# **CS3500 General Instruction for Lab Assignments:**

- 1. Download the Lab Assignment files from WMU e-learning (a single zip file available under the Content tab). Create a directory on your local computer and unzip the files to the directory.
- 2. Files are organized by textbook chapters. When you work on an assignment, keep the original file names and directory structure.
- 3. To submit your assignment, pack all related files with directory structure in a single zip file and upload it to e-learning (Click the Assessments tab, choose Dropbox, find the correct Assignment folder and upload there.)

## **Software Tools and Web Resources:**

- CS3500 introduces a set of web-enabling technologies, languages and tools. These include HTML, CSS, JavaScript on the client side, and Apache, PHP, MySQL, etc. on the server side. Your web browser has built-in support of the client-side technologies. On the server side, software tools are often bundled into packages for your convenience. I highly recommend that you use XAMPP for all your assignments. XAMPP packages Apache, PHP, MySQL (MariaDB), and can be downloaded from www.apachefriends.org.
- 2. We make extensive use of HTML5, the current HTML standard. Among web browsers, I recommend that you use the most recent version of Google Chrome. For comparison of web browsers and their supported HTML5 features, visit <a href="https://html5test.com">httml5test.com</a>.
- 3. The World Wide Web Consortium (W3C) is the main standard organization for the web. Its web site is <a href="www.w3c.org">www.w3c.org</a>. If you are interested in official web standards, visit <a href="www.w3c.org/standards">www.w3c.org/standards</a>.
- 4. W3C offers HTML markup validation service. Visit <u>validator.w3.org/</u> to check standard compliance of your web pages.
- 5. There exist super nice web tutorials online. Visit <a href="https://www.w3schools.com">www.w3schools.com</a> if you have questions on any web language and/or technologies.
- 6. Visit www.php.net for PHP documentation.

# Assignment #1: XHTML and CSS

# PART I: Share Your Travel Photos (Chapter 2, Project 1)

#### Overview

This project is the first step in the creation of a travel photo sharing website. You are asked to add a Related Photos section to the given page.

#### Instructions

- 1. Open chapter02-project01.html in the editor of your choice.
- 2. Open the file in your browser. You should see a page like the top part of the following figure.
- 3. Start by adding a link to Related Photos, in the unordered list that currently contains

  Descriptions and Reviews. (You can make the href attribute point to # for the moment)
- 4. Now go down to the bottom of the page and add the new Related Photos <section>.
- 5. In the new section add three images from the ones provided in the images folder. Use the small images related-squarel1.jpg, related-square2.jpg, and related-square3.jpg in the src attribute of your <img> tag, but link them to the large images with almost the same names.

#### Test

- 1. Firstly, test your page by seeing if it looks like the one in the figure on the next page.
- 2. Now check that the link correctly links the Related Photos link to the newly defined section, and that clicking on the related images brings up the larger versions.
- 3. Validate the page by either using a built-in tool in your browser, or pasting the HTML into http://validator.w3.org/ and ensure that it displays the message: This document was successfully checked as HTML5!



# **Share Your Travels**

# New York - Central Park

- Description
- Related Photos
- Reviews

# Description

Photo by Randy Connolly

This photo of Conservatory Pond in Central Park in New York City was taken on October 22, 2011 with a Canon EOS 30D camera.



Conservatory Pond in Central Park

Share: Share:

#### **Related Photos**







#### Reviews

By Ricardo on September 15, 2012

Easy on the HDR buddy.

By Susan on October 1, 2012

I love Central Park.

