Laboratory Module 6

Problem 1) Develop an asp.net page that displays a list of options with check boxes (Use CheckBoxList web control).

On clicking a button (web control) the page displays the selected options in a label control.

Sample User Interaction

Solution)
.aspx page

Code behind file


```vbnet
Partial Class CheckListTest
    Inherits System.Web.UI.Page

    Protected Sub Page_Load(ByVal sender As Object, ByVal e As EventArgs) _
    Handles MyBase.Load
        If Me.IsPostBack = False Then
            chklst.Items.Add("C")
            chklst.Items.Add("C++")
            chklst.Items.Add("C#")
            chklst.Items.Add("Visual Basic 6.0")
            chklst.Items.Add("VB.NET")
            chklst.Items.Add("Pascal")
        End If
    End Sub

    Protected Sub cmdOK_Click(ByVal sender As Object, ByVal e As EventArgs) _
     Handles cmdOK.Click
        lblResult.Text = "You chose:<b>"

        Dim lstItem As ListItem


        For Each lstItem In chklst.Items

            If lstItem.Selected Then
                lblResult.Text &= "<br/>" & lstItem.Text
            End If
        Next

        lblResult.Text &= "</b>"
    End Sub

End Class
```
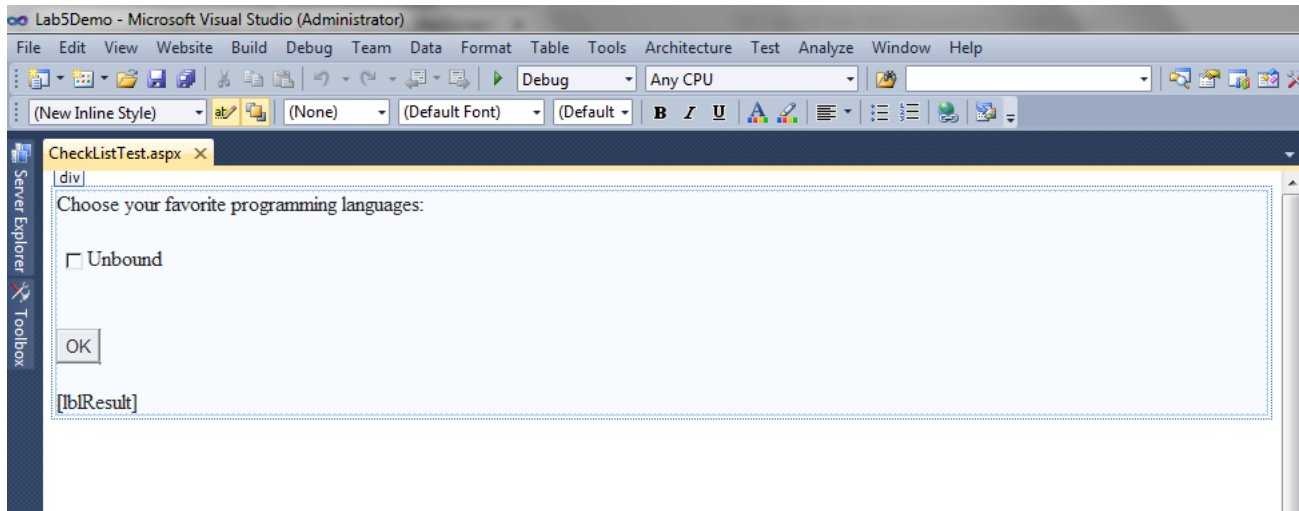
**Problem 2)** Develop a page that displays two text boxes and a button web control. The textboxes are used to capture number of rows and number of columns from user.

    (a) On clicking button, generate a table with r rows and c columns. In each cell display row,col values.

    (b) Optionally add features of border and image in each cell.

