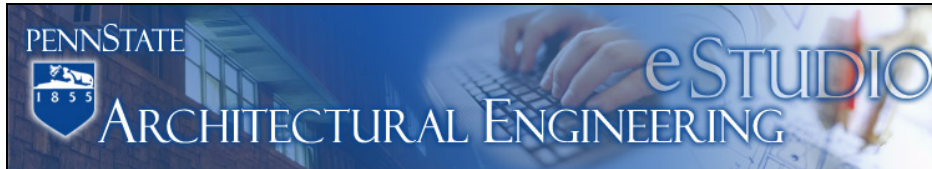



Architectural Engineering Senior Thesis CPEP Tutorial



Introduction


Welcome to AE 481W - Senior Thesis. Through the duration of your course you will be required to create and maintain a web site which will showcase your senior thesis project. This tutorial will give you all the information you will need to setup a basic web site, but is in no way the ONLY means of creating your site. You are encouraged to add to the provided templates and to design your own layout from scratch, it is only asked that you maintain the same information, in the same order, as the provided template to ensure all of the main links are included on your site and they all look cohesive.

Student Name
 Option
 Building
 Location



This is a student-generated Capstone Project e-Portfolio (CPEP) produced in conjunction with the AE Senior Thesis e-Studio.

[Home](#)
[Student Name](#)
[Building Statistics](#)
[Thesis Abstract](#)
[Technical Assignments](#)
[Progress Log](#)
[Thesis Research](#)
[Thesis Proposal](#)
[Presentation](#)
[Final Report](#)
[Reflection](#)
[Senior Thesis e-Studio](#)

Welcome to STUDENT's AE Senior Thesis e-Portfolio


Date	Announcement
TODAY	Newest announcement are added to the top
3.24.06	Presentation recognized as among the elite
9.15.05	Technical Assignment
8.30.05	Started 5th year course work

The Capstone Project Electronic Portfolio (CPEP) is a web-based project and information center. It contains material produced for a year-long Senior Thesis class. Its purpose, in addition to providing central storage of individual assignments, is to foster communication and collaboration between student, faculty consultant, course instructors, and industry consultants. This website is dedicated to the research and analysis conducted via guidelines provided by the Department of Architectural Engineering. For an explanation of this capstone design course and its requirements click here.

User Note:
 Note: While great efforts have been taken to provide accurate and complete information on the

Figure 1 - Sample Thesis Template

The Layout

What does my site have to include? Each CPEP must contain at least four main sections; these include a page-heading, navigation menus, page content, and a page-footer. The information that must appear in each of these sections can be found below.

- Header
 - Your first and last name
 - Your Option
 - Your building's name
 - Your building's location
- Navigation Menus
 - HomeA link back to your Introduction page
 - Student BiographyA brief page which introduces yourself
 - Thesis Abstract
 - Technical Assignments
 - Progress LogA list of which items you have finished
 - Thesis Research
 - Thesis Proposal
 - Presentation.....Your final PowerPoint® Presentation
 - Final Report
 - Senior Thesis e-StudioA link to the main course site
- Page Content
 - Introduction to your site and what senior thesis is. Possible layouts (similar to the template) include range of other features that you can incorporate into your design.
- Footer
 - "This page was last updated on *DATE*, by *YOUR NAME* and is hosted by the AE Department ©20XX"

Again this list includes only the minimum requirements for the course, feel free to add and improve your site. You may want to view the sites of previously successful students to see what a good layout includes. For those of you who are familiar with how to make websites you may use this list as your starting point and are encouraged to create your CPEP from scratch, but must NOT implement frames into your design, as this leads to the inability of searching for your site easily- No Frames allowed.

Using Templates

How do I go about creating my CPEP website? We have provided a sample template for your use; you have access to a few different color schemes to choose from to get started, the template is available at <http://www.arche.psu.edu/thesis/eblueprint/assignments/templates/>. To preview a theme click on the 'Preview' link, or download the zipped files for the theme you want to use.

