Invoice.aspx

```
<%@ Page Language="vb" Src="Invoice.aspx.vb" Inherits="Web_VB.GeneratorExamples.Invoice" %>
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN" >

<html>
  <head>
    <title>DynamicPDF Generator v10.0 for .NET - Invoice Example</title>
    <link rel="stylesheet" type="text/css" href="../DynamicPDF.css">
  </head>
  <body MS_POSITIONING="GridLayout">

    <div id="banner">
      <img src="../Images/DynamicPDF_top.gif" align=right><img src="../Images/ceTeSoftware_top.gif">
      <div id="header"><i>Dynamic</i><b>PDF</b> Generator v10.0 for .NET Examples</div>
      <h1>Invoice Example</h1>
    </div>

   <div id="content">
      <form id="FormFill" method="get" target="_blank" runat="server">
        <h1>Select the invoices to include in the PDF.</h1>
        <asp:CheckBoxList id="chkInvoices" runat="server">
          <asp:ListItem Value="10248">10248</asp:ListItem>
          <asp:ListItem Value="10249">10249</asp:ListItem>
          <asp:ListItem Value="10250">10250</asp:ListItem>
          <asp:ListItem Value="10251">10251</asp:ListItem>
          <asp:ListItem Value="10252">10252</asp:ListItem>
          <asp:ListItem Selected=True Value="10360">10360</asp:ListItem>
          <asp:ListItem Selected=True Value="10979">10979</asp:ListItem>
          <asp:ListItem Value="11077">11077</asp:ListItem>
        </asp:CheckBoxList>
        <asp:Button id="btnCreateInvoices" Text="Create Invoices" runat="server" />
      </form>
 </div>

  </body>
</html>
```

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```
Imports System
Imports System.Data
Imports System.Data.SqlClient
Imports Microsoft.VisualBasic

Imports ceTe.DynamicPDF
Imports ceTe.DynamicPDF.PageElements
Imports ceTe.DynamicPDF.PageElements.BarCoding

Namespace Web_VB.GeneratorExamples
    Public Class Invoice
        Inherits System.Web.UI.Page

#Region " Member Variables "

        Protected chkInvoices As System.Web.UI.WebControls.CheckBoxList
        Protected btnCreateInvoices As System.Web.UI.WebControls.Button
        Protected WithEvents FormFill As System.Web.UI.HtmlControls.HtmlForm

        'Connection string to the Northwind database
        Private Shared DBConnString As String = _
            System.Configuration.ConfigurationSettings.AppSettings("NorthWindConnectionString")

#End Region

#Region " Page_Load Method "

        Private Sub Page_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load
            If IsPostBack Then
                CreateInvoices()
            End If
        End Sub

#End Region

#Region " Private Methods "

        Private Sub CreateInvoices()
            'Create a MyDocument and set it's properties
            Dim MyDocument As Document = New Document
            MyDocument.Creator = "Invoice.aspx"
            MyDocument.Author = "ceTe Software"
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43              MyDocument.Title = "Invoice"
44
45              'Add the template to the MyDocument
46              MyDocument.Template() = MyInvoice.GetTemplate
47
48              'Establises connection to the database
49              Dim Connection As SqlConnection = GetOpenDBConn()
50
51              'Add Invoices to the MyDocument
52              Dim Item As System.Web.UI.WebControls.ListItem
53              For Each Item In chkInvoices.Items
54                  If Item.Selected Then
55                      Dim Invoice As MyInvoice = New MyInvoice(Me.Server)
56                      Invoice.Draw(Connection, MyDocument, Integer.Parse(Item.Value))
57                  End If
58              Next
59
60              'Cleans up database connections
61              Connection.Close()
62
63              'Outputs the Invoices to the current web MyPage
64              Try
65                  MyDocument.DrawToWeb("Invoice.pdf")
66              Catch empty As EmptyDocumentException
67                  'Show an empty MyDocument error
68                  ShowErrorDocument("Document is empty. No invoices were selected.", "")
69              Catch general As Exception
70                  'Show a general error
71                  ShowErrorDocument(general.Message, general.StackTrace)
72              Finally
73                  'If no error end response.
74                  Response.End()
75              End Try
76          End Sub
77
78          Private Sub ShowErrorDocument(ByVal Message As String, ByVal StackTrace As String)
79              'Shows the error in a PDF MyDocument
80              Response.Clear()
81              Dim MyDocument As Document = New Document
82              Dim MyPage As ceTe.DynamicPDF.Page = New ceTe.DynamicPDF.Page(PageSize.Letter, PageOrientation.Portrait)
83
84              Dim MyMessage As TextArea = New TextArea(Message, 0, 0, 512, 36, Font.Helvetica, 18, RgbColor.Red)
```

