

CSCI E-12 Assignment 2

150 points.

Due by Saturday, March 16th, 12 noon EDT

Submit via the "Assignment 2 Dropbox" on the course site.

<http://cscie12.dce.harvard.edu/dropbox>

Assignment 2 focuses on Cascading Style Sheets (CSS).

Goals:

1. **Become familiar with CSS properties.** You are provided an HTML/XHTML document with classes specified in various elements. You will author a CSS document for the existing markup to achieve a particular presentation styling.
2. **Separate markup and presentation code.** You are provided an HTML 4.01 document where markup and presentation code are mixed. Based upon the content of the provided HTML 4.01 document, you will author either an HTML5 or XHTML 1.0 Strict document and a CSS document that separates markup and presentation.
3. **Use CSS for page layout and design.** Based upon content provided, you will create HTML/XHTML and CSS documents that control page layout and presentation through CSS style rules.
4. **Use a CSS framework (optional).** Use one of the recommended CSS frameworks as the basis for the page layout and design
5. **Use multiple browsers to test your work.** You are **required** to check your work with at least two HTTP clients (e.g. Firefox, IE, Safari, Chrome, Opera). We recommend that one of the two browsers you check your work on is IE (this will demonstrate the most common real-life cross browser issues with CSS). You will need to include the "User-Agent" string of the browsers you used (there is a section in "answers.html" for this. To find the "User-Agent" string of your web browser, go to:
http://cscie12.dce.harvard.edu/assignment_files/browser.html

Getting Started with this Assignment

- You will both submit your assignment as a zip file to the course website dropbox, and publish your work on the course web hosting server (morpheus.dce.harvard.edu).
- **Working on the course web hosting server.** Use your obscurely named directory for this assignment as well. If you haven't already, please create an obscurely named folder in your `public_html` directory that will contain your work for the course. The reason for the obscure name is to prevent intentional or unintentional browsing via the web of your hard work by others. For example, the user John Harvard might create a folder named `VeRiTas_1636`.
- Download the Assignment 2 "zip" file from the course web site and unzip it.
- **Keep the file names and directory structures the same!**
We rely on the file names being consistent when we grade.
- Edit "answers.html" to provide the requested information.

- When you are done with the assignment, zip the contents of the assignment folder and submit the zip file via the "Assignment 2 Dropbox" on the course site.
<http://cscie12.dce.harvard.edu/dropbox>
- Be sure to upload all of your assignment 2 files to your obscure directory on morpheus, including your edited `answers.html`. Navigate to your `answers.html` file on morpheus, and select all the links to your assignment files in turn, including your link to `answers.html`, to make sure they work.

Part 1: CSS for Existing Markup

30 points. I have a short list of some of my favorite website development books. I have retrieved information about these books through the Amazon Web Services Product Advertising API, and have created an HTML5 document. I have already defined the markup structure and classes. For this part of the assignment, you will need to create an **external stylesheet** to style the document provided. A screenshot of how the "styled" document should look is provided.

- **XHTML document.** The file, `part1/books.html`, is provided and validates as XHTML 1.0 Strict. Do not change this document! Classes are already defined and the XHTML document is already structured; you simply need to provide the external stylesheet.
- **CSS.** Use the file, `part1/books.css`, for your CSS document (level 3 or level 2.1).
- **CSS Validation.** Your CSS should validate with **no errors**, warning are acceptable.
- **Desired Styling.** A screenshot is provided to demonstrate how the styled document should appear. It should be used as a guide when constructing the CSS. The goal is not for you to determine the exact padding, margins, border widths, and such, from the screenshot. The goal is for you to take the existing markup document and create a CSS document that will produce results that resembles the screenshot.
 - The date and ISBN text is slightly smaller (80%) than the body text, and there is additional vertical spacing that separates the date/ISBN from the author, title, and publisher.
 - The publisher is in small-caps. The author names are in italics (and a different color).
 - The book titles are hyperlinks. Use the `a:link`, `a:visited`, `a:hover`, and `a:active` pseudo-classes in your CSS.
 - To place the image properly, use the CSS float property. Remember to also use the clear property. Think a bit about what elements you will need to float and which ones you will need to set "clear" on.

Screenshot of `part1/books.html` with CSS applied is shown on the next page.

Useful Website Development Books

Elisabeth Robson and Eric Freeman
Head First HTML and CSS
O'REILLY MEDIA
2012-09-05
ISBN: 0596159900



Jennifer Niederst Robbins
Learning Web Design: A Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics
O'REILLY MEDIA
2012-08-21
ISBN: 1449319270



Dan Cederholm
Bulletproof Web Design: Improving flexibility and protecting against worst-case scenarios with HTML5 and CSS3 (3rd Edition) (Voices That Matter)
NEW RIDERS
2011-12-24
ISBN: 0321808355



David Sawyer McFarland
JavaScript & jQuery: The Missing Manual
POGUE PRESS
2011-10-28
ISBN: 1449399029

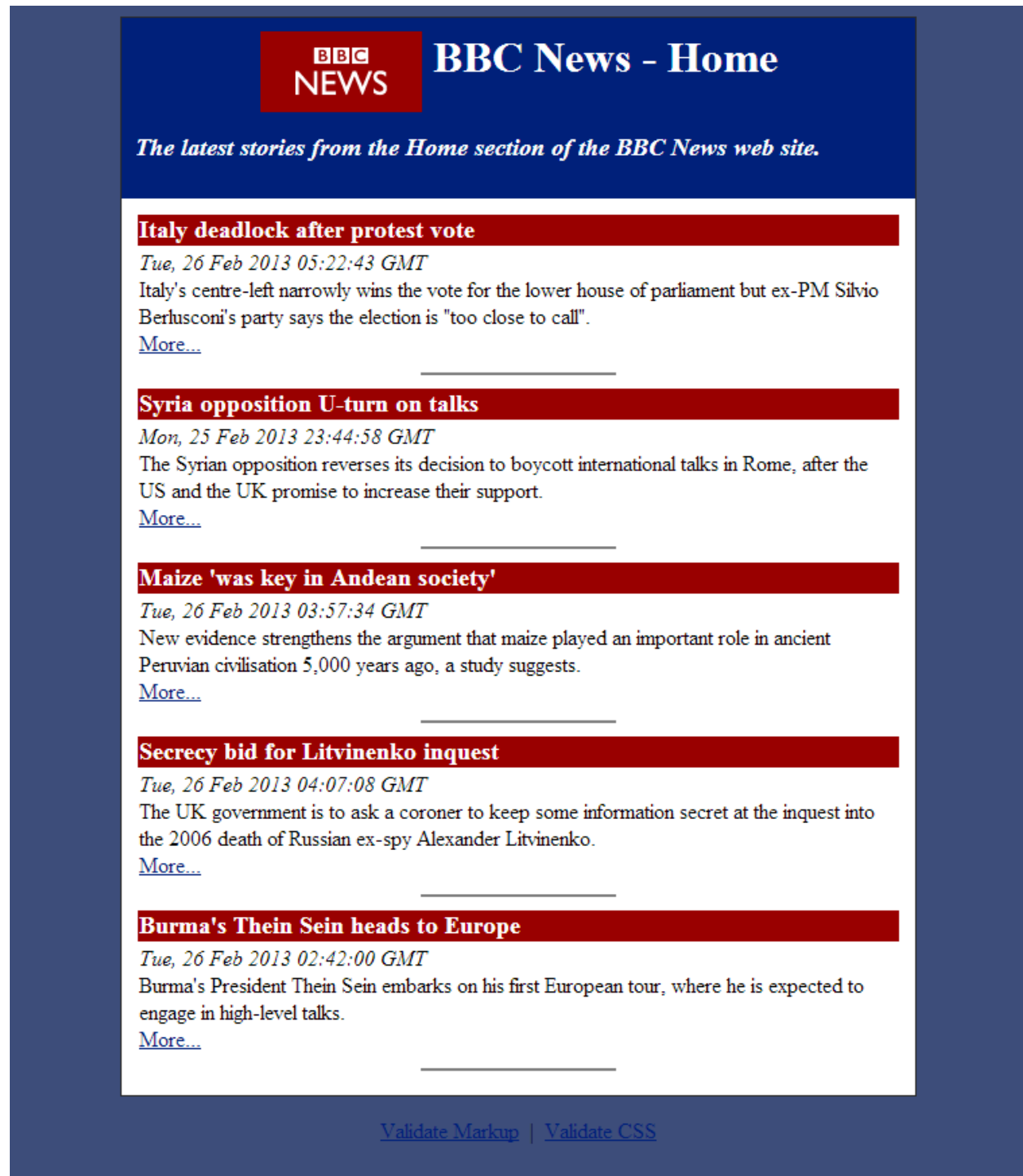


Part 2: Semantic and Strict Markup and Styles from Deprecated Markup

40 points. In this exercise, you are provided a valid HTML 4.01 Transitional document that mixes markup and presentation. The document you are provided (part2/deprecated.html) is valid HTML 4.01 Transitional, but the content and style are mixed. The task is to **author a new markup document that validates as HTML5 or XHTML 1.0 Strict** (part2/strict.html) and **author a new CSS document** (part2/style.css) **to separate the presentational aspects of the page.**

