'DiceGame

'Gaw

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Public Class Form1

Dim totalPoints As Integer = 1000

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

Dim risk As Integer = Val(Me.txtRisk.Text)

Dim total As Integer

If ValidEntry(risk) Then

Call RollDice(Me.picDie1, Me.picDie2, total)

If total Mod 2 = 0 Then 'player loses

totalPoints -= risk

Else 'player wins

totalPoints += (2 \* risk)

End If

Me.lblPoints.Text = "Total points = " & totalPoints

If totalPoints = 0 Then

MessageBox.Show("Game Over.")

Application.Exit()

End If

End If

End Sub

'Gets two random numbers to represent each die and displays the corresponding die

'image in the picture box objects and calculates the total of the dice.

'

'post: the total of roll of dice has been calculated and the picture box objects have been

'assigned the corresponding dice images.

'

Sub RollDice(ByRef picDie1 As PictureBox, ByRef picDie2 As PictureBox, ByRef total As Integer)

Dim die1 As Integer = RndInt(1, 6)

Select Case die1

Case 1

picDie1.Image = My.Resources.die1

Case 2

picDie1.Image = My.Resources.die2

Case 3

picDie1.Image = My.Resources.die3

Case 4

picDie1.Image = My.Resources.die4

Case 5

picDie1.Image = My.Resources.die5

Case 6

picDie1.Image = My.Resources.die6

End Select

Dim die2 As Integer = RndInt(1, 6)

Select Case die2

Case 1

picDie2.Image = My.Resources.die1

Case 2

picDie2.Image = My.Resources.die2

Case 3

picDie2.Image = My.Resources.die3

Case 4

picDie2.Image = My.Resources.die4

Case 5

picDie2.Image = My.Resources.die5

Case 6

picDie2.Image = My.Resources.die6

End Select

total = die1 + die2

End Sub

'Calculates a random number between lowNum and highNum.

'

'post: a number between lowNum and highNum has been returned.

'

Function RndInt(ByVal lowNum As Integer, ByVal highNum As Integer) As Integer

Randomize()

Return Int((highNum - lowNum + 1) \* Rnd() + lowNum)

End Function

'Determine if player can bet risk points out of the totalPoints that the player owns

'

'post: true has been returned if risk had been less than or equal to totalPoints

'false has been returned if risk had been greater than totalPoints

'

Function ValidEntry(ByVal risk As Integer) As Boolean

If risk > totalPoints Then

Me.lblPoints.Text = "You may not risk more than " & totalPoints & "."

Return False

ElseIf risk <= 0 Then

Me.lblPoints.Text = "You may not risk less than 1 point."

Return False

Else

Return True

End If

End Function

End Class