**blackCSIS210 - Data Structures**

Web App. Dev.

### Laboratory 1

**Lab 1**

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# General Lab Procedures

* You should create a directory (folder) in your home account called csis390. At the beginning of each lab, create a new sub-directory called labX, where X is the lab number.
* Files used in the lab can be found on the course canvas webpages.
* Turn in this lab sheet stapled to print outs of the code you produce as needed in each assigned section from the laboratory manual. These sheets should be in order. One lab submission is sufficient for each group.
* You can find documentation for the HTML 5 specification at

<https://html.spec.whatwg.org/>

**Lab Objectives**

* Create a basic content webpage, using structure tags from HTML5.
* Use winSCP/Cyberduck to move files from a local machine to a server.

## Lab 1

#### Part 1 – HTML Exercises and Hello World

In this part of the lab, you will answer some written questions about HTML5. You may consult online sources, your book, and your class notes for answers.

* What kind of file format holds webpage w/ HTML information?
* What suffix is used in the filename of a file holding HTML?
* What is the editor of choice for HTML files?
* What is the browser of choice for webpages for this course?
* How would you formally validate your webpage as being HTML5 compliant using the W3C site?
* Create a webpage with the words **Hello, World** displayed in both the title and the main text of your screen. Next, add a byline displaying the names of all partners of this lab assignment. Once finished, test it by locally loading it into a browser. Use the W3C Validation Service site to make sure your page is HTML5 compliant.
* Once completed, demonstrate your webpage for your instructor and have him initial here. If you do not finish during the lab period, then demonstrate your webpage at the beginning of the next lab period.

Instructor’s Initials \_\_\_\_\_\_\_\_

#### Part 2 – Chocolate Cookie Recipe

In this part of the lab, you will create a webpage that displays a chocolate cookie recipe.

* Create a new webpage for this chocolate chip cookie recipe.
* The ingredients are
  + 2 1/4 cups all-purpose flour
  + 1 teaspoon baking soda
  + 1 teaspoon salt
  + 1 cup (2 sticks) butter, softened
  + 3/4 cup granulated sugar
  + 3/4 cup packed brown sugar
  + 1 teaspoon vanilla extract
  + 2 large eggs
  + 2 1/2 cups chocolate chips
  + 1 cup chopped nuts
* Add the ingredients to your webpage as a list.
  + Replace fractions with appropriate HTML special character representations. Where would you find these special characters in the HTML5 specification? HINT: we saw one in class with &nbsp;
* After the ingredients, add the following instructions afterwards.

**PREHEAT** oven to 375° F.  
  
**COMBINE** flour, baking soda and salt in small bowl. Beat butter, granulated sugar, brown sugar and vanilla extract in large mixer bowl until creamy. Add eggs, one at a time, beating well after each addition. Gradually beat in flour mixture. Stir in morsels and nuts. Drop by rounded tablespoon onto ungreased baking sheets.  
  
**BAKE** for 9 to 11 minutes or until golden brown. Cool on baking sheets for 2 minutes; remove to wire racks to cool completely.

* Use good formatting and headers to organize your ingredients and instructions sections. Be creative.
* Add two appropriate pictures to your site. Place the picture files in your lab1 folder within a folder called *images*. How would this affect the src attribute in the IMG tag?
* Add one table that will contain at least 2 rows and two columns for optional ingredients to your cookies. Have a header row with the first column for ingredient name, and the second column for the amount to be added for one batch.
  + Sample acceptable ingredients include walnuts and almonds.
  + Unacceptable ingredients include raisins.
* Create a numbered list of links to additional chocolate cookie recipe versions ordered by your personal preference. Your list must have at least three links to recipes you have found and find more than reasonable.
* Change to background color to something other than the default. Which tag and attribute needed to be added to accomplish this?
* Once completed, show your webpage for your instructor and have him initial here. If you do not finish during the lab period, then show your webpage by the beginning of the next lab period.

Instructor’s Initials \_\_\_\_\_\_\_\_

#### Part 3 – Upload your html files and pictures to the site

In this part of the lab, you will practice uploading your webpage to the servers. Each lab group will consist of at least one member on [www.sienasellbacks.com](http://www.sienasellbacks.com) and one member on [www.breimer.net](http://www.breimer.net) (if applicable).

* Each person should obtain information from the lab instructor on which server their account will lie.
* As a reminder, to connect using WinSCP,
  + Use the hostname of [ftp.sienasellbacks.com](ftp://ftp.sienasellbacks.com) or [ftp.breimer.net](ftp://ftp.breimer.net).
  + Use File protocol FTP
  + Use Port number 21
  + Use your given username with @sienasellbacks.com or @breimer.net as the User name
  + Use your 901/902# followed by Aa! as the password
  + You may save these credentials for efficiency purposes, once you have successfully connected
* Upload a copy of your website (.html file and directory of images) to each of your home pages. You may place them in additional folders for organizational purposes.
* Test your pages using a browser to make sure they are completely functional.
* Write down the URLs for each team member’s page.

