

ShapedDemo2.bas

This code accompanies the article [Creating a Nonrectangular Window](#)

```
' ShapedDemo2.bas - Janet Terra
'Demo to accompany
'Demo - Creating a Nonrectangular Window
'LBPE July, 2011
'Originally appeared in
'LB Newsletter #132, May, 2005

Nomainwin

'Define the Window
WindowWidth = 250
WindowHeight = 250
UpperLeftX = int((DisplayWidth-WindowWidth)/2)
UpperLeftY = int((DisplayHeight-WindowHeight)/2)

stylebits #ShapeWindow.gb, 0, _WS_BORDER, 0, 0
graphicbox #ShapeWindow.gb, 0, 0, 250, 250
stylebits #ShapeWindow, 0, 0, _WS_EX_TOPMOST, 0

open "Shape Window" for window_popup as #ShapeWindow
#ShapeWindow "trapclose [closeShapeWindow]"

'Obtain the Handles and Device Controls
hBw = hWnd(#ShapeWindow)
hBgb = hWnd(#ShapeWindow.gb)
hDCw = GetDC(hBw)
hDCgb = GetDC(hBgb)

'Draw the Shape
#ShapeWindow.gb "down; fill black"
gosub [drawShape]
wait

[closeShapeWindow]
call DelObject hBw
close #ShapeWindow
end
```

```
[drawShape]
'Set region to null
hRgn = RectRegion(0, 0, 0, 0)

'Draw a Circle
#ShapeWindow.gb "color darkred; backcolor red"
#ShapeWindow.gb "place 100 100; circlefilled 75"

'Draw a Rectangle
#ShapeWindow.gb "color darkblue; backcolor blue"
#ShapeWindow.gb "place 50 200; boxfilled 225 225"

'Set background to Transparent
call SetBkMode hDCgb, 1
'Release memory
call ReleaseDC hBgb, hDCbg

'Format and write text
#ShapeWindow.gb "font Courier_New 16 86 Bold"
#ShapeWindow.gb "color Darkgreen; place 5 210"
#ShapeWindow.gb "\Alt-F4 to Close"
#ShapeWindow.gb "flush"

'Read each pixel.  Add each pixel to hRgn only if
'color is NOT black (0)
for x = 0 to 250
    for y = 0 to 250
        if pixelColor(hDCgb, x, y) <> 0 then
            hTempRgn = RectRegion(x, y, x+1, y+1)
            newRgn = CombineRgn(hRgn, hRgn, hTempRgn, 3)
            call DelObject hTempRgn
        end if
    next y
next x

'Set the region as the Window
call SetWindowRgn hBw, hRgn, 1
return

function GetDC(hW)
    call dll #user32, "GetDC", _
        hW as ulong, _
        GetDC as ulong
end function

function RectRegion(ulx, uly, width, height)
```

```
call dll #gdi32, "CreateRectRgn", _
    ulx as long, _
    uly as long, _
    width as long, _
    height as long, _
    RectRegion as ulong
end function

function CombineRgn(hDest, hSource1, hSource2, combineMode)
    call dll #gdi32, "CombineRgn", _
        hDest as ulong, _
        hSource1 as ulong, _
        hSource2 as ulong, _
        combineMode as long, _
        CombineRgn as ulong
end function

sub DelObject hObject
    call dll #gdi32, "DeleteObject",_
        hObject as ulong,_
        null as long
end sub

sub ReleaseDC hWnd, hDC
    call dll #user32, "ReleaseDC", _
        hWnd as ulong,_
        hDC as ulong, _
        null as long
end sub

sub SetWindowRgn hWnd, hRgn, redrawMode
    call dll #user32, "SetWindowRgn", _
        hWnd as ulong,_
        hRgn as ulong,_
        redrawMode as long,_
        SetWindowRgn as long
end sub

sub SetBkMode hDC, flag
    call dll #gdi32, "SetBkMode", _
        hDC as ulong,_
        flag as long, _
        null as long
end sub

function pixelColor(hDC, x, y)
```

```
call dll #gdi32, "GetPixel", _
    hDC as ulong, _
    x as long, _
    y as long, _
    pixelColor as long
end function
```