How to Install Your Own Copy of Our Nature’s Source Website

Users of this text will have access to a zip file (NaturesSourceWebsite.zip) containing all the files necessary to replicate a complete copy of the **Nature’s Source** website that we develop in a step-by-step process through the first ten chapters. Setting up your own copy of this website will make it easier for you to follow the incremental developments as they are introduced and discussed in each chapter, and will also permit easy experimentation to answer those “what-if” questions that will inevitably arise.

We outline here the necessary steps to achieve this setup. Our own setup is on a Linux (Ubuntu) machine running the Apache web server, and what follows needs to be read in that context. However, any other environment will work as well, as long as the following three conditions are satisfied:

1. The web server must be “SSI-aware”. That is, it must be able to properly process server-side includes.
2. The web server must be able to run PHP scripts, and for development purposes the PHP installation should be configured to display error messages, which may not be the default.
3. MySQL must be installed on the same machine as the web server, and any account on that machine wishing to install the **Nature’s Source** website must also have sufficient MySQL access on the machine to be able to install the **Nature’s Source** MySQL database.

Given that the above conditions are satisfied, and you have an account on the machine where you wish to install the **Nature’s Source** website, the first step is to obtain a copy of the zip file containing the website (NaturesSourceWebsite.zip), and unzip it within your document root directory (typically public\_html, but not always). This will put all files in their proper locations, ready to be “served” by the web server, but not all files will be properly served until some adjustments are made, so this is not the end of the story. The following steps will now have to be taken to make the necessary changes to (just some of) the unzipped files, and install the **Nature’s Source** database:

1. In the early chapters of the text we make extensive use of server-side includes and the HTML base element. Since the zip file contains an exact copy of our own working site, our base elements contain href attribute values which are absolute paths for our site location and these will have to be changed to match the location of the newly installed website. Here is a list of the lines that will have to be changed:

ch03/nature3/common/document\_head.html:7: <base href="http://cs.smu.ca/webbook2e/ch03/nature3/">

ch04/nature2/common/document\_head.html:6: <base href="http://cs.smu.ca/webbook2e/ch04/nature2/">

ch04/nature3/common/document\_head.html:7: <base href="http://cs.smu.ca/webbook2e/ch04/nature3/">

ch04/nature4/common/document\_head.html:7: <base href="http://cs.smu.ca/webbook2e/ch04/nature4/">

ch07/nature1/common/document\_head.html:7: <base href="http://cs.smu.ca/webbook2e/ch07/nature1/">

ch07/nature2/common/document\_head.html:7: <base href="http://cs.smu.ca/webbook2e/ch07/nature2/">

ch08/nature/common/document\_head.html:7: <base href="http://cs.smu.ca/webbook2e/ch08/nature/">

ch10/nature/common/document\_head.html:7: <base href="http://cs.smu.ca/webbook2e/ch10/nature/">

To illustrate the kind of change that needs to be made, look at the first line in the above list. If you have done as we suggested above and unzipped the files directly into your document root, then you need to go to line 7 of the document\_head.html file found in the subdirectory ch03/nature3/common and change cs.smu.ca/webbook2e to (for example) www.your\_school.edu. If you have put the files in some other location (inside a subdirectory within your document root, for example) an appropriate adjustment would, of course, have to be made.

1. The simplest way to install the **Nature’s Source** database is to first log in to the account where the Nature’s Source website content has been installed and in which the **Nature’s Source** database is to be located, change to ch09 subdirectory containing the Nature’s Source database zip file (webbook2e\_backup20150504.sql) is found, and log in to MySQL. At the mysql> prompt give the following two commands:  
   mysql> use your\_database\_name;  
   mysql> source webbook2e\_backup20150504.sql
2. For security reasons at least your database username and password should be located in a file outside the public area (outside your public\_html, say) of your web site, but the file must be readable by PHP so that the information can be “included” in any PHP script where it is needed. This is requirement is discussed in Chapter 8 of the text, and if you want the website files to work properly (out of the box, so to speak) you should do something analogous to what we have done in our own case: Create a file called database.inc  
   (a “database include file” for PHP, if you like) in a subdirectory at the root level of your account, and place in this file the following contents:  
   <?php

$dbLocation = "localhost";

$dbUsername = "your\_mysql\_username";

$dbPassword = "your\_mysql\_password";

$dbName = "your\_mysql\_database\_name";

?>

The path to this database.inc file will have to be placed in line 10 of this file:

ch10/nature/scripts/connectToDatabase.php