Individual Project

ITS3123, Javascript & Ajax

Guidelines for Javascript & Ajax Individual Project

Project Due by Monday, November 13, 2017

Project Purpose

- Demonstrate how well you have learned about using Javascript, Ajax and jQuery
- Demonstrate your ability to use Javascript, Ajax and jQuery

Your project will be graded based on your ability to meet the requirements as listed below. The more requirements you meet the higher your grade.

Project Requirements

Your task is to meet the requirements listed below:

- A. Form Validation
 - 1. Create a form that contains the following:
 - a. Drop down list of countries that contains only two countries, USA and Canada.
 - b. Drop down list that contains State/Province is disabled and empty until a country is selected. Once a country is selected the drop down list is enabled and contains those states/Provinces for the particular country selected. If the country is changed then the contents of the drop down list change to the newly selected country's states/provinces. If blank country is selected then the drop down list is emptied and disabled.
 - c. Text dialog labeled Username, which must contain at least 2 characters and be no longer than 15 characters in length and must begin with alphabetical character and may not contain any symbols or spaces.
 - d. Checkbox labeled Agree and whose default is unchecked.
 - e. A button to submit form data whose name is Submit. Initially, the Submit button must be disabled. In order for the submit button to be enabled requires that the Agree Checkbox be checked. Unchecking the Agree checkbox disables the button. Once the button is enabled, the form undergoes validation.

- f. Password dialog labeled Password that contains a string, which must have at least one upper and lower case letter, one number, and one symbol. The password needs to be at least 8 characters in length and no more than 16 characters in length, and may not contain the username. Once the pointer leaves this dialog, the password needs to be checked to insure it meets the above requirements. If this error occurs it should also disable the submit button. Once the error is corrected the error should disappear and the Submit button should not be affected by the error.
- g. Confirming password dialog labeled Confirming Password that must match the values in the password dialog. Checking to insure the values match should be done the moment the pointer leaves the dialog. If they do not match an error in red must above the confirming password telling the user the passwords do not match and need to be re-entered. If this error occurs it should also disable the submit button. Once the error is corrected the error should disappear and the Submit button should not be affected by the error.
- h. Form validation checks that a country and state/province have been selected, a correct username was also provided, the Agree checkbox was checked, correct password was provided and a confirming password was provided. All errors found need to be shown in red above the input where the error occurred with a message describing what the error was. Do not send data to anywhere, return a false to the form onsubmit function.

B. Object Movement

1. Add an image to the page and have it slowly move diagonally from the left bottom corner to the upper right corner. If there is a mouse enter on the image, reverse the direction of the image. Once there is a mouse leave on the image, the image continues along its original path.

C. Sending and Retrieving Data

1. Show coding only for how you would obtain state/province data from server using an Ajax GET based on the country that was selected in the form drop down (See A.1.a-b). Once you received data from the server, show in the response function how you would populate the State/Province dropdown with the data. Assume the data is coming back as a JSON Array containing full name of State/Province and its abbreviation. Also, show how you would handle a problem like no data coming back from the server or some other problem.

D. Loading Data

 Use JSONP to obtain weather forecast from: https://query.yahooapis.com/v1/public/yql and display the results on the page in a fieldset called weather.

E. Changing Styles (CSS)

1. Create three radio buttons that share the same name. The first radio should be labeled small, the second labeled medium and the third large. The medium button must initially be checked. When the medium radio is selected, the Fieldset and its data from D above has a background color of white, text dolor of black, text font size is 18pt, font family of Verdana, Geneva, sans-serif. When the small radio is selected, the Fieldset and its data from D above has a background color of black, text dolor of white, text font size is 8pt, font family of Comic Sans, Comic Sans MS, cursive. When the large radio is selected, the Fieldset and its data from D above has a background color of red, text dolor of green, text font size is 48pt, font family of Courier New, Courier, monospace.

F. jQuery

1. Load correct versions of jQuery into page for 3 different widgets you have selected to show on the page.

Project Changes

This project's requirements may change during the course of this class. If it does, students will be notified by the instructor of the changes. The instructor has sole authority to make changes to the project's requirements.