**CS/IS 3023 Assignment 7 14 points**

**Due: 3/30**

Email your finished answers and to me at [harringp@nsuok.edu](mailto:harringp@nsuok.edu)

You are welcome to copy and paste your .vb source code below or attach your .vb source code to the email.

**Chapter 7:**

1. What is an object variable?

An object variable is a container that holds a reference to a specific instance of a class.

1. Do tutorial 7-1, p. 437 , on creating an application with two forms.

Public Class MainForm

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

Dim frmMessage As New MessageForm

frmMessage.ShowDialog()

End Sub

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

Me.Close()

End Sub

End Class

Public Class MessageForm

Private Sub Button1\_Click(sender As Object, e As EventArgs) Handles Button1.Click

Me.Close()

End Sub

End Class

1. Do tutorial 7-3, p. 446, on accessing a control on a different form.

Public Class MainForm

Private Sub Button2\_Click(sender As Object, e As EventArgs) Handles Button2.Click

Me.Close()

End Sub

Private Sub Button1\_Click(sender As Object, e As EventArgs) Handles Button1.Click

' Create an instance of the NutritionForm.

Dim frmNutrition As New NutritionForm

' Find the selected radio button.

If radBanana.Checked = True Then

frmNutrition.lblFood.Text = "1 banana"

frmNutrition.lblCalories.Text = "100"

frmNutrition.lblFat.Text = "0.4"

frmNutrition.lblCarb.Text = "27"

ElseIf radPopcorn.Checked = True Then

frmNutrition.lblFood.Text = "1 cup air-popped popcorn"

frmNutrition.lblCalories.Text = "31"

frmNutrition.lblFat.Text = "0.4"

frmNutrition.lblCarb.Text = "6"

ElseIf radMuffin.Checked = True Then

frmNutrition.lblFood.Text = "1 large blueberry muffin"

frmNutrition.lblCalories.Text = "385"

frmNutrition.lblFat.Text = "9"

frmNutrition.lblCarb.Text = "67"

End If

' Display the NutritionForm.

frmNutrition.ShowDialog()

End Sub

End Class

Public Class NutritionForm

Private Sub Button1\_Click(sender As Object, e As EventArgs) Handles Button1.Click

Me.Close()

End Sub

End Class

1. Do tutorial 7-6, p.475, on creating a windows forms application with try-catch and if-statements.

Public Class MainForm

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

Me.Close()

End Sub

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

Dim frmScuba As New ScubaForm

frmScuba.ShowDialog()

End Sub

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

Dim frmScuba As New SkyDiveForm

frmScuba.ShowDialog()

End Sub

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

MessageBox.Show("High Adventure Travel Price Quote System Version 1.0")

End Sub

Private Sub PictureBox1\_Click(sender As Object, e As EventArgs) Handles PictureBox1.Click

End Sub

End Class

Public Class SkyDiveForm

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

Const decSKYDIVE\_PRICE\_PER\_PERSON As Decimal = 2500D

' Local variables

Dim intNumberPeople As Integer ' Number of people

Dim decDiscount As Decimal ' Amount of discount

Dim decTotal As Decimal ' Total cost

Try

intNumberPeople = CInt(txtNumberPeople.Text)

decTotal = intNumberPeople \* decSKYDIVE\_PRICE\_PER\_PERSON

If intNumberPeople >= g\_intMINIMUM\_FOR\_DISCOUNT Then

decDiscount = CalcDiscount(decTotal)

decTotal = decTotal - decDiscount

Else

decDiscount = 0D

End If

lblDiscount.Text = decDiscount.ToString("c")

lblTotal.Text = decTotal.ToString("c")

Catch ex As Exception

MessageBox.Show("Enter a valid integer for number of people.")

End Try

End Sub

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

txtNumberPeople.Clear()

lblDiscount.Text = String.Empty

lblTotal.Text = String.Empty

txtNumberPeople.Focus()

End Sub

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

Me.Close()

End Sub

End Class

Public Class ScubaForm

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

' Constant for the price per person for this package

Const decSCUBA\_PRICE\_PER\_PERSON As Decimal = 3000D

' Local variables

Dim intNumberPeople As Integer ' Number of people

Dim decDiscount As Decimal ' Amount of discount

Dim decTotal As Decimal ' Total cost

Try

intNumberPeople = CInt(txtNumberPeople.Text)

decTotal = intNumberPeople \* decSCUBA\_PRICE\_PER\_PERSON

If intNumberPeople >= g\_intMINIMUM\_FOR\_DISCOUNT Then

decDiscount = CalcDiscount(decTotal)

decTotal = decTotal - decDiscount

Else

decDiscount = 0D

End If

lblDiscount.Text = decDiscount.ToString("c")

lblTotal.Text = decTotal.ToString("c")

Catch ex As Exception

MessageBox.Show("Enter a valid integer for number of people.")

End Try

End Sub

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

' Clear the text box and the display labels.

txtNumberPeople.Clear()

lblDiscount.Text = String.Empty

lblTotal.Text = String.Empty

txtNumberPeople.Focus()

End Sub

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

Me.Close()

End Sub

End Class