



Republic of the Philippines  
**CEBU TECHNOLOGICAL UNIVERSITY**  
MAIN CAMPUS  
M.J. Cuenco Ave. Cor. R. Palma Street, Cebu City, Philippines  
Website: <http://www.ctu.edu.ph>



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# ASP.NET

## Module 6

### Validation Controls



## I. Preparations

At the end of this module students will:

- implement the RegularExpression, RangeValidators, RequiredField Validator, and Compare Validator

## II. Presentation

**RegularExpression** validator control mostly use for validate **Internet E-mail address** and **Internet URL**.

The Internet Email address must contain @ after some text and dot(.) before some text, then the address is right other wise the email address is invalid format.

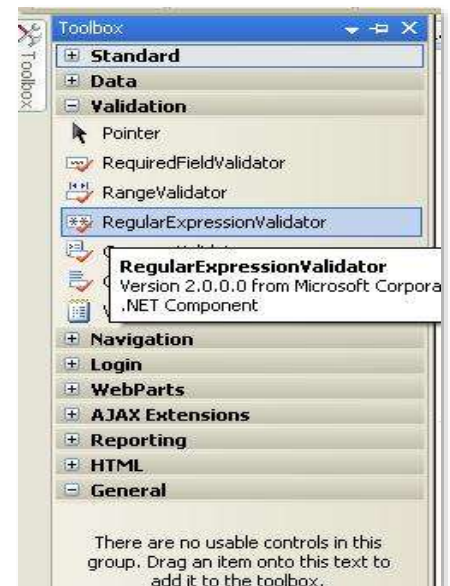
Same way in Internet URL means internet website name or domain name must start with **http://**.

**Implementation: For email and URL.**

1. First Design the web form with Three Textbox control, Name, Email and Website URL along with the one button control.
2. Drag the RegularExpresion Validation control on webforms from toolbox.
3. Take note: In RegularExpression Validator control must set below property :

ControlToValidate = TextBox control which will be validate.  
ErrorMessage = Display the message when error occur.  
Validation Expression = Select the expression for validation criteria.

4. Set the **Validation Expression** property of RegularExpression Validation control.



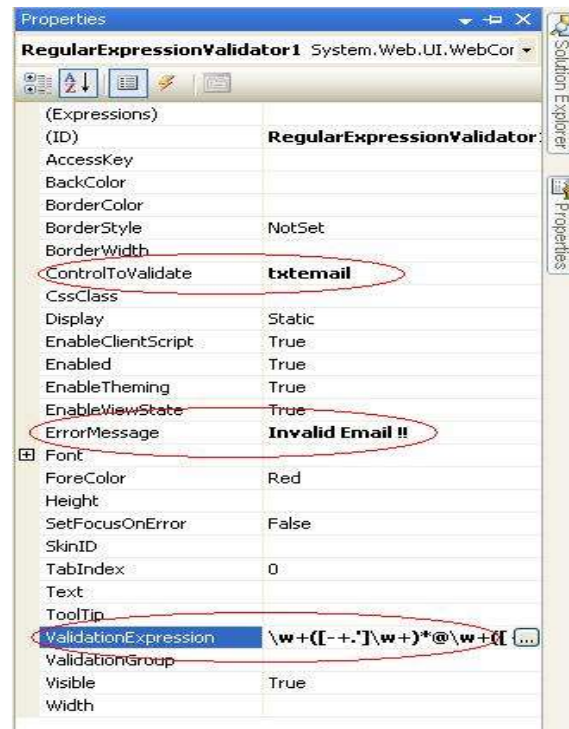


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5. Select Internet e-mail address option for validate email address.



6. Set ControltoValidate, ErrorMessage and ValidationExpression property.



For validating the **Internet URL**, select Internet URL option in Validationexpressions.



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1. Select Internet URL for validate website URL.



2. Select Internet URL option from expression then the property windows looks like below screen.



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3. Below is the example output using RegularExpression validator control.