        Following figure shows a table with 4 rows and 4 columns.
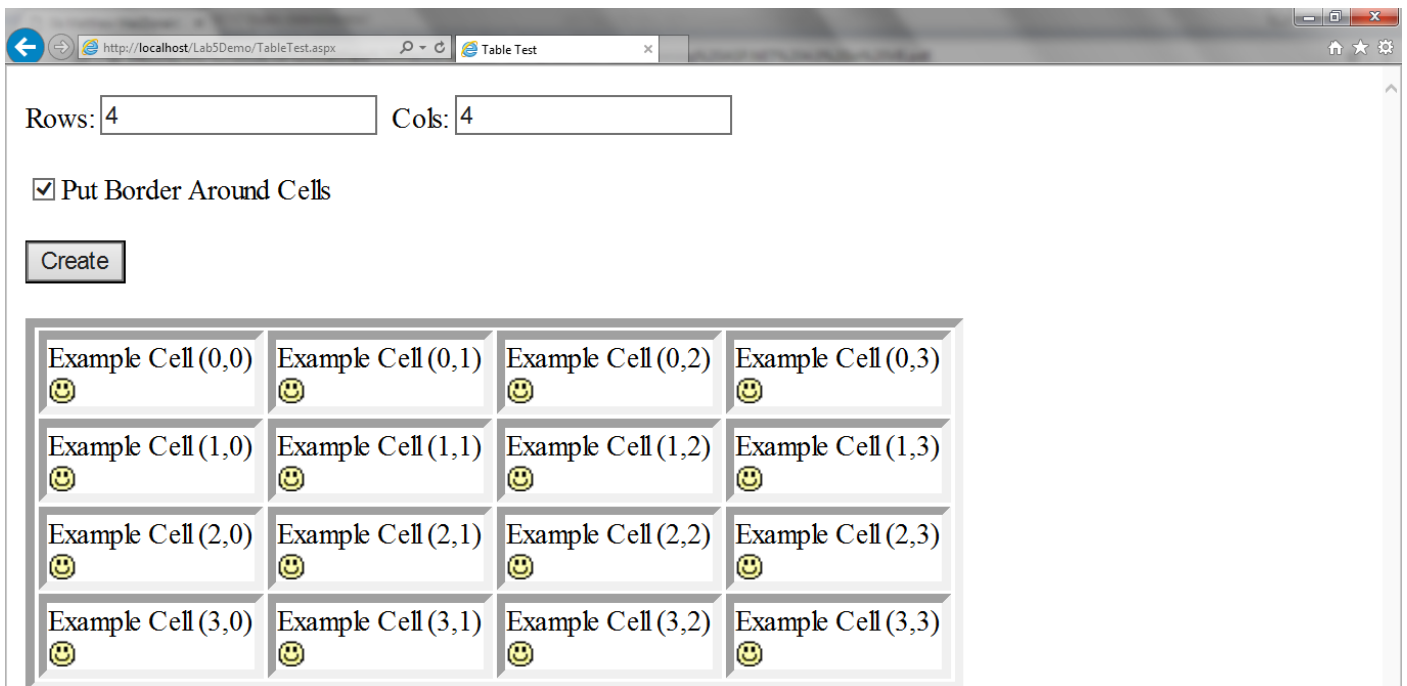
Solution)

Code behind (Pseudo code)

Page_Load Event Handler (Pseudo code)

(i) Configure the table's appearance. This could also be performed in the .aspx file, or in the cmdCreate_Click event handler.

cmdCreate_Click Event Handler (Pseudo code)

(i)   Clear table.

(ii) Iteratively create a new TableRow object.

(iii) Put the TableRow in the Table.

(iv) Iteratively create a new TableCell object.

(v)   Create a new Label object. Display row, col numbers on label.

(vi) Add label and image in cell.

(vii) Optionally adjusted border style and width

(viii) Put the TableCell in the TableRow.

```
tbl.Controls.Clear( )                    (Is it necessary to clear table here?)

Dim row, col As Integer
For row = 0 To Val(txtRows.Text - 1)

' Create a new TableRow object.
Dim rowNew As New TableRow()

' Put the TableRow in the Table.
tbl.Controls.Add(rowNew)

For col = 0 To Val(txtCols.Text - 1)

        ' Create a new TableCell object.
        Dim cellNew As New TableCell()

        ' Create a new Label object.
        Dim lblNew As New Label()
        lblNew.Text = "Example Cell (" & row.ToString() & "," & col.ToString() & ")<br />"

        Dim imgNew As New Image()
        imgNew.ImageUrl = "cellpic.png"

        ' Put the label and picture in the cell.
        cellNew.Controls.Add(lblNew)
        cellNew.Controls.Add(imgNew)

        If chkBorder.Checked = True Then
           cellNew.BorderStyle = BorderStyle.Inset
           cellNew.BorderWidth = Unit.Pixel(5)
        End If

        ' Put the TableCell in the TableRow.
        rowNew.Controls.Add(cellNew)

    Next
  Next
```

