



DOUGLAS COLLEGE

COMMERCE AND BUSINESS ADMINISTRATION  
CSIS 1280: MULTIMEDIA WEB DEVELOPMENT

Quiz 2 (November 20, 2020)  
(6 % towards your Final Grade)  
Total Marks: 100

**Instruction: Please place all the JavaScript code in one external file “solution.js”.**

**Question 1:**

**Marks: 40 (35 + 5)**

- (a) Code an event handler (function) named `processEntries()` that gets the user entries for subtotal and tax rate, calculates the sales tax and total, and displays those results in the text boxes with ids "sales\_tax" and "total" respectively. Attach the `processEntries()` function to the onclick event handler attribute of the **Calculate Sales Tax** button.
- Add data validation inside the `processEntries()` function.
    - The subtotal entry should be a positive number that's less than 10,000. If not, display the error message in alert dialog box: ***Subtotal must be > 0 and < 10000***
    - The tax rate should be a positive number that's less than 12. If not, display the error messages in alert dialog boxes: ***Tax Rate must be > 0 and < 12***
  - Move the focus to the Subtotal field when the user clicks the **Calculate Sales Tax** button.
- (b) Also code the event handler for the onclick event handler attribute of the **Clear Entries** button. This should clear all text boxes and move the cursor to the Subtotal field.

**Formula:** Sales Tax = Subtotal \* Tax Rate and Total = Total + Sales Tax

**Question 2:**

**Marks: 30 (20 + 10)**

- (a) Code an event handler `styledContent()` and attach it to the onclick event attribute of the **“Press here to see the styled content”** button. The function should style the content as follows:
- For `<p>` element with id="q2a": change the background to red, text color to yellow, font-size to 32 pt, and the text should be in bold.
  - For `<p>` element with id="q2b": change the background to white, text color to purple, font-size to 45 pt, and the text should be in *italics*.

**Hint:** For example, to set font-size property, use the syntax `element.style.fontSize = "32"`; where element is the object returned by `document.getElementById("q2a")`. Also note that the JavaScript property names use camel case notation for the associated CSS property name. [fontSize for font-size, backgroundColor for background-color and so on.]

**Note:** The styling should be done using JavaScript and not hard-coded into the HTML!

- (b) Create the following rollover effect for the `<h2>` element with text ROLLOVER EFFECT
- on mouse over, the text should be underlined and red,
  - on mouse out, the text should be yellow with no underlining.

**Question 3:** Code an event handler displayScores() and attach it to the body element using onload event handler attribute. Inside the function displayResults():

**Marks: 30**

- Create an array **scores** that contains eight score values 85, 77, 56, 99, 87, 89, 67, 70
- Calculate the average score and the highest score from the array
- Display the results in the <p> elements with ids "averageScore" and "highestScore"
- Insert two new scores 90, 95 into the array starting at position 3 and display the new array in <p> with id "newScores"

Quiz 2		
Question 1	Question 2	Question 3
<p><b>Enter Subtotal and Tax Rate</b></p> <p>Enter the Subtotal: <input type="text" value="5000"/></p> <p>Enter the Tax Rate: <input type="text" value="2.5"/></p> <p>Sales Tax: <input type="text" value="\$ 125"/></p> <p>Total: <input type="text" value="\$ 5125.00"/></p> <p><input type="button" value="Calculate Sales Tax"/></p> <p><input type="button" value="Clear Entries"/></p>	<p><b>Styled Content and Mouse Rollover</b></p> <p><b>It is the Multimedia Web Development Class</b></p> <p><i>Today is Friday!!!!</i></p> <p><input type="button" value="Press here to see the styled content"/></p> <p><b>ROLLOVER EFFECT</b></p>	<p><b>Use of Array and Loop</b></p> <p>The Average Score is: 78.75</p> <p>The Highest Score is: 99</p> <p>The new array is:</p> <p>85 77 90 95 56 99 87 89 67 70</p>

**Submission:**

- Your submission should be a **single zip file** named **lastname\_StudentID** that contains your work.
- Include your name and Student ID in the head section of the HTML document where specified.
- You need to submit your exam through the Blackboard community. **NO LATE SUBMISSION** will be allowed.

**Rubrics for Grading:**

- Every non-meeting requirement will incur a loss of 5 marks