Validation Controls

Chapter – 9

Types of User Errors during Data Entry
Leaving a field blank
Entering invalid data by mistake
Entering invalid data on purpose to break the code

Validation Controls

Control Class	Description
RequiredFieldValidator	Validation succeeds if input control doesn't contain an empty string.
RangeValidator	Validation succeeds if the input control contains a value within a specific numeric, alphabetic, or date range.
CompareValidator	Validation succeeds if the input control contains a value that matches the value in another input control, or a fixed value that is specified.
RegularExpressionValidator	Validation succeeds if the value in an input control matches a specified regular expression.
CustomValidator	Validation is performed by a user-defined function.

Server-Side Validation

- Validator controls can be used to verify a page automatically when the user submits it or manually in your code.
- When using automatic validation, the user receives a normal page and begins to fill in the input controls.
- When finished, the user clicks a button to submit the page. Every button has a CausesValidation property, which can be set to true or false

Client-Side Validation

- In modern browsers, ASP.NET automatically adds JavaScript code for client-side validation. In this case, when the user clicks a CausesValidation button, the same error messages will appear without the page needing to be submitted and returned from the server. This increases the responsiveness of your web page.
- However, even if the page validates successfully on the client side, ASP.NET still revalidates it when it’s received at the server.

BaseValidator Class

Property	Description
ControlToValidate	Identifies the control that this validator will check.
ErrorMessage and ForeColor	If validation fails, the validator control can display a text message (set by the ErrorMessage property). By changing the ForeColor, you can make this message stand out in angry red lettering.
Display	Static / Dynamic
IsValid , Enabled, EnableClientScript	True / False

Validator-Specific Properties

Property	Description
RangeValidator	MaximumValue, MinimumValue, Type
CompareValidator	ControlToCompare, Operator, Type, ValueToCompare
RegularExpressionValidator	ValidationExpression
CustomValidator	ClientValidationFunction, ValidateEmptyText, ServerValidate event

Manual Validation

Disable validation and perform the work on your own

You can create manual validation in one of three ways:

- Use your own code to verify values. In this case, you won’t use any of the ASP.NET validation controls.
- Disable the EnableClientScript property for each validation control. This allows an invalid page to be submitted, after which you can decide what to do with it depending on the problems that may exist.
- Add a button with CausesValidation set to false. When this button is clicked, manually validate the page by calling the Page.Validate() method. Then examine the IsValid property and decide what to do.

Validation with Regular Expression

Character	Description
*	Zero or more occurrences of the previous character or subexpression. For example, 7*8 matches 7778 or just 8.
+	One or more occurrences of the previous character or subexpression. For example, 7+8 matches 7778 but not 8.
{ }	Groups a subexpression that will be treated as a single element. For example, (78)+ matches 78 and 787878.
{m,n}	Previous character (or subexpression) can occur from *m* to *n* times. A{1,3}
|	Either of two matches
[ ]	Matches one character in a range of valid characters.
[^]	Matches a character that isn't in the given range. [^A-B]
.	Any character except a newline.
\s	Any whitespace character (such as a tab or space).
\S	Any non-whitespace character.
\d	Any digit character
\D	Any character that isn't a digit.
\w	Any "word" character (letter, number, or underscore).
\W	Any character that isn't a "word" character (letter, number, or underscore).

Master Page

- Chapter 12 – Page 369

- [a-z][A-Z]+ - one lower case character followed by one or more uppercase character
- [a-zA-Z]+ - one or more lowercase/uppercase character
- [a-zA-Z]+[ ] [a-zA-Z]+ - one or more lowercase/uppercase character, followed by a space, followed by one or more lowercase/uppercase character