```
85              MyMessage.Height = MyMessage.GetRequiredHeight()
86              MyPage.Elements.Add(MyMessage)
87
88              If StackTrace.Trim().Length > 0 Then
89                  Dim StackTraceTop As Single = MyMessage.Y + MyMessage.Height + 20
90
91                  Dim StackTraceMessage As TextArea = New TextArea(StackTrace, 0, StackTraceTop, 512, 692 - StackTraceTop,
    Font.Helvetica, 10)
92
93                  MyPage.Elements.Add(New ceTe.DynamicPDF.PageElements.Label("StackTrace:", 0, StackTraceTop - 12, 512, 12,
    Font.HelveticaBold, 10))
94                  MyPage.Elements.Add(StackTraceMessage)
95              End If
96              MyDocument.Pages.Add(MyPage)
97              MyDocument.DrawToWeb("ErrorDocument.pdf")
98          End Sub
99
100         Private Function GetOpenDBConn() As SqlConnection
101             'Creates and opens a database connection
102             Dim Connection As SqlConnection = New SqlConnection(DBConnString)
103             Connection.Open()
104             Return Connection
105         End Function
106
107 #End Region
108
109 #Region " MyInvoice Sub Class "
110
111         Public Class MyInvoice
112             Private SubTotal As Decimal = 0
113             Private Freight As Decimal = 0
114
115             Private Shared MyTemplate As Template = New Template
116             Private Shared MyPageTemplateImageSet As Boolean = False
117             Private Shared BGColor As RgbColor = New WebColor("#E0E0FF")
118             Private Shared TotalBGColor As WebColor = New WebColor("#FFC0C0")
119             Private Shared ThankYouTextColor As WebColor = New WebColor("#000080")
120
121             Shared Sub New()
122                 'Uncomment the line below to add a layout grid to the MyPages
123                 'MyTemplate.Elements.Add(New LayoutGrid())
124
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125                 'Top part of Invoice
126                 MyTemplate.Elements.Add(New Label("Northwind Traders" & vbCrLf & "1234 International Drive" _
127                     & vbCrLf & "Anywhere, Earth  ABC123", 56, 0, 200, 44, Font.Helvetica))
128                 MyTemplate.Elements.Add(New Label("Invoice", 0, 0, 540, 18, Font.HelveticaBold, 18, TextAlign.Right))
129                 MyTemplate.Elements.Add(New PageNumberingLabel("Page %%SP%% of %%ST%% ", 450, 253, 90, 20, Font.HelveticaBold,
    12, TextAlign.Center))
130
131                 'Add Invoice Details Template
132                 MyTemplate.Elements.Add(GetDetailsGroup())
133
134                 'Add BillTo Template
135                 MyTemplate.Elements.Add(GetBillToGroup())
136
137                 'Add ShipTo Template
138                 MyTemplate.Elements.Add(GetShipToGroup())
139
140                 'Add Line Item Template
141                 MyTemplate.Elements.Add(GetLineItemGroup())
142             End Sub
143
144             Public Sub New(ByVal server As System.Web.HttpServerUtility)
145                 'Sets the image to the MyPage template
146                 'This is done in the constructor because MapPath is not available in the static methods
147                 SetPageTemplateImage(server)
148             End Sub
149
150             Public Shared Function GetTemplate()
151                 Return MyTemplate
152             End Function
153
154             Private Shared Function GetDetailsGroup() As Group
155                 'Returns a group containing the details template
156                 Dim MyGroup As Group = New Group
157
158                 MyGroup.Add(New Rectangle(340, 24, 200, 72, Grayscale.Black, BGColor, 0.5F))
159                 MyGroup.Add(New Label("Order ID:", 343, 25, 85, 12, Font.HelveticaBold, 12, TextAlign.Right))
160                 MyGroup.Add(New Label("Order Date:", 343, 39, 85, 12, Font.HelveticaBold, 12, TextAlign.Right))
161                 MyGroup.Add(New Label("Customer ID:", 343, 53, 85, 12, Font.HelveticaBold, 12, TextAlign.Right))
162                 MyGroup.Add(New Label("Shipped Date:", 343, 67, 85, 12, Font.HelveticaBold, 12, TextAlign.Right))
163                 MyGroup.Add(New Label("Order ID:", 343, 25, 85, 12, Font.HelveticaBold, 12, TextAlign.Right))
164                 MyGroup.Add(New Label("Shipped Via:", 343, 81, 85, 12, Font.HelveticaBold, 12, TextAlign.Right))
165
```

