LAMPIRAN A

Listing Program

Program pada Microsoft Visual Basic 6.0

LISTING PROGRAM PADA VISUAL BASIC 6.0

```
Dim q, ph As String
Dim z As Boolean
Private Declare Function GetPixel Lib "GDI32" (ByVal hdc As Long, ByVal x As
Long, ByVal y As Long) As Long
Private Declare Function SetPixel Lib "GDI32" (ByVal hdc As Long, ByVal x As
Long, ByVal y As Long, ByVal crColor As Long) As Long

Option Explicit

Private Sub Command2_Click()
Dim i As Integer, j As Integer
  Dim R As Integer, G As Integer, B As Integer
  Dim R2 As Integer, G2 As Integer, B2 As Integer
  Dim c As Long, c2 As Long
  Dim t As Integer

  t = 55
  Picture2.Cls
  Picture2.DrawWidth = 1

  For i = 0 To Picture1.ScaleWidth
     For j = 0 To Picture1.ScaleHeight

        c = GetPixel(Picture1.hdc, i, j)

        R = c Mod 256
        G = (c \ 256) Mod 256
        B = (c \ 256 \ 256) Mod 256

        c2 = Picture4.BackColor
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        R2 = c2 Mod 256
        G2 = (c2 \ 256) Mod 256
        B2 = (c2 \ 256 \ 256) Mod 256

        If Abs(R - R2) < t And Abs(G - G2) < t And Abs(B - B2) < t Then

          SetPixel Picture2.hdc, i, j, vbWhite

        Else

          SetPixel Picture2.hdc, i, j, vbBlack

        End If

      Next j
   Next i
End Sub



Private Sub command5_click()
Dim R As Integer
   Dim G As Integer
   Dim B As Integer
   Dim warna As String
   Dim warna2 As String
   Dim R2 As Integer
   Dim G2 As Integer
   Dim B2 As Integer
   Dim mse As Long
   mse = 0
   Dim i, j As Integer
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    For i = 0 To Picture3.ScaleWidth
    For j = 0 To Picture3.ScaleHeight
       warna = GetPixel(Picture3.hdc, i, j)
       R = warna Mod 256
       G = (warna \ 256) Mod 256
       B = (warna \ 256 \ 256) Mod 256
       warna = (R + G + B) / 3
       warna2 = GetPixel(Picture5.hdc, i, j)
       R2 = warna2 Mod 256
       G2 = (warna2 \ 256) Mod 256
       B2 = (warna2 \ 256 \ 256) Mod 256
       warna2 = (R2 + G2 + B2) / 3
       mse = mse + (warna - warna2) ^ 2
    Next j
    Next i
    MsgBox mse
    mse = mse / (Picture3.ScaleWidth * Picture3.ScaleHeight)
    Text3.Text = mse
End Sub

Private Sub Command7_Click()
CommonDialog3.ShowSave
ph = CommonDialog3.FileName
If Len(ph) > 0 Then
  SavePicture Picture3.Image, ph
End If
End Sub

Private Sub Picture1_MouseDown(Button As Integer, Shift As Integer, x As
Single, y As Single)
z = True
If z Then
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Picture4.BackColor = Picture1.Point(x, y)
End If
End Sub

Private Sub Picture1_MouseUp(Button As Integer, Shift As Integer, x As Single,
y As Single)
z = False
End Sub


Private Sub Command1_Click()
LoadPic Picture1
q = CommonDialog1.FileName
Arrange
End Sub
Sub LoadPic(BackgroundPic As Control)

On Error GoTo err:
With CommonDialog1
.DialogTitle = "Select a picture"
.Filter = "*.*|*.*"
.ShowOpen
End With

BackgroundPic.Picture = LoadPicture(CommonDialog1.FileName)

Exit Sub
