



CMST 385: Web Site Design

Assignment 1: HTML Elements – Parts AB

Summary:

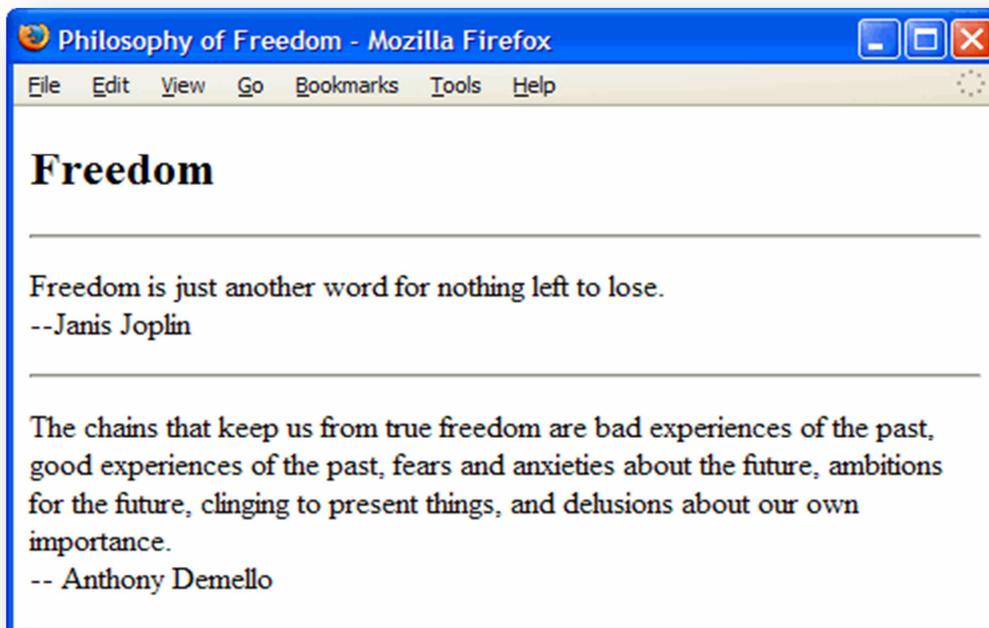
The purpose of this assignment is to gain familiarity a text editor to enter HTML code in the creation of web pages. You will also experience HTML validation and the coding process.

Part A: Block Level Elements

The focus of this Part A will be usage of document and block level elements.

Requirements:

1. Write the HTML5 valid code to display the following text in a browser window. You must use a text editor for this assignment and name the file **freedom.html**
2. Create an additional section with your version of the meaning of freedom and your name located within the body code following the Anthony DeMello quotation. Separate your section from Anthony DeMello's quotation using a horizontal rule.
3. Properly format the code with proper indents of block level elements and their contents.
4. Submit your code for validation to <http://validator.w3.org> and correct any errors.



Part B: Inline Elements

The focus of this Part B will be usage of inline elements that are embedded within block, and document level elements. If you pay attention you will also learn the AC method which is useful for the class MATH103.

**Requirements:**

1. Write the HTML5 valid code to display the following text in a browser window. You must use a text editor for this assignment and name the file **factoring.html**
2. Create the HTML5 valid code to generate the factoring web page shown below.
3. Your score will be based on displaying all items accurately and code validity.

Factoring Trinomial using AC Method

Solve: $6x^3 - 40x^2 + 56x$

Step 1: $2x [3x^2 - 20x + 28]$ Factor out anything common to all terms.

Step 2: $2x [3x^2 + (-20)x + 28]$ Write trinomial in standard form $ax^2 + bx + c$

Step 3: $2x [3x^2 + (-20)x + (-28)]$ Determine product of $a \cdot c = 3 \cdot 28 = 84$

Step 4: List all pairs of factors of $a \cdot c$ If $a \cdot c$ is negative, then factors have opposite signs. If $a \cdot c$ is positive, then factors have same signs. Sign of b determines sign of factors.

Factors of 84 are: -1, -84 -4, -21 -6, -14 -7, -12

Select factor pair such that their sum is b term = -20

Step 5: Split middle term b order factors as multiple of the a and c terms

$2x [3x^2 + (-6)x + (-14)x + (-28)]$

Step 6: Factor out something common to first two terms.

$2x [3x^2 + (-6)x + (-14)x + (-28)] \rightarrow 2x [3x(x - 2) + (-14)x + (-28)]$

Step 7: Factor out same binomial in last two terms.

$2x [3x(x - 2) + (-14)(x - 2)]$

Step 8: Apply Distributive Law and convert trinomial into the product of two binomials and a monomial.

$2x [(3x - 14)(x - 2)] \rightarrow 2x(3x - 14)(x - 2)$ This is the answer

Due Date and Assignment Submission:

This assignment is due at the beginning of **Class 1 Week 3**. Late assignments will be reduced 20% for each class period late. Submit URLs for the two web pages. Your score on this assignment will be based on validation results <http://validator.w3.org> for your web pages and attention to detail for the requirements described above for each part.