

.NET Technologies





.NET Technologies - Lecture 7

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UNIT 2: Topics in this presentation

Validators in ASP.NET:

- RequiredField
- Range
- Compare
- Validation Summary



Validators

- ASP.NET validation controls validate the user input data to ensure that useless, unauthenticated, or contradictory data don't get stored.
- ASP.NET provides the following validation controls:
 1. RequiredFieldValidator
 2. RangeValidator
 3. CompareValidator
 4. RegularExpressionValidator
 5. CustomValidator
 6. ValidationSummary

Need for Validators

- Validation controls are used to:
 1. Implement presentation logic.
 2. To validate user input data.
 3. Data format, data type and data range is used for validation.
- There are 2 types of Validation - Client and Server types.
- Client side validation is good but we have to be dependent on browser and scripting language support.
- Client side validation is considered convenient for users as they get instant feedback. The main advantage is that it prevents a page from being postback to the server until the client validation is executed successfully

Required Field Validator

- The RequiredFieldValidator control is simple validation control, which checks to see if the data is entered for the input control.
- You can have a RequiredFieldValidator control for each form element on which you wish to enforce Mandatory Field rule.
- Example :

```
<asp:RequiredFieldValidator ID="rt1" runat="server" ControlToValidate="t1"  
ErrorMessage="UserName is mandatory"></asp:RequiredFieldValidator>
```

Important Properties :

- I. ControlToValidate : ID of the control you want to enforce the validator.
- II. ErrorMessage : String Message to be displayed when validator is printed.

Range Validator

- The RangeValidator Server Control is another validator control, which checks to see if a control value is within a valid range.
- The attributes that are necessary to this control are: MaximumValue, MinimumValue, and Type.
- Example :

```
<asp:RequiredFieldValidator ID="rt1" runat="server" ControlToValidate="t1" ErrorMessage="UserName is mandatory"></asp:RequiredFieldValidator>
```

Important Properties :

- I. MaximumValue, MinimumValue : Declare range of validation
- II. Type : Type of the range eg. integer or string

Compare Validator

- The CompareValidator control compares a value in one control with a fixed value or a value in another control.

| Properties | Description |
|------------------|---|
| Type | It specifies the data type. |
| ControlToCompare | It specifies the value of the input control to compare with. |
| ValueToCompare | It specifies the constant value to compare with. |
| Operator | It specifies the comparison operator, the available values are: Equal, NotEqual, GreaterThan, GreaterThanEqual, LessThan, LessThanEqual, and DataTypeCheck. |

Compare Validator

- Example :

```
<asp:CompareValidator ID="cmpv1" runat="server"  
ControlToValidate="t4" ControlToCompare="t2" Operator="Equal"  
ErrorMessage="Passwords don't match"></asp:CompareValidator>
```

Validation Summary

- The ValidationSummary control does not perform any validation but shows a summary of all errors in the page. The summary displays the values of the ErrorMessage property of all validation controls that failed validation.
- The following two mutually inclusive properties list out the error message:
 - ✓ ShowSummary : shows the error messages in specified format.
 - ✓ ShowMessageBox : shows the error messages in a separate window.
- Example:

```
<asp:ValidationSummary ID="vs1" runat="server" DisplayMode="BulletList"  
    ShowMessageBox="true" ShowSummary="false"/>
```

Summary of Validators

| Validation Control | Description |
|----------------------------|---|
| RequiredFieldValidation | Makes an input control a required field |
| CompareValidator | Compares the value of one input control to the value of another input control or to a fixed value |
| RangeValidator | Checks that the user enters a value that falls between two values |
| RegularExpressionValidator | Ensures that the value of an input control matches a specified pattern |
| CustomValidator | Allows you to write a method to handle the validation of the value entered |
| ValidationSummary | Displays a report of all validation errors occurred in a Web page |

Note: For examples please refer to the programs of practical no. 5