# Introduction to UIC Web Services and Building Web Pages and Web Sites with Adobe Dreamweaver

# UIC Web Services

People and departments at UIC can have web sites on several different servers with differing characteristics:

* The [http://people.uic.edu](http://people.uic.edu/) server allows offers basic HTML- and CSS-based web sites.
	+ Dreamweaver and other tools can transfer files to people.uic.edu.
	+ Your folder on people.uic.edu can be mounted on your local workstation to simplify file transfer:
		- **Map a Network drive** to \\people.uic.edu\*uic\_netid* on Windows.
		- **Go to Server** smb://people.uic.edu/*uic\_netid* on Mac OS.
	+ The web site is accessible as [http://*uic\_netid*.people.uic.edu](http://uic_netid.people.uic.edu/).
* The [http://publish.uic.edu](http://publish.uic.edu/) server offers Word Press based web sites.
	+ Word Press must be used to transfer files to publish.uic.edu.
	+ The web site is accessible as [http://*uic\_netid*.publish.uic.edu](http://uic_netid.publish.uic.edu/).
* Google Mail and Google Docs at UIC offers web sites through Google Sites.
	+ Upload web page files and folders to Google Docs or through Google Drive.
	+ Build web pages of various types in the Google Sites web editor.
	+ The web site is accessible as [http://sites.google.com/a/uic.edu/*site\_name*](http://sites.google.com/a/uic.edu/site_name).

Older UIC web sites are housed on the tigger.uic.edu server.

* Department web sites of the form [http://www.uic.edu/depts/*dept*\_](http://www.uic.edu/depts/department_name)*abbrev* are located in the /usr/local/etc/httpd/htdocs/depts/*dept\_abbrev* folder.
* Personal web sites of the form [http://www.uic.edu/~*uic\_netid*](http://www.uic.edu/~uic_netid) are located in the public\_html folder of the user's home folder /homes/home8/*uic\_netid*.
	+ Dreamweaver and other tools, such as, Van Dyke SecureFX, can transfer files to these folders on tigger.uic.edu.

This information can also be found on the ACCC web pages at <http://accc.uic.edu> under *Web Publishing* services and particularly under *What are the paths and URLs for websites hosted on ACCC Unix servers?*

# Major Steps for Creating a Static Web Pages and Web Sites

**Remember:** Separate content and presentation to be able to easily use content in different places for different purposes. Don’t just highlight and format—use CSS.

1. Identify a local folder for your web files.
2. Create a web page.
3. Add content to your web page.
4. Design your page(s).
5. Layout your page by identifying your content items by role.
6. Insert links to other web pages.
7. Attach formatting to content items.
8. Insert (accessible) media, forms and scripts to your page.
9. Organize your web pages.
10. View the underlying HTML coding.
11. Check for errors and problems.
12. Upload your web page(s) to your web site.

Other instructions for using Dreamweaver, HTML, and CSS can be found on-line at <http://go.uic.edu/lynda.com> and [http://w3school.com](http://w3school.com/).

# Exploring Dreamweaver

The Dreamweaver **Welcome Screen** (window) allows you to **Open a Recent Item**, to **Open…** any found item, and to **Create a New** **HTML** item.

* Select **Create New HTML** to display the *Document Window*.
* Notice the items in the *Menu Bar*.
* Notice the icons in the *Application Bar* to the right below the *Menu Bar*.
* Notice that **Designer** is selected as the *Workplace Layout*.
* Hold the cursor over the icons in the *Application Bar* to identify each of them.
* Hold the cursor over each of the items in the *Menu Bar* to display the respective drop down menus.
* Select **Window** from the *Menu Bar* to see a list of the available windows.
* Select the **Insert**, **CSS Styles**, **AP Elements**, **Files** and **Assets** from the **Window** drop down menu to display these panels (windows) or their icons.
* Notice the panels along the right of the screen.
* Hold the cursor over the icons near the tops and bottoms of these panels to identify each of the icons.
* Select the menu icon in the upper right corner of each of these panels to display the respective drop down menus.
* Notice the *Status Bar* immediately below the *Document Window*.
* Select **Split** to show both HTML **Code** and the resulting **Design** (appearance) of the web page.
* Notice the tags and structure of an HTML file.

## An Empty HTML File -- filename.html

##

<!DOCTYPE HTML PUBLIC …>

<**html**>

 <**head**>

 <**title**>…<**/title**>

 <**meta** … />

 <**/head**>

 <**body**>

 Your content goes here.

