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1 'Tyler Lish
2 'RCET0265
3 'Asg4-1
4 'https://github.com/lishtyl2/TL-VS-F19/tree/master/Assignments
5 Option Strict On
6 Option Explicit On
7
8 Public Class MathContest
9     Dim age As Integer
10    Dim grade As Integer
11    Dim firstNumber As Integer
12    Dim secondNumber As Integer
13    Dim answer As Integer
14    Dim totalRight As Integer
15    Dim totalWrong As Integer
16    Dim overall As Double
17
18    Private Sub ClearButton_Click(sender As Object, e As EventArgs) Handles 
19        ClearButton.Click
20        ClearAllFields()
21    End Sub
22
23    Sub ClearAllFields()
24        NameTextBox.Text = ""
25        GradeComboBox.Text = ""
26        AgeComboBox.Text = ""
27        FirstNumberTextBox.Text = ""
28        SecondNumberTextBox.Text = ""
29        AnswerTextBox.Text = ""
30    End Sub
31
32    Private Sub DisableFields()
33        AgeComboBox.Enabled = False
34        GradeComboBox.Enabled = False
35        AddRadioButton.Enabled = False
36        SubtractRadioButton.Enabled = False
37        MultiplyRadioButton.Enabled = False
38        DivideRadioButton.Enabled = False
39        AnswerTextBox.Enabled = False
40        NameTextBox.Enabled = True
41        SubmitButton.Enabled = False
42        ClearButton.Enabled = True
43        SummaryButton.Enabled = False
44        ExitButton.Enabled = True
45    End Sub
46
47    Private Sub ExitButton_Click(sender As Object, e As EventArgs) Handles 
48        ExitButton.Click
49        Me.Close()
50    End Sub
```

```
48 Private Sub EnableQuestion()  
49     AddRadioButton.Enabled = True  
50     SubtractRadioButton.Enabled = True  
51     MultiplyRadioButton.Enabled = True  
52     DivideRadioButton.Enabled = True  
53  
54 End Sub  
55 Private Sub EnableAnswer()  
56     AddRadioButton.Enabled = False  
57     SubtractRadioButton.Enabled = False  
58     MultiplyRadioButton.Enabled = False  
59     DivideRadioButton.Enabled = False  
60     NameTextBox.Enabled = False  
61     AgeComboBox.Enabled = False  
62     GradeComboBox.Enabled = False  
63     AnswerTextBox.Enabled = True  
64     SubmitButton.Enabled = True  
65     ClearButton.Enabled = True  
66     SummaryButton.Enabled = True  
67     AnswerTextBox.Select()  
68     GenerateNumber()  
69 End Sub  
70 Private Sub GenerateNumber()  
71     firstNumber = CInt(Int((10 * Rnd()) + 1))  
72     secondNumber = CInt(Int((10 * Rnd()) + 1))  
73     FirstNumberTextBox.Text() = Convert.ToString(firstNumber)  
74     SecondNumberTextBox.Text() = Convert.ToString(secondNumber)  
75 End Sub  
76 Private Sub studentNameTextBox_TextChanged(sender As Object, e As EventArgs) Handles NameTextBox.TextChanged ↗  
77     DisableFields()  
78     If NameTextBox.Text = "" Then  
79         MessageBox.Show("You need to enter your name please.")  
80         NameTextBox.Select()  
81     Else  
82         AgeComboBox.Enabled = True  
83         GradeComboBox.Enabled = True  
84     End If  
85 End Sub  
86  
87 Private Sub SubmitButton_Click(sender As Object, e As EventArgs) Handles SubmitButton.Click ↗  
88     Select Case True  
89  
90         Case AddRadioButton.Checked  
91             answer = firstNumber + secondNumber  
92         Case SubtractRadioButton.Checked  
93             answer = firstNumber - secondNumber  
94         Case MultiplyRadioButton.Checked
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95         answer = firstNumber * secondNumber
96         Case DivideRadioButton.Checked
97             answer = firstNumber \ secondNumber
98     End Select
99     Try
100
101         overall = Double.Parse(AnswerTextBox.Text)
102     Catch ex As Exception
103         overall = 0
104     End Try
105     If answer = overall Then
106         MessageBox.Show("Woohoo!!")
107         totalRight += 1
108     Else
109         MessageBox.Show("DOH! The correct answer is " & answer & ".")
110         totalWrong += 1
111     End If
112     EnableAnswer()
113     GenerateNumber()
114     AnswerTextBox.Clear()
115
116 End Sub
117
118 Private Sub GradeComboBox_SelectedIndexChanged(sender As Object, e As EventArgs) Handles GradeComboBox.SelectedIndexChanged ↗
119     EnableQuestion()
120 End Sub
121
122 Private Sub AddRadioButton_CheckedChanged(sender As Object, e As EventArgs) Handles AddRadioButton.CheckedChanged ↗
123     EnableAnswer()
124 End Sub
125
126 Private Sub SubtractRadioButton_CheckedChanged(sender As Object, e As EventArgs) Handles SubtractRadioButton.CheckedChanged ↗
127     EnableAnswer()
128 End Sub
129
130 Private Sub MultiplyRadioButton_CheckedChanged(sender As Object, e As EventArgs) Handles MultiplyRadioButton.CheckedChanged ↗
131     EnableAnswer()
132 End Sub
133
134 Private Sub DivideRadioButton_CheckedChanged(sender As Object, e As EventArgs) Handles DivideRadioButton.CheckedChanged ↗
135     EnableAnswer()
136 End Sub
137
138 Private Sub MathContest_Load(sender As Object, e As EventArgs) Handles ↗
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```
Me.Load
139     DisableFields()
140 End Sub
141
142 Private Sub SummaryButton_Click(sender As Object, e As EventArgs) Handles SummaryButton.Click
143     MessageBox.Show(NameTextBox.Text & " had " & totalRight & " correct, and " & totalWrong _
144         & " incorrect.")
145     totalRight = 0
146     totalWrong = 0
147     ExitButton.Enabled = True
148     DisableFields()
149     ClearAllFields()
150 End Sub
151 End Class
152
```