err:
MsgBox "an error occured while loading " & CommonDialog1.FileName
End Sub
Private Sub Command3_Click()
If Option1 = True Then
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Call with_database
End If
If Option2 = True Then
Call without_database
End If
End Sub

Private Sub with_database()
Dim i As Integer, j As Integer
  Dim c As Long, c2 As Long
  Dim R As Long, G As Long, B As Long
  Dim R2 As Integer, G2 As Integer, B2 As Integer
  Dim color As Long
  Picture3.AutoRedraw = True
  Picture3.Cls
  Picture3.DrawWidth = 1

  For i = 0 To Picture1.ScaleWidth
    For j = 0 To Picture1.ScaleHeight
      'c = GetPixel(Picture1.hdc, i, j)
      'R = c Mod 256
      'G = (c \ 256) Mod 256
      'B = (c \ 256 \ 256) Mod 256
      If GetPixel(Picture2.hdc, i, j) = vbWhite Then
        'If (i - 1 > 0) Then
        'If (j - 1 > 0) Then
        R = 0
        R = R + (GetPixel(Picture5.hdc, i - 1, j - 1) Mod 256)
        R = R + (GetPixel(Picture5.hdc, i, j - 1) Mod 256)
        R = R + (GetPixel(Picture5.hdc, i + 1, j - 1) Mod 256)
        R = R + (GetPixel(Picture5.hdc, i - 1, j) Mod 256)
        R = R + (GetPixel(Picture1.hdc, i, j) Mod 256)
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R = R + (GetPixel(Picture5.hdc, i + 1, j) Mod 256)
R = R + (GetPixel(Picture5.hdc, i - 1, j + 1) Mod 256)
R = R + (GetPixel(Picture5.hdc, i, j + 1) Mod 256)
R = R + (GetPixel(Picture5.hdc, i + 1, j + 1) Mod 256)
R = Abs(R / 9)

G = 0
G = G + ((GetPixel(Picture5.hdc, i - 1, j - 1) \ 256) Mod 256)
G = G + ((GetPixel(Picture5.hdc, i, j - 1) \ 256) Mod 256)
G = G + ((GetPixel(Picture5.hdc, i + 1, j - 1) \ 256) Mod 256)
G = G + ((GetPixel(Picture5.hdc, i - 1, j) \ 256) Mod 256)
G = G + ((GetPixel(Picture1.hdc, i, j) \ 256) Mod 256)
G = G + ((GetPixel(Picture5.hdc, i + 1, j) \ 256) Mod 256)
G = G + ((GetPixel(Picture5.hdc, i - 1, j + 1) \ 256) Mod 256)
G = G + ((GetPixel(Picture5.hdc, i, j + 1) \ 256) Mod 256)
G = G + ((GetPixel(Picture5.hdc, i + 1, j + 1) \ 256) Mod 256)
G = Abs(G / 9)

B = 0
B = B + ((GetPixel(Picture5.hdc, i - 1, j - 1) \ 256 \ 256) Mod 256)
B = B + ((GetPixel(Picture5.hdc, i, j - 1) \ 256 \ 256) Mod 256)
B = B + ((GetPixel(Picture5.hdc, i + 1, j - 1) \ 256 \ 256) Mod 256)
B = B + ((GetPixel(Picture5.hdc, i - 1, j) \ 256 \ 256) Mod 256)
B = B + ((GetPixel(Picture1.hdc, i, j) \ 256 \ 256) Mod 256)
B = B + ((GetPixel(Picture5.hdc, i + 1, j) \ 256 \ 256) Mod 256)
B = B + ((GetPixel(Picture5.hdc, i - 1, j + 1) \ 256 \ 256) Mod 256)
B = B + ((GetPixel(Picture5.hdc, i, j + 1) \ 256 \ 256) Mod 256)
B = B + ((GetPixel(Picture5.hdc, i + 1, j + 1) \ 256 \ 256) Mod 256)
B = Abs(B / 9)

SetPixel Picture3.hdc, i, j, RGB(R, G, B)
SetPixel Picture2.hdc, i, j, vbBlack
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            'End If
            'End If
          Else
            SetPixel Picture3.hdc, i, j, GetPixel(Picture1.hdc, i, j)
          End If

      Next j
  Next i
End Sub


Private Sub without_database()