```
166             Return MyGroup
167         End Function
168
169         Private Shared Function GetBillToGroup() As Group
170             'Returns a group containing the bill to template
171             Dim MyGroup As Group = New Group
172
173             MyGroup.Add(New Rectangle(25, 120, 200, 90, 0.5F))
174             MyGroup.Add(New Line(25, 136, 225, 136, 0.5F))
175             MyGroup.Add(New Label("Bill To:", 28, 121, 200, 12, Font.HelveticaBold, 12))
176
177             Return MyGroup
178         End Function
179
180         Private Shared Function GetShipToGroup() As Group
181             'Returns a group containing the ship to template
182             Dim MyGroup As Group = New Group
183
184             MyGroup.Add(New Rectangle(315, 120, 200, 90, 0.5F))
185             MyGroup.Add(New Line(315, 136, 515, 136, 0.5F))
186             MyGroup.Add(New Label("Ship To:", 318, 121, 200, 12, Font.HelveticaBold, 12))
187
188             Return MyGroup
189         End Function
190
191         Private Shared Function GetLineItemGroup() As Group
192             'Returns a group containing the line items template
193             Dim MyGroup As Group = New Group
194
195             Dim I As Integer
196             For I = 0 To 10 - 1 Step I + 1
197                 MyGroup.Add(New Rectangle(0, 306 + I * 36, 540, 18, Grayscale.Black, BGColor, 0.0F))
198             Next
199             MyGroup.Add(New Rectangle(450, 250, 90, 20, 0.5F))
200             MyGroup.Add(New Rectangle(450, 702, 90, 18, Grayscale.Black, TotalBGColor, 0.0F))
201             MyGroup.Add(New Rectangle(0, 270, 540, 450, 0.5F))
202             MyGroup.Add(New Line(0, 288, 540, 288, 0.5F))
203             MyGroup.Add(New Line(0, 666, 540, 666, 0.5F))
204             MyGroup.Add(New Line(60, 270, 60, 666, 0.5F))
205             MyGroup.Add(New Line(360, 270, 360, 720, 0.5F))
206             MyGroup.Add(New Line(450, 270, 450, 720, 0.5F))
207             MyGroup.Add(New Line(450, 702, 540, 702, 0.5F))
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```
208                 MyGroup.Add(New Label("Quantity", 0, 272, 60, 12, Font.HelveticaBold, 12, TextAlign.Center))
209                 MyGroup.Add(New Label("Description", 60, 272, 300, 12, Font.HelveticaBold, 12, TextAlign.Center))
210                 MyGroup.Add(New Label("Unit Price", 360, 272, 90, 12, Font.HelveticaBold, 12, TextAlign.Center))
211                 MyGroup.Add(New Label("Price", 450, 272, 90, 12, Font.HelveticaBold, 12, TextAlign.Center))
212
213                 MyGroup.Add(New Label("Thank you for your purchase." & vbCrLf & "We appreciate your business.", 5, 672, 350, 54,
    Font.HelveticaBold, 18, ThankYouTextColor))
214                 MyGroup.Add(New Label("Sub Total", 364, 668, 82, 12, Font.HelveticaBold, 12, TextAlign.Right))
215                 MyGroup.Add(New Label("Freight", 364, 686, 82, 12, Font.HelveticaBold, 12, TextAlign.Right))
216                 MyGroup.Add(New Label("Total", 364, 704, 82, 12, Font.HelveticaBold, 12, TextAlign.Right))
217
218                 Return MyGroup
219             End Function
220
221             Private Shared Sub SetPageTemplateImage(ByVal server As System.Web.HttpServerUtility)
222                 'Adds the image to MyPage template if it is not already added
223                 If Not MyPageTemplateImageSet Then
224                     MyTemplate.Elements.Add(New Image(server.MapPath("../Images/DPDFLogo.png"), 0, 0, 0.16F))
225                     MyPageTemplateImageSet = True
226                 End If
227             End Sub
228
229             Public Sub Draw(ByVal Connection As SqlConnection, ByVal MyDocument As Document, ByVal invoiceNumber As Integer)
230                 'Gets the Invoice data
231                 Dim Data As SqlDataReader = GetInvoiceData(Connection, invoiceNumber)
232
233                 'Adds the invoice if there is Data
234                 If Data.Read() Then
235                     'Sets the Freight amount
236                     Freight = CType(Data("Freight"), Decimal)
237
238                     'Draws the invoice data, returns a MyPage object if it is the last MyPage
239                     Dim LastPage As Page = DrawInvoiceData(Data, MyDocument)
240                     'Draws aditional MyPages if necessary
241                     While LastPage Is Nothing
242                         LastPage = DrawInvoiceData(Data, MyDocument)
243                     End While
244
245                     'Draws the totals to the bottom of the last MyPage of the Invoice
246                     DrawTotals(Data, LastPage)
247                 End If
248
```

