

PROBLEM STATEMENT

Develop a page to demonstrate various events which are raised and handled during ASP.NET Page processing once the page object has been created? Develop a story about it?

Solution:

Default.aspx:

```
<%@ Page Language="VB" AutoEventWireup="false"
CodeFile="Default.aspx.vb" Inherits="_Default" %>

<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>ASP.NET Page Life Cycle with Controls</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <h2>Page Life Cycle Events</h2>
            <asp:Label ID="lblLog" runat="server" /><br /><br />

            <asp:DropDownList ID="ddlOptions" runat="server"
AutoPostBack="True">
                <asp:ListItem Text="Select an Option" Value="" />
                <asp:ListItem Text="Option 1" Value="1" />
                <asp:ListItem Text="Option 2" Value="2" />
            </asp:DropDownList>
            <br /><br />

            <asp:Button ID="btnClick" runat="server" Text="Click Me" />
        </div>
    </form>
</body>
</html>
```

Default.aspx.vb:

```
Partial Class _Default
    Inherits System.Web.UI.Page

    Private log As New System.Text.StringBuilder()
```

```
Protected Sub Page_PreInit(ByVal sender As Object, ByVal e As EventArgs)
Handles Me.PreInit
    log.Append("Page_PreInit fired.<br/>")
End Sub
```

```
Protected Sub Page_Init(ByVal sender As Object, ByVal e As EventArgs)
Handles Me.Init
    log.Append("Page_Init fired.<br/>")
End Sub
```

```
Protected Sub Page_InitComplete(ByVal sender As Object, ByVal e As
EventArgs) Handles Me.InitComplete
    log.Append("Page_InitComplete fired.<br/>")
End Sub
```

```
Protected Sub Page_PreLoad(ByVal sender As Object, ByVal e As EventArgs)
Handles Me.PreLoad
    log.Append("Page_PreLoad fired.<br/>")
End Sub
```

```
Protected Sub Page_Load(ByVal sender As Object, ByVal e As EventArgs)
Handles Me.Load
    log.Append("Page_Load fired.<br/>")
```

```
    If Not IsPostBack Then
        log.Append("First time page is loading (IsPostBack = False).<br/>")
    Else
        log.Append("Page is loading due to postback (IsPostBack = True).<br/>")
```

```
        If ddlOptions.SelectedValue <> "" Then
            log.Append("Dropdown selected value: " &
ddlOptions.SelectedItem.Text & "<br/>")
        End If
    End If
End Sub
```

```
Protected Sub Page_LoadComplete(ByVal sender As Object, ByVal e As
EventArgs) Handles Me.LoadComplete
    log.Append("Page_LoadComplete fired.<br/>")
End Sub
```

```
Protected Sub Page_PreRender(ByVal sender As Object, ByVal e As
EventArgs) Handles Me.PreRender
    log.Append("Page_PreRender fired.<br/>")
End Sub
```

```

Protected Sub Page_PreRenderComplete(ByVal sender As Object, ByVal e
As EventArgs) Handles Me.PreRenderComplete
    log.Append("Page_PreRenderComplete fired.<br/>")
End Sub

Protected Overrides Sub OnLoadComplete(ByVal e As EventArgs)
    MyBase.OnLoadComplete(e)
    lblLog.Text = log.ToString()
End Sub

Protected Sub btnClick_Click(ByVal sender As Object, ByVal e As EventArgs)
Handles btnClick.Click
    log.Append("Button Click event fired.<br/>")
End Sub

Protected Sub ddlOptions_SelectedIndexChanged(ByVal sender As Object,
ByVal e As EventArgs) Handles ddlOptions.SelectedIndexChanged
    log.Append("Dropdown SelectedIndexChanged event fired.<br/>")
End Sub

Protected Sub Page_Unload(ByVal sender As Object, ByVal e As EventArgs)
Handles Me.Unload
    ' Do not access controls here.
End Sub

End Class

```

Code Snippets:

```
Default.aspx.vb  Default.aspx  X
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<head runat="server">
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        <asp:ListItem Text="Select an Option" Value="" />
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      </asp:DropDownList>
      <br /><br />

      <asp:Button ID="btnClick" runat="server" Text="Click Me" />
    </div>
  </form>
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```
Default.aspx.vb  Default.aspx
1 Default.aspx  _Default  Profile

2 references
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  Inherits System.Web.UI.Page

  Private log As New System.Text.StringBuilder()

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  Protected Sub Page_Load(ByVal sender As Object, ByVal e As EventArgs) Handles Me.Load
    log.Append("Page_Load fired.<br/>")

    If Not IsPostBack Then
      log.Append("First time page is loading (IsPostBack = False).<br/>")
    Else
      log.Append("Page is loading due to postback (IsPostBack = True).<br/>")

      If ddlOptions.SelectedValue <> "" Then
        log.Append("Dropdown selected value: " & ddlOptions.SelectedItem.Text & "<br/>")
      End If
    End If
  End Sub
End Class
```

```

        log.Append("Dropdown Selected value: " & ddOptions.SelectedItem.Text & "<br/>")
    End If
End Sub

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    log.Append("Button Click event fired.<br/>")
End Sub

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Protected Sub ddOptions_SelectedIndexChanged(ByVal sender As Object, ByVal e As EventArgs) Handles ddOptions.SelectedIndexChanged
    log.Append("Dropdown SelectedIndexChanged event fired.<br/>")
End Sub

```

Output

Page Life Cycle Events

Page_PreInit fired.
 Page_Init fired.
 Page_InitComplete fired.
 Page_PreLoad fired.
 Page_Load fired.
 Page is loading due to postback (IsPostBack = True).
 Dropdown selected value: Option 2
 Dropdown SelectedIndexChanged event fired.
 Page_LoadComplete fired.

Option 2 ▼

Click Me

Page Life Cycle Events

Page_PreInit fired.

Page_Init fired.

Page_InitComplete fired.

Page_PreLoad fired.

Page_Load fired.

Page is loading due to postback (IsPostBack = True).

Dropdown selected value: Option 1

Dropdown SelectedIndexChanged event fired.

Page_LoadComplete fired.

Option 1 ▼

Click Me