 <**/body**>

<**/html**>

* Select **View** from the *Menu Bar* and **Toolbars** from the drop down menu.
* Select **Coding** from the sub menu to remove the toolbar from the left side of the *Code Window*.
* Select **Document** from the sub menu to remove the toolbar from the top of the *Document Window*.
* Select **Coding** from the sub menu to display the toolbar at the left side of the *Code Window*.
* Select **Document** from the sub menu to display the toolbar at the top of the *Document Window*.
* Select **Standard** from the sub menu to display the toolbar with the common commands from the **File** and **Edit** menus at the top of the *Document Window*.

# Starting a Local Folder (Site)

Dreamweaver (and file transfer software, such as Secure FX) allows the manipulation of files and subfolders stored on two file servers: in a *Local Folder or Site* (on your workstation) and in a *Remote Folder or Site* (on the web server). Files and folders for a web site can be uploaded once they are ready to be published on the web server (or downloaded to be saved or worked on).

1. Identify a local web folder (site) for your web (HTML, CSS and asset) files.
	* Select **Site** from the *Menu Bar* (or from the menu for the **Files** panel) or select the *Site* icon from the *Application Bar*.
	* Select **New Site…** from the drop down menu to display the **Site Setup** window.
	* Select **Site** from the items at the left if not already selected.
	* Enter a **Site Name**.
	* Browse for a **Local Site Folder** for the files and folders of the site.
	* Create a new folder when appropriate.
	* Put off identifying the **Server** for the remote site until after you have created some web pages.
	* Select **Save** to establish the local site.
2. Create a web page (an HTML file).
	* Select **File** from the *Menu Bar*.
	* Select **New…** from the drop down menu for **File** to display the **New Document** window.
	* Select **Blank Page**.
	* Select **HTML** as the **Page Type**.
	* Select various **Layouts** to view previews of their structures at the right.
	* Select **1 column fixed, centered, header and footer** as the **Layout**.
	* Select **XHTML 1.0 Transitional** as the **Doc Type**.
	* Select **Create New File** for the **Layout** CSS.
	* Select **Preferences…** to see where you change Dreamweaver preferences.
	* Select **Cancel** to close the **Preferences** window.
	* Select **Create** to display a **Save Style Sheet File As** window.
	* Notice that the style sheet file has a **.css** extension.
	* Select the folder **Where** in the local site folder that you want this style sheet files saved to display a web page template in a window.
	* Select **Code** to display the HTML code that produces the web page.
	* Notice the related files next to **Source Code** at the top of the *Document Window*.
	* Select **Split** to display the HTML code and the rendered web page.
	* Select **Design** to display only the rendered web page.
	* Enter a **Title** to appear in the *Title Bar* of the web page.
	* Select **File** from the *Menu Bar*.
	* Select **Save As** from the **File** drop down menu.
	* Change the **File Name** to **index.html**.
	* Notice the *File Management* icon to the right of **Title** at the top of the *Document Window*.
	* Select **Okay** to save the web page as the main page of the site.
3. Add content to your web page.
	* Type your content directly into the *Document Window*.
	* Copy and Paste content from other windows.
	* Drag and Drop content from the **File** panel or other windows.
4. Design your web page(s).
	* Identify all the roles for various pieces of your content.
	* Identify the styles you can use to the consistently identify the role(s) of your content.
5. Layout your web pages by identifying your content items by their role(s).
	* Notice the hierarchy of content elements for the text in the *Status Bar* at the bottom of the *Document Window* for selecting the elements.
	* Place cursor in content to select an element in the *Status Bar*.
	* Place cursor on the element in the *Status Bar* to select.

