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Lab no 15

Internet application development

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Aspx Code:

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="Default.aspx.vb"</pre>
Inherits="lab15 Default" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Lab 15</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            background-color: #f9f9f9;
            margin: 20px;
            color: #333;
        }
        h1, h2, p {
            margin-bottom: 10px;
        }
        h1 {
            font-size: 32px;
            color: #4285f4;
            text-align: center;
        }
        h2 {
            font-size: 24px;
            color: #ea4335;
            text-align: center;
        }
        p {
            font-size: 18px;
            color: #3c4043;
            text-align: center;
        a {
            color: #4285f4;
            text-decoration: none;
        }
        #Div1 {
            background-color: #ffffff;
            padding: 20px;
            border-radius: 5px;
            box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
            margin-top: 20px;
            text-align: center;
        }
        img {
            max-width: 100%;
```

```
height: auto;
           margin-top: 20px;
       }
       /* Interactive Styles */
       h1:hover, h2:hover, p:hover {
           color: #ea4335;
           cursor: pointer;
       }
   </style>
</head>
<body>
  <h1><b>Lab no : 15</b></h1>
  <hr />
   <h2><b>Problem Statement:</b></h2>
   <b>Problem 1) Refer to Chapter 09 "Validation". </b>
   <b>PDF Page 319-340 Implement all code examples given in this chapter</b>
   <br />
   <hr />
   <h2><b>Lab Demo</b></h2>
   Click here: <a href="Validation.aspx">Lab 15 Demo</a>
   <hr />
   <h2><b>Lab Report:</b></h2>
   <div id="Div1" runat="server">
       <a href="lab15.pdf" download>Download Lab 15</a>
       <hr />
       <h2><b>Output</b></h2>
       <br />
       <img src="Capture1.PNG" alt="lab15_output1">
       <img src="Capture2.PNG" alt="lab15_output2">
       <br />
   </div>
</body>
</html>
Vb Code:
Partial Class lab15 Default
   Inherits System.Web.UI.Page
```

End Class

Aspx Code:

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="Validation.aspx.vb"</pre>
Inherits="lab15 Validation" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
    <style>
        body {
            background-color: #f2f2f2;
            color: #333;
            font-family: Arial, sans-serif;
        }
        .container {
            margin: 20px;
            padding: 20px;
            background-color: #fff;
            border-radius: 5px;
            box-shadow: 0 2px 4px rgba(0, 0, 0, 0.1);
            transition: background-color 0.3s ease;
        }
        .container:hover {
            background-color: #f9f9f9;
        h1 {
            color: #333;
            font-size: 24px;
            font-weight: bold;
            margin-bottom: 20px;
            text-align: center;
            transition: color 0.3s ease;
        }
        h1:hover {
            color: #4caf50;
        }
        .container label {
            display: block;
            margin-bottom: 5px;
            color: #555;
            font-weight: bold;
        }
        .container input[type="text"],
        .container input[type="button"] {
            padding: 8px;
            border-radius: 3px;
            border: 1px solid #ccc;
            background-color: #f9f9f9;
```

```
color: #555;
            font-size: 14px;
            margin-bottom: 10px;
            width: 200px;
        }
        .container input[type="text"]:focus,
        .container input[type="button"]:focus {
            outline: none;
            border-color: #4caf50;
        }
        .container input[type="text"]::placeholder {
            color: #999;
        }
        .container input[type="button"] {
            background-color: #4caf50;
            color: #fff;
            cursor: pointer;
        }
        .container input[type="button"]:hover {
            background-color: #45a049;
        }
        .container .validation-message {
            color: #ff0000;
            margin-top: 5px;
            font-size: 13px;
    </style>
</head>
<body>
 <form id="form1" runat="server">
        <div class="container">
            <h1>Validation</h1>
        <div class="container">
            <label for="txtValidated">Validated Number:</label>
            <asp:TextBox id="txtValidated" runat="server" />
            <asp:RangeValidator id="RangeValidator" runat="server"</pre>
                Text="The number is not in range" ErrorMessage="The number is not in the
range"
                ControlToValidate="txtValidated"
                MaximumValue="10" MinimumValue="1" Type="Integer"
                ForeColor="#ff0000" Display="Dynamic" />
            <br />
            Not validated:
            <asp:TextBox id="txtNotValidated" runat="server" />
            <br /><br />
            <asp:Button id="cmdOK" runat="server" Text="OK" />
            <br /><br />
            <asp:Label id="lblMessage" runat="server" EnableViewState="False" />
        </div>
        <div class="container">
```

```
<label for="txtExpression">Enter Validation Expression:</label>
            <asp:TextBox ID="txtExpression" runat="server"></asp:TextBox>
            <br /><br />
            <label for="txtTestString">Enter Test String:</label>
            <asp:TextBox ID="txtTestString" runat="server"></asp:TextBox>
            <br /><br />
            <asp:Button ID="btnValidate" runat="server" Text="Validate"</pre>
OnClick="btnValidate Click" />
            <br /><br />
            <asp:Label ID="lblResult" runat="server" CssClass="validation-</pre>
message"></asp:Label>
            <br /><br />
            <asp:RegularExpressionValidator ID="revTestString" runat="server"</pre>
ControlToValidate="txtTestString"
                ValidationExpression="^[a-zA-Z]+$" ErrorMessage="Invalid format. Only
letters allowed."
                ForeColor="#ff0000" Display="Dynamic" />
        </div>
        <div class="container">
            <label for="txtName">Name:</label>
            <asp:TextBox ID="txtName" runat="server"></asp:TextBox>
            <br /><br />
            <asp:RequiredFieldValidator ID="rfvName" runat="server"</pre>
ControlToValidate="txtName"
                ErrorMessage="Name is required." ForeColor="#ff0000" Display="Dynamic" />
            <br /><br />
            <label for="txtEmail">Email:</label>
            <asp:TextBox ID="txtEmail" runat="server"></asp:TextBox>
            <asp:Button ID="btnCheckEmail" runat="server" Text="Check Email"</pre>
OnClick="btnCheckEmail Click" />
            <br /><br />
            <asp:Label ID="lblEmailResult" runat="server" CssClass="validation-</pre>
message"></asp:Label>
            <br /><br />
            <asp:CustomValidator ID="cvEmail" runat="server" ControlToValidate="txtEmail"</pre>
                ErrorMessage="Invalid email format."
OnServerValidate="cvEmail_ServerValidate"
                ForeColor="#ff0000" Display="Dynamic" />
            <br /><br />
            <asp:Button ID="btnSubmit" runat="server" Text="Submit"</pre>
OnClick="btnSubmit_Click" />
            <br /><br />
            <asp:Label ID="Label1" runat="server" CssClass="validation-</pre>
message"></asp:Label>
        </div>
    </form>
</body>
</html>
```

