

Building a New Home

Your objective in this lab is to create a web page utilizing XHTML, external CSS, and some built-in PHP functions. In addition to having content of its own, this web page will serve as the home page for your course work and to view your submissions for grading purposes.

Design Overview and Requirements

As this web page will serve as your home page, it should be stored in a directory called *IT207* within your *helios_html* directory on the Zeus/Helios server. It should be given the default file name for folders so when specifying just 'http://helios.ite.gmu.edu/~username/IT207/' it will automatically load. You can create the web page using any text editor (Microsoft Notepad, RogSoft Notepad+, Adobe Homesite, etc) that is not WYSIWYG capable (Adobe Dreamweaver, Microsoft Word, etc).

For your early submission points you do not need to be concerned about the positioning of the elements on your web page. You should focus more on structure of the web page and the flow of that structure. At the point of final submission, the web page should be laid out as illustrated in the following image:

<div>Lab Assignments</div> <ul style="list-style-type: none">• <u>Assignment 1</u>• <u>Assignment 2</u>• <u>Assignment 3</u>• <u>Assignment 4</u> <div>Lab Practica</div> <ul style="list-style-type: none">• <u>Practicum 1</u>• <u>Practicum 2</u>	<div>Course Title, Section, Semester</div> <div>Instructor's Name</div> <div>University Name</div>		<div>Your Name</div> <div><u>Your Email</u></div> <div>Last Modified: <i>Time Date Zone</i></div>
	<div>Lab Content</div>		
<div>Copyright Content</div>			

While on your first submission you will only be using CSS stylizing, for your final submission, you will need to utilize CSS positioning in order lay out your home page. HTML tables should not be used for positioning, as they are not XHTML compliant. In doing so, you should aim to maximize the size of the *Lab Content* division.

Items emphasized in bold in the image should receive similar emphasis on your web site.

Items in the image that are underlined should act as hyperlinks on your web site. You should have a hyperlink to send an email and hyperlinks that point to the Lab Assignments and Lab Practica. The email hyperlink should be working in case any of the Instructors need to contact you.

The main page should be created using an HTML concept called server side includes (SSI) so that the basic navigation and common structural content is common to all your Assignments and Practica. Basic instructions on SSI are included with this assignment, courtesy of Robert Darrell (note that our server allows the .html extension to be used even when incorporating SSI). For your first submission point you do not need to incorporate any PHP and should use HTML only. HTML frames should not be used, as they are not XHTML compliant.

The header division/SSI should include 2-columns with the course/instructor information in the left column and your information in the right column. The items within each column need to be centered horizontally.

The copyright division/SSI should include the following statement (in a small font size) to communicate to others that your work is original and is therefore copyrighted:

This web site is entirely original work and full academic copyright is retained. This web site complies with the Mason Honor Code (<http://oai.gmu.edu/mason-honor-code/>).

Since you have not created any of the lab assignments, etc. yet, at this point the Lab division/SSI links should just go to a series of appropriately named empty directories (assignment1, assignment2, practica1, etc.) that you create within the *IT207* directory. The Assignment and Practica links should be in a CSS stylized list. As we proceed through each of the assignments and practica in the course, each of the links should eventually bring up a web page for the corresponding submission where the content of the submission appears in the *Lab Content* division. The rest of the web page should originate from a common set of SSI files in order to produce visual continuity across your web site.

While the *Lab Content* division will display the content of all the labs, for the home page, it should be laid out like in the following image:

Lab Assignments <ul style="list-style-type: none">• Assignment 1• Assignment 2• Assignment 3• Assignment 4 Lab Practica <ul style="list-style-type: none">• Practicum 1• Practicum 2	Course Title, Section, Semester Instructor's Name University Name		Your Name Your Email Last Modified: Time Date Zone
	<div>Self Photograph</div>		Professional & Personal Details
	Summary <ul style="list-style-type: none">• Personal • Academic		
<i>Copyright Content</i>			

For the home page, the *Lab Content* division should contain a photograph of you, along with some summarized personal and academic information. You are free to choose what you want to include in your academic and personal summary however you should include some ancestral data including the home town and country your family is from. You should list this information in a stylized list. In addition to the summarized information, you should also include some professional and personal details utilizing stylized lists and paragraphs. This could either be information from your resume that is not included in the summary or details of your professional career objectives along with personal interests. In either case you should provide further details of your ancestral home town.

While for your first submission you will only be using CSS stylizing, for your final submission, you will need to utilize CSS positioning in order lay out the *Lab Content* division of home page. It should be laid out in two columns/three divisions as shown in the preceding image. As noted earlier, HTML tables and frames should not be used for positioning, as they are not XHTML compliant.