## Document Object Model (DOM) Hierarchy for an HTML File -- filename.html

##

<!DOCTYPE HTML PUBLIC …>

<**html**>

 <**head**>

 <**title**>…<**/title**>

 <**meta** … />

<**base href=”…”** />

 <**link** … />

 <**/head**>

 <**body**>

 …

 <**div**>

 …

 <**p**> … <**span**> … <**/span**> … <**/p**>

 …

 <**/div**>

 …

 <**/body**>

<**/html**>

* + Scroll through the **Common** and **Text** items in the **Insert** panel.
	+ Select the menu at the top right of the **Insert** panel.
	+ Select **Move to Toolbar** to turn the **Insert** panel into a toolbar above the *Document Window*.
	+ Hold the cursor over the items in the toolbar to identify the items.
	+ Select **Insert** from the *Menu Bar* to see the items available.
	+ Select **HTML** from the **Insert** drop down menu.
	+ Select **Text Objects** from **HTML** the drop down submenu.
	+ Notice the following items (elements) that selected text can be:
		- Paragraph <p> ignores line breaks and wraps text.
		- Preformatted Text <pre> keeps its line breaks.
		- Blockquote <blockquote> indents the text, ignores line breaks, and wraps text.
		- Paragraph Titles (headings) <h1>, <h2>, <h3>, <h4>, <h5>, and <h6> emphasize and organize text.
		- Division of a Web Page <div> identifies large pieces of text and adds spacing around the text.
		- Span <span> identifies text in a paragraph without adding surrounding space.
		- List <ol>, <ul>, <li>, <dl>, and <dd>
		- Table <table>, <tr>, and <td>
		- Page Header <header>
		- Page Footer <footer>
		- Navigation <nav>
		- Aside <aside>
		- Figure <figure>
		- Section <section>
		- Header Group <hgroup>
		- Article <article>
		- Abbreviation <abbr>
		- Acronym <acronym>
		- Address <addr>
		- Definition <defn>
		- Citation <cite>
		- Insertion <ins>
		- Deletion <del>
		- Code Sample <samp>
		- Code Variable <var>
		- Keyboard Input <kbd>
		- Output <output>
		- Visible Web Page <body>
		- Comment <!--…--> is not displayed on the web page.
	+ XML Rules for Tags
		- All *elements* must be terminated with a slash “< … />”.
		- All *names* and *properties* (*attributes*) must be in lowercase.
		- All *values* of *properties* (*attributes*) must be enclosed in double quotes: align=”centered”.
		- *Properties* (*attributes*) must be given a *value*: checked=”checked”.
		- Special characters <, >, &, ″ and ′ must always appear as &lt, &gt, &amp, &quot and &apos, respectively, when used in the *value* of a *property*.
		- *Anchors* (*links*) and other *elements* cannot be nested.
		- Notice the **Properties** panel (window) below the *Document Window*.
	+ Select **HTML (< >)**.
	+ Notice that text can be identified with the content elements in the **Format** drop down menu.
	+ Notice that there are some formatting options, *Bold* and *Italic*, and *Button Lists* and *Numeric Lists*, *Indent* and *Outdent* to identify content.
	+ Notice that content elements can be identified with an #**id\_name** or a .**class\_name** for consistent formatting.
	+ Select **Page Properties** to format the visible web page (<body>).
	+ Notice the hierarchy of elements for the text at in the **Status Bar** at the bottom of the *Document Window*.
	+ Use **Tag Selector** to display structure around cursor.
	+ Notice the **Properties** panel (window) at the bottom of the screen.
1. Insert links to anchors of other web pages.
	* Link to the external anchor of another web page:
		+ <**a href=”***url***“**>…<**a/**>
		+ A URL points to the start of a web page.
	* Create internal anchor:
		+ <**a name=”***anchor\_name***“**>…<**a/**>
	* Link to internal anchor:
		+ <**a href=”#***anchor\_name***“**>…<**a/**>
	* Link to internal anchor of another web page:
		+ <**a href=”***url***#***anchor\_name***“**>…<**a/**>
	* Link to mailserver:
		+ <**a href=”mailto:***name*@*mailserver***“**>…<**a/**>
2. Attach formatting to content items.
	* Browser preferences hold default formats for each element.
	* Deprecated format tags – because not connected with content elements
		+ center
		+ font
		+ b, i, s, u, tt and strike
	* Usable format tags
		+ <big> and <small> (for relative font size changes)
		+ <em> and <strong>
		+ <sub> and <sup>
		+ <q>
	* Line Break <**br /**>
	* Horizontal Rule <**hr /**>
	* Styles are used to format the content elements in this hierarchy.
		+ Inline Style – most work – local formatting takes precedence
			- <*element* style=”…”> … </*element*>
		+ Header of HTML file
			- <style type=”text/css”>…</style>
			- #id\_name – Use for formatting one element on a web page
			- .class\_name – Use for formatting multiple elements the same way
		+ CSS file – filename.css – collects styles for use in multiple web pages

## An HTML File with CSS Formatting Elements -- filename.html

<!DOCTYPE HTML PUBLIC …>

<html>

 <head>

 <title>…</title>

<**style type=”text/css”**>

 ***element* {**

 /\* *comment* \*/

 /\* selector: apply to this element (tag) \*/

 ***property*: *value*;** /\* *declaration* \*/

 …

 **}**

 **#*id\_name* {**

 /\* apply to a single element unique on the page \*/

 …

 **}**

 **.*class\_name* {**
 /\* apply to multiple elements \*/

 …

 **}**

 ***element.class\_name* {**

 /\* apply to specific element (tag) \*/

 …

 **}**

 …

<**/style**>

<**link href=”mystyles.css” rel=”stylesheet” type=”text/css”** />

 </head>

 <body>

 <**p** **style=”*property*: *value*; …”**>…<**/p**>

<**p**>...</p> <!-- where **p** is the ***element*** in the **style** in the **head** -->

