Assignment 3 - Simple Javascript pages

In this task, javascript code is reported, all scripts must be well commented on and the pages must, as always, be validated: https://validator.w3.org/Länkar to an external page.

Note that you must also submit a separate document explaining your code.

You can use one html page or multiple html pages. If you use multiple html pages, link to the other pages. Note that in this task you should use Javascript, so you should solve the task without php code.

1. Create an array that contains 10 unique integers in the range of 1-100. The numbers should be randomized and saved in the array. Should a number be randomized that is already in the array, a new number should be randomized. Sort these numbers so lowest comes first using the appropriate function and presenting the result on the screen, both the unsorted and the sorted array must be printed.

2. Create a form where the user can register as a user. The user enters a desired username, a password (at least 6 characters), the password again (which should match the first entered password), a valid e-mail address* and the user must also have ticked a checkbox to confirm that they have read the terms and conditions. Verify the input with Javascript (i.e. not with HTML5 validation). When the form is filled in correctly, you should be sent to a new page that thanks for the registration. If it is not filled in correctly, the user should not be sent to any new page but be notified of what is incorrectly filled in in the appropriate way and thus get another chance to fill in the information. Note that in the event of a new attempt, all completed form fields should remain.

3. Make another form that works in the same way as before but now use HTML5 validation instead (however, leave the form above with Javascript for assessment). You cannot easily check if two fields contain matching data using only HTML5, therefore a password field in this form is enough (alternatively, add some javascript code to solve this).

   *By valid e-mail is only meant that you have not accidentally entered your name instead of your e-mail, so it is enough for the Javascript form that you check that you have entered an @ somewhere in the input (but not as the first or last character).

   Remember to carefully comment on your code to show that you really understood the meaning of the different code snippets and how they work. Also, do not forget the document that contains the link, as well as describe what functions, control / flow statements and objects you have used in the code, what they do and why you have chosen these.

Documentation

The requirements for the scripts are that you should use:

- At least three self-defined functions, i.e. you should create your own functions that solve the appropriate parts of the task.
- At least three different control/flow kits.
- At least three different predefined objects.

The link to your index page and the above points should be clearly described in a document, i.e. which functions, control / flow statements and objects you have used in the code, what they do and why you have chosen these.

Below you find the template that should be filled in for the documentation, just fill in short descriptions regarding following:

Documentation Lab 3a – Simple Javascript

Link to my page:

At least three self-defined functions

Describe what features you've created, where they're located, what they do, and why you've created them

1. Feature 1:
2. Feature 2:
3. Feature 3:

At least three different control/flow kits

Describe what control/flow kits you use, where they are located, what they do, and why you have used them

1. Control/flow kit 1
2. Control/flow kit 2
3. Control/flow kit 3

At least three different predefined objects

Describe what predefined items you use, where they are located, what they do, and why you have used them

1. Predefined object 1:

2. Predefined object 2:

3. Predefined object 3: