

Laboratory Sheet 4

JavaScript Form Validation + jQuery

Published date: Monday, 15 October 2018

Due Date: Monday, 12 November 2018, 9:00 am

Successful completion of this lab is worth **2%** of the module marks.

Successful completion of all 7 labs is worth an additional **1%** of the module marks.

Note:

1. All the code (e.g., .html, .css and .js files) must be submitted using webcourses – in zipped format.
2. Must be demo-ed in the labs either before or after submission.
3. Failure to provide code or demo will result in a mark of 0%.

What you need: Notepad++ (or another); Chrome (or another); HTML5, CSS, JavaScript, jQuery.

Where you can get support: Lecture notes on webcourses + full references on <https://www.w3schools.com>.

Remember: Use “Dev Tools”, such as the Console and Inspect Elements, to debug your code.

- 1) Complete the Week5_FormValidationExercise.html (available on Webcourses):
 - a) Edit the HTML input fields and complete the validateForm() function in plain JavaScript, to ensure that the user enters all of the required data, in valid format:
 - i) All fields are mandatory.
 - ii) Name has letters only.
 - iii) The email is valid (using the regular expression taught in the lecture).
 - iv) The date of birth must be valid and not in the future.

That includes checking if the day does not exceed the allowable value for any month. Be sure to account for 29 days in February on a leap year.

Use the included isLeapYear() function.
 - v) Gender is selected, i.e., not left the default blank.
 - vi) The city has letters only.
 - vii) Zip code has at least one letter followed by a white space, followed by at least one digit.

- b) For each error, tell the user in good time how to properly enter the value.
Make the user experience as pleasant as possible.
- 2) Create a second version of the Week5_FormValidationExercise.html and all relevant javascript files:
 - a) Use input type=email for the email field, comment your email validation code and test how the automatic email validation works on different browsers.
 - b) Use jQuery instead of plain JS in your form validation code.
Check this thread about mixing jQuery with the JS validation API:
<https://stackoverflow.com/questions/7386817/html5-form-checkvalidity-method-not-found>.
 - c) Replace the text fields in the birth date for a jQuery date picker.
Get help here: <http://api.jqueryui.com/datepicker/>.
 - d) Create an animation with jQuery for when the form has been successfully validated, e.g. hiding it within 2 seconds