- **Content Source.** The HTML 4.01 Transitional document (part2/deprecated.html) is provided as the source of the content (and clues to the overall styling). You will author your own markup (either HTML5 or XHTML 1.0 Strict) and CSS document based upon the content provided.
- **Markup.**
 - The markup you author (part2/strict.html) should validate as HTML5 or XHTML 1.0 Strict.
 - Your XHTML markup document should not use the `table` element.
 - *You should restructure the markup* of the document in other ways as well (use `h1`, `h2`, and other semantic markup; assign "class" and "id" attributes). Keep the same content, but improve the markup.
- **CSS.**
 - The CSS you author (part2/style.css) should validate with **no errors; warnings are acceptable** (CSS Level 3 or 2.1).
 - Do not use third-party CSS frameworks for this part of the assignment (i.e. you should author all of the CSS in this part of the assignment).
 - Feel free to improve upon the original 'look' of the document when you are creating your CSS.
- **Suggested Strategy.**
 - First, examine the page (part2/deprecated.html) as rendered in a web browser (start by looking at the page in a browser, not at the deprecated markup).
 - What parts of the page are there?
 - Are there repeated structures of content? What are the parts of these repeated structures?
 - Then begin creating your XHTML document and CSS document.
 - Start with a fresh markup document and move content into it as needed (as opposed to using the deprecated HTML as your starting point).
 - Create the basic framework of the markup page (use "id" attributes for unique parts of the page). Create the repeating content structures (use "class" attributes for these).
 - Create CSS rules for the elements, ids, and classes in your page.
 - Work iteratively with your markup and styles until the page is how you want it.

Screenshot of deprecated HTML which mixes markup and style:



Part 3: Markup and Style for “Distance Education” page

80 points. The purpose of this part of the assignment is to design an entire page using CSS. You will create an HTML5 markup document that is styled by CSS based upon the resources provided. I have included a screenshot of my solution (which is based on the styles of the Extension School site) – your solution does not need to look exactly like mine. You should draw on the content and resources that are provided – you will need to edit the HTML5 document as well as the CSS document. With this part of the assignment, you have freedom in how the page is styled. It should look nice and the underlying markup should be solid as well as the CSS styling.

- **Resources and Content sources.** I have provided some basic content and navigation components for the page, as well as two images (`part3/distance_education.html` and `part3/images/`). These are your starting points – you will need to edit the HTML5 document, but you don’t need to add any content to this page.
- **Markup.** The markup document you author (`part3/distance_education.html`) should validate as HTML5. Here the exercise is to focus on the page layout issues – header, navigation, footer. Where appropriate, you should use the semantic structural elements that HTML5 provides, such as `section`, `nav`, `header`, `footer`.
- **Style.** The CSS document you author (`part3/site.css`) should validate **with no errors; warnings are acceptable**. Tables should not be used to control page layout.
 - **Note:** If you use third party CSS frameworks (see below), their CSS may not validate. This is acceptable for this part of the assignment. You may use the CSS that is provided by a CSS framework. *However, the CSS that you write yourself needs to validate with no errors and no warnings (CSS Level 3 or 2.1).*
- **Header Image**
 - **Image.** To simplify creating the page, you are provided with header image that you should use (`images/masthead.png`).
 - **Header Accessible.** Use either the "Rundle/Phark" or the "Leahy/Langridge" method of image replacement to keep the header accessible. These techniques are outlined in "Web Design in a Nutshell" (Part III Presentation Layer → CSS Techniques → Image Replacement).
- **Navigation.** Three forms of navigation are provided on the page. The “youarehere” class is hardcoded for the purpose of this assignment, and hyperlinks href values are set to “#”. Create CSS rules so that these lists are styled appropriately and so that the style changes when the mouse hovers over the link.
- **CSS Frameworks.** You may wish to explore one of the following CSS frameworks for this part of the assignment. It is not a requirement that one of these frameworks be used, but it is allowed and encouraged for this part of the assignment. I would recommend trying Blueprint, 960 Grid System, or YUI.

- Example

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Distance Education
 Online Course Offerings
How Distance Education Works
 Online Video Courses
 Web-Conference Courses
 Academic Policy and Exam Proctoring
 Video: The Distance Education Experience
 Frequently Asked Questions
 Need Help?

How Distance Education Works

Distance education classes are either in an online video or live web-conference format. Both options are semester-long with scheduled assignments and exams, but online video and live web-conference courses differ in their presentation and technical requirements.

Online video courses

These online courses feature videos of faculty lecturing on campus, and you watch the videos at your convenience. In some cases, class meetings on-campus are broadcast live. Check course syllabi or websites to see if you can participate live during class meeting times and to learn if live participation is required. You interact with classmates and faculty via online media.

Learn more about the [technical requirements](#) for online video courses.

Currently enrolled?
 To watch your videos, find a link to your course website in the online courses list.

Web-conference courses

You participate in your virtual classroom using web-conference software at the scheduled meeting time each week—much as you would attend a course on campus. In most courses, there are no videos; everything is live. You communicate with the instructor and other students by chat or voice technology.

Learn more about the [technical requirements](#) for live web-conference courses.

Currently enrolled?
 Find the link to your virtual classroom by logging into online services a few days before classes begin.

Harvard Extension School
 51 Brattle Street
 Cambridge, MA 02138
 (617) 495-4024

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