UMEÅ UNIVERSITY
Department of Interactive Media and Learning
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Assignment 1

More about Web Techniques

Part 1 – Moving from HTML to XHTML

Reading instructions

Duckett, chapter 1-2

Exercises

- Study the example files ch01_eg01.html, ch01_eg02.html and ch01_eg03.html. Make sure you understand the differences in code between these. If not, post a question to the Assignment 2 forum in Moodle.
- ch02_eg01.html, ch02_eg02.html

Validation

Code validation is an important tool for the web designer. By validating the code (HTML, XHTML, CSS), you make sure that your pages comply with the W3C web standards. This way you will ensure that your web pages will work for a majority of users. You should also make a habit of regularly checking your site with a couple of different web browsers on different computer platforms if possible. A page that will undergo validation must have a correct DTD in the very beginning of the file.

Validation exercise

W3C Validation services:
http://www.w3.org/QA/Tools/#validators

- Use the W3C Validator to validate the code of a page you have built yourself or any other page on the web. You can validate both against HTML and XHTML (transitional and strict). Make sure you understand the report presented by the Validator. Try to rewrite the code, if possible.

Chapter ending exercise, sample site

- Ch 2 – From HTML to XHTML, p 67
  This is an exercise on how to go from HTML to XHTML. Download the code for the pages that will undergo transformation and try altering these on your own. If you get stuck, you will find detailed instructions in the book how to proceed. Use the W3C code validators in your work.

Grading Exercise, XHTML

In this exercise you will create two XHTML document types, transitional and strict. Frameset XHTML is left out for the moment. We will return to the topic of frames in the accessibility part of the course.

For each document type there should be a description of the code architecture (se below).

Transitional

- Create a simple XHTML Transitional page according to recommendations in Duckett.
- File name should be **xhtml_tr.html**.
- A summary of the main differences between XHTML Transitional and HTML should be readable on the page.
- The page should be valid XHTML Transitional.

Strict

- Create a XHTML Strict document according to recommendations in Duckett.
- File name should be **xhtml_st.html**.
- A summary of the main differences between XHTML Strict and Transitional should be readable on the page.
- You should also include examples of differences in code in your XHTML files (xhtml_tr.html and xhtml_st.html).
- The page should be valid XHTML Strict.

Criteria for Pass

- Valid XHTML files according to instructions above have been uploaded by using the file upload form in Moodle. See the *Assignment hand-in* section below for further instructions.

Part 2 – Cascading Style Sheets

Reading instructions
Duckett, chapter 3-5

Coming to this course, we assume that you already have basic skills in CSS. By following the exercises/examples in Duckett for each chapter you will get the opportunity to deepen your skills in CSS and finally also learn about element positioning with CSS.

After reading chapters 3-5 you should be familiar with the following:

- Structure of CSS
- Selectors (9 types)
- Declarations (property, value)
- Class attribute
- CSS Inheritance
- <link /> element and its options
- Differences between internal and external style sheets.
- Units of measurements
- Fonts
- Text properties
- Box model
- div and span elements
- Pseudo classes
- Pseudo elements
- Properties for links, tables and lists
- Precedence of rules
- Modular style sheets
- Validation of style sheets
- Fixed/Liquid layouts
- Positioning methods
- Comments in CSS

Exercises
There are a lot of exercises/examples available for this section of the book. Make sure you take a closer look at each of these.

- Ch 3 – ch03_eg01.html/css to ch03_eg37.html/css
- Ch 4 – ch04_eg01.html/css to ch04_eg27.html/css
- Ch 5 – ch05_eg01.html/css to ch05_eg18.html/css

Chapter ending exercises, sample site

- Ch 3 – CSS, page 143
- Ch 4 – CSS, page 189
- Ch 5 – CSS, page 232

Grading Exercise, CSS

You should use any number of XHTML and CSS documents to exemplify the following

- At least five different selectors
- The four ways of specifying a font size
- Examples of div and span elements
- Multiple style sheets (@import)
- An example of the box model principles
- Overlapping layers, z-index property

Criteria for Pass

- XHTML and CSS documents with examples according to above have been uploaded according to instructions (see *Assignment hand-in* below)
- All design actions taken should be described in text on your web page/s.
- The CSS files should be commented
- The XHTML files should follow the Strict DTD.
- All files should be successfully validated.

Assignment hand-in, part 1 and 2

- All files should be handed in at the same time by using the file upload form in Moodle.
  The files from each part should be put in separate folders (**xhtml** and **css** respectively). The folders with the files should be compressed into a zip archive before uploaded. This way you will only upload a single file. If you are unsure about how to create zip files, post a question to the forum in Moodle. Note that you should create one file for each thing you exemplify and we also want you to name your files so that it is easy to understand what you want to exemplify with each particular file.

Optional exercise

Convert any page you have written in the past to valid XHTML. Start with the structure of the page and remove unwanted HTML only tags. If you have used tables for object positioning, remove these tags as well. When the XHTML structure is set you can go on with the design aspects by creating a style sheet and try to get back to a position where the page looks the same as it did before.

Part 3 – Grading Assignment – Moodle Online Test

When you have read chapters 1-5 thoroughly and run through the exercises you are ready to take the web based test. The test consists of a series of questions about HTML, XHTML and CSS. You have three attempts to pass the test. In order to pass, you must receive at least 85 % correct answers.