Worksheet 13: Event Listeners

1. Create a new web page and copy all the files which you created for worksheet 12.

2. Simply change the title from *DOM Events* to *Event Listeners*:

3. In the same window.onload function, replace all DOM Event Handlers with Event Listeners.

4. Test your page properly and check that all functionality works and follows requirements set out in worksheet 12.

5. Since parameters can be used with Event Listeners, change the *reset error message* function so that it accepts the element's ID as input, and resets the message for that element accordingly.

6. If you review your code, you may notice that there is repeated code while checking the username and password separately.

   a) Create a function, *checkInput()*, which checks for input with an empty string and also checks if the input has a specific length.

   b) This length depends on the first parameter passed to *checkInput()*.

c) The second parameter for this function should be the paragraph element's ID (the corresponding paragraph used to display the error message).

d) The third parameter for this function needs to be the whole element (the text field which has fired the event).

   Reason being, the anonymous function can know which element has fired the event but other called functions cannot acquire this information unless it is passed to them as a parameter.

   You need to do so, so that the *checkInput()* can use the element's attributes accordingly.

e) *checkInput()* needs to be called by the set anonymous function for the username and password event listeners.

f) The password event listener's anonymous function, should also call another function, *checkCorrectPass()*, which checks if the password has at least one special character or digit.

   Since this check only should be done if the user has actually inputted something and if the password is of the correct length, you should set *checkInput()* to return a boolean value.

   checkInput() should return true if there was an error, otherwise false.

   Therefore, in the anonymous function, you should check the returned value (from *checkInput()*) and only call *checkCorrectPass()* if the returned value is false (since this would mean that a password has been entered and is of the correct length).

g) Once these changes are implemented, the web page should keep on functioning exactly as it was before.

   Therefore, you need to ensure that *checkInput()* is able to output the proper text to indicate the current text field having the error.

   HINT: You should set these text field's ids as '*username*' and '*password*'. This would make it easier to display the appropriate text accordingly.

Username: _____

Please fill in your username!

Password: _____

Username: _____

Password: •••••

Your password needs to be made up of at least 6 characters!

Confirm
Password: _____

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h) Note that this function should also display the minimum length for the input accordingly:

Username: dee

Your username needs to be made up of at least 5 characters!

Password: _____