CSI3140 (Winter 2018)
ASSIGNMENT 2

Due Date: Email your completed assignment directly to TA1 by 14:00 on Monday, February 12, 2018.

Instructions:

- This assignment has 2 pages and **must be done individually**. It consists of 7 questions with the mark for each question indicated below, resulting in 75 marks in total.
- **Late assignments will NOT be accepted: They will receive a grade of zero.**
- Save your answer to each question in a separate file and name it using the following format: **AssignmentNo_QuestionNo_YourLastName_YourStudentID**
  For example, John Smith, whose student ID is 1234567, should save his answer to Question 1 under the file name: **A2_Q1_Smith_1234567.html**
- Create a cover page in Word format containing your full name, student ID, course number, and assignment number. Name your cover page as **A2_CoverPage_YourLastName_YourStudentID.docx**. The TA will provide your assignment mark on this cover page and send it back to you (with your answer files if he/she has comments/feedback on them).
- Zip all your answer files together with your cover page into a single .zip file and name it **A2_YourLastName_YourStudentID.zip**, and email that .zip file to the TA by the due time and date above.
- The subject line of your email should follow the format: **CSI3140_A2_YourLastName_YourStudentID**

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1. Write an embedded CSS rule using the *style* element that changes the color of all elements containing attribute *class = "greenMove"* to green and shifts them down 25 pixels and right 15 pixels. Your *html* document must contain the necessary elements to demonstrate the effect of the CSS rule. [10 marks]

Note: For each of the Questions 2, 3 and [illegible] below, build and render a web page that makes the indicated effect(s) appear. Validate your page with the following validators:

- For CSS3: http://jigsaw.w3.org/css-validator/ (under **More Options > Profile**, select CSS level 3). Some CSS3 properties may not validate because they are not yet standardized.
- For HTML5: http://validator.w3.org/#validate-by-upload

Also, test your page with as many browsers as possible (e.g., Internet Explorer, Firefox, Google Chrome, and Safari).

2. Make a navigation button using a *div* element with a link inside it. Give it a border, background, and text color, and make them change when the user hovers the mouse over the button. Use an **external** style sheet. [10 marks]

3. Create a *div* element with a *width* and *height* of 500px. Create a radial gradient with three colors. Start the gradient in the bottom-left corner with the colors changing as they move along the gradient line to the right. [10 marks]

4. Create an infinite animation of an element moving in a square pattern. [10 marks]

Note: The remaining questions require JavaScript programming. Your code should be well written (e.g., variables declared, meaningful variable names, easy to understand and no confusing shortcuts, meaningful functions, and useful comments, etc.).

5. Write a script (embedded in an HTML5 document) that reads in two integers and determines and outputs HTML5 text that displays whether the first is a multiple of the second. [10 marks]

6. A palindrome is a number or text phrase that reads the same backward and forward. For example, each of the following five-digit integers is a palindrome: 12321, 55555, 45554 and 11611. Write a script (embedded in an HTML5 document) that reads in a five-digit integer not starting with zero and determines whether it is a palindrome. If the number is not five digits long, display an *alert* dialog indicating the problem to the user. Allow the user to enter a new value after dismissing the *alert* dialog. [10 marks]

7. A mail-order house sells five different products whose retail prices are as follows: product 1, $2.98; product 2, $4.50; product 3, $9.98; product 4, $4.49; and product 5, $6.87. Write a script (embedded in an HTML5 document) that reads a series of pairs of numbers as follows:

a) Product number
b) Quantity sold

Your program should use a *switch* statement to determine each product's retail price, and should calculate and output a table that displays the total sales for each of the five products. Use a *prompt* dialog to obtain the product number and quantity sold from the user. Use sentinel-controlled loop to determine when the program should stop looping and display the final results. [15 marks]