Vb Code:

```
Imports System.Text.RegularExpressions
Partial Class lab15_Validation
    Inherits System.Web.UI.Page
```

```
Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Me.Load
    End Sub
   Protected Sub cmdOK_Click(sender As Object, e As EventArgs) Handles cmdOK.Click
        Dim ErrorMessage As String = "<b>Mistakes found:</b><br />"
        For Each ctrl As BaseValidator In Me.Validators
            If ctrl.IsValid = False Then
                ErrorMessage &= ctrl.ErrorMessage & "<br />"
                Dim ctrlInput As TextBox = CType(Me.FindControl(ctrl.ControlToValidate),
TextBox)
                ErrorMessage &= " * Problem is with this input: "
                ErrorMessage &= ctrlInput.Text & "<br />"
            End If
        Next
        lblMessage.Text = ErrorMessage
    End Sub
    Protected Sub btnValidate Click(sender As Object, e As EventArgs) Handles
btnValidate.Click
        Dim validationExpression As String = txtExpression.Text
        Dim testString As String = txtTestString.Text
        Dim regex As New Regex(validationExpression)
        Dim match As Match = regex.Match(testString)
        If match.Success Then
            lblResult.Text = "Valid"
        Else
            lblResult.Text = "Invalid"
        End If
   End Sub
    Protected Sub btnSubmit_Click(sender As Object, e As EventArgs) Handles
btnSubmit.Click
        If Page.IsValid Then
            lblResult.Text = "Form submitted successfully!"
        F1se
            lblResult.Text = "Form contains errors. Please check the validation
messages."
        End If
    End Sub
    Protected Sub cvEmail_ServerValidate(source As Object, args As
ServerValidateEventArgs)
        Dim email As String = args.Value.Trim()
        ' Perform custom email validation logic
        If IsValidEmail(email) Then
            args.IsValid = True
        Else
            args.IsValid = False
        End If
    End Sub
    Private Function IsValidEmail(email As String) As Boolean
        ' Use regular expression to validate email format
```

```
Dim emailRegex As New Regex("^[A-Za-z0-9._%+-]+@[A-Za-z0-9.-]+\.[A-Za-z]{2,}$")
    Return emailRegex.IsMatch(email)
End Function

Protected Sub btnCheckEmail_Click(sender As Object, e As EventArgs) Handles
btnCheckEmail.Click
    Dim email As String = txtEmail.Text.Trim()
    If IsValidEmail(email) Then
        lblEmailResult.Text = "Valid email"
    Else
        lblEmailResult.Text = "Invalid email"
    End If
End Sub
End Class
```

Output:

