```
...uments\GitHub\DAC-VS-F19\Assignments\Asg4-6\rentalForm.vb
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1 'Doug Cluff
 2 'RCET0265
 3 'Asg4-6
 4 'Rental Car Form
 5 'https://github.com/clufdoug/DACVSF19/tree/master/Assignments/Asg4-6
 6
7 Option Strict On
8 Option Explicit On
10 Public Class RentalForm
11
12
       Dim beginOdometer As Double
13
       Dim endOdometer As Double
14
       Dim custName As String
15
       Dim custAddress As String
16
       Dim custCity As String
       Dim custState As String
17
18
       Dim custZip As Integer
       Dim days As Integer
19
20
       Dim totalcustomers As Integer
21
       Dim totalmiles As Double
       Dim totalsales As Double
22
23
24
       Private Sub RentalForm_Load(sender As Object, e As EventArgs) Handles
         MyBase.Load
25
            'Disables the Summary Button until input has been validated
            SummaryButton.Enabled = False
26
           NameTextBox.Text = "Tim Rossiter"
27
           AddressTextBox.Text = "2019 Mr.Roboto LN."
28
29
           CityTextBox.Text = "Chubbuck"
30
           StateTextBox.Text = "Idaho"
31
            ZipCodeTextBox.Text = "83202"
32
       End Sub
33
34
       Private Sub calculateButton_Click(sender As Object, e As EventArgs) Handles
          CalculateButton.Click
35
            'Handles button click to begin validation protocols
36
           ValidateInput()
37
       End Sub
38
39
       Private Sub clearButton_Click(sender As Object, e As EventArgs) Handles
          ClearButton.Click
40
            'Handles button click to clear all boxes and calculated values
41
           NameTextBox.Clear()
42
           AddressTextBox.Clear()
           CityTextBox.Clear()
43
44
            StateTextBox.Clear()
45
           ZipCodeTextBox.Clear()
            BeginOdometerTextBox.Clear()
46
47
           EndOdometerTextBox.Clear()
48
            DaysTextBox.Clear()
            milesDrivenLabel.Text = ""
49
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50
             mileChargeLabel.Text = ""
             dayChargeLabel.Text = ""
51
             discountLabel.Text = ""
52
            youOweLabel.Text = ""
53
54
            milesRadioButton.Enabled = True
55
            kilometersRadioButton.Enabled = False
56
             aaaCheckBox.Enabled = False
57
             seniorCheckBox.Enabled = False
58
        End Sub
59
        Private Sub ValidateInput()
60
             'Validates the input of the text boxes
61
62
             'All errorMessage values are combined and listed on separate lines
63
             'boxFocus determined that the first box with the error message will be
               selected
64
65
            Dim errorMessage As String
66
             Dim boxFocus As Object
            boxFocus = ""
67
68
            errorMessage = ""
69
70
            If NameTextBox.Text = "" Then
                 errorMessage = "Customer name may not be blank" & vbNewLine
71
72
                 boxFocus = NameTextBox.Focus()
73
            End If
            If AddressTextBox.Text = "" Then
74
75
                 errorMessage += "Address may not be blank" & vbNewLine
                 If boxFocus Is "" Then
76
77
                     boxFocus = AddressTextBox.Focus()
78
                 End If
79
             End If
             If CityTextBox.Text = "" Then
80
                 errorMessage += "City may not be blank" & vbNewLine
81
                 If boxFocus Is "" Then
82
83
                     boxFocus = CityTextBox.Focus()
84
                 End If
85
            End If
86
             If StateTextBox.Text = "" Then
87
88
                 errorMessage += "State may not be blank" & vbNewLine
                 If boxFocus Is "" Then
89
90
                     boxFocus = StateTextBox.Focus()
91
                 End If
92
            End If
93
94
            Try
95
                 Integer.Parse(ZipCodeTextBox.Text)
96
            Catch ex As Exception
                 errorMessage += "Zip code must be a number" & vbNewLine
97
98
                 ZipCodeTextBox.Clear()
                 If boxFocus Is "" Then
99
                     boxFocus = ZipCodeTextBox.Focus()
100
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101
                 End If
102
             End Try
103
             Try
104
                 Integer.Parse(BeginOdometerTextBox.Text)
105
             Catch ex As Exception
                 errorMessage += "Beginning Odometer Reading must be a number" &
106
                                                                                         P
                   vbNewLine
107
                 BeginOdometerTextBox.Clear()
108
                 If boxFocus Is "" Then
109
                     boxFocus = BeginOdometerTextBox.Focus()
110
                 End If
             End Try
111
112
             Try
113
                 Integer.Parse(EndOdometerTextBox.Text)
114
             Catch ex As Exception
115
                 errorMessage += "Ending Odometer Reading must be a number" &
                   vbNewLine
116
                 EndOdometerTextBox.Clear()
                 If boxFocus Is "" Then
117
                     boxFocus = EndOdometerTextBox.Focus()
118
119
                 End If
120
             End Try
121
             Try
122
                 Integer.Parse(DaysTextBox.Text)
123
             Catch ex As Exception
124
                 errorMessage += "Number of Days must be a number" & vbNewLine
125
                 DaysTextBox.Clear()
                 If boxFocus Is "" Then
126
127
                     boxFocus = DaysTextBox.Focus()
128
                 End If
129
             End Try
130
             If errorMessage <> "" Then
131
                 MessageBox.Show(errorMessage, "Input Error")
132
133
                 boxFocus.ToString()
134
             Else
135
                 'If all checked values pass validation the following subs and
                   functions
                 'will calculate And return values.
136
137
                 MilesDriven()
138
                 MileCharge()
139
                 DayCharge()
140
                 Discount()
141
                 YouOwe()
142
                 Total()
143
                 SummaryButton.Enabled = True
144
             End If
145
146
         End Sub
         Private Sub SummaryButton_Click(sender As Object, e As EventArgs) Handles
147
           SummaryButton.Click
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'Displays the number of customers and the daily totals in a messagebox

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             MessageBox.Show("Daily Totals" & vbNewLine & "Customers = " &
149
               totalcustomers & vbNewLine
                              & "Miles = " & totalmiles & vbNewLine
150
                              & "Sales = " & totalsales.ToString("C"))
151
152
        End Sub
153
154
        Private Sub ExitButton Click(sender As Object, e As EventArgs) Handles
           ExitButton.Click
155
             'Exits the program
             If MessageBox.Show("Do you want to Exit?" & vbNewLine & "All Data Will be →
156
                lost.", "Exit Program?",
157
             MessageBoxButtons.OKCancel) = Windows.Forms.DialogResult.OK Then
158
                 Me.Close()
159
             End If
160
        End Sub
161
162
163
        Private Function MilesDriven() As Double
             'Validates the miles driven and converts if data is in Kilometers.
164
165
             Try
                 beginOdometer = Double.Parse(BeginOdometerTextBox.Text)
166
167
             Catch ex As Exception
                 MessageBox.Show("Odometer Values must be a number", "Input Error")
168
169
                 BeginOdometerTextBox.Clear()
170
                 BeginOdometerTextBox.Focus()
171
             End Try
172
             Try
173
                 endOdometer = Double.Parse(EndOdometerTextBox.Text)
174
             Catch ex As Exception
175
                 MessageBox.Show("Odometer Values must be a number", "Input Error")
176
                 EndOdometerTextBox.Clear()
                 EndOdometerTextBox.Focus()
177
178
             End Trv
179
             If kilometersRadioButton.Checked = True Then
180
                 MilesDriven = ((endOdometer - beginOdometer) * 0.62)
181
             ElseIf milesRadioButton.Checked = True Then
182
                 MilesDriven = endOdometer - beginOdometer
183
184
             milesDrivenLabel.Text = MilesDriven.ToString
185
             'Console.WriteLine(milesDriven)
        End Function
186
187
        Private Function MileCharge() As Double
188
             'Calculates the rate based on miles traveled
189
             If MilesDriven() <= 200 Then</pre>
190
191
                 MileCharge = 0
192
             ElseIf MilesDriven() > 200 And MilesDriven() <= 500 Then</pre>
193
                 MileCharge = (MilesDriven() - 200) * 0.12
194
             ElseIf MilesDriven() > 500 Then
195
                 MileCharge = ((MilesDriven() - 500) * 0.1) + (300 * 0.12)
```

