Nama : Renaldi Pratama

Nim : 2209106054

Posttest 2

Source code

Form1.vb

```vb
Public Class Form1
    Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load
        Module1.InitializeListBuku()
    End Sub

    Private Sub ButtonTambah_Click(sender As Object, e As EventArgs) Handles
btnTambah.Click
        Dim judul As String = txtJudul.Text.Trim()
        Dim genre As String = txtGenre.Text.Trim()
        If Module1.IsJudulBukuExist(judul) Then
            MessageBox.Show("Judul buku sudah ada dalam daftar. Judul buku tidak boleh
sama.", "Peringatan", MessageBoxButtons.OK, MessageBoxIcon.Warning)
        ElseIf Not String.IsNullOrEmpty(judul) AndAlso Not String.IsNullOrEmpty(genre)
Then
            Dim bukuBaru As New Module1.Buku
            bukuBaru.Judul = judul
            bukuBaru.Genre = genre

            Module1.TambahBuku(bukuBaru)
            txtJudul.Clear()
            txtGenre.Clear()
        Else
            MessageBox.Show("Harap isi Judul dan Genre buku.", "Peringatan",
MessageBoxButtons.OK, MessageBoxIcon.Warning)
        End If
    End Sub


    Private Sub ButtonLihatDaftar_Click(sender As Object, e As EventArgs) Handles
btnLihat.Click
        Dim form2 As New Form2()
        form2.Show()
    End Sub

    Private Sub ButtonHapus_Click(sender As Object, e As EventArgs) Handles
btnHapus.Click
        Dim judul As String = txtHapus.Text.Trim()

        If Not String.IsNullOrEmpty(judul) Then
            Dim index As Integer = CariIndexBuku(judul)
            If index <> -1 Then
                Module1.HapusBuku(judul)
                TampilkanDaftarBuku()
                txtHapus.Text = ""
```

```vb
                MessageBox.Show("Buku Berhasil Dihapus", "Informasi",
MessageBoxButtons.OK, MessageBoxIcon.Information)
            Else
                MessageBox.Show("Buku dengan judul tersebut tidak ditemukan.",
"Peringatan", MessageBoxButtons.OK, MessageBoxIcon.Information)
            End If
        Else
            MessageBox.Show("Masukkan judul buku yang ingin dihapus.", "Peringatan",
MessageBoxButtons.OK, MessageBoxIcon.Information)
        End If
    End Sub

    Private Function CariIndexBuku(ByVal judul As String) As Integer
        For i As Integer = 0 To Module1.JumlahBuku - 1
            If Module1.ListBuku(i).Judul = judul Then
                Return i
            End If
        Next
        Return -1
    End Function

    Private Sub TampilkanDaftarBuku()
        lvBuku.Items.Clear()
        For Each buku As Module1.Buku In Module1.ListBuku
            Dim item As New ListViewItem(buku.Judul)
            item.SubItems.Add(buku.Genre)
            lvBuku.Items.Add(item)
        Next
    End Sub
    Private Sub ButtonKeluar_Click(sender As Object, e As EventArgs) Handles
btnKeluar.Click
        Me.Close()
    End Sub

End Class
```

Form2.vb

```vb
Public Class Form2
    Private Sub Form2_Load(sender As Object, e As EventArgs) Handles MyBase.Load
        TampilkanDaftarBuku()
        lvBuku.Columns.Add("Judul", 120)
        lvBuku.Columns.Add("Genre", 120)
    End Sub

    Private Sub TampilkanDaftarBuku()
        lvBuku.Items.Clear()

        For i As Integer = 0 To JumlahBuku - 1
            Dim item As New ListViewItem(ListBuku(i).Judul)
            item.SubItems.Add(ListBuku(i).Genre)
            lvBuku.Items.Add(item)
        Next
    End Sub

    Private Sub ButtonKeluar_Click(sender As Object, e As EventArgs) Handles
btnKeluar.Click
        Me.Close()
    End Sub
End Class
```

Module1.vb

```vb
Module Module1
    Public Structure Buku
        Public Judul As String
        Public Genre As String
    End Structure

    Public ListBuku() As Buku
    Public JumlahBuku As Integer
    Public Sub InitializeListBuku()
        ReDim ListBuku(-1)
        JumlahBuku = 0
    End Sub
    Public Function IsJudulBukuExist(ByVal judul As String) As Boolean
        For Each buku As Buku In ListBuku
            If buku.Judul = judul Then
                Return True
            End If
        Next
        Return False
    End Function

    Public Sub TambahBuku(ByVal bukuBaru As Buku)
        If Not IsJudulBukuExist(bukuBaru.Judul) Then
            ReDim Preserve ListBuku(JumlahBuku)
            ListBuku(JumlahBuku) = bukuBaru
            JumlahBuku += 1
        End If
    End Sub
    Public Sub HapusBuku(ByVal judul As String)
        For i As Integer = 0 To JumlahBuku - 1
            If ListBuku(i).Judul = judul Then
                For j As Integer = i To JumlahBuku - 2
                    ListBuku(j) = ListBuku(j + 1)
                Next
                JumlahBuku -= 1
                ReDim Preserve ListBuku(JumlahBuku - 1)
                Exit For
            End If
        Next
    End Sub
End Module
```

https://www.youtube.com/watch?v=moityAJQi9U