




```
1 'Tyson Kriner
2 'RCET0265
3 'asg4-6
4 'rentalForm
5 'https://github.com/krintyso/TK-VS-F19
6
7 Option Strict On
8 Option Explicit On
9
10 Public Class rentalForm
11
12     Dim beginOdometer As Decimal
13     Dim endOdometer As Decimal
14     Dim days As Double
15     Dim distanceTotal As Double
16     Dim dayCharge As Double
17     Dim Distance As Double
18     Dim totalCost As Double
19     Dim costTotal As Double
20     Dim totalCharge As Double
21     Dim milesCharge As Double
22     Dim Distance2 As Double
23     Dim Discount As Double
24     Dim numberOfCustomers As Integer
25     Dim errors As Boolean = False
26     Private Sub CalculateButton_Click(sender As Object, e As EventArgs) Handles >
        calculateButton.Click
27         Dim beginOdometerStr As String
28         Dim endOdometerStr As String
29         Dim daysStr As String
30         beginOdometerStr = beginOdometerTextBox.Text
31         endOdometerStr = endOdometerTextBox.Text
32         daysStr = daysTextBox.Text
33
34
35         InputValidation()
36
37
38         beginOdometer = Decimal.Parse(beginOdometerStr)
39         endOdometer = Decimal.Parse(endOdometerStr)
40         days = Decimal.Parse(daysStr)
41
42
43
44
45
46     If beginOdometer > endOdometer Then
47         MessageBox.Show("Beginning odometer cannot be larger than ending
            odometer", "Invalid odometer", MessageBoxButtons.OK) >
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48         beginOdometerTextBox.SelectAll()
49     ElseIf days < 0 Or days > 45 Then
50         MessageBox.Show("Number of days cannot be less than 0 or greater
51         than 45", "Invalid days", MessageBoxButtons.OK)
52         daysTextBox.SelectAll()
53     End If
54
55     If errors = False Then
56         Try
57             dayCharge = days * 15
58             dayChargeLabel.Text = dayCharge.ToString("C")
59             If milesRadioButton.Checked = True Then
60                 Distance = endOdometer - beginOdometer
61                 milesDrivenLabel.Text = Distance.ToString
62             ElseIf kilometersRadioButton.Checked = True Then
63                 Distance = (endOdometer - beginOdometer) * 0.62
64                 milesDrivenLabel.Text = Distance.ToString
65             End If
66             If Distance <= 200.0 Then
67                 milesCharge = 0.00
68                 mileChargeLabel.Text = milesCharge.ToString("C")
69
70             ElseIf Distance >= 500.0 Then
71                 milesCharge = (300.0 * 0.12) + ((Distance - 500.0) * 0.1)
72
73                 mileChargeLabel.Text = milesCharge.ToString("C")
74             ElseIf Distance <= 500.0 And Distance >= 200.0 Then
75                 Distance2 = Distance - 200.0
76                 milesCharge = Distance2 * 0.12
77                 mileChargeLabel.Text = milesCharge.ToString("C")
78             End If
79             If aaaCheckBox.Checked = True Then
80                 Discount = totalCost * 0.05
81                 discountLabel.Text = Discount.ToString("C")
82             ElseIf seniorCheckBox.Checked = True Then
83                 Discount = totalCost * 0.03
84                 discountLabel.Text = Discount.ToString("C")
85             ElseIf aaaCheckBox.Checked = True And seniorCheckBox.Checked =
86             True Then
87                 Discount = totalCost * 0.08
88                 discountLabel.Text = Discount.ToString("C")
89             End If
90             totalCost = milesCharge + dayCharge
91             totalCharge = totalCost - Discount
92             youOweLabel.Text = totalCharge.ToString("C")
93
94             discountLabel.BackColor = Color.White
```

```
95         milesDrivenLabel.BackColor = Color.White
96         youOweLabel.BackColor = Color.White
97         mileChargeLabel.BackColor = Color.White
98         dayChargeLabel.BackColor = Color.White
99
100
101
102
103         Catch ex As FormatException
104             InputValidation()
105         Catch ex1 As InvalidCastException
106             MessageBox.Show("Invalid Conversion", "Illegal conversion",
107                             MessageBoxButtons.OK)
108         Catch ex2 As ArithmeticException
109             MessageBox.Show("Division by zero or variable overflow",
110                             "Invalid Calculation", MessageBoxButtons.OK)
111         Catch ex3 As OutOfMemoryException
