**CS2010  
Lab Guide  
Points: n/a**

# Lab Guide

## Overview

This guide provides information on

* how to perform the labs in this course
* software needed for the labs
* how to set up your local drive
* publish the lab
* submitting the lab for grading

There are two types of labs in this course:

* **Lab{letter} –** These labs were created for this course and are not from the textbook.
* **Lab{number}** – These labs are from the textbook and were created by the author.

The textbook labs are provided in the CS2010 lab files download area on Blackboard. The student can also download all the textbook files from the companion website is at <https://media.pearsoncmg.com/aw/ecs_connollyhoar_cwwebdev_2/cw/>. Accessing the site will require the access code that is available when the book is purchased.

The information in this guide covers the labs as the apply to this course.

## Instructions

### Applications used for the labs

In order to perform the labs, the following applications will be needed:

|  |  |  |  |
| --- | --- | --- | --- |
| **Type of application** | **Recommended** | **Used in** | **Comments** |
| FTP client | FileZilla | * All textbook labs * CS2010\_LabB-FTP * Project | Refer to the instructions in **CS2010\_LabB-FTP** in how to obtain and use the application. |
| Image editing software | GIMP | * CS2010\_Lab06-Web-Media-GIMP as needed * Project as needed | Available at  Installation download: <https://www.gimp.org/downloads/>  Portable installation: <https://portableapps.com/apps/graphics_pictures/gimp_portable> |
| Text editor | Notepad++ | * All textbook labs * Project | Available at  Installation download:  <https://notepad-plus-plus.org/download>  Portable installation:  <https://portableapps.com/apps/development/notepadpp_portable> |
| Local hosting server | XAMPP | * CS2010\_Lab11-PHP * CS2010\_Lab12-PHP-Arrays * CS2010\_LabD-XAMPP * Project as needed | Refer to the instructions in **CS2010\_LabD-XAMPP** in how to obtain, setup, and use the application. |

### Preparation of the local drive

1. Download the lab files and extract to the local drive into a folder specific to this course. Recommend you name the folder as **CS2010**.
2. Recommended folders under **CS2010**:

* **Chapter Projects**
* Unzipped chapter projects of the chapters covered in the course. Can be found in the **CS2010\_Project\_Assets.zip** file available on Blackboard.
* The projects are not required for this course, but the assets are made available for the student to use in their project.
* **Code Listings**
  + Code listings for the chapters covered in the course. Can be found in the **CS2010\_Project\_Assets.zip** file available on Blackboard.
* **Labs**
  + Unzipped labs for the chapters covered in this course.
  + Students are encouraged to copy the files into their appropriate locations under the Site folder before working on the files.
* **Site**
  + Folder structure the student should be using for doing their labs and project work on the local drive.
  + This folder structure and the contents within will be published to the students web server.

1. When performing work on the labs, copy the files from their expanded source location under **Labs** into their appropriate location under **Site**.

### Performing the lab

1. When performing a lab, copy the necessary files from the appropriate **Labs** subfolder into the appropriate **Site** subfolder for the lab.
2. If you have downloaded the source files from the companion website, ensure you use the files from the **start** folder. Do not use the files under the done subfolder as they contain information that is not complete and if used, the student does not actually perform the lab.
3. When working on the project, ensure all files related to the project that will be published are under the **project** folder under **Site**. Any file or other document the student uses to assist in creating the project that will not be published onto the site will need to be stored outside the **Site project** folder.
4. All assets such as images, css style sheets, js files, etc. that reside in their own lab subfolders must follow the same structure when they are placed under the **Site** subfolder and published to the website.
5. Any extraneous information and files that are not used in the labs or the project will incur point deductions if found on the web server during grading of the labs.

### Publishing the lab

1. When ready to publish the lab, follow the information in the **CS2010\_LabB-FTP** instructions to publish from your local folder to the hosting server.
2. Test the functionality of the lab by going to the course domain and navigate to the appropriate location of the lab. The student may set up an **index.html** file in the main location of the course domain that has links to each lab and update it for easier access to the lab.

### Lab Testing

1. Once the lab is published to the web server, test the functionality of the pages as applicable for the lab.
2. View the lab in different browsers to ensure consistency of the look and feel (this is called cross browser compatibility check).
3. Verify, as applicable, the site against these online validators:

* **W3C Markup Validation:** <http://validator.w3.org/>
* **W3C CSS Validation:** <https://jigsaw.w3.org/css-validator/>

1. Note, not all errors or warning messages found by the validators will need to be corrected. Look for obvious mistakes like syntax and coding issues. If there are any questions, review the errors with the instructor.
2. The completed labs will be verified for accuracy and if they came from the done folder. If the student publishes the files from the done folder, they will receive zero points for the lab.
3. Make any changes as needed to the lab and republish and test the lab.

### Submitting Lab for Grading

1. When a lab is ready for grading, ensure the lab is published to the server then zip the lab folder into a single zip file.
2. Submit the zipped file using the assignments submission link.
3. This zip file is the official assignment submission and will be used to record your official lab submission and have a date/time stamp to determine if the assignment was completed on time. The online version of the assignment will be used to test the functionality and completeness of the lab.