Student Name	Student Name	Student Name
Option	Option	Option
Building	Building	Building
Location	Location	Location
This is a student-generated Cap	This is a student-generated Cap	This is a student-generated Cap
Home	Home	Home
Student Name	Student Name	Student Name
Building Statistics	Building Statistics	Building Statistics
Thesis Abstract	Thesis Abstract	Thesis Abstract
Technical Assignments	Technical Assignments	Technical Assignments
Progress Log	Progress Log	Progress Log
Thesis Research	Thesis Research	Thesis Research
Thesis Proposal	Thesis Proposal	Thesis Proposal
Presentation	Presentation	Presentation
Final Report	Final Report	Final Report
Reflection	Reflection	Reflection
Senior Thesis e-Studio	Senior Thesis e-Studio	Senior Thesis e-Studio
User Note:	User Note:	User Note:

Figure 2 - Color Scheme examples

Before we continue it should be addressed that we recommend using Macromedia's "Dreamweaver® MX" software for editing your template. Microsoft's FrontPage® software is NOT recommended because it is optimized for viewing in Internet Explorer® only. The template that has been created for you has been designed to work in multiple browsers. Dreamweaver is available on all of the lab classroom computers, and is available to AE students for installation on their own PC's. You can find more information on installing Dreamweaver at http://www.arche.psu.edu/o_drive.htm.

To ensure your site is being design to render properly you should use Dreamweaver's "browser check" tool, which is shown below. In the "Results" pane of Dreamweaver you can view possible errors your design includes. The results pane lists which files have errors, which line of the code they reside on, and a short description of your specific problem. Double-click on the error for Dreamweaver to go to that line of code, typically the description of the error should be enough for you to remedy it, however if problems persist please use the contact information on the last page of this article in order to solve the problem.

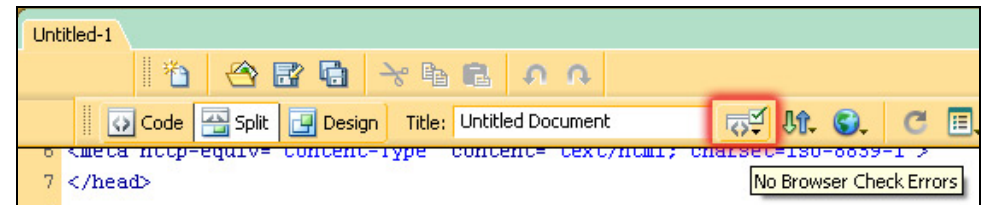


Figure 3 – Browser Check tool

Click on the Browser Check tool for Dreamweaver to run through your code and look for errors. Once this process is complete (which only takes a few seconds) you should scroll down to the results tab in Dreamweaver.

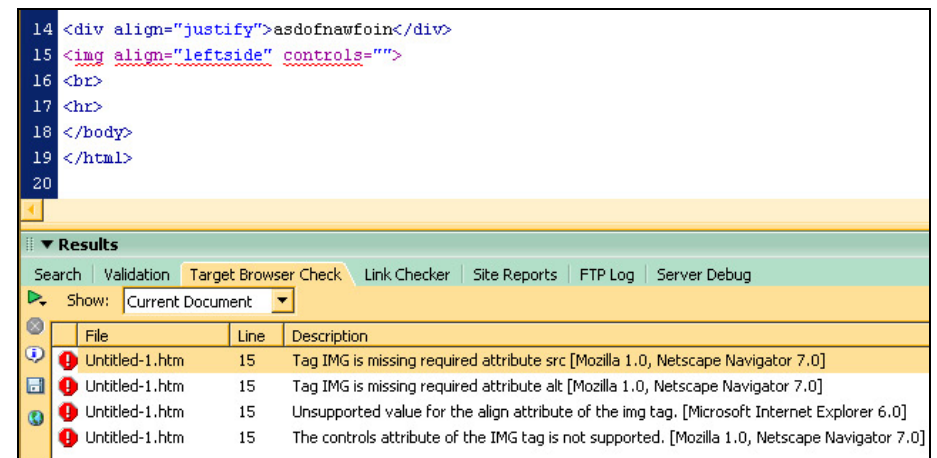


Figure 4 - Sample error report from Dreamweaver

This feature should be ran on your design before you plan to upload that file to your web space, Dreamweaver notes errors in the code window pane with a squiggly red line similar to spelling errors in Microsoft Word®.

