UNIVERSITY OF REGINA
Department of Computer Science

CS 215 – Web & Database Programming
Fall 2018

Assignment #3: Micro-Polling Website – Form Validation & Other Interaction

Due: Tuesday October 23, 2018 by 11:55 PM

This is the second in the series of assignments for building a micro-polling website. In the first of these assignments, you built an interface mock-up of the site. For this one, you will use JavaScript to implement the form validation and to support other types of interaction. In the subsequent assignments, you will design and implement the database (Assignment #4), implement the back-end programming in PHP (Assignment #5), and implement AJAX-based updating (Assignment #5). Because the assignments build upon each other, you may wish to make modifications to your previous assignment submission before starting this assignment.

An important part of building an online application is verifying that the users have provided input in a format that is expected. Doing this on the client side allows the feedback to be provided quickly, and without the need to reload the Web page.

A. In the previous step of the assignment, there were three pages that each had some kind of a form on them. For each of these, your task is to implement JavaScript-based form validation. The following is a list of the pages, the form elements that are required, and the type of validation to be preformed.

1. Login Form
    - email address (valid email address format)
    - password (8 characters or longer, no spaces)

2. Sign-up Form
    - email address (valid email address format)
    - screen name (no spaces or other non-word characters)
    - date of birth (proper date format)
    - password (8 characters long, at least one non-letter character)
    - verify password (matches password)

3. Poll Creation Form
    - open date/time (proper date/time format)
    - close date/time (proper date/time format)
    - question (non-blank; shorter than 100 characters)
    - answers (up to five; either blank or shorter than 50 characters)

For each of these form validation elements, you should highlight the portion of the form that contains the error, and add informative instructions to help the user to

correct their mistake. To do this, you will be required to manipulate the document via the DOM. All JavaScript event processing code is to be registered using the DOM2 event registration and event handling methods. As much as possible, you should write your validation functions to be reusable.

B. Given the limitations on the number of characters in the question and the answers, it is also beneficial to give the user some feedback on the number of characters in these fields, as well as the number of characters left. This should operate dynamically as the user types in the fields on Poll Creation Form. Should the character limit be exceeded, the user should be permitted to continue typing, but it should be made apparent that the limit has been exceeded. The function for counting the number of characters should be designed to be re-used for all six fields.

Since these pages will each be modified, you should ensure that they are still HTML5 compliant (following the syntax rules of XTHML), use CSS, and that there is a proper separation of the specification of the content from the specification of the presentation rules and the specification of the JavaScript code.

Grading Scheme

This assignment will be graded out of 10 marks, based on the following criteria:

1 mark:	Form validation on login page.
2 marks:	Form validation on sign-up form.
2 marks:	Form validation on poll creation form.
2 marks:	Dynamic character counter on questions and answers.
2 marks:	Proper use of DOM document manipulation and DOM2 event registration.
1 mark:	Valid HTML 5 that follows XHTML syntax rules.

Submissions

All of the files for this assignment should be posted to your personal website, as well as uploaded to UR Courses (a single zip file). A simple submission log file should be provided that includes your name, student number, class number, the URL of where you have posted the files, and a listing of the files you have submitted along with a short explanation of the purpose of each file. **Failure to provide these support documents will result in delays in the grading of your assignment and possibly a deduction in your grade.**

Late submissions will not be accepted. If there are exceptional circumstances that kept you from submitting your assignment on-time, you should consult with your instructor as soon as you are able to do so. See the syllabus for more details on the late policy for this class.