# *Web Programming IV (420-C40-HR)*

# *Lab 4 – Fun with Validation*

Date assigned: Thursday, February 2, 2017

Date due: **Thursday, February 2, 2017, 4:00 p.m.**

**Learning Objectives**

Upon successful completion of this lab exercise, the student will be able to:

* Work with Validation in ASP .NET

Lab Set-Up

1. Copy the zip file from Moodle and unzip it to a folder **YourUserNameC40L04** in your H:\420-C40\Labs folder
2. Remember, you must use CSS for all formatting and styling of your web pages. All CSS must be kept in a separate file with an appropriate name. CSS files should be stored in a folder called “styles” which is a subfolder of the root folder of the website.

To do:

**Part A – Starting Over?**

1. Start Visual Studio and open the website Web site Validation in the C 40L06 folder you copied.
2. Before adding any validators, there are a couple of lines to be added to the web.config file. This allows jQuery to run the validations on the query mode (you can copy these lines).

<appSettings>

<add key="ValidationSettings:UnobtrusiveValidationMode" value="None" />

</appSettings>

1. Open the page PresentValue.aspx. This is the solution to the first asp page you created in lab 2.
2. Next to the textbox for the interest rate add a required field validator. Associate the validator with the txtInterest field. Change the error message to “Interest Rate is required” and make the message Red and make the display Dynamic.
3. Add a similar required field validation control next to the number of years textbox with an appropriate message.
4. Add a similar required field validation control next to the drop down list. This time you have to add an initial value of 0 to the validation control.
5. Add a range validator next to the required field validator next to the interest rate field. Add a minimum value of 1 and a maximum value of 20. Make sure you change the Type to integer.
6. Add a comparison validator next to the required field validator next to the number of years field. This validator makes sure that the number entered is an integer and greater than 0.
7. Run the program and test to make sure each of the validators works and the appropriate error message is displayed.
8. Make sure all the (validation) controls are appropriately named and they should all be dynamic.

**Part B – Validation Controls**

1. Open the file StumbleInn.aspx.
2. Add required field validators for the Arrival date, Number of nights, Name and Email text boxes. Be sure to add these validators to the end of the paragraphs that contain the controls they validate. Enter an appropriate error message for each validator and set the Display property to Dynamic.
3. Notice that the error messages are displayed in black. Add a CSS style class called validator in the main.css stylesheet with the property to display in red. Set the CssClass property of each validator to this class.
4. Run the application at this point to make sure the validators work.
5. Run the application a second time and click the Clear button. Notice that the error messages are still displayed. To fix this, change the CausesValidation property of the Clear button to be false. Test the application again to make sure it worked.
6. Set the Text property of the arrival text box to mm/dd/yyyy. Then, modify the code in the Page load function so that it doesn’t set the property to the current date. Comment out the code, do not delete it. You will also have to correct the Clear button click.
7. Set the initialValue property of the arrival date text box to the value that’s displayed in this control by default.
8. Add a compare validator for the arrival text box. This validator should check that a date is entered in the text box. Add a brief error message.
9. Add a compare validator to the Number of nights text box. This validator should check that an integer greater than or equal to 1 is entered. Add a brief error message and CSS Class.
10. Run the application and check that the compare validators are working by testing them in a few different situations.
11. Add a range validator for the arrival date text box. Because the date range will be set at runtime you do not need to add a minimum and maximum value. Add an appropriate error message and CSS Class.
12. Add code to the Page load event handler that sets the minimum value of the range validator to the current date and the maximum value to six months from the current date. To do this set the MinimumValue property to Today.ToShortDateString and the MaximumValue to Today.AddMonths(6).ToShortDateString.
13. Run the application and check the limits to make sure that the validator is working.
14. Add a regular expression validator for the Email text box. Use the regular expression editor dialog box from the ValidationExpression property of the control to select an internet email address. Add an appropriate error message and CSS Class.
15. Run the application and check that the validator works for a variety of conditions
16. Add a new paragraph to the bottom of the page and then add a validation summary control to the paragraph. We talked about the control briefly at the end of class. This control allows all the error messages to be in one location on the screen. Enter appropriate text for a header of the control and format the control. There is nothing else that needs to be done to the control for it to work. It will now display the error messages for all fields in the summary control.
17. Run the application and test it to see how the error messages work. Notice that the error messages are displayed in both the validators and the summary control.
18. Set the text property of each of the validators to asterisk (\*). Run the application again and see the difference.

**To submit**

When you have completed the lab exercise show me the result, create a single zip file called YourUserNameC40L06.zip. The zip file must contain all of the parts of the lab in the folder you created at the beginning of the lab. Copy the file to the Moodle page for the course.