CSS – Cascading Style Sheets: An Introduction

The template we created uses Cascading Style Sheets (CSS) to apply a style format to the template html file. Simply put, your web site is a composite of content (an html file) and formatting (a CSS file). You need 2 files for your site to appear correctly:

- “index-template.html” Content
- “style.css” Style

We host many different style sheets for your use, this way you only have to edit your index page. If you wish to create or modify your own style sheet you are encouraged to do so. If you use a different style sheet you must place that CSS file on your own web space, if you chose to stick with the templates the files are located for you at <http://www.arche.psu.edu/thesis/styles> and you do not need to copy these files to your web space. Currently there are blue, white, green and black styles available.

To specify the style sheet you wish to use (instead of using the default) you need to open your “index-template.html” in Dreamweaver. Upon opening Dreamweaver for the first time it will ask you which “Workspace Setup” you wish to use in the program, chose “Designer” so that this tutorial is easier to follow. There are also 3 ways to view any html file you open in Dreamweaver, these are “Code”, “Split” or “Design”. Though the code may not make much sense to you now, it is best to view your page in “Split” mode so that we can edit code, and see our changes in a preview pane. To change the layout of Dreamweaver to “Split” click on the button as shown below:

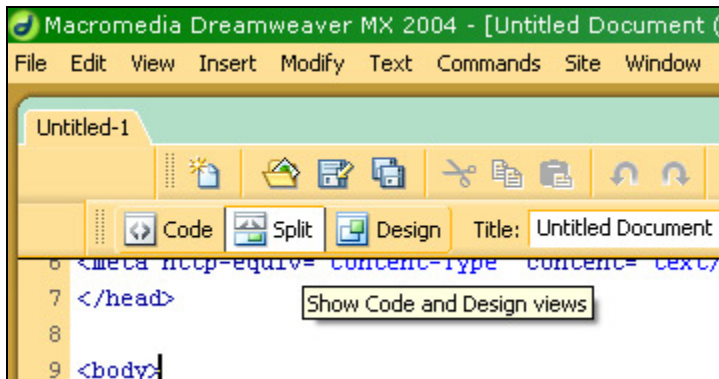


Figure 5 - Split the work layout to view a preview and the html code.

The html code is now shown in the top window pane, and a preview of what your code looks like once rendered in an internet browser is shown in the bottom pane. To edit which style sheet your page will use it's location must be specified in the code, by default the color of the template you download has only a relative link to your style sheet (see page 4 for link types). To edit this location look at the 7th line of code; which reads:

```
<link... href="somecolor.css"...>
```

The href="....." is the location of the style sheet that your page uses to format it's content, if you have created your own style sheet, or wish to use a different scheme (previews of available styles can be found on page 2) you need to change this line to refer to the location of your style sheet, for example if you wish to use the “green-gold” style sheet that is shown below you must change the link located in the 7th line from that which is shown above, to:

```
<link... href="http://www.arche.psu.edu/thesis/styles/green.css"...>
```

Now when your page loads your fonts and colors will be generated according to the CSS file specified, you can change the address to one that refers to a style sheet located in your web space if you would like to modify one of the given styles. For additional help with CSS please refer to:

- <http://tlt.its.psu.edu/suggestions/accessibility/css.html> ****
- <http://www.artypapers.com/csshelppile>
- <http://www.htmlhelp.com/reference/css>
- <http://www.w3schools.com/css>

• Editing Your Page

Your template has been created with Macromedia's Dreamweaver MX and we recommend using it to modify your web site. You can edit/add text, pictures, and anything else you'd like to implement into your site using Dreamweaver. When using Dreamweaver to edit your page, modifying text is very easy, in fact, you can simply select and edit text right in the preview pane, instead of changing the source code. Dreamweaver can easily add pictures too, very similar to applications like Word® and PowerPoint®.