```
249                 'Close DataReader
250                 Data.Close()
251             End Sub
252
253             Private Function DrawInvoiceData(ByVal Data As SqlDataReader, ByVal MyDocument As Document) As Page
254                 'Tracks if the invoice is finished
255                 Dim InvoiceFinished As Boolean = True
256                 'Tracks the y position on the MyPage
257                 Dim YOffset As Single = 288
258
259                 'Create a MyPage for the Invoice
260                 Dim MyPage As Page = New Page(PageSize.Letter, PageOrientation.Portrait, 36.0F)
261                 'Add Details to the Invoice
262                 DrawInvoiceDetails(Data, MyPage)
263                 'Add bill to address
264                 DrawBillTo(Data, MyPage)
265                 'Add ship to address
266                 DrawShipTo(Data, MyPage)
267
268                 'Add line items to the Invoice
269                 While DrawLineItem(Data, MyPage, YOffset)
270                     'Break if at the bottom of the MyPage
271                     If YOffset >= 666 Then
272                         InvoiceFinished = False
273                         Exit While
274                     End If
275                 End While
276
277                 'Add the MyPage to the MyDocument
278                 MyDocument.Pages.Add(MyPage)
279
280                 'If Invoice is finished return the MyPage else return null so another MyPage will be added
281                 If InvoiceFinished Then
282                     Return MyPage
283                 Else
284                     MyPage.Elements.Add(New Label("Continued...", 454, 704, 82, 12, Font.Helvetica, 12, TextAlign.Right))
285                     Return Nothing
286                 End If
287             End Function
288
289             Private Sub DrawInvoiceDetails(ByVal Data As SqlDataReader, ByVal MyPage As Page)
290                 'Adds Invoice details to the MyPage
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```
291                 MyPage.Elements.Add(New Label(Data("OrderID").ToString(), 437, 25, 100, 12, Font.Helvetica, 12))
292                 MyPage.Elements.Add(New Label((CType(Data("OrderDate"), DateTime)).ToString("d MMM yyyy"), 437, 39, 100, 12,
    Font.Helvetica, 12))
293                 MyPage.Elements.Add(New Label(Data("CustomerID").ToString(), 437, 53, 100, 12, Font.Helvetica, 12))
294                 If Not TypeOf Data("ShippedDate") Is DBNull Then
295                     MyPage.Elements.Add(New Label((CType(Data("ShippedDate"), DateTime)).ToString("d MMM yyyy"), 437, 67, 100,
    12, Font.Helvetica, 12))
296                 End If
297                 MyPage.Elements.Add(New Label(Data("ShipperName").ToString(), 437, 81, 100, 12, Font.Helvetica, 12))
298                 MyPage.Elements.Add(New Interleaved25(Data("OrderID").ToString(), 380, 4, 18, False))
299             End Sub
300
301             Private Sub DrawBillTo(ByVal Data As SqlDataReader, ByVal MyPage As Page)
302                 'Adds bill to address
303                 Dim BillToAddress As String = _
304                     Data("BillName").ToString() & vbCrLf & _
305                     Data("BillAddress").ToString() & vbCrLf & _
306                     Data("BillCity").ToString() & ", " & _
307                     Data("BillPostalCode").ToString() & vbCrLf & _
308                     Data("BillCountry").ToString()
309
310                 MyPage.Elements.Add(New TextArea(BillToAddress, 28, 138, 194, 70, Font.Helvetica, 12))
311             End Sub
312
313             Private Sub DrawShipTo(ByVal Data As SqlDataReader, ByVal MyPage As Page)
314                 'Adds ship to address
315                 Dim ShipToAddress As String = _
316                     Data("ShipName").ToString() & vbCrLf & _
317                     Data("ShipAddress").ToString() & vbCrLf & _
318                     Data("ShipCity").ToString() & ", " & _
319                     Data("ShipPostalCode").ToString() & vbCrLf & _
320                     Data("ShipCountry").ToString()
321
322                 MyPage.Elements.Add(New TextArea(ShipToAddress, 318, 138, 194, 70, Font.Helvetica, 12))
323             End Sub
324
325             Private Function DrawLineItem(ByVal Data As SqlDataReader, ByVal MyPage As Page, ByRef YOffset As Single) As Boolean
326                 'Adds a line item to the invoice
327                 Dim Quantity As Int16 = CType(Data("Quantity"), Int16)
328                 Dim UnitPrice As Decimal = CType(Data("UnitPrice"), Decimal)
329                 Dim LineTotal As Decimal = UnitPrice * Quantity
330                 SubTotal += LineTotal
```

