

#### SOEN287 – Fall 2018 Assignment #2

**Due Date:** By 11:55pm Friday October 12, 2018

**Evaluation:** 4% of final mark **Late Submission:** none accepted

Type: Individual Assignment

**Purpose:** The purpose of this assignment is to have you practice HTML5 tags

document-level style sheets (in Head section).

**CEAB Attributes:** This assignments is primarily evaluating your use of HTML5 tags and

document-level style sheets. (Use of engineering tools)

#### Question #1: - Formatting a list and table/External style sheet (5 pts)

Script the webpage in figure 2 using an html file for the format and content and an external CSS file for the presentation. You choose the topic; here are a few ideas: cars, animals, sports, foods

Here are the specifications:

1. The **background** of your page has a repeated image of your choice.

The header must be formatted using the box model. The image to the right illustrates the CSS box model.

To accomplish this use the <div> tag. You can use any color combinations for the border and the background. The color of your header must be the same color as the border of the box model. Set the margin of the box model to be the same as the margin of the table that follows (so they line up nicely). Set the border to be at least 10px and solid. Set the internal padding to be at



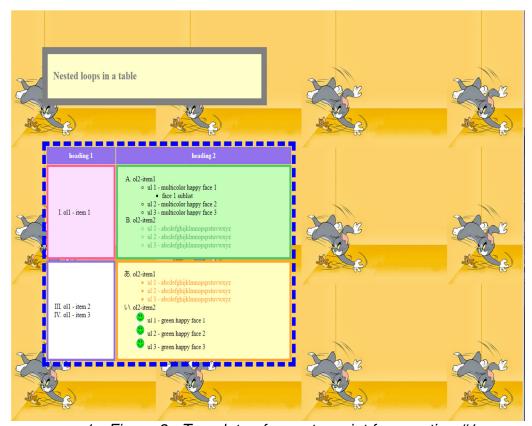
Figure 1- Box model

least 10px. Set the width to a value of your choice other than 100%.

- 3. The table must have 3 rows and 2 columns.
  - a. Set the table margin the same as the header margin.
  - b. Set the border of the table to be at least 15px, dashed and a different color from any other colors in the table.
  - c. The 1<sup>st</sup> row is for headings. The background color must be different from any of the other cells in the table, and the text must be any color other than black. Add a padding of at least 10px for the heading cells.



- d. The cells in rows 2 and 3 must all have a different color background and a different colored border.
- e. The cells in the column 1 of row 2 and 3 each have an ordered list whose list style is upper roman. Notice that the numbering of the list items in the cell col 1/row 3 starts at 3 (and not 1).
- f. The cell in row 2/col 2 has an ordered list whose list type is uppercase letters. The 1<sup>st</sup> nested unordered list has bullets that are a 25px x 25px image of your choice and first element of this list has one nested unordered list. The second nested unordered list's bullets are the default circle. The color of the text in the 2<sup>nd</sup> unordered list is the same as the border of that cell.
- g. The cell in row 3/col 2 has an ordered list whose list type is hiragana numbering. The 1st nested unordered list's bullets are square. The 2<sup>nd</sup> nested unordered list has bullets that are a 25px x 25px image of your choice, different from the image used in cell Row 2/col 2. The color of the text in the 1st unordered list is the same as the border of that cell.
- All style need to be entered in an external CSS.
- 5. Be sure to include your name in the page as well as the sources of your images with links to the pages at a location of your choice.
- 6. Validate your code using the HTML5 validator.



1. Figure 2 - Template of page to script for question #1



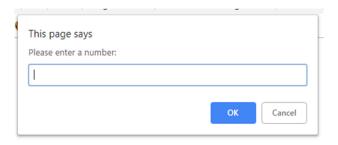
#### **Question #2:**

Write a script that prompts the user to enter numerical data until they enter -1. The program displays the following results:

- The number of entries
- The number of values which are multiple of 3.
- The number of values which are multiple of 5.

The program should check for non-numeric and empty values and should ignore that data.

Here is a sample to illustrate the expected behavior of your program if you enter 10, 15, 14, 21, A, 17 and then -1 :



# Question 2 Solution

you enetered 5 numbers multiple of 3: 2 numbers multiple of 5: 2 numbers



#### Question #3:

Write a script in the head section that shows the multiplication table of the numbers from 1 to 5. The program displays the resulting values in HTML5 table format including the width = 50% and border = 1, as below:

number	1	2	3	4	5
1	1	2	3	4	5
2	2	4	6	8	10
3	3	6	9	12	15
4	4	8	12	16	20
5	5	10	15	20	25

**Note:** You don't need to develop any function to calculate the square and cube of these numbers.

#### **Question #4:**

Write a function *Patternmatch* in JavaScript language declared in the document head section. This function takes a parameter an array of strings called *names*. This function returns the number of names in the given array that end in either "ly" or "ne" patterns and they have also at least one 'a' in their names.

The test driver of the program must be defined as a script in the body section, including the declaration of the array and the invocation of the function. Use this following data of the array (names):

Names = "bradly", "anna", "john", "sherly", "adriane"

The array must be created as an instance of the class **Array** using the "new" operator.

The program displays the result as follows: (the table on top has a dotted border style, the text and background have different colors and their colors are different from the border color. Use a separate css file for the style)



Question 4 Solution

The number of names having these two patterns (/ly\$/) and (/ne\$/) and at least one character'a', in the array is : 2

#### Hint:

- Use the loop : for
- Use the existing method **search()** to provide you the position of these patterns in the array.

### **Submitting Assignment #2**

- Zip the source code (the .java only please) of this assignment.
- Naming convention for zip file: Create one zip file, containing all source code files for your assignment using the following naming convention:
  - The assignment is done by 1 student:
    - The zip file should be called *a#\_studentID1*, where # is the number of the assignment *studentID* is your student ID number. For example, for the first assignment, student 123456 would submit a zip file named *a2 123456.zip*
- For submission instructions please refer to the course web page.
- Assignments not submitted to the correct location or not in the requested format will not be graded.



## **Evaluation Criteria or Assignment #2** (20 points)

JavaScript Source Code		
Question #1 (5 pts.)		
Page background & Header		
Table properties		
Row 1		
Row 2		
Row 3		
All style are to be entered in an in-document style sheet		
sources of your images with links to the pages (or name of image)		
Question #2 (5 pts.)		
Declaring and initializing variables	1 pt.	
Prompting user/reading data		
Using the while statement		
Ignore invalid inputs		
Displaying the results		
Question #3 (5 pts.)		
HTMT5 table format with different tags		
Calculating the multiplication table from 1 to 5		
Displaying the result in the table	1 pts.	
Question #4 (5 pts.)		
Function NbnamePattern(names) described in head section		
Using loop : for		
Using the If statement		
Tester described in body section		
Display the proper result	1 pt.	