On the topic of pictures, you must ensure that you have properly linked your pictures inside of your document. The best way to ensure that your page will load correctly is to view it after posting it to your web space. There are two ways to add links in your web page. These include Absolute and Relative links. Examples of each can be seen below, Absolute links specify the entire address of the object and Relative links refer to the object's location relative to the current folder.

Absolute:

This type specifies the entire location of the object/file you are referencing. These links are optimal when you need the absolute address; say for links to another website like Google. The link is only absolute when beginning with 'http://' otherwise the browser will assume your link is relative.

Example:

Code :Google

Relative:

This type specifies the relative location of the object/file you are referencing. These are best used for your site internally, to reference your images and files. In the example below the link refers the subfolder called 'Pictures' then the image file in that folder is specified as 'my-logo.gif'.

Example:

Code :
or

This difference is one of importance, since your files may be moved in the future to a different folder it is preferred that you use relative links, this way if you page refers to a subfolder, the content will be linked properly if you main

folder is relocated. Relative links are also shorter and are more efficient for navigation through your site, but Absolute links will be necessary if you wish to include links to external websites, like a link back to our main thesis page.

Changing your fonts and colors will be done in the style sheet you are using. You can open the style sheet in Dreamweaver as well.

If you want to change you font-type for the page you must edit the style sheet- not your content page. Each part of your template will be broken down by name, i.e. the heading, content, navigation menu, etc. View the image on page 6 which gives the name for each section of the page, each section has its style attributes specified in the style sheet. For example, if you wish to change the font and the font color of the header from the default Arial and black to Veranda and blue go to the section of the style sheet titled "masthead" and change the font-family to "Verdana, Arial, Helvetica". The reason the other 3 fonts are specified is to ensure that if the computer someone is using to view your site doesn't have the correct font, the browser will jump to the next font on this list. Arial and Helvetica are pretty common thus a good 'safe' font to use.

To change the color of your background or text color you must also specify the color you would like to use in your style sheet. Again each part of the style sheet is broken down into sections based on the page layout, this is where you specify you colors as well as your fonts. Colors are given as hexadecimal numbers; you can see that anytime the color is mentioned in the style sheet that it's followed by the number sign and 6 digits or letters. These six characters refer to the color you'd like to use. Below is a list of colors commonly used, you can also use the color picker option in Dreamweaver to from a larger range of values:

Colors and their hexadecimal code:

Black	#000000	Grey.....	#999999
White	#FFFFFF	Lt Blue	#99CCFF
Red.....	# FF0000	Dk Blue.....	#333366
Blue	# 3300FF	Lt Green	#CCFFCC
Green	# 00FF00	Dk Green	#006600
Yellow.....	# FFFF00	Purple	#993399
Orange	# FF9900	Cyan	#33FFFF

As an example, if you wish to change your main content's background-color to a shade of light green you could easily do so by modifying the 'background-color:#XXXXXX' value under the '.content' tag to 'background-color:# CCFFCC'. You can see the naming convention of the style sheet in the picture on the next page.

