

```
1 Imports System.Drawing.Drawing2D
2 Imports System.Runtime.InteropServices
3
4 Public Class Login
5
6     'Campos
7     Private borderRadius As Integer = 20
8     Private borderSize As Integer = 5
9     Private borderColor As Color = Color.Green
10    'Constructor
11    Public Sub New()
12        InitializeComponent()
13        ' Add any initialization after the InitializeComponent() call.
14        Me.FormBorderStyle = FormBorderStyle.None
15        Me.Padding = New Padding(borderSize)
16        Me.PanelTitleBar.BackColor = borderColor
17        Me.BackColor = borderColor
18    End Sub
19
20    'agarrar form
21    <DllImport("user32.DLL", EntryPoint:="ReleaseCapture")>
22    Private Shared Sub ReleaseCapture()
23    End Sub
24    <DllImport("user32.DLL", EntryPoint:="SendMessage")>
25    Private Shared Sub SendMessage(ByVal hWnd As System.IntPtr, ByVal wParam As Integer, ByVal lParam As Integer)
26    End Sub
27
28    Private Sub panelTitleBar_MouseDown(ByVal sender As Object, ByVal e As MouseEventArgs) Handles MyBase.MouseDown, Panel1.MouseDown, PanelTitleBar.MouseDown
29        ReleaseCapture()
30        SendMessage(Me.Handle, &H112, &HF012, 0)
31    End Sub
32
33    'Minimizar form sin bordes desde la barra de tara
34    Protected Overrides ReadOnly Property CreateParams As CreateParams
35        Get
36            Dim cp As CreateParams = MyBase.CreateParams
37            cp.Style = cp.Style Or &H20000
38            Return cp
39        End Get
40    End Property
41
42
43    Private Structure FormBoundsColors
44        Public TopLeftColor As Color
45        Public TopRightColor As Color
46        Public BottomLeftColor As Color
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47     Public BottomRightColor As Color
48 End Structure
49
50 Private Function GetFormBoundsColors() As FormBoundsColors
51     Dim fbColor = New FormBoundsColors()
52     Using bmp = New Bitmap(1, 1)
53         Using graph As Graphics = Graphics.FromImage(bmp)
54             Dim rectBmp As New Rectangle(0, 0, 1, 1)
55             'Top Left
56             rectBmp.X = Me.Bounds.X - 1
57             rectBmp.Y = Me.Bounds.Y
58             graph.CopyFromScreen(rectBmp.Location, Point.Empty, rectBmp.Size)
59             fbColor.TopLeftColor = bmp.GetPixel(0, 0)
60             'Top Right
61             rectBmp.X = Me.Bounds.Right
62             rectBmp.Y = Me.Bounds.Y
63             graph.CopyFromScreen(rectBmp.Location, Point.Empty, rectBmp.Size)
64             fbColor.TopRightColor = bmp.GetPixel(0, 0)
65             'Bottom Left
66             rectBmp.X = Me.Bounds.X
67             rectBmp.Y = Me.Bounds.Bottom
68             graph.CopyFromScreen(rectBmp.Location, Point.Empty, rectBmp.Size)
69             fbColor.BottomLeftColor = bmp.GetPixel(0, 0)
70             'Bottom Right
71             rectBmp.X = Me.Bounds.Right
72             rectBmp.Y = Me.Bounds.Bottom
73             graph.CopyFromScreen(rectBmp.Location, Point.Empty, rectBmp.Size)
74             fbColor.BottomRightColor = bmp.GetPixel(0, 0)
75         End Using
76     End Using
77     Return fbColor
78 End Function
79
80 Private Function GetRoundedPath(rect As Rectangle, radius As Single) As GraphicsPath
81     Dim path As GraphicsPath = New GraphicsPath()
82     Dim curveSize As Single = radius * 2.0F
83     path.StartFigure()
84     path.AddArc(rect.X, rect.Y, curveSize, curveSize, 180, 90)
85     path.AddArc(rect.Right - curveSize, rect.Y, curveSize, curveSize, 270, 90)
86     path.AddArc(rect.Right - curveSize, rect.Bottom - curveSize, curveSize, curveSize, 0, 90)
87     path.AddArc(rect.X, rect.Bottom - curveSize, curveSize, curveSize, 90, 90)
```

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88     path.CloseFigure()
89     Return path
90 End Function
91
92 Private Sub FormRegionAndBorder(form As Form, radius As Single, graph As Graphics, borderColor As Color, borderSize As Single)
93     If Me.WindowState <> FormWindowState.Minimized Then
94         Using roundPath As GraphicsPath = GetRoundedPath
95             (form.ClientRectangle, radius)
96             Using penBorder As Pen = New Pen(borderColor, borderSize)
97                 Using transform As Matrix = New Matrix()
98                     graph.SmoothingMode = SmoothingMode.AntiAlias
99                     form.Region = New Region(roundPath)
100                     If borderSize >= 1 Then
101                         Dim rect As Rectangle = form.ClientRectangle
102                         Dim scaleX As Single = 1.0F - ((borderSize + 1) / rect.Width)
103                         Dim scaleY As Single = 1.0F - ((borderSize + 1) / rect.Height)
104                         transform.Scale(scaleX, scaleY)
105                         transform.Translate(borderSize / 1.6F, borderSize / 1.6F)
106                         graph.Transform = transform
107                         graph.DrawPath(penBorder, roundPath)
108                     End If
109                 End Using