```
331
332                 MyPage.Elements.Add(New Label(Quantity.ToString(), 4, 3 + YOffset, 52, 12, Font.Helvetica, 12, TextAlign.Right))
333                 MyPage.Elements.Add(New Label(Data("ProductName").ToString(), 64, 3 + YOffset, 292, 12, Font.Helvetica, 12))
334                 MyPage.Elements.Add(New Label(UnitPrice.ToString("#,##0.00"), 364, 3 + YOffset, 82, 12, Font.Helvetica, 12,
    TextAlign.Right))
335                 MyPage.Elements.Add(New Label(LineTotal.ToString("#,##0.00"), 454, 3 + YOffset, 82, 12, Font.Helvetica, 12,
    TextAlign.Right))
336
337                 YOffset += 18
338
339                 'Advanses the recordset and returns if there are additional records
340                 Return Data.Read()
341             End Function
342
343             Private Sub DrawTotals(ByVal Data As SqlDataReader, ByVal MyPage As Page)
344                 'Add totals to the bottom of the Invoice
345                 Dim GrandTotal As Decimal = SubTotal + Freight
346
347                 MyPage.Elements.Add(New Label(SubTotal.ToString("#,##0.00"), 454, 668, 82, 12, Font.Helvetica, 12,
    TextAlign.Right))
348                 MyPage.Elements.Add(New Label(Freight.ToString("#,##0.00"), 454, 686, 82, 12, Font.Helvetica, 12,
    TextAlign.Right))
349                 MyPage.Elements.Add(New Label(GrandTotal.ToString("#,##0.00"), 454, 704, 82, 12, Font.Helvetica, 12,
    TextAlign.Right))
350             End Sub
351
352             Private Function GetInvoiceData(ByVal Connection As SqlConnection, ByVal invoiceNumber As Integer) As SqlDataReader
353                 'Creates a DataReader for the Invioce
354                 Dim command As SqlCommand = Connection.CreateCommand()
355                 command.CommandText = "SELECT o.OrderID, o.CustomerID, o.OrderDate, o.ShippedDate, Freight, " & _
356                     "  o.ShipName, o.ShipAddress, o.ShipCity, o.ShipPostalCode, o.ShipCountry, " & _
357                     "  c.CompanyName as BillName, c.Address as BillAddress, " & _
358                     "  c.City as BillCity, c.PostalCode as BillPostalCode, " & _
359                     "  c.Country as BillCountry, s.CompanyName as ShipperName, " & _
360                     "  p.ProductName, od.UnitPrice, od.Quantity " & _
361                     "FROM Orders o " & _
362                     "JOIN Customers c ON " & _
363                     "  o.CustomerID = c.CustomerID " & _
364                     "JOIN Shippers s ON " & _
365                     "  o.ShipVia = s.ShipperID " & _
366                     "JOIN [Order Details] od ON " & _
367                     "  o.OrderID = od.OrderID " & _
368                     "JOIN Products p ON " & _
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```
                    "  od.ProductID = p.ProductID " & _
                    "WHERE o.OrderID = " & invoiceNumber
                Dim DataReader As SqlDataReader = command.ExecuteReader()

                Return DataReader
            End Function

        End Class

#End Region

    End Class
End Namespace
```