RegularExpression Validator in ASP.Net	
Name:	<input type="text" value="me"/>
Email :	<input type="text" value="me"/> Invalid Email !!
Website :	<input type="text" value="me"/> Invalid Url !!
<input type="button" value="Enter"/>	

RegularExpression Validator in ASP.Net	
Name:	<input type="text" value="me"/>
Email :	<input type="text" value="me@yahoo.com"/>
Website :	<input type="text" value="http://www.me.com"/>
<input type="button" value="Enter"/>	

### RangeValidator Control

Is used to checks the input control's value is within a specified range, Means input values must be between two values, It has minimum and maximum value.

Generally we use RangeValidator control for Mobile no and Pincode Number.

The most important properties of the RangeValidator control are **MaximumValue**, **MinimumValue**, and **Type**.

**Note:** Specify the Range from Minimum values to Maximum Values and Type of Input Values.

**MaximumValue** – Specify the MaximumValue of Input Value

**MinimumValue** -Specify the MinimumValue of Input Value

**Type** – Specify the Data Type of Input Value





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### How to use Range Validator Control

**Range Validator Control in ASP.Net**

Drag the RangeValidator to web forms

Set the properties

Set the Control name which is validated

Set Error Message

Set the Maximum and Minimum Range for input value

Set Type Double for 10 digit mobile number

For 3 Digit Type = Integer and Max= 999 and Min = 100

**RangeValidator Properties:**

Property	Value
AccessKey	
BackColor	
BorderColor	Red
BorderStyle	None
BorderWidth	1px
ControlToValidate	txtName
CssClass	
CultureInvariantValues	False
Display	Static
EnableClientScript	True
Enabled	True
EnableTheming	True
EnableViewState	True
ErrorMessage	Mobile must be 10 digit
Font	
ForeColor	Red
Height	20px
MaximumValue	9999999999
MinimumValue	1000000000
SetFocusOnError	False
Skid	0
TabIndex	0
Text	
ToolTip	
Type	Double
ValidGroup	
Visible	True
Width	100px



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Example 1: Numbers values

Range Validator in ASP.Net	
Name :	<input type="text"/>
Mobile :	<input type="text"/> Invalid Mobile !!
Pincode :	<input type="text"/> Invalid Pincode !!
<input type="button" value="SAVE"/>	

1. The Design

```
<table>
<tr>
    <td style="text-align: right">Name :</td>
    <td style="text-align: left"><asp:TextBox ID="txtname"
runat="server"></asp:TextBox></td>
</tr>
<tr>
    <td style="text-align: right">Mobile :</td>
    <td style="text-align: left"><asp:TextBox ID="txtmobile"
runat="server"></asp:TextBox>
        <asp:RangeValidator ID="RangeValidator1" runat="server"
ControlToValidate="txtmobile" ErrorMessage="Invalid Mobile !!"
MaximumValue="999999999" MinimumValue="111111111"
Type="Double"></asp:RangeValidator>
    </td>
</tr>
<tr>
    <td style="text-align: right">Pincode :</td>
    <td style="text-align: left"><asp:TextBox ID="txtpincode"
runat="server"></asp:TextBox>
        <asp:RangeValidator ID="RangeValidator2" runat="server"
ControlToValidate="txtpincode" ErrorMessage="Invalid Pincode !!"
MaximumValue="999999" MinimumValue="111111"
Type="Integer"></asp:RangeValidator>
    </td>
</tr>
<tr>
    <td colspan="2" style="text-align: center;">
        <asp:Button ID="btnSave" runat="server" Text="SAVE"
style="font-weight: 700" />
    </td>
</tr>
</table>
```



