

COMP 3111: Software Engineering

Lab Activity: Validating Data in ASP.NET Add Data Validation to the *HKeInvest* Client Registration Page



If you have not attended the tutorial or read the tutorial and lab notes for *Validating Data in ASP.NET*, you may not know how to complete this lab activity. Attending the tutorial will help ensure that you are able to complete the lab activity during the lab period.

LAB OBJECTIVE

Web pages that accept user input require the input data be validated before they are further processed. In this lab activity you will validate data that is input through the client registration page by adding validation server controls to the web form.

IMPORTANT: The following must be available for you to be able to complete this lab activity.

- The “RegistrationPage.aspx” web form that you constructed in the Week 1 lab activity.
- The *HKeInvestDB.mdf* SQL Server database that you created in the Week 2 lab activity.

IMPORTANT: The ID properties of all controls should be set exactly as specified or you will get errors when you view the web form.

REGISTRATION PAGE VALIDATION

Open the “RegistrationPage.aspx” web form.

Set the MaxLength property of each TextBox control according to the information provided in the appendix of the *Managing Data Using SQL Server* lab activity (see page 1 of the notes).

If not already set, set the TextMode property of the “Email” Textbox control to Email and of the “Password” and “ConfirmPassword” controls to Password (see page 1 of the notes).

Note: Do not set the TextMode property of the DateOfBirth control to “Date” as this text mode is not supported in Internet Explorer or Firefox.

Add RequiredFieldValidator Controls

For each TextBox control, add a RequiredFieldValidator control to the right of the TextBox control and set the properties of the RequiredFieldValidator controls appropriately (see pages 3 to 5 of the notes).

Add CompareValidator Control

For the ConfirmPassword TextBox control, add a CompareValidator control to check that the value entered in the Password and ConfirmPassword TextBox controls match (see page 5 of the notes).

Add RegularExpressionValidator Control

For the DateOfBirth, UserName and Password TextBox controls, add RegularExpressionValidator controls to the right of all existing validation controls that will check the following (see page 5 of the notes)¹.

- DateOfBirth is in the format “dd/mm/yyyy” (see *Account Application*).
- UserName is between 6 and 10 characters, contains only letters and digits and is case insensitive (see *requirement 2 Client login accounts*).
- Password is between 8 and 15 characters, contains at least two non-alphanumeric characters and is case sensitive (see *requirement 2 Client login accounts*).

Add a CustomValidator Control

For the AccountNumber TextBox control add a CustomValidator control to check that the account number contains the first or first two letters of the clients last name in uppercase followed by 8 digits (see pages 5 and 6 of the notes).

¹ You can test your regular expression at <https://regex101.com/>.

Add a ValidationSummary Control

Add a ValidationSummary control at the top of the "RegistrationPage.aspx" web form just below the first <div> tag and set its properties appropriately to show a summary of the errors that occurred on the page and to allow any custom validators to execute (see pages 7 and 8 of the notes).

Set Additional Properties of Validation Controls

For all controls set the following properties (the Text property cannot be set for the ValidationSummary control).

Property	CssClass	Display	EnableClientScript	Text
Value	text-danger	Dynamic	False	*

How To Get The Credit for This Lab

Part 1: During the Lab Session

To get half the credit for this lab, you must submit, by the end of the lab period, a print out of the client registration page, displayed in a browser, showing the following.

- Your name in the First Name and Last Name textboxes.
- All other values as given.
- The error messages shown in the ValidationSummary control.
- Your name and student number in the footer of the registration page.

An example of such a printout is shown in Figure 1.

HKInvest LLC Home About Contact Search Place order ▾ My holdings ▾ My orders ▾ Register Log in

- The account number does not match the client's last name.
- A HKID or Passport number is required.
- Date of birth is not valid.
- Email address is required.
- User Name must contain at least 6 characters.
- User Name must contain only letters and digits.
- Password must contain at least 8 characters.
- Password must contain at least 2 nonalphanumeric characters.
- Password and confirm password do not match.

← These error messages must appear here.

Create a new client login account

Account# AZ00000001 * First Name Typical

HKID/Passport# * Last Name Student

Date of Birth 02/29/1999 * Email *

User Name abc# ** Password ** Confirm Password *

Register

© 2016 Typical Student (00000000) ← Your name and student number must appear here.

Figure 1: Example printout of client registration page.

Part 2: After the Lab Session

To get the remaining credit for this lab you must construct the web page for the Account Application form. You will be required to demonstrate your Account Application web page to the TAs in next week's lab.