

CSCI N241 Web Fundamentals: The Developing (Web) Story

Lab Purpose

The purpose of this lab is to establish a development environment for your web work. Having good tools -- and understanding how they work -- provides significant advantage to a web developer. We will look at some more complicated tools along the way, but we will begin with a simple editor and a small browser set.

Our goals include:

- ... Beginning to develop a web page using basic HTML elements.
- ... Learning how to validate a web page to insure compliance to W3W 1.0 Strict standards
- ... Begin working toward publication of lab work on the IUPUI CSCI server

Lab Description

This is our beginning foray into the web. At first, you won't even put your finished work on the web (that's our next lab!). You'll complete this lab and just send it to me as an assignment. But make sure you save a copy, because in the very next lab we create a class course page, add this lab to it as a link, and publish it to a department server. However, first things first.

As an overview, you are going to copy and paste some code into a simple editor. If you are using Windows, your editor should be Notepad++. If you are a Mac user, TextEdit is a fine tool. Once you have copied the HTML source code into your editor, you'll make a simple edit to the code and save your file. Each step along the way, you'll view your file in both the Windows and Mozilla browsers. Finally, you will validate your file using a free online validation tool. When finished, you'll send me your file as an assignment this time. After this, we are on the web, baby!

Lab Deliverables

- Edited and validated HTML file, submitted as an assignment.
- Installed text editor (your choice) and testing process that includes viewing your work in at least the Mozilla and IE browsers.

Lab Directions

- Install at least the Mozilla and IE browsers. (Why? Because Mozilla is the best browser for developers and IE has market share). (If you want to expand your browser base, you should include Safari, Chrome and Opera, but that's not a requirement.) Below are links to download our required browsers:
 - [Mozilla](#)
 - [IE](#)
- Access a low end editor. Why low end? Because we want you to start off controlling every part of the process. If you like, you can switch to a "Do More For Us" higher end tool later. But for now, we want the power that learning a low end editor will give us. Plus, the low end editors are free (and we like free!) You can substitute other low end editors, but here are my suggestions, with active links for downloads:
 - For Windows users, access [Notepad++](#).
 - For Mac users, access [TextWrangler](#) from the BareBones link or via the Apple Store
- Once you have set up your browsers and editor, you are ready to work with some html
- Launch your editor (Notepad++ or TextWrangler), and open a new file
- Copy the following code and paste it into your new file in your editor. Make sure you copy everything from the first "<" (those less than and greater than signs are called chevrons) to the last ">". Make sure you start at the chevron.

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en">

<head>
<title>An XHTML 1.0 Strict standard template</title>
<meta http-equiv="content-type" content="text/html; charset=utf-8" />
<meta http-equiv="Content-Style-Type" content="text/css" />
<!-- Author: JoeBlow Student -->
<style type = "text/css">
</style>
</head>

<body>
<h1>My first valid XHTML File</h1>

<p>
Nooooooo! The semester can't be starting already!
</p>
</body>
</html>
```

- Save your file as myFirst.html, and **choose an html file format**. Hang in there, we are almost done!

- Look at your file in Mozilla and IE. You can do this inside your editor (The "Run" link in Notepad++ on the upper toolbar) or outside your editor by opening your browser and using the appropriate File open options (Firefox, New Tab, Open File) and (IE, File, Open). Make sure you see a "rendered" page without chevrons. Click here to see what the file should look like.
- Validate your file by uploading it to the free [validation site](http://validator.w3.org) (<http://validator.w3.org>) maintained by the World Wide Web organization (W3W). Bookmark this site, because you'll be coming here alot. Use the Browse button to select your myFirst.html file, and then press "Check". Verify that you get a message on a green background that says: "This document was successfully checked as XHTML 1.0 Strict!"
- Make edits to your myFirst.html file. Change Author: Joe Blow to reflect your name (of course, if you really are Joe Blow, you don't have to change anything!). And, find the paragraph tags (the "<p>" tag) and change wording from "Nooooooo The semester can't be starting already" to read "I am going to love this N241 class!". Save your file, again as myFirst. html
- Re-view your file in the browsers and check for validation
- Turn your work in You did GREAT!

Lab DeBrief

- What you just accomplished is significant! You edited, validated, and tested a strictly compliant web page. Next, you'll publish to the web. Whoo-hoo, you're on your way to Zen Master-dom, Grasshopper!