Problem 3) Develop a web form that records all page processing events in a list box as shown below.
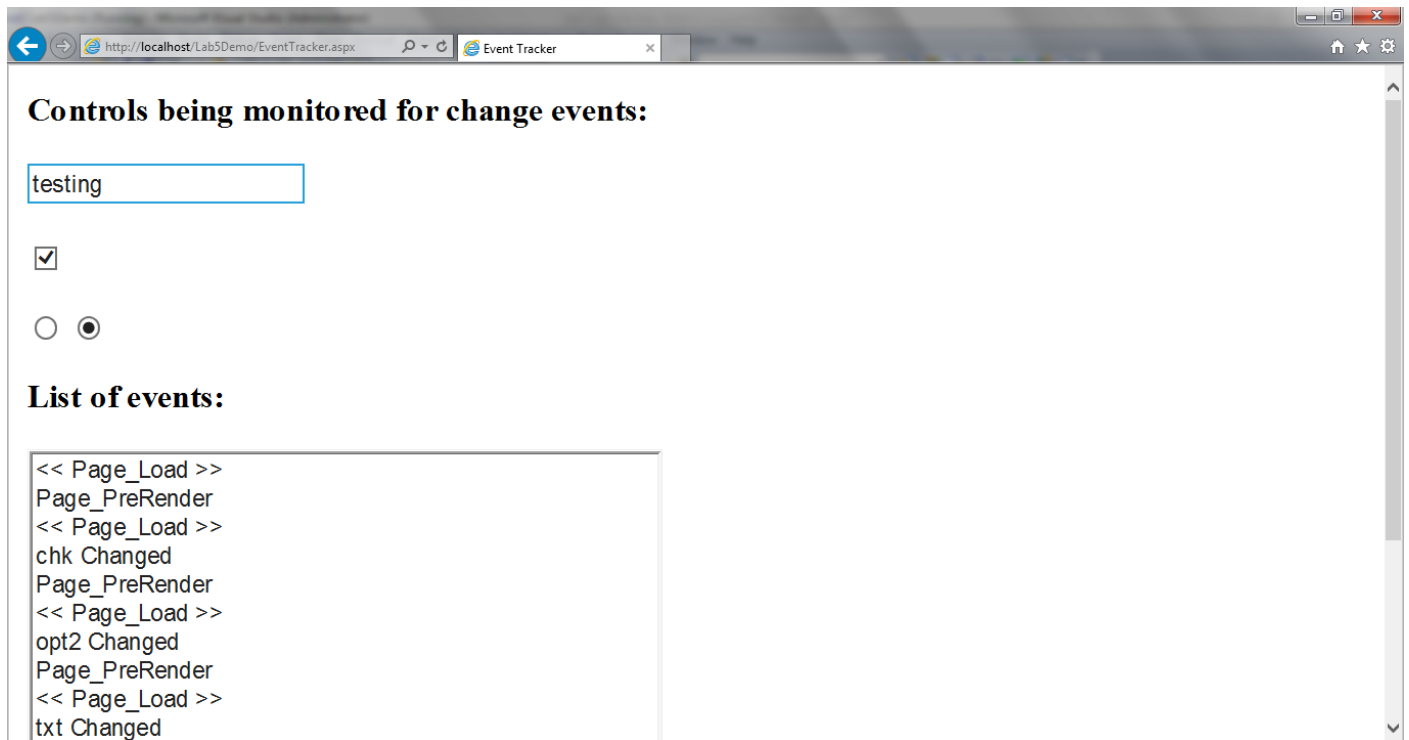
References:

Note: This problem is in continuation with Lab No 2:
Demonstration of ASP.NET Page Processing