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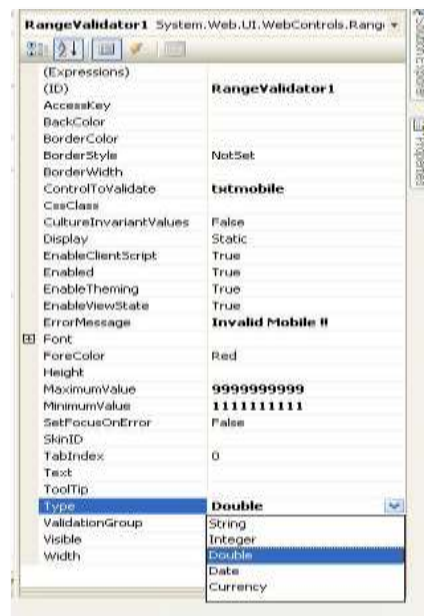
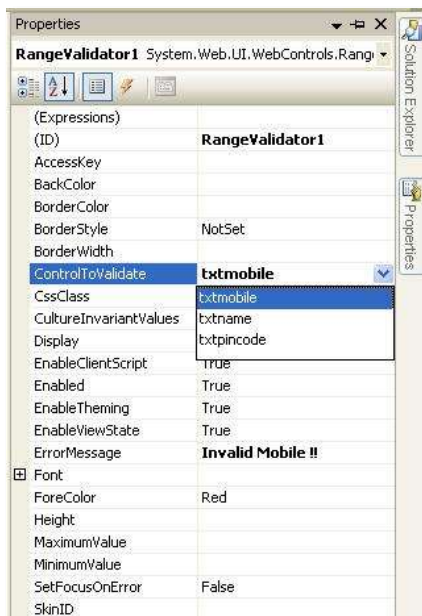
2. Drag and drop RangeValidator control on web forms.
3. Validate the TextBox for Mobile Number. Mobile number must be 10 digit.

First set ControlToValidate property = textbox mobile as below.  
 and set ErrorMessage = "Invalid Mobile !!"

4. Set the Minimum and Maximum value property of range validator control for mobile number.

For Mobile Number : **MinimumValue = 1111111111**  
**MaximumValue = 9999999999**  
**Type = Double**

For Pincode Number : **MinimumValue = 111111**  
**MaximumValue = 999999**



5. Running Output:

### Range Validator in ASP.Net

Name :

Mobile :  **Invalid Mobile !!**

Pincode :

### Range Validator in ASP.Net

Name :

Mobile :  **Invalid Mobile !!**

Pincode :  **Invalid Pincode !!**





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### Example 2: String values

1. Set the RangeValidator control Property for String
2. Here, the textbox allow only character between D and K.

**MaximumValue = K**  
**MinimumValue = D**  
**Type = String**

3. Below screen entered E, so it doesn't shows the error message.

**Range Validator in ASP.Net**

Enter Character :

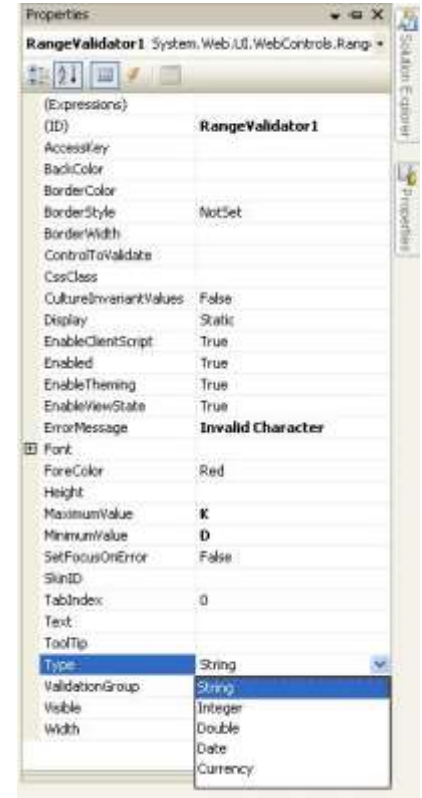
(Enter between D & K)

4. Entered B, then B is not between D and K so it will shows the ErrorMessage.

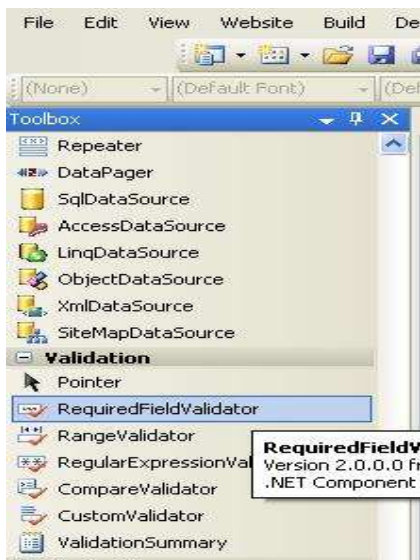
**Range Validator in ASP.Net**

Enter Character :  **Invalid Character**

(Enter between D & K)



### RequiredFieldValidator Control



**RequirefieldVaidator** control Checks that the validated control must contains a value. It cannot be empty.

- checks to see if something was entered into the HTML form element.



