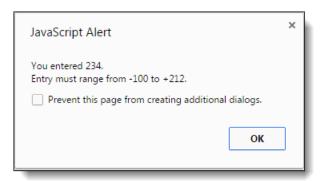
JavaScript Programming

Assignment 2-1: Enhance the Fahrenheit to Celsius application

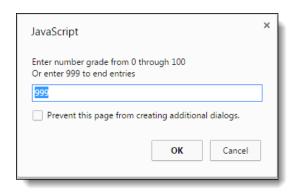
In this assignment, you'll add data validation to the application you created in Assignment 1. You'll also let the user do multiple conversions before ending the application. This is the dialog box for an invalid entry:

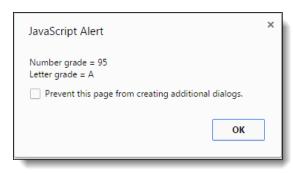


- 1. If you didn't already do Assignment 1, do it now.
- 2. Add data validation to the application so it won't do the conversion until the user enters a Fahrenheit temperature between -100 and 212. If the entry is invalid, a dialog box like the one above should be displayed.
- 3. Add a loop to the code so the user can do a series of calculations without restarting the application. To end the application, the user must enter 999 as the temperature.

Assignment 2-2: Convert number grades to letter grades

This assignment will give you some practice using if statements. To start, this application should display a prompt dialog box like the one below that gets a number grade from 0 through 100: Then, it should display an alert dialog box like the one below that displays the letter grade for that number:





To derive the letter grade, you should use this table:

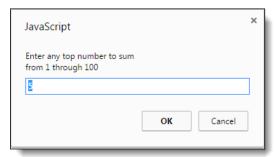
- A 88-100
- B 80-87
- C 68-79
- D 60-67
- F < 60
 - 1. Open this HTML file:

JavaScriptProgramming-Assignment2\letter_grade.html

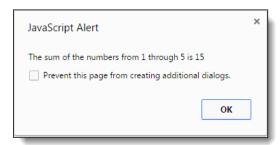
- 2. In the script element, add the JavaScript code for getting the user's entry while the entry amount isn't 999. This should provide for multiple entries and conversions.
- Add the JavaScript code for deriving the letter grade from the table above and displaying it in an alert dialog box.
- 4. If you haven't already done so, add data validation to make sure the entry is a valid number from 0 through 100. If the entry is invalid, the application should just display the starting prompt dialog box. It doesn't need to display a special error message.

Assignment 2-3: Create a Sum of Numbers application

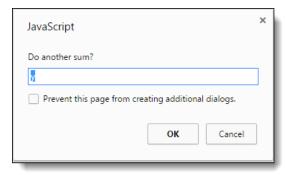
This application will give you a chance to use a for loop. It asks the user to enter a number from 1 through 100 with this prompt dialog box:



Then, it adds all the numbers from one to the user's entry and displays the sum of the numbers in an alert dialog box like this:



Then, to give the user a chance to do multiple entries, this dialog box is displayed:



1. Open this HTML file:

JavaScriptProgramming-Assignment2\sum_numbers.html

- 2. In the script element, add a do-while loop that prompts the user for an entry from 1 through 100. If the entry is invalid, display an alert box with this message: "Please enter a number between 1 and 100". Then, continue the loop until the entry is valid.
- 3. After the do-while loop, code a for loop that sums the numbers, and then display the second dialog box above. For instance, the sum for an entry of four is 1 + 2 + 3 + 4.
- 4. Add a do-while loop around all of the code that uses the third dialog box above to determine whether the first dialog box should be displayed again so the user can enter another number. The application should end for any entry other than "y".