<**p#id\_name**>...<**/p**>

<**p.class\_name**>...<**/p**>

 </body>

</html>

* + Notice the hierarchy of content elements for the text in the *Status Bar* at the bottom of the *Document Window* for selecting the elements.
		- Place cursor in content to select an element in the *Status Bar*.
		- Place cursor on the element in the *Status Bar* to select.
	+ Notice the **Properties** panel (window) below the *Document Window*.
	+ Select the **CSS** icon.
	+ Notice the **CSS Rules** that can be **Targeted** (**Edited**).
	+ Select a **Font**, a **Size**, a *Unit of Measurement*, a *Color*, an *Alignment* and a *Font* *Type* (*Bold* or *Italic*).
	+ Select **Page Properties** to format the background (<body>) of the page.
	+ *Elements* have *properties* that determine the spacing around the *element*s:
		- padding inside of the borders
		- borders
		- margins outside of the borders
1. Insert (accessible) media, forms and scripts to your page.
	* Use **Rulers**, **Grids** and drag-out **Guidelines** to position.
	* Select **View** from the Menu Bar.
	* Select **Rulers** from the drop down menu.
	* Select **Show Rulers**.
	* Select **Grid** from the drop down menu.
	* Select **Show Grid**.
	* Select **Insert** from the *Menu Bar* or select the **Insert** panel.
	* Select **Image** from the drop down menu to display the **Select Image Source** window.
	* Select a folder to **Look in**.
	* Select an image file.
	* Select **OK**.
	* Select **OK** to save your document first and create a document-relative path for the image.
	* Select **Yes** to copy your image into the Local Site (Folder).
	* Select **Save**.
	* Enter a description of the image as **Alternate Text**.
	* Browse for the file in the local folder to get its URL.
	* Select **OK**.
	* Embedded Image <img … />
	* External Image <img source= … />
	* Embedded Web Page <iframe … />
	* Audio <audio … />
	* Video <video … />
	* <object … /> -- generic piece of HTML code with attributes
	* <param … />
	* <map … />
	* <area … />
	* <form … />
	* <script … />
2. Organize your web pages.
	* **File** *panel* for moving and copying elements and automatically adjust pathnames in the HTML and CSS files.
	* Select the **Assets** *panel* from behind the **Files** *panel*.
	* Select assets to preview or to organize as *Favorites* and with folders.
3. View the underlying HTML coding.
	* Select **Split** or **Code**.
	* Select any content with your cursor to identify it in the **Source Code** panel.
	* Select *highlight*, *collapse*, *indent* and *outdent* from the tools at the left.
	* Select the **Apply Comment** button to insert notes describing an item or progress.
	* Select **Design** *view* to edit on the page.
		+ Refreshes after changes in **Code** *view*.
	* Select **Live View** to see how the page looks in a browser (not editable).
	* Select **Live Code** to select the (not editable) code used to render an **element**.
4. Check for errors and problems.
	* Select the *Check browser compatibility* icon from the *Application Bar*.
	* View the report in the **Browser Compatibility** window at below the *Document Window*.
	* Select *Validate Markup* icon from the *Application Bar*.
	* View the report in the **Validation** window at below the *Document Window*.
	* Select **Site** from the menu bar or from the menu for the **Files** panel or select the *Site* icon from the *Application Bar*.
	* Select **Reports…** from the drop down menu to display the **Reports** window.
	* Select to **Report on** the **Current Document** or the **Entire Current Local Site**.
	* Select what to report on.
		+ Untitled Documents
		+ Combinable Nested Font Tags
		+ Redundant Nested Tags
		+ Removable Empty Tags
		+ Missing Alternative Text
		+ Accessibility
	* Select **Run**.
	* View the report in the **Site Reports** window at below the *Document Window*.
	* Select **Site** from the menu bar or from the menu for the **Files** panel or select the *Site* icon from the *Application Bar*.
	* Select **Check Links Sitewide…** from the drop down menu.
	* View the report on **Broken Links**, **External Links** and **Orphaned Files** in the **Link Checker** window at below the *Document Window*.
	* Select the *Preview/Debug in browser* icon from the *Application Bar*.
5. Upload your web page(s) to you web site.
	* Select **Site** from the menu bar or the menu for the **Files** panel, or select the *Site* icon from the *Application Bar*.
	* Select **Manage Site…** from the drop down menu.
	* Select your site from the **Manage Sites** window.
	* Select **Edit…** to display the **Site Setup** window.
	* Select **Server** from the four items at the left.
	* Select the plus sign (**+**) at the bottom of the window to add a new server.
	* Enter a **Server Name** of your choice.
	* Select **FTP** or **SFTP** from the **Connect** drop down menu.
		+ At UIC, people, publish, and tigger only use SFTP.
	* Enter the server IP address as the **FTP Address**, for example, people.uic.edu, publish.uic.edu, or tigger.uic.edu.
	* Enter your **Username**, for example, your UIC NetID.
	* Enter your **Password**, for example, your UIC Common Password.
	* Copy and paste the pathname for your public web folder on the remote server, for instance, */usr/local/etc/httpd/httpdocs/dept/accc/itl/project*, as the **Root Directory**.
	* Copy and paste the **Web URL** (address) for your web site, for instance, <http://www.uic.edu/accc/itl/project>.
	* Select **Test** to check the connection to the remote server.
	* Select **Save** to establish the remote site.
	* Select **Done** to close the **Manage Sites** window.
	* Select the **Connect to Remote Server** icon from the **Files** panel.
	* Select the **Expand to Show Local and Remote Sites** icon.
	* Select all the files in the local folder that you want transferred.
	* Select the **Put File(s)** (*up arrow*) icon or the **Synchronize** icon to copy files to the remote server.
	* Select the **Collapse to Show only Local or Remote Site** icon.