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Example:

### 1. The Output Design

RequiredField Validator in ASP.Net	
Name :	<input type="text"/> Enter Name !!
City :	<input type="text"/> Enter City !!
<input type="button" value="SAVE"/>	

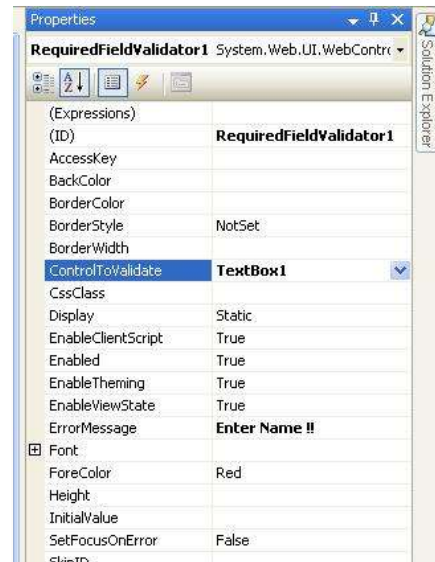
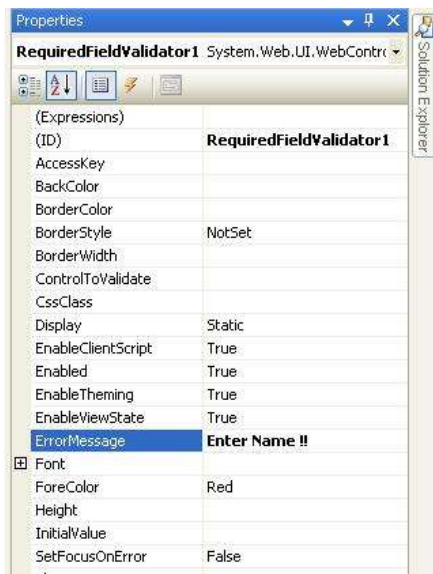
HTML Code:

```
<table>
<tr>
  <td style="text-align: right">Name :</td>
  <td style="text-align: left">
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
  </td>
  <td style="text-align: left">
    <asp:RequiredFieldValidator ID="RequiredFieldValidator1"
      runat="server"
      ControlToValidate="TextBox1" ErrorMessage="Enter Name !!"
      SetFocusOnError="True"></asp:RequiredFieldValidator>
  </td>
</tr>
<tr>
  <td style="text-align: right">City :</td>
  <td style="text-align: left">
    <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
  </td>
  <td style="text-align: left">
    <asp:RequiredFieldValidator ID="RequiredFieldValidator2"
      runat="server"
      ControlToValidate="TextBox2" ErrorMessage="Enter City
      !!"></asp:RequiredFieldValidator>
  </td>
</tr>
<tr>
  <td>&nbsp;</td>
  <td style="text-align: left">
    <asp:Button ID="Button5" runat="server" Text="SAVE" />
  </td>
  <td>&nbsp;</td>
</tr>
</table>
```



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2. In Requiredfieldvalidator control property, set **ErrorMessage** and **ControlToValidate** property.



**Note:** If both textbox name and textbox city will be blank then both validator control show the ErrorMessage when Save button is click.

3. Here, textbox name has value and textbox city is blank, then validator control shows the error message.

**RequiredField Validator in ASP.Net**

Name :

City :

**Enter City !!**

**RequiredField Validator in ASP.Net**

Name :

City :



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### CompareValidator Control

- CompareValidator control is used to compare/match the value of one input control to the value of another input control.
- Mostly this control is used to Entering the **Password detail** in Registration form.
- For this control, the input Datatype must be specify for comparison.
  - **Input Type may be:**
    - String
    - Date
    - Currency
    - Integer
    - Double
  - Have to set two property for validation.

