

' GestioneArray - Gestione Array Dinamici Unidimensionali - prof. Zampini - 21/01/2011 - VB 2010

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Public Class Form1

    Dim Nomi() As String
    Dim Eta(), Dimensione, DimensioneR, DimensioneNew As Integer
    Dim ArrayRandom() As Long

    Private Sub BtnCarica_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles BtnCarica.Click
        Dim i As Short
        lvwNomiEta.Items.Clear() ' Pulizia della listview lvwNomiEta
        For i = 0 To Dimensione - 1
            Nomi(i) = InputBox("Inserire il " & i + 1 & "° Nome", "INPUT NOMI")
            Eta(i) = InputBox("Inserire Et  di " & Nomi(i), "INPUT ETA'")
            Dim lvi As New ListViewItem ' Dichiarazione di un oggetto item lvi
            lvi.Text = Nomi(i) ' Assegnamento di Nomi(i) alla propriet  Text dell'item lvi
            lvi.SubItems.Add(Eta(i)) ' Assegnamento di Eta(i) a un sotto item aggiunto a lvi
            lvwNomiEta.Items.Add(lvi) ' Aggiunta dell'item lvi alla listview lvwNomiEta
        Next
        BtnCarica.Enabled = False : BtnPreserva.Enabled = True
    End Sub

    Private Sub BtnDimensiona_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles BtnDimensiona.Click
        Do
            Dimensione = Val(InputBox("Inserire la Dimensione dell'array", "Dimensionamento Array"))
        Loop While Dimensione < 2
        ReDim Nomi(Dimensione - 1) : ReDim Eta(Dimensione - 1)
        lblDim1.Text = CStr(Dimensione) : BtnCarica.Enabled = True : BtnDimensiona.Enabled = False
    End Sub

    Private Sub BtnFine_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles BtnFine.Click
        End
    End Sub

    Private Sub BtnDimensionaR_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles BtnDimensionaR.Click
        Do
            DimensioneR = Val(InputBox("Inserire la Dimensione dell'array", "Dimensionamento Array"))
        Loop While DimensioneR < 2
        ReDim ArrayRandom(DimensioneR - 1)
        BtnDimensionaR.Enabled = False : BtnCaricaR.Enabled = True
        ProgressBar1.Minimum = 0 : ProgressBar1.Maximum = UBound(ArrayRandom)
        lblMax.Text = UBound(ArrayRandom) + 1
    End Sub

    Private Sub BtnCaricaR_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles BtnCaricaR.Click
        Dim j As Integer
        txtLista.Text = "INDICE" & vbTab & "VALORE" & vbCrLf
        For j = 0 To UBound(ArrayRandom)
            ArrayRandom(j) = Int(Rnd() * 100000)
            txtLista.Text = txtLista.Text & j & vbTab & Format(ArrayRandom(j), "00000") & vbCrLf
            ProgressBar1.Value = j
        Next
        BtnCaricaR.Enabled = False : BtnSortA.Enabled = True : BtnSortD.Enabled = True
    End Sub
End Class
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Private Sub BtnSortA_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles BtnSortA.Click
    Dim j As Integer
    txtLista.Text = "INDICE" & vbTab & "VALORE" & vbCrLf
    Array.Sort(ArrayRandom)
    For j = 0 To UBound(ArrayRandom)
        txtLista.Text = txtLista.Text & j & vbTab & Format(ArrayRandom(j), "00000") & vbCrLf
        ProgressBar1.Value = j
    Next
    BtnSortA.Enabled = False : BtnSortD.Enabled = True
End Sub

Private Sub BtnSortD_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles BtnSortD.Click
    Dim j As Integer
    txtLista.Text = "INDICE" & vbTab & "VALORE" & vbCrLf
    Array.Reverse(ArrayRandom)
    For j = 0 To UBound(ArrayRandom)
        txtLista.Text = txtLista.Text & j & vbTab & Format(ArrayRandom(j), "00000") & vbCrLf
        ProgressBar1.Value = j
    Next
    BtnSortD.Enabled = False : BtnSortA.Enabled = True
End Sub

Private Sub BtnPreserva_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles BtnPreserva.Click
    Dim j As Integer
    Do
        DimensioneNew = Val(InputBox("Dim Attuale = " & UBound(Nomi) + 1 & vbCrLf & "Inserire Nuova Dim", "Ridim Array"))
    Loop While DimensioneNew <= UBound(Nomi)
    ReDim Preserve Nomi(DimensioneNew - 1) : ReDim Preserve Eta(DimensioneNew - 1)
    lblDim2.Text = CStr(DimensioneNew)
    For j = Dimensione To DimensioneNew - 1
        Nomi(j) = InputBox("Inserire il " & j + 1 & "° Nome", "INPUT NOMI")
        Eta(j) = InputBox("Inserire Età di " & Nomi(j), "INPUT ETA'")
        Dim lvi As New ListViewItem
        lvi.Text = Nomi(j)
        lvi.SubItems.Add(Eta(j))
        lvwNomiEta.Items.Add(lvi)
    Next
    BtnPreserva.Enabled = False
End Sub

Private Sub BtnReset_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles BtnReset.Click
    lvwNomiEta.Items.Clear() : lblDim1.Text = "" : lblDim2.Text = "" : txtLista.Text = "" : LblMax.Text = ""
    BtnSortA.Enabled = False : BtnSortD.Enabled = False : BtnCaricaR.Enabled = False : BtnCarica.Enabled = False
    BtnPreserva.Enabled = False : BtnDimensiona.Enabled = True : BtnDimensionaR.Enabled = True
    ProgressBar1.Value = 0
End Sub

End Class

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