Everything within the .html file, including all the SSI files, should be well-formed and XHTML strict compliant. As such, you will need to use the XHTML strict DTD. Don't forget to include the `<html xmlns="http://www.w3.org/1999/xhtml">` attribute in the `<html>` tag.

Certain labs may necessitate that you update their link on this division/SSI when posting the lab. If well planned and designed correctly as part of this lab, you should not need to update any SSI files (including the links within them) throughout the course. As such, careful planning is required as part of this lab in order to come up with a home page that generalizes well enough for the greatest number of situations. Your CSS files should also be designed so they do not need updating during later labs, as this will also impact earlier labs.

As noted, you should use XHTML for the content of all the files and CSS for the stylizing and layout of those files to make your home page. The CSS should be an external .css file that will be either shared by all your labs in the course.

For the first submission, the external sheet should include general stylizing of existing XHTML tags. If you need to apply formatting to a subsection of a tag's content, such as a portion of a paragraph, you will want to look into the `` tag where 'XXX' is defined as .XXX in the external sheet.

While you are free to use any CSS properties, you need to use at least 6 of the following CSS properties somewhere within your web page:

- font-weight
- font-family
- font-size
- font-style
- text-decoration
- background-color
- background-image
- border-style
- border-color
- width
- height
- first-letter (Use this to capitalize the first letter on each of your content pages.)
- a:hover (Use this to change the color of a link when the mouse moves over it.)
- padding (Use this to move your text away from the edge of the screen.)
- margin (Use this to move the text away from your images.)

For the final submission, you should continue to develop your external .css file to include positioning. This will allow you to arrange your web page so that the divisions noted earlier are laid out like the image shown at the beginning of the lab assignment.

As these divisions will prove critical in the positioning of your web page, you should integrate them early into the styling of your web page. The most common way involves incorporating the `<div id="XXX">` tag where 'XXX' is defined as #XXX in the external sheet. While setting up the positioning of the divisions, note that the layout should remain consistent and visible no matter the size of the browser window.

Also for your final submission, you should begin to become comfortable with the primary resource PHP programmers use when programming. Utilizing the docs for PHP found under the Documentation link on <http://php.net> you will need to incorporate at least 6 built-in functions that come as part of PHP. You should spend some time exploring the Function Reference in the PHP docs to find functions that produce browser output (or produce with a simple `echo` statement). The functions chosen should be appropriate to and appear by the content they correspond with on your home page. They should also be simple enough given the limited PHP covered thus far.

Don't forget that all these PHP requirements will require you to change the extension of your homepage to `.php` for your final submission on the web server. In doing so you will need to use the built-in `readfile()` function for your SSI files to continue working.

As you are building your home page you should either submit that web page to the W3C Validator or use the Firefox HTML Validator to assure XHTML compliancy. Beyond these requirements, you should make sure that your website is visually appealing. In other words, once meeting the requirements listed, go ahead and be creative.

Approach

You should first make sure you meet the requirements of the first submission point before proceeding with the final requirements. The accompanying grade sheet further details these requirements.

In general, the first submission point requires you to create an XHTML web page that includes CSS styling. Your final submission point requires you to add CSS positioning and PHP. As you prepare your final submission, validate all the pages and correct any ill-formed tags where necessary.

Submission

You will need to upload this web page and the files that make it up to your IT207 directory within your Zeus/Helios server space. Verify that all the uploaded pages work in the browser, as this is what will be used for grading. Also for each submission point, you must submit all the files to the appropriate Assignment drop box on Blackboard.

Notables

- Remember that the lab assignment must clearly display your name in the interface (if any) and be commented with your name in all files.
- Try to be consistent in the naming of your files as this will help you later on.
- Feel free to use your book and notes for general information on these technologies.
- If need be, for reference material on HTML, you may want to visit <http://w3schools.com/html/> which we discussed in class.
- For reference material on CSS, you may want to visit <http://w3schools.com/css/> which we discussed in class.
- For reference material on PHP, you may want to visit <http://php.net> which we discussed in class.
- Just a reminder... this is individual work so while you can provide general assistance to other students while in the lab class, you should not work together or give solutions. Assistance provided to others while outside the lab class should only be through the use of the discussion forums.

Extra Credit

In addition to the 6 built-in functions you have selected, you will need to denote the Last Modified date as part of your information in the header division. This information should be provided dynamically by using the built-in `date()` function within the `getlastmod()` function. The *Time Date Zone* specification should be formatted so the output follows the following example: *22:41 Oct 10, 2017 EST*.