Dim i, j, k, l, sb, tb, sr, tr, sg, tg As Integer
  Dim c, c2 As Long
  Dim R2 As Integer, G2 As Integer, B2 As Integer
  Dim R As Long, G As Long, B As Long
  Dim color As Long
  List1.Clear
  Picture3.AutoRedraw = True
  Picture3.Cls
  Picture3.DrawWidth = 1

  For i = 0 To Picture2.ScaleWidth
    For j = 0 To Picture2.ScaleHeight
      If GetPixel(Picture2.hdc, i, j) = vbWhite Then
        R = 0
        tr = 0
        G = 0
        tg = 0
        B = 0
        tb = 0
        For k = i - 10 To i
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        For l = j - 10 To j
          sr = (GetPixel(Picture1.hdc, k, l) Mod 256)
          If sr > 55 Then
            R = R + sr
            tr = tr + 1
          End If

          sg = ((GetPixel(Picture1.hdc, k, l) \ 256) Mod 256)
          If sg > 55 Then
            G = G + sg
            tg = tg + 1
          End If

          sb = ((GetPixel(Picture1.hdc, k, l) \ 256 \ 256) Mod 256)
          If sb > 55 Then
            B = B + sb
            tb = tb + 1
          End If
        Next l
      Next k
      If tr > 0 Then R = Int(R / tr)
      'If R < 40 Then R = R + 55
      If tg > 0 Then G = Int(G / tg)
      'If G < 40 Then G = G + 55
      If tb > 0 Then B = Int(B / tb)
      'If B < 40 Then B = B + 55


'SetPixel Picture3.hdc, i - 1, j - 1, RGB(R, G, B) ' GetPixel(Picture2.hdc, i, j)
'SetPixel Picture3.hdc, i, j - 1, RGB(R, G, B)
'SetPixel Picture3.hdc, i + 1, j - 1, RGB(R, G, B)
'SetPixel Picture3.hdc, i - 1, j, RGB(R, G, B)
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      ‘SetPixel Picture3.hdc, i, j, RGB(R, G, B)
       'SetPixel Picture3.hdc, i + 1, j, RGB(R, G, B)
       'SetPixel Picture3.hdc, i - 1, j + 1, RGB(R, G, B)
       'SetPixel Picture3.hdc, i + 1, j, RGB(R, G, B)
       'SetPixel Picture3.hdc, i + 1, j + 1, RGB(R, G, B) ' GetPixel(Picture2.hdc, i, j)
          SetPixel Picture2.hdc, i, j, RGB(R, G, B)
          Else
            SetPixel Picture3.hdc, i, j, GetPixel(Picture1.hdc, i, j)
          End If
        Next j
    Next i
End Sub

Private Sub Command4_Click()
LoadPic2 Picture5
q = CommonDialog1.FileName
Arrange
End Sub
Sub LoadPic2(BackgroundPic As Control)

On Error GoTo err:
With CommonDialog2
.DialogTitle = "Select a picture as database"
.Filter = "*.*|*.*"
.ShowOpen
End With


BackgroundPic.Picture = LoadPicture(CommonDialog2.FileName)


Exit Sub
```

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err:
MsgBox "an error occured while loading " & CommonDialog2.FileName
End Sub
Sub Arrange()
Picture1.Move Picture5.Left + Picture5.Width + 20, Picture5.Top,
Picture5.Width, Picture5.Height
Picture2.Move Picture1.Left + Picture1.Width + 20, Picture1.Top,
Picture1.Width, Picture1.Height
Picture3.Move Picture2.Left + Picture2.Width + 20, Picture2.Top,
Picture1.Width, Picture1.Height
Frame3.Move Picture5.Left, Picture5.Top + Picture5.Height + 20
Frame1.Move Frame3.Left, Frame3.Top + Frame3.Height + 20
End Sub


Private Sub Command6_Click()
End
End Sub
```