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1  'Dane Davids
2  'RCET 0265
3  'Sprint-1 & Sprint-2
4  'Convert string to integer
5
6  Option Explicit On
7  Option Strict On
8  Option Compare Binary
9  Public Class SprintForm
10     Private Sub TestValidateAndConvert() Handles Me.Load
11         Dim count As Integer = 0
12         Dim result As Integer = 0
13         Dim pad As Integer = 15
14         Dim report As String = ""
15         Dim temp As String = ""
16         Dim testData = New String(4, 4) {{ "5", "2", "17", "8", "42"}, {"6.7",
17             "3.14", "5.4", "5.5", "0.125"}, {"-21", "-32.1", "-4", "-4.5", "-4.4"},
18             {"", "", "", "", ""}, {"True", "False", "10010", "90210", "dog"}}
19
20     For row = 0 To 4
21         For column = 0 To 4
22             result = 0
23             temp = ValidateAndConvert(testData(row, column), result)
24             report &= ("Trying: " & testData(row, column)).PadRight(pad)
25             If row < 3 Then
26                 If CStr(CInt(testData(row, column))) <> CStr(result) Or temp
27                     <> "" Then
28                     report &= " TEST FAIL" & vbNewLine
29                     report &= ("Result is: " & CStr(result)).PadRight(pad) &
30                         " : " & temp & vbNewLine
31                     report &= ("Should be: " & CStr(CInt(testData(row,
32                         column))))).PadRight(pad) & " : " & "<Empty>" & vbNewLine
33                 Else
34                     report &= " TEST PASS" & vbNewLine
35                     count += 1
36                 End If
37             ElseIf temp <> "is empty" And row = 3 Then
38                 report &= " TEST FAIL" & vbNewLine
39                 report &= ("Result is: " & CStr(result)).PadRight(pad) & " : " &
40                     temp & vbNewLine
41                 report &= ("Should be: " & CStr(0)).PadRight(pad) & " : " &
42                     "is empty" & vbNewLine
43             ElseIf temp <> "Must contain a number" And row > 3 Then
44                 report &= " TEST FAIL" & vbNewLine
45                 report &= ("Result is: " & CStr(result)).PadRight(pad) & " : " &
46                     temp & vbNewLine
47                 report &= ("Should be: " & CStr(0)).PadRight(pad) & " : " &
48                     "Must contain a number" & vbNewLine
49             Else
50                 report &= " TEST PASS" & vbNewLine
51                 count += 1
52             End If
53         Next
54     Next
55 End Class

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44     Next
45     Console.WriteLine(report & "Passed " & CStr(count) & " of 25 tests. Score: " & CStr((count / 25) * 100) & "%")
46     MessageBox.Show("Passed " & CStr(count) & " of 25 tests. Score: " & CStr((count / 25) * 100) & "%")
47 End Sub
48
49 Private Function ValidateAndConvert(ByRef convertThisString As String,
50                                     ByRef toThisInteger As Integer) As String
51
52     'Try and catch attempts to convert a string to integer
53     Try
54         toThisInteger = CInt(convertThisString)
55     Catch ex As Exception
56
57         'If statement is placed to check if string is empty, or else the _
58         'output will tell the user to input a number
59         If convertThisString = "" Then
60
61             ValidateAndConvert = "is empty"
62         Else
63
64             ValidateAndConvert = "Must contain a number"
65         End If
66         If ValidateAndConvert = "" Then
67
68             End If
69     End Try
70
71     Return (ValidateAndConvert)
72 End Function
73
74 Private Sub ConvertButton_Click(sender As Object, e As EventArgs)
75     'convertThisString and toThisInteger are Dimension to meet the _
76     'arguments in the sub it is calling; arguments were placed because _
77     'of instructions
78     Dim convertThisString As String, toThisInteger As Integer
79     ValidateAndConvert(convertThisString, toThisInteger)
80 End Sub
81
82 Private Sub ExitButton_Click(sender As Object, e As EventArgs) Handles _
83     ExitButton.Click
84     Me.Close()
85 End Sub
86 End Class
87

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