## Troubleshooting HTML Problems in Blackboard Learn

Blackboard Learn is an interactive service that produces web (HTML) pages formatted with CSS. Some problems in Blackboard Learn are the result of poorly constructed or unfortunately compromised HTML. These problems can be solved by restructuring the HTML or revising the CSS formatting that produce a page of Blackboard Learn content.

* Select the chevron to the right of the name of the content item on a page in Blackboard Learn and select Edit form the drop down menu to view the text used to create the content item.
* Select the *Validate HTML* icon and follow the directions to let Blackboard Learn check for and remove inconsistencies in the HTML.
* Select the *Validate HTML* icon again to be sure that there are no longer any inconsistencies.
* Select the Remove formatting icon from the Visual Text Box Editor in an attempt to remove any obstinate formatting that might continue to cause any problems.
* Select the <> icon in the tool bar for the Visual Text Box Editor to display the HTML and text used by Blackboard Learn to render the page.
* Use line breaks in the HTML to separate chunks of the code to make it more readable.
* Check for and repair any unmatched tags in the HTML.
* Select the <> icon in the tool bar again for the Visual Text Box Editor to display the text used by Blackboard Learn to create the page.
* Select all the ill-formatted content as it appears on a page in Blackboard Learn or in the Visual Text Box Editor window for that page.
* Copy the content from Blackboard Learn.
* Open Adobe Dreamweaver.
* Create an HTML page.
* Select the **Code** button at the upper left to display the HTML shell for the page.
* Right click to place your cursor between the **<body> </body>** tags (if it is not already there).
* Select **Paste Special...** from the drop down menu.
* Make sure that **Retain line breaks** is checked in the **Paste Special...** window.
* Select the appropriate formatting to paste:
* Text Only
* Test with structure (paragraphs, lists, tables, etc.) <<< Usually this one.
* Text with structure plus basic formatting (bold, italic)
* Text with structure plus full formatting (bold, italic, styles)
* Select **OK** to paste the HTML into Dreamweaver.
* Look for the *element tags* to help you recognize the structure of the HTML.
* Look for *class\_names* to help you recognize the formatting of the text.
* Use line breaks in the HTML to separate chunks of the code to make it more readable.
* Check for and repair any unmatched tags in the HTML.
* Repair any other structural defects.
* Use the features in Dreamweaver and described in Section 11 to check the HTML.
* Select the Design mode to view the rendering of the HTML and text.
* Copy all the text shown in Design mode and paste it back into Blackboard Learn.

Finally, remember that you are supposed to be checking the accessibility of your HTML and CSS as soon as you start building it:

* Use headings, lists, and consistent structure to organize your content.
* Keep your styles out of the <body> of your document—use your <head >.
* Make hyperlink of the text that describes its destination.
* Summarize tables and make line-byline reading sensible.
* Use alt tags to describe aural and visual content.
* Provide descriptions, captions, or a transcript for aural and visual content.
* Provide alternate descriptions for dynamic features when unsupported.

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