Home | Browse | Search

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# PART 2: Book Rep Customer Relations Management (Chapter 2, Project 2)

#### Overview

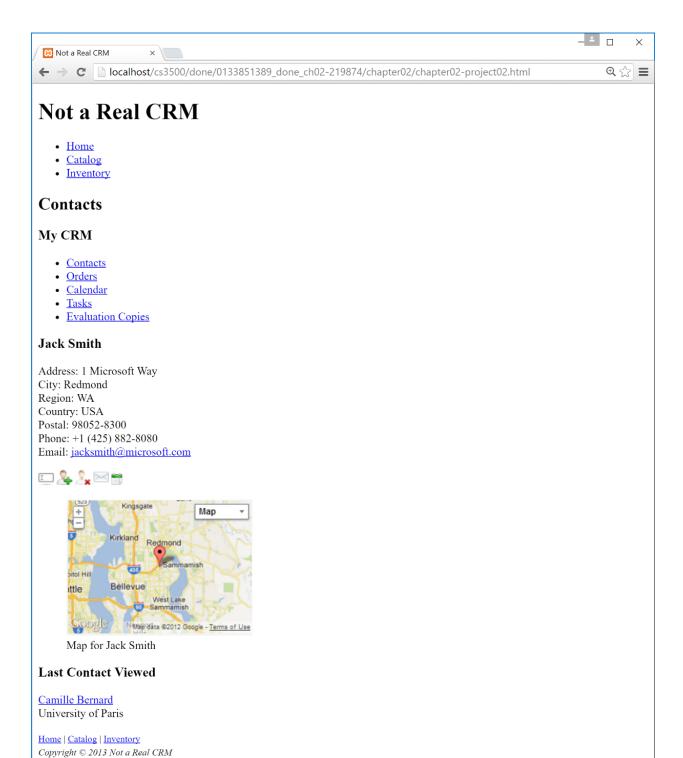
This project is the first step in the creation of a CRM website. In this project, you will be augmenting the provided page to use semantic HTMLS tags.

#### Instructions

- 1. Open chapter02-project02.html in the editor of your choice, and in a browser. In this project the look of your page will remain unchanged.
- 2. Reflect on why adding semantic markup is a worthwhile endeavor, even if the final, rendered page looks identical.
- Replace and supplement generic HTML tags like <div> with semantic tags like <article>, <nav>,
   or <footer> (for example). Some parts make sense to wrap inside a tag such as <section> or
   <figure>.

#### Test

- 1. Firstly, test your page side by side with the original in a browser to make sure it looks the same.
- 2. Validate the page by either using a built-in tool in your editor, or pasting the HTML into http://validator.w3.org/ and seeing if it passes. You will notice to pass it must do many extra things like have alt attributes on <img> tags.



# PART 3: Art Store (Chapter 2, Project 3)

#### Overview

This project is the first step in the creation of an art store website. Unlike the previous exercises, your task is to create an HTML page from scratch based on the result shown in the next page.

#### Instructions

- 1. Create your own chapter02-project03.html file and open it in your browser.
- 2. Add markup and content, making best guesses as to what HTML markup to use.
- 3. Remember to try and get in the habit of using semantic markup, since it adds meaning and has no visual impact.

#### Test

- 1. Display your page in a browser and determine if it looks like what is shown in the next page.
- 2. Validate the page by pasting the HTML into http://validator.w3.org/ and seeing if it passes.

#### Note:

- 1. Notice the accent on the letter e in the portrait title.
- 2. The portrait should be linked to a larger version. Also, do not forget alt and title attributes.



# **My Sample Art Store**

Home | Artists | Artworks | About Us | Search

# Mademoiselle Caroline Rivière

by Jean-Auguste-Dominique Ingres



The portrait of Mademoiselle Caroline Rivière was painted in 1806 by the French Neoclassical artist Jean Auguste Dominique Ingres, and today hangs in the Louvre. It is the third of three portraits of the Rivière family the artist painted that year.

Date: 1806

Medium: Oil on Canvas Dimensions: 100 x 70 cm Home: Musèe du Louvre, Paris



# Related Paintings



#### Reviews

# Love this painting John Smith

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam id metus sit amet ipsum cursus placerat nec vel enim. Aliquam justo tortor, euismod quis facilisis ullamcorper, consequat sed eros.

#### It's okay Jane Doe ★★★

Quisque vitae ipsum quis risus sagittis sollicitudin. Nam elementum ipsum malesuada mi sagittis hendrerit.