110             End Using
111         End Using
112     End If
113 End Sub
114
115
116
117 Private Sub DrawPath(rectForm As Rectangle, graphics As Graphics, color As Color)
118     Using roundPath As GraphicsPath = GetRoundedPath(rectForm, borderRadius)
119         Using penBorder As Pen = New Pen(color, 3)
120             graphics.DrawPath(penBorder, roundPath)
121         End Using
122     End Using
123 End Sub
124
125
126 Private Sub ControlRegionAndBorder(control As Control, radius As Single, graph As Graphics, borderColor As Color)
127     Using roundPath As GraphicsPath = GetRoundedPath
128         (control.ClientRectangle, radius)
```

```
128         Using penBorder As Pen = New Pen(borderColor, 1)
129             graph.SmoothingMode = SmoothingMode.AntiAlias
130             control.Region = New Region(roundPath)
131             graph.DrawPath(penBorder, roundPath)
132         End Using
133     End Using
134 End Sub
135
136 Private Sub Login_Paint(sender As Object, e As PaintEventArgs) Handles Login\_Paint
137     MyBase.Paint
138     '→ Smooth Outer Border
139     e.Graphics.SmoothingMode = SmoothingMode.AntiAlias
140     Dim rectForm As Rectangle = Me.ClientRectangle
141     Dim mWidht As Integer = rectForm.Width / 2
142     Dim mHeight As Integer = rectForm.Height / 2
143     Dim fbColor = GetFormBoundsColors()
144     'Top Left
145     DrawPath(rectForm, e.Graphics, fbColor.TopLeftColor)
146     'Top Right
147     Dim rectTopRight As New Rectangle(rectForm.Right - mWidht, rectForm.Y, mWidht, mHeight)
148     DrawPath(rectTopRight, e.Graphics, fbColor.TopRightColor)
149     'Bottom Left
150     Dim rectBottomLeft As New Rectangle(rectForm.X, rectForm.Bottom - mHeight, mWidht, mHeight)
151     DrawPath(rectBottomLeft, e.Graphics, fbColor.BottomLeftColor)
152     'Bottom Right
153     Dim rectBottomRight As New Rectangle(rectForm.Right - mWidht, rectForm.Bottom - mHeight, mWidht, mHeight)
154     DrawPath(rectBottomRight, e.Graphics, fbColor.BottomRightColor)
155     '→ Set Rounded Region and Border
156     FormRegionAndBorder(Me, borderRadius, e.Graphics, borderColor, borderRadius)
157 End Sub
158
159 Private Sub Login_ResizeEnd(sender As Object, e As EventArgs) Handles Login\_ResizeEnd
160     MyBase.ResizeEnd
161     Me.Invalidate()
162 End Sub
163
164 Private Sub Login_SizeChanged(sender As Object, e As EventArgs) Handles Login\_SizeChanged
165     MyBase.SizeChanged
166     Me.Invalidate()
167 End Sub
168
169 Private Sub Login_Activated(sender As Object, e As EventArgs) Handles Login\_Activated
170     MyBase.Activated
171     Me.Invalidate()
172 End Sub
```

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169
170     Private Sub Panel1_Paint(sender As Object, e As PaintEventArgs) ➤
171         Handles Panel1.Paint
172         ControlRegionAndBorder(Panel1, borderRadius - (borderSize / 2.0F), ➤
173             e.Graphics, borderColor)
174     End Sub
175
176     Private Sub RoundButton(btn As Button)
177         btn.FlatStyle = FlatStyle.Flat
178         btn.FlatAppearance.BorderSize = 0
179         btn.BackColor = Color.DarkGreen
180         btn.ForeColor = Color.White
181         btn.Cursor = Cursors.Hand
182         btn.Font = New Font("Century Gothic", 16)
183
184         Dim Radius As New Drawing2D.GraphicsPath
185
186         Radius.StartFigure()
187         'appends an elliptical arc to the current figure
188         'left corner top
189         Radius.AddArc(New Rectangle(0, 0, 20, 20), 180, 90)
190         'appends a line segment to the current figure
191         Radius.AddLine(10, 0, btn.Width - 20, 0)
192         'appends an elliptical arc to the current figure
193         'right corner top
194         Radius.AddArc(New Rectangle(btn.Width - 20, 0, 20, 20), -90, 90)
195         'appends a line segment to the current figure
196         Radius.AddLine(btnLogin.Width, 20, btn.Width, btn.Height - 10)
197         'appends an elliptical arc to the current figure
198         'right corner bottom
199         Radius.AddArc(New Rectangle(btn.Width - 25, btn.Height - 25, 25, ➤
200             25), 0, 90)
201         'appends a line segment to the current figure
202         'left corner bottom
203         Radius.AddLine(btn.Width - 10, btn.Width, 20, btn.Height)
204         'appends an elliptical arc to the current figure
205         Radius.AddArc(New Rectangle(0, btn.Height - 20, 20, 20), 90, 90)
206         'Close the current figure and start a new one.
207         Radius.CloseFigure()
208         'set the window associated with the control
209         btnLogin.Region = New Region(Radius)
210     End Sub
211
212
213     Private Sub Form2_Load(sender As Object, e As EventArgs) Handles ➤
214         MyBase.Load
```

```
214         RoundButton(btnLogin)
215     End Sub
216
217     Private Sub btnLogin_Click(sender As Object, e As EventArgs) Handles ➤
218         btnLogin.Click
219         Inicio.Show()
220         Me.Hide()
221     End Sub
222
223 End Class
```