	1,296	PHP File	01/21/2005 11:14:19 AM	-rw-r--r--
index	580	HTML Document	01/05/2005 01:09:08 PM	index.php	2,295	PHP File	12/29/2004 08:30:59 PM	-rw-r--r--
index	2,295	PHP File	12/29/2004 08:30:59 PM	jobs.php	934	PHP File	11/17/2004 07:45:06 PM	-rw-rw-r--
jobs	934	PHP File	11/17/2004 07:45:06 PM	links.php	1,481	PHP File	11/17/2004 07:33:01 PM	-rw-r--r--
links	1,481	PHP File	11/17/2004 07:33:01 PM	loan_guidelines.html	1,568	HTML Document	09/09/2004 04:20:10 PM	-rw-r--r--
loan_guidelines	1,605	HTML Document	09/09/2004 04:20:10 PM	loan_procedure.html	1,626	HTML Document	02/01/2005 09:59:54 AM	-rw-rw-r--
loan_procedure	1,659	HTML Document	02/01/2005 09:59:54 AM	location.php	11,740	PHP File	01/11/2005 09:54:09 PM	-rw-rw-r--
location	11,740	PHP File	01/11/2005 09:54:09 PM	mapping_network_drive.html	1,337	HTML Document	01/10/2005 08:18:05 AM	-rw-r--r--
mapping_network_drive	1,373	HTML Document	01/10/2005 08:18:05 AM	mapprojections.php	843	PHP File	11/17/2004 07:42:42 PM	-rw-rw-r--
mapprojections	843	PHP File	11/17/2004 07:42:42 PM	mod_esrisoftware.php	1,754	PHP File	11/17/2004 07:56:50 PM	-rw-r--r--
mod_esrisoftware	1,754	PHP File	11/17/2004 07:56:50 PM	mod_forms.php	1,289	PHP File	01/31/2005 11:22:57 AM	-rw-rw-r--
mod_forms	1,289	PHP File	01/31/2005 11:22:57 AM	mod_gen_links.php	3,929	PHP File	02/14/2005 08:46:37 PM	-rw-r--r--
mod_gen_links	3,929	PHP File	02/14/2005 08:46:37 PM	mod_hardware.php	3,327	PHP File	11/17/2004 01:51:53 AM	-rw-r--r--
mod_hardware	3,327	PHP File	11/17/2004 01:51:53 AM					

Transfer Queue

Source File	Source Directory	Destination Directory	Size	Status	Speed	Time
tipsandtricks.php	/user0/uhhweb/sdalhelp/public_html	Z:\WEB\sdalhelp	614	Complete	7.9 kB/s	00:00:00
tutorials.php	/user0/uhhweb/sdalhelp/public_html	Z:\WEB\sdalhelp	556	Complete	7.1 kB/s	00:00:00
uhh_benchmark.html	/user0/uhhweb/sdalhelp/public_html	Z:\WEB\sdalhelp	2,978	Complete	45.7 kB/s	00:00:00



Let's Try It Out

Useful Tips

- Indent your source code. Much easier to read, easier to find code errors
 - Indentation helps a lot especially when there are nested tags (e.g. tables)
- Use white space in your source code. Not recognized by the browsers; code is easier to read

```
<html>
  <head>
    <title>My First Web Page</title>
  </head>

  <body>
    <h1>This Is My First Web Page</h1>

    <p>The first paragraph comes here.
      <strong>And this text is bold.</strong>
    </p>

  </body>
</html>
```

Useful Tips

(Continued)

- When you insert an opening HTML tag, insert the closing one right away, then come back and fill in the contents in-between
 - If the page looks distorted or contents is missing or misplaced, check your tag pairs. Make sure every opening tag has a matching closing one at the right place.
- Keep an up-to-date copy of the website files on your local machine
- If you are involved in maintaining a web site with or for the University, please be advised that you are required by federal law to ensure your site meets accessibility guidelines
<http://www.webaim.org/standards/508/checklist>
- A copy of this presentation is available at:
<http://www.uhh.hawaii.edu/~sdalhelp/tutorials.php>

HTML Online Resources

- A beginner's Guide to HTML:
<http://archive.ncsa.uiuc.edu/General/Internet/WWW/HTMLPrimerAll.html>
- Practice your HTML at:
http://www.w3schools.com/html/tryit.asp?filename=tryhtml_basic
- HTML tag reference: http://www.w3schools.com/html/html_reference.asp
- Macromedia Dreamweaver:
<http://www.macromedia.com/software/dreamweaver>
- Download SSH Secure Shell:
<http://www.hawaii.edu/help/software/pc/ssh.html>
- CSS – Cascading Stylesheets:
<http://www.w3schools.com/css/default.asp>

Dreamweaver Available

- Dreamweaver is available for use on one of our computers in room K274A. Please e-mail us at sdalhelp@hawaii.edu if you would like access to Macromedia Dreamweaver.



Questions?

More questions, e-mail me at yanko@hawaii.edu