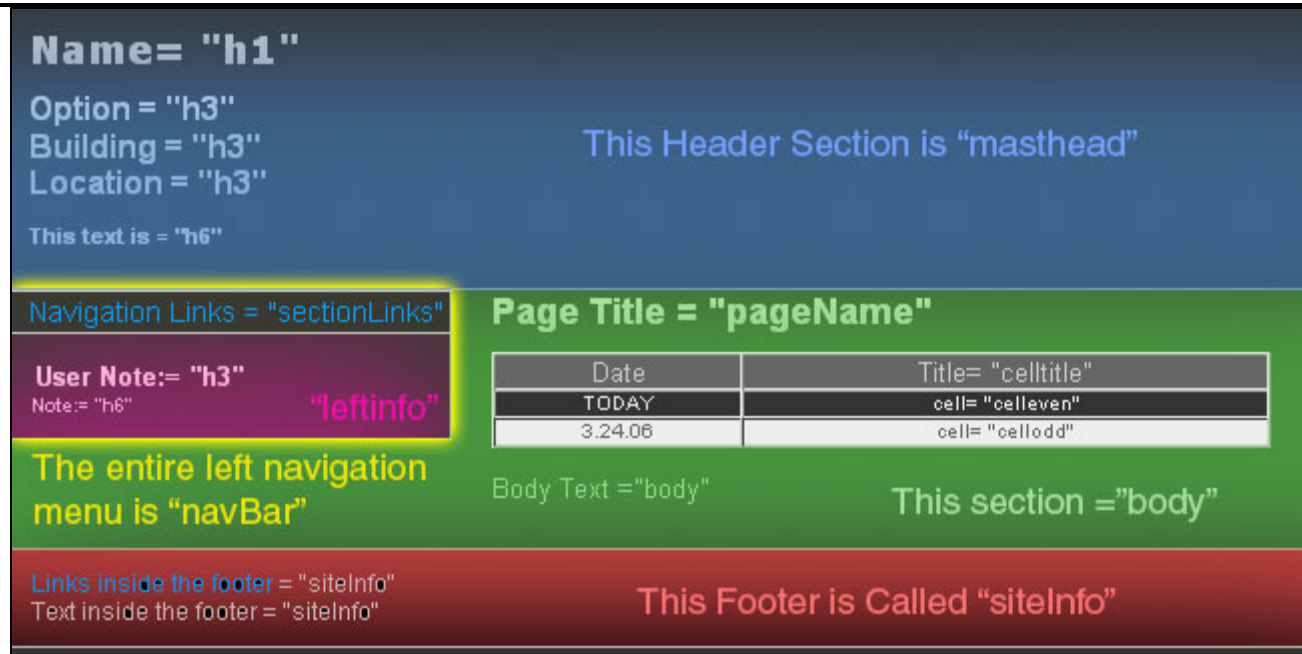


Figure 6 - Style Sheet - naming convention of page sections

Adding pages to your site is a rather simple process, however, you have been given all the files that you will need inside of the zipped template folders.

These zipped template folders can be found at:

<http://www.arche.psu.edu/thesis/eblueprint/assignments/templates/>

Mapping Your Web Drive

You have access to your web-space day or night. If you are in the computer labs you can skip the VPN section, but if you would like to connect to your drive from a location outside of the labs please review the VPN help.

VPN or Virtual Private Network is a way for your computer to connect to the lab computers in a safe, and encrypted way. To connect to the College of Engineering you will need to download a VPN client, follow the link below:

<https://www.work.psu.edu/access/vpn/>

After installing the client launch it and double click 'ISP_to_COE', this is the College of Engineering server, your login information is the same as your regular PASS account (webmail). Once you are connected you should see a little lock logo in your task bar.

Mapping your drive is done by opening your 'My Computer' window, proceeding to 'Tools' — 'Map network drive...' and specifying the following:

1. Chose a drive letter, anything that you aren't currently using (W is common).
2. To the folder target, add: [\\aeweb.arche.psu.edu\xyz123\\$](http://www.arche.psu.edu/xyz123$)
 - a. 'xyz123' being your university id
 - b. The '\$' must follow
3. Then click on 'connect using a different user name'
 - a. User Name: PSUAE\xyz123
 - b. Password: 'Your AE lab password'
4. Finally click finish and your web drive should now be mounted under the 'Network Drives' list on 'My Computer'.

Please always use '\' not '/' for network addresses

INDEX

Introduction	1
Layout.....	1
Using Templates	2
CSS-Cascading Style Sheets	3
Editing Your Page	4
Links.....	4
Changing Fonts and Colors	4
CSS Naming Convention	5
Adding Pages.....	5
Mapping Your Web Drive	5

Contact

If you have any questions/comments concerning senior thesis, this tutorial or need help creating/editing your site please contact one of the following:

Thesis (Course Work) -----

Professor Kevin Parfittmkp@psu.edu

Website Inquiries -----

Eric Yanovich (5th Year AE).....ejy112@psu.edu

David Smith (4th Year AE)dbs176@psu.edu

Michael Royer (3rd Year AE)mpr184@psu.edu

Architectural Engineering Senior Thesis

All images and text in this paper are ©Copyright 2005

The Department of Architectural Engineering

The Pennsylvania State University

