



Homework 6:

This homework assignment is comprised of three files:

- HW6.html → Obviously the web page file that drives this homework assignment
- HW6.js → Associated JavaScript file for HW6.html
- HW6.css → Associated style file for formatting

Part 1:

Create the following HTML page (HW6.html):

Homework 6 title

file:///G:/Documents/Cour Search

Getting Started Latest Headlines Finance Databases Community IT Technical

CSS Scripting & Animations, Events

Enter a username having at least 6 characters and no more than 20.

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 Count of Characters =

- Link the JavaScript and the Stylesheet file in the head section (store those files in the same folder).
- The text input has an id of "txtUsername" and a value property set to: Enter Username.
- The pre element has an id of "preTicker". The text inside the pre element will be assign using JavaScript using a scrolling effect.
- The span tag has an id of "spnCount" and put the following text inside the span elements: Count of Characters =

Create the following Stylesheet file (HW6.css):

- Style the preTicker element having a width of 250px, a height of 25px, and a background color of silver.
- Style the txtUsername element having a solid black border of 1px and overall margins of 5px.



Create the following JavaScript file (HW6.js):

When the document has finished loading execute the following steps:

- Create a variable named txt referencing the txtUsername element.
- Listen to two events of element txt and assign them the following functions (to be created later):
 - Event onfocus assign fTextInputGetFocus
 - Event onblur assign fTextInputLostFocus

Function fTextInputGetFocus:

- Set the value of the txtUsername input to an empty string if the current value equals "Enter Username". Ensure that the comparison is done caseinsensitive. (When user clicks inside the text input, the string "Enter Username" goes away, but if there is any other value then do not remove that value.).
- Make the border color of txtUsername red and 2px thick.

Function fTextInputLostFocus:

- If the length of the value entered in the txtUsername is equal to zero, set the value back to "Enter Username".
- Remove the border style set in fTextInputGetFocus.

Test this functionality by clicking inside the text input and clicking outside. Also enter a value and perform your tests.

Part 2:

In the window load event, assign the function fValidateUserName to the oninput event of the txtUsername element. Create the function fValidateUserName as follows:

- Create a variable named spn and reference the span element in the HTML file.
- Create a variable named count and reference the length property of the value property of the text input element.
- Assign count to the innerHTML property of the span element combined with the text "Count of Characters = ".
- Test this new feature by entering a few characters into the text input.
- Change the background color of the text input depending on the value of the count as follows:
 - Count is 5 or less → background color red
 - Count is between 6 and 12 → background color green
 - Count is between 13 and 20 → background color orange
 - Count is 20 or greater → background color red
 - In the function fTextInputLostFocus, remove the background color of the text input.



Part 3:

The last part is comprised of creating a scrolling ticker effect in the pre element with the silver background. There are many different ways of achieving this functionality, I am trying to accomplish this in a fairly simple way. Below are the basic, logical steps:

Assign the scroll text into a variable and left pad it with a certain number of blank spaces. Then remove the leftmost character and the entire string is moved one character to the left. Now repeat this process every second or so until the length of the string is zero. Then start over again with the original string. This is the reason why I am using the pre HTML element so that the blank spaces are preserved.



Create a function fStartScrolling and then call this function in the window load event:

time

- Create six variables: msg, len, pos, pad, lpadMsg, pre.
- Assign the text "Enter a username having at least 6 characters and no more than 20" to variable msg.
- Initialize variable len with 25 (you can tweak this value later).
- Initialize the variable pos with 0.
- Create a string of blanks with a length len and assign it into pad. There is no such built in function in JavaScript. So take the msg variable using regular expression and replace every character with a blank space, then use the substr or slice method to reduce the length to the value of len.
- Add the pad and msg variables together and assign them into lpadMsg. This variable now holds the original string with a specified number of blank spaces on the left.
- Assign the reference of the pre HTML element into the variable pre.
- Now call a function fScrollText which is described below.
- Within this function, create sub function named fScrollText:
 - Create a variable named curMsg and assign it the substring lpadMsg starting at the incremented value of pos and using a length of len. (substr(lpadMsg, pos++,len)).
 - Assign the curMsg variable to the innerHTML property of the pre reference variable.
 - If the length of the string curMsg equals 0, reset pos to 0.
 - Now call the function fScrollText again using setTimeout method and a value of 100ms.

Test the scrolling ticker.



Homework Guidelines:

- Use Notepad++ or another text editor to write the program.
- Use comments, when designing the program, start out by putting comments into your program as a framework.
- Design and execute test cases, that means make a list of how you want to test your program and what values and/or actions to perform to test the various features of your program.
- Start early, do not procrastinate.
- Review your code once more before uploading.
- Zip up all the individual files into one zip file named HW6_{yourname}.zip