**ControlToValidate** – The main input control means **Original first password.**

**ControlToCompare** – The second input control which is compare with main control, means **confirm -password control.**

Example: Login Form

#### 1. The Login Form design

#### 2. HTML Code

```
<table align="center" class="style1" style="border: thin solid #008080">
  <tr>
    <td colspan="2" style="border-bottom: thin solid #008080; font-weight: 700; text-align: center; color: #990033;"
      class="style2"> CompareValidator Control in ASP.Net</td>
  </tr>
  <tr>
    <td>
      Name : <input type="text"/>
      Password : <input type="password"/>
      Confirm - Pass : <input type="password"/>
      <input type="button" value="SAVE"/>
    </td>
  </tr>
</table>
```





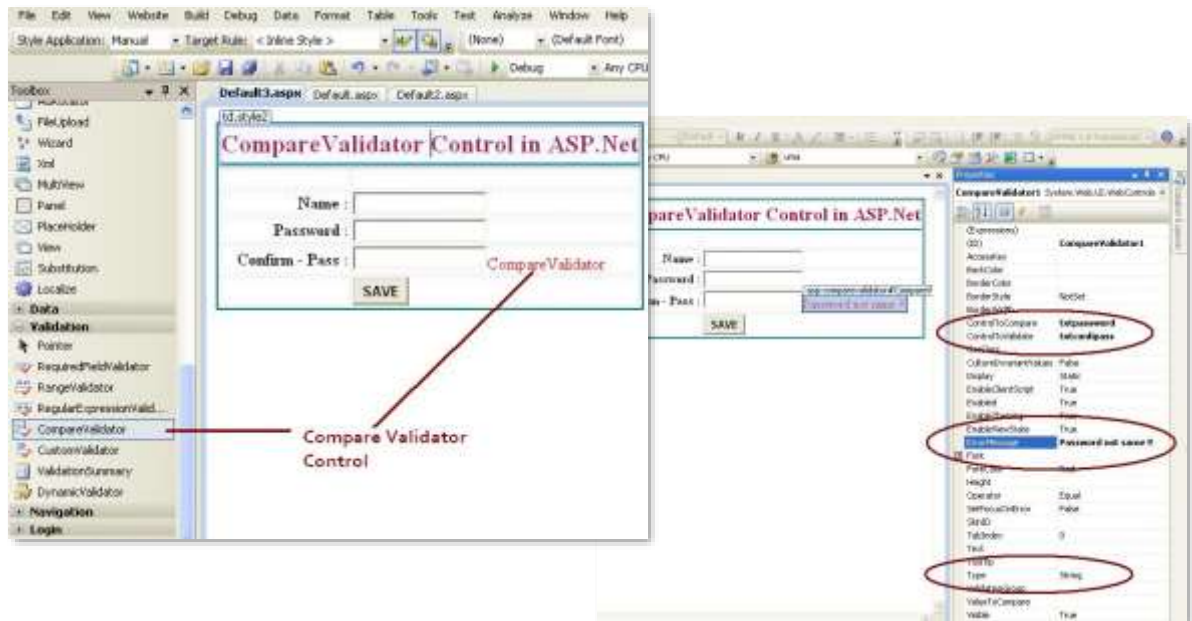
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```

    &nbsp;   </td>
  </td>
    &nbsp;   </td>
</tr>
<tr>
  <td style="font-weight: 700; text-align: right">
    Name :</td>
  <td>
    <asp:TextBox ID="txtname" runat="server"></asp:TextBox>
  </td>
</tr>
<tr>
  <td style="font-weight: 700; text-align: right">
    Password :</td>
  <td>
    <asp:TextBox ID="txtpassword" runat="server"></asp:TextBox>
  </td>
</tr>
<tr>
  <td style="font-weight: 700; text-align: right">
    Confirm - Pass :</td>
  <td>
    <asp:TextBox ID="txtconfipass" runat="server"></asp:TextBox>
    <asp:CompareValidator ID="CompareValidator1" runat="server"
      ControlToCompare="txtpassword" ControlToValidate="txtconfipass"
      ErrorMessage="Password not same !!"></asp:CompareValidator>
  </td>
</tr>
<tr>
  <td>
    &nbsp;   </td>
  <td>
    <asp:Button ID="Button1" runat="server" Font-Bold="True" Text="SAVE" />
  </td>
</tr>
</table>

```

### 3. Using compare validator control





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### **III. Performance**

Open and modify your web forms (Student Entry and Course Forms). Apply the validation controls.