    (a) Refer to book page 187

    (b) Web Control Events and AutoPostBack

    (c) Automatic postback feature
    (d) Table 6-5. Web Control Events

```
┌─────────────────────────────┐
│  Page object is created from │
│         .aspx file           │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│    Page.Init event occurs    │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│   Controls are repopulated with │
│   information from view state │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│    Page.Load event occurs    │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│      All other events occur  │
│   (like Click and Change events) │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│  Page.PreRender event occurs │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│  Control information is stored in │
│          view state          │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│    HTML for page is rendered │
│  (and can no longer be changed) │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│   Page.Unload event occurs   │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│   Page object is released    │
│        from memory           │
└─────────────────────────────┘
```
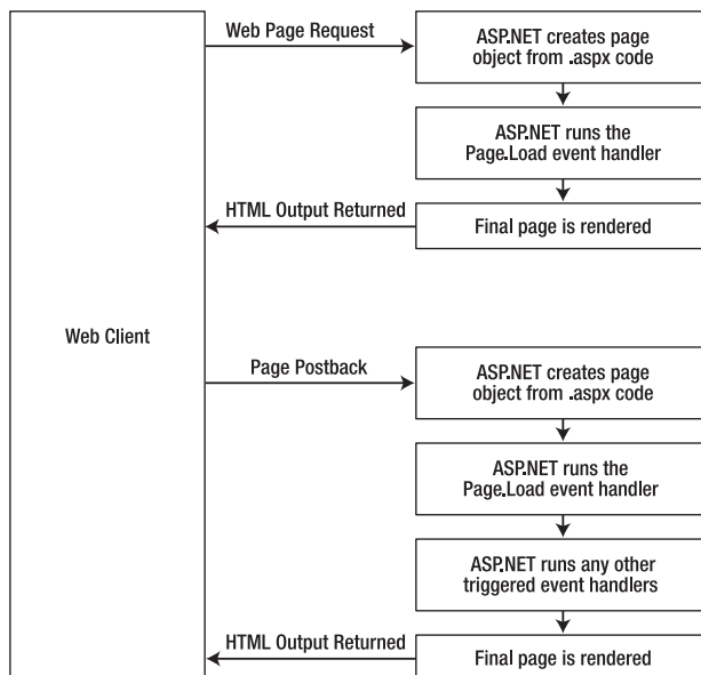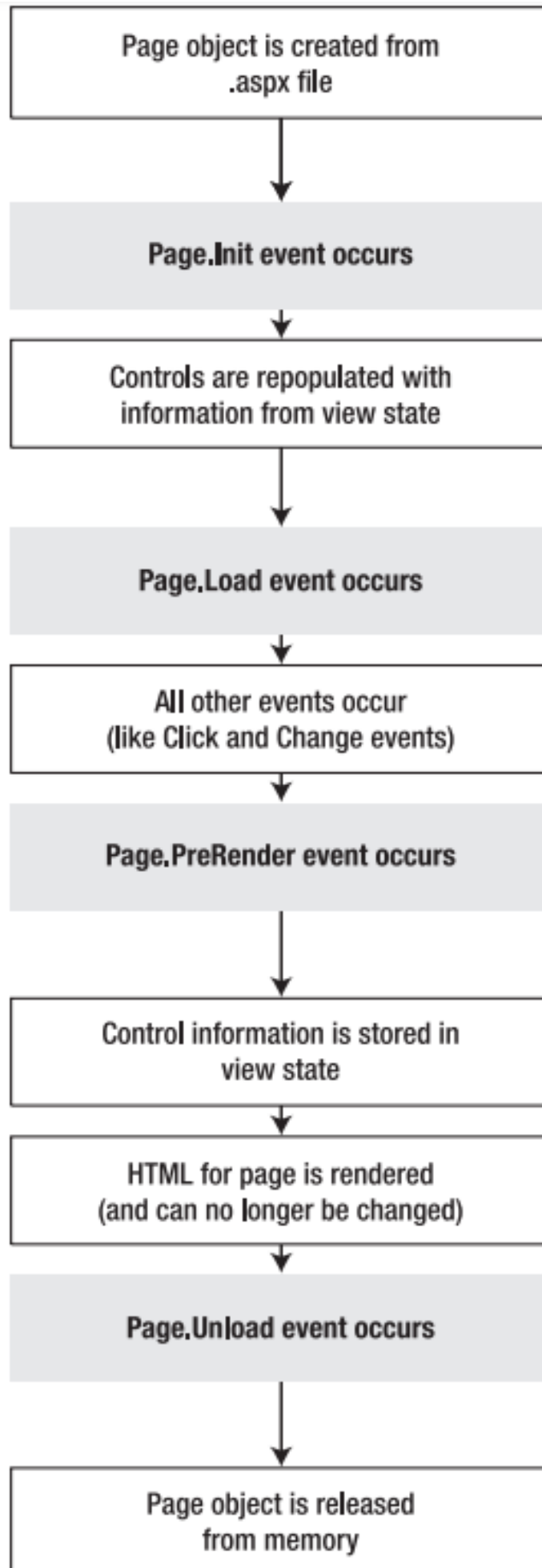
(e) Read about "How Postback Events Works?"

(f) The Page Life Cycle

Solution)

Book Page 192-4