Assignment No. 1

Setting Up to Take This Course

Date Due: Tuesday, September 6, 2016

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What This Assignment Is About

This is not a graded assignment. However, this assignment is critical because you need to have a local web server on your own system to do proper web development. This write-up therefore leads you through installing XAMPP, a package that integrates a complete web development environment on either Windows or Macintosh systems. The standard practice throughout this course will then be to do development on your own system and then upload your web pages to the CS server so that all of us -- me as your professor, our teaching assistant and/or graders, and even other students — can view your work.

It is critical that you do this assignment by our second class of the semester: **Tuesday, September 6, 2016.** That way, if you have problems, we will have time to address them before the second assignment is due, which will be just days after that. Don't procrastinate. Get the semester off to a good start. Install XAMPP over the weekend (if not sooner) to ensure that you have it up and running before our second class. If you have problems, use the <u>Piazza discussion forum</u> to get help from your classmates, our teaching assistant, and me.

The current XAMPP 5.6.12 installation for either Windows (32- or 64-bit systems) or Mac (OS X) systems includes

- Apache 2.4.16
- MySQL 5.6.26
- PHP 5.6.12
- phpMyAdmin 4.4.14
- as well as a host of other packages that we will not be using in this course

What You Are To Do

(1) Complete Your Course Registration, join Piazza and Blackboard

- a. Begin by completing your registration for this class using the Google form posted at https://goo.gl/forms/Ghj2Gl03K7VL88I13
 - You **MUST** Submit a printed copy (or ctrl-p, save as pdf)
- b. Next, join the <u>Piazza class discussion forum</u> so that you can get help from your classmates, our teaching assistant (TA), and me if you need it, and likewise provide help to others where you can. We will use this forum throughout the semester for all course-related communications outside of class, so it is critical that you register on it or you will miss important class announcements.
- c. If you have not already done so, please register/Sign-in at new Blackboard Face2Face School Pilot Site. I will be posting most teaching materials here, so it is also critical that you register on it or you will miss important class materials/announcements. Please contact https://lowell.umassonline.net

(2) Get a Web Server Up and Running on Your System

Macintosh Users

If you are a Macintosh user, there is already a web server installed on you system. However, there are some advantages to using XAMPP rather than the built-in server. To install XAMPP, follow the directions for Windows Users below.

Here are the steps to enable what on the Mac is called "web sharing" (covered in Lesson 1, Step 8)

- 1. click the Apple Icon
- 2. select System Preferences
- 3. select **Sharing** (under "Internet & Wireless")
- 4. check to see if **Web Sharing** is enabled (checked)
 - o if it is, note the information about your IP address, etc.
 - look for a message such as: Your personal website address is: http://192.{something}/~{something}/
- click the Create Personal Website Folder button, which then changes to Open Personal Website Folder
 - o this opens a folder named **Sites**, which is under the **Home** directory
 - to find this folder, using the Finder or click **Home** in the **Go** menu, and note **Sites** is the list of subfolders
- put your HTML files in the **Sites** folder for them to be available via http://192.{something}/~{something}/

Windows Users

First, if you already have any of the XAMPP components on your system, you may wish to uninstall them

- I had no trouble at all installing XAMPP on a "clean" system that had none of the components installed, but I did have trouble on a system that already had some of the components installed
- On the other hand, if you have existing components installed, make sure you back those up before
 installing XAMPP so that you can restore your own configuration files if necessary

When you're ready to do the installation

- 1. go to http://www.apachefriends.org/en/xampp-windows.html
- scroll down (if necessary) to the XAMPP for Windows section and click the Download button for Version 1.8.3
- 3. the easiest installation package is the XAMPP Windows 1.8.3 Installer Version
- 4. click the **Installer** link to download the EXE file, run that file, and follow the directions to complete the installation

(3) Installing NetBeans

Note: This installation is optional. Some of you may already have NetBeans or Eclipse installed. It isn't important which Integrated Development Environment (IDE) you use, but it is important that you use one to develop code (rather than a plain text editor) to learn how to do so. A professional IDE will help you manage your work as the number of related files gets large.

Installing NetBeans on Windows Systems

On Windows systems, you need to install the Java Development Kit (JDK) before installing NetBeans, or install the JDK+NetBeans bundle

installing the bundle is easier, but installing separately gives you more flexibility

- the JDK and bundle can be found at http://www.oracle.com/technetwork/java/javase/downloads
- they also reside at http://netbeans.org/downloads

Installing the bundle

- this is much simpler!
- simply download the "All" bundle from http://netbeans.org/downloads and run the downloaded EXE file

Testing Java

- test your installation using the two commands covered in the next section
- the java command may work "out of the box" after Java is installed, but the javac command will almost certainly require you to add the JDK's bin folder to your system's PATH environment variable

Installing NetBeans on Macintosh Systems

On Mac OSX, Java is already installed. You can verify this by opening a terminal window and entering the commands shown below.

Note #1: Your version numbers will almost certainly be different from those below, but the commands themselves should give you similar messages.

Note #2: You may have to set your system PATH environment variable for these commands to work from the command line.

```
Jesses-MacBook-Pro::~ > java -version
java version "1.8.0_20"
Java(TM) SE Runtime Environment (build 1.8.0_20-b26)
Java HotSpot(TM) 64-Bit Server VM (build 25.20-b23, mixed mode)

Jesses-MacBook-Pro::~ > javac -version
javac 1.8.0_20
```

To install NetBeans, all you need to do is to download and install the DMG "All" package from http://netbeans.org/downloads

Checking for NetBeans Updates

Once NetBeans is installed (on either system), check for updates as follows (click the figure to enlarge it)



Submitting Your Assignment for Grading

- The only thing you need to submit for this assignment is a printed copy of your completed registration for this class using the Google form posted at https://goo.gl/forms/Ghj2Gl03K7VL88l13
- b. If everything discussed above works, you'll be all set for Assignment No. 2.

How You Will Be Graded

As noted on the first page, this is not a graded assignment. However, it is critical for you to set up your system so that you are ready for the next assignment. In addition, there will be a quiz on the material in the Learnable course.