mileChargeLabel.Text = MileCharge.ToString("C")

196

197

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198
             'Console.WriteLine(mileCharge)
199
200
        End Function
201
202
        Private Function DayCharge() As Double
             'Validates the number of days and charges based on a $15 daily charge
203
204
             If Integer.Parse(DaysTextBox.Text) = 0 Or Integer.Parse(DaysTextBox.Text) →
                > 45 Then
205
                 MessageBox.Show("Days must be greater than 0 and less than 45",
                   "Input Error")
                 DaysTextBox.Clear()
206
207
                 DaysTextBox.Focus()
208
             Else
209
                 DayCharge = Integer.Parse(DaysTextBox.Text) * 15.0
210
            End If
             dayChargeLabel.Text = DayCharge.ToString("C")
211
212
             Console.WriteLine(DayCharge)
213
        End Function
214
215
        Private Function Discount() As Double
216
             'Applies the any applicable discounts to the total
             Discount = 0
217
218
             If aaaCheckBox.Checked = True Then
219
                 Discount = (0.05 * (MileCharge() + DayCharge()))
220
             End If
221
             If seniorCheckBox.Checked = True Then
222
                 Discount += (0.03 * (MileCharge() + DayCharge()))
223
224
             discountLabel.Text = Discount.ToString("C")
225
             Console.WriteLine(Discount)
        End Function
226
227
        Private Function YouOwe() As Double
228
229
             'Returns the total charge minus any discounts
230
             YouOwe = MileCharge() + DayCharge() - Discount()
231
             youOweLabel.Text = YouOwe.ToString("C")
232
             Console.WriteLine(YouOwe)
233
        End Function
234
235
        Private Sub Total()
236
             totalcustomers += 1
             totalmiles += MilesDriven()
237
238
             totalsales += YouOwe()
        End Sub
239
240
241 End Class
242
```