**Assignment 2 - Form Validation**

**Due Date:** February 15th, 2015

Many web applications involve some kind of forms. Form validation is a way for you to tell the user what kind of input is required in each field, and allows you to notify the user when the input is incorrect. There are many ways to do form validation, but in this assignment you will write a plugin that displays information / error messages besides the fields. The [Microsoft account sign up page](https://signup.live.com/) is a good example of form validation – it is also a good example of an extremely long and complicated form that would be unfriendly without validation!

***Requirements***

The code files for form validation are validate.html, css/validate.css and js/validate.js. You will only need to modify js/validate.js.

You should implement the function validateField. validateField should take in three parameters, fieldElem, infoMessage, and validateFn.

fieldElem is a jQuery element that represents a single form text field. infoMessage should be a string that gives a human-readable description of the field’s requirements. validateFn should be a function that validates the field’s value.

When the function is invoked, you should insert a <span> notification element immediately after the form field. The notification element should initially be hidden.

When the field is currently being edited, the notification element’s text should be infoMessage, its class should be “info”, and it should be visible.

When the field is not being edited:

* If the field is empty, the notification element should be hidden.
* If the field is non-empty and the form field validates, the notification element’s text should be “OK”, its class should be “ok”, and it should be visible.
* If the field is non-empty and the form field does not validate, the notification element’s text should be “Error”, its class should be “error”, and it should be visible.

Additionally, use this function to validate the form fields on the web page. You may use any sensible information messages of your choosing. The validations are as follows:

* The username field must contain only alphabetical or numeric characters.
* The password field should be at least 8 characters long.
* The email address field should contain a @ character.

***Hints***

You should use the [form events](http://api.jquery.com/category/events/form-events/) functions to detect when a form field gains or loses focus. You should not use mouse and keyboard events such as click or keydown: there are multiple ways to give a form field focus, and it is difficult to detect all of them reliably using mouse and keyboard events.

The information span element can be added using [element creation](http://api.jquery.com/jQuery/#jQuery2) and [DOM insertion](http://api.jquery.com/category/manipulation/dom-insertion-outside/).