112             MessageBox.Show("Not enough memory", "Out of Memory",
113                             MessageBoxButtons.OK)
114     End Try
115 End If
116
117 milesDrivenLabel.Text = Distance.ToString
118 youOweLabel.Text = totalCharge.ToString("C")
119 mileChargeLabel.Text = milesCharge.ToString("C")
120 discountLabel.Text = Discount.ToString("C")
121
122 Totals(Distance, milesCharge, dayCharge, totalCost)
123
124 End Sub
125 Private Sub Totals(ByVal Distance As Double, ByVal milesCharge As Double,
126                   ByVal daycharge As Double, ByVal totalCost As Double)
127
128     numberOfCustomers += 1
129     distanceTotal += Distance
130     costTotal += totalCost
131
132 End Sub
133 Private Sub SummaryButton_Click(sender As Object, e As EventArgs) Handles
134     summaryButton.Click
135     Dim summarylist As New List(Of String)
136     Dim sSummary As String = " "
137
138     summarylist.Add("Total miles: " & distanceTotal.ToString)
139     summarylist.Add("Total charges: " & costTotal.ToString("C"))
140     summarylist.Add("Total customers: " & numberOfCustomers.ToString)
141
142     For Each item As String In summarylist
```

```
139         sSummary &= item & " " & vbNewLine
140     Next
141
142
143     MessageBox.Show(sSummary, "Summary", MessageBoxButtons.OK)
144
145 End Sub
146 Private Sub InputValidation()
147     Dim nameCheck As Double
148     Dim cityCheck As Double
149     Dim stateCheck As Double
150     Dim zipCheck As Double
151     Dim beginodCheck As Double
152     Dim endodCheck As Double
153     Dim daysCheck As Double
154     Dim errorList As New List(Of String)
155     Dim sErrors As String = " "
156
157
158
159
160
161     If Double.TryParse(nameTextBox.Text, nameCheck) Then
162         errorList.Add("Invalid name")
163         nameTextBox.SelectAll()
164         errors = True
165     End If
166     If Double.TryParse(cityTextBox.Text, cityCheck) Then
167         errorList.Add("Invalid city")
168         cityTextBox.SelectAll()
169         errors = True
170     End If
171     If Double.TryParse(stateTextBox.Text, stateCheck) Then
172         errorList.Add("Invalid state")
173         stateTextBox.SelectAll()
174         errors = True
175     End If
176
177     If Double.TryParse(zipCodeTextBox.Text, zipCheck) Then
178     Else
179         errorList.Add("Invalid zip code")
180         zipCodeTextBox.SelectAll()
181         errors = True
182     End If
183
184     If Double.TryParse(beginOdometerTextBox.Text, beginodCheck) Then
185     Else
186         errorList.Add("Invalid Beginning Odometer")
187         beginOdometerTextBox.SelectAll()
```

```
188         errors = True
189     End If
190
191     If Double.TryParse(endOdometerTextBox.Text, endodCheck) Then
192     Else
193         errorList.Add("Invalid Ending Odometer")
194         endOdometerTextBox.SelectAll()
195         errors = True
196     End If
197     If Double.TryParse(daysTextBox.text, daysCheck) Then
198     Else
199         errorList.Add("Invalid Number of days")
200         daysTextBox.SelectAll()
201         errors = True
202     End If
203
204     If errors = True Then
205         For Each item As String In errorList
206             sErrors &= item & " " & vbNewLine
207         Next
208         MessageBox.Show(sErrors, "Errors", MessageBoxButtons.OK)
209     End If
210
211 End Sub
212
213 Private Sub ExitButton_Click(sender As Object, e As EventArgs) Handles 
214     exitButton.Click
215
216     DialogResult = MessageBox.Show("Are you sure you want to exit", "Exit", 
217         MessageBoxButtons.YesNo)
218
219     If DialogResult = DialogResult.Yes Then
220         Me.Close()
221     End If
222
223 End Sub
224
225 Private Sub ClearButton_Click(sender As Object, e As EventArgs) Handles 
226     clearButton.Click
227     nameTextBox.Text = ""
228     addressTextBox.Text = ""
229     cityTextBox.Text = ""
230     stateTextBox.Text = ""
231     zipCodeTextBox.Text = ""
232     beginOdometerTextBox.Text = ""
233     endOdometerTextBox.Text = ""
234     daysTextBox.Text = ""
235     milesDrivenLabel.Text = ""
236     mileChargeLabel.Text = ""
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```
234         dayChargeLabel.Text = ""
235         discountLabel.Text = ""
236         youOweLabel.Text = ""
237     End Sub
238 End Class
```