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1  'Tyler Hattan
2  'Project: Update 6-1 to 7-2
3  '9/8/2020
4  'Calculates Invoice Total
5
6  'Using Select Case seems to be easier to read since it breaks it into sections.
   'The switch statement in Java and C# does not use "End Select"
7
8  Public Class frmInvoiceTotal
9
10     Private Sub btnCalculate_Click(sender As Object,
11         e As EventArgs) Handles btnCalculate.Click
12
13         Dim subtotal As Decimal = CDec(txtSubtotal.Text)
14         Dim discountPercent As Decimal
15         Dim customerType As String = txtCustomerType.Text.ToUpper()
16         Dim validCustomerType As Boolean
17         Dim validSubtotal As Boolean
18
19         validCustomerType = IsValidCustomerType(customerType)
20         validSubtotal = IsValidSubtotal(subtotal)
21
22         If validCustomerType = True AndAlso validSubtotal = True Then
23             discountPercent = DiscountPct(subtotal, discountPercent, customerType)
24
25             Dim discountAmount As Decimal = subtotal * discountPercent
26             Dim invoiceTotal As Decimal = subtotal - discountAmount
27
28             txtDiscountPercent.Text = FormatPercent(discountPercent, 1)
29             txtDiscountAmount.Text = FormatCurrency(discountAmount)
30             txtTotal.Text = FormatCurrency(invoiceTotal)
31         End If
32
33
34         txtCustomerType.Select()
35
36     End Sub
37
38     Private Shared Function DiscountPct(subtotal As Decimal, discountPercent As
   Decimal, customerType As String) As Decimal
39         Select Case customerType
40             Case "R"
41                 If subtotal < 100 Then
42                     discountPercent = 0
43                 ElseIf subtotal >= 100 AndAlso subtotal < 250 Then
44                     discountPercent = 0.1D
45                 ElseIf subtotal >= 250 AndAlso subtotal < 500 Then
46                     discountPercent = 0.25D
47                 ElseIf subtotal >= 500 Then
48                     discountPercent = 0.3D
49                 End If
50
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51         Case "C"
52             discountPercent = 0.2D
53
54         Case "T"
55             discountPercent = 0.4D
56
57         '
58         Case Else
59             discountPercent = 0.1D
60
61     End Select
62     Return discountPercent
63 End Function
64
65 Private Function IsValidCustomerType(customerType As String) As Boolean
66     customerType.ToUpper()
67     If customerType = "R" Or customerType = "C" Or customerType = "T" Then
68         Return True
69     Else
70         MessageBox.Show("Customer Type must be either R, C or T")
71         Return False
72     End If
73
74 End Function
75
76 Private Function IsValidSubtotal(subtotal As Decimal) As Boolean
77     If subtotal < 0 OrElse subtotal > 1000 Then
78         MessageBox.Show("Subtotal must be between 0 and 1000")
79         Return False
80     Else
81         Return True
82     End If
83 End Function
84
85 Private Sub ClearAllBoxes(sender As Object, e As EventArgs) Handles 
86     txtCustomerType.TextChanged, txtSubtotal.TextChanged
87     txtDiscountAmount.Text = ""
88     txtDiscountPercent.Text = ""
89     txtTotal.Text = ""
90 End Sub
91
92 Private Sub btnExit_Click(sender As Object,
93     e As EventArgs) Handles btnExit.Click
94     Me.Close()
95 End Sub
96 End Class
```