' Michael Voell

' Campground Rates

' 1/22/2016

' Purpose: To calculate the cost of a stay at campgrounds under different conditions.

' --TODO--

' Input values need a Try-Catch block

Option Strict On

Public Class frmCampgroundRates

Private Sub frmCampgroundRates\_Load(sender As System.Object, e As System.EventArgs) Handles MyBase.Load

Threading.Thread.Sleep(5000)

End Sub

Private Sub btnCalculateCost\_Click(sender As System.Object, e As System.EventArgs) Handles btnCalculateCost.Click

' Variables

Dim decTentCost As Decimal

Dim decNightsStaying As Decimal

' Setting decNightsStaying to the appropriate text box

Try

decNightsStaying = CDec(txtNumberOfNights.Text)

Catch ex As DivideByZeroException

MsgBox("Cannot divide by 0")

txtNumberOfNights.Clear()

txtNumberOfNights.Focus()

Catch ex As FormatException

MsgBox("Inproper format. Please use only numbers.")

txtNumberOfNights.Clear()

txtNumberOfNights.Focus()

Catch ex As Exception

MsgBox("General exception caught.")

txtNumberOfNights.Clear()

txtNumberOfNights.Focus()

End Try

' Getting choices from ComboBox and setting approriate function tags

decTentCost = cboStayType.SelectedIndex

Select Case decTentCost

Case 0

CalculateSubTotal(20, decNightsStaying)

Case 1

CalculateSubTotal(35, decNightsStaying)

Case 2

CalculateSubTotal(55, decNightsStaying)

End Select

End Sub

Private Sub CalculateSubTotal(ByVal decTheTentCost As Decimal, ByVal decTheNightsStaying As Decimal)

' Variables

Dim decSubTotal As Decimal

Dim decDiscount As Decimal

' Calculations

decSubTotal = decTheTentCost \* decTheNightsStaying

' MAKE THIS IN A SUBPROCEDURE

lblSubtotalOutput.Text = "SubTotal: " & decSubTotal.ToString("C")

' Getting choices from ComboBox and setting approriate function tags

decDiscount = cboDiscount.SelectedIndex

Select Case decDiscount

Case 0

FindDiscount(decSubTotal, 0)

Case 1

FindDiscount(decSubTotal, CDec(0.1))

Case 2

FindDiscount(decSubTotal, CDec(0.12))

End Select

End Sub

Private Function FindDiscount(ByVal decSubTotal As Decimal, ByVal decDiscountAmount As Decimal) As Decimal

' Variables

Dim decDiscountedTotal As Decimal

Dim decDiscounted As Decimal

' Calculations

decDiscounted = decSubTotal \* decDiscountAmount

decDiscountedTotal = decSubTotal - decDiscounted

' MAKE THIS IN A SUBPROCEDURE

lblDiscountOutput.Text = "Discount: -" & decDiscounted.ToString("C")

' More calculations, but in a different function

FindTax(decDiscountedTotal, decSubTotal, decDiscounted)

' Returning decDiscountedTotal to original class

Return decDiscountedTotal

End Function

Private Function FindTax(ByVal decDiscountedTotal As Decimal, ByVal decSubtotal As Decimal, ByVal decDiscounted As Decimal) As Decimal

' Tax: 7.5%

' Variables

Dim decTaxes As Decimal

Dim decTaxTotal As Decimal

' Calculations

decTaxes = CDec(decDiscountedTotal / 0.75)

decTaxTotal = decSubtotal - decTaxes

' Outputting to Label

lblTaxes.Text = "Taxes: " & decTaxTotal.ToString("C")

' More calculations, but in a different function

FindTotal(decDiscountedTotal, decTaxTotal, decSubtotal)

' Returning decTaxTotal to original class

Return decTaxTotal

End Function

Private Function FindTotal(ByVal decDiscount As Decimal, ByVal decTax As Decimal, decSubTotal As Decimal) As Decimal

' Variables

Dim decFinalTotal As Decimal

Dim decFinalsFinal As Decimal

' Calculations

Try

decFinalTotal = decTax / decSubTotal

Catch ex As DivideByZeroException

MsgBox("Cannot divide by 0")

txtNumberOfNights.Clear()

txtNumberOfNights.Focus()

Catch ex As FormatException

MsgBox("Inproper format. Please use only numbers.")

txtNumberOfNights.Clear()

txtNumberOfNights.Focus()

Catch ex As Exception

MsgBox("General exception caught.")

txtNumberOfNights.Clear()

txtNumberOfNights.Focus()

End Try

decFinalsFinal = decFinalTotal + decSubTotal

lblTotalOutput.Text = decFinalsFinal.ToString("C")

' Returning decFinalTotal to original class

Return decFinalsFinal

End Function

End Class