## Home | Art Works | Artists | About Us

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# PART 4: Share Your Travel Photo (Chapter 3, Project 1)

#### Overview

This project updates your existing project from Chapter 2 to add some visual stylistic improvements with CSS.

#### Instructions

- 1. Use your chapter02-project01.html file from the last chapter as a starting point but save it as chapter03-project01.html.
- 2. Create an external style sheet called reset.css that removes all the browser formatting from the main HTML elements and reference inside chapter03-project01.html as follows:

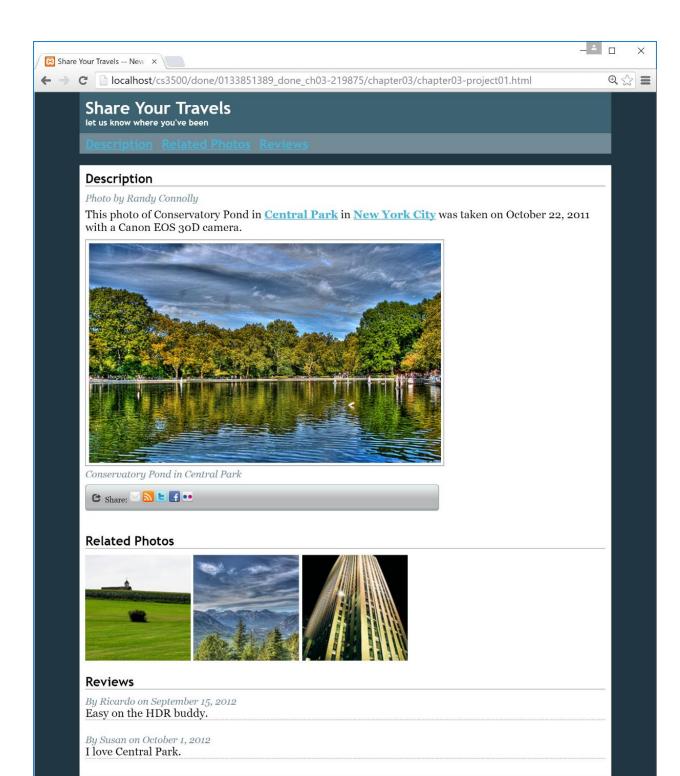
```
html, body, header, footer, hgroup, nav, article, section, figure,
figcaption, h1, h2, h3, u1, li, body, div, p, img {
  margin: 0;
  padding: 0;
  font-size: 100%;
  vertical-align: baseline;
  border: 0;
}
```

- 1. Create another external style sheet named chapter03-project01.css and include it in your HTML file as well.
- 2. Add styles to chapter03-project01.css so that it looks similar to that shown in the next page. Do not modify the markup within the <body> element. Be sure to group your style rules together in appropriate commented sections and to make your sizes scalable (i.e., don't use pixels for font sizes, padding, or margins). Here's a hint for the header and footer:

```
header, footer {
color: white;
background-color: #306271;
margin: Oem 4em 0.5em 4em;
}
```

#### **Testing**

1. Although an exact match is not required, see how closely you can make your page look like the one on the next page. Be sure to test in multiple browsers at different browser widths.



Home | Browse | Search
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# PART 5: Art Store (Chapter 3, Project 3)

#### Overview

This project builds on the art store example and lets you dig a little deeper into CSS.

#### Instructions

- 1. Create a new file named chapter03-project03.html and remove all default styles via a reset.css stylesheet.
- 2. Modify the HTML and the associated CSS files so that your output looks similar to that shown in the following. Do not modify the markup within the <body> element.
- 3. You will have to use a CSS3 feature that will require some research on your own. The background-size property can be used to force a background image to resize to the browser window.
- 4. Notice that two of the blocks in the figure are partially transparent. Remember that CSS3 allows you to specify the alpha transparency of any color.
- 5. Finally, the header uses the font Six Caps, which will have to be supplemented with other options in the font stack in the event that the font is not present on the client's computer.

#### Test

- 1. First, try resizing your browser to ensure the image resizes to fill the space, the floating objects position themselves correctly.
- 2. Try out different browsers.

