

Desenvolvimento de Jogo 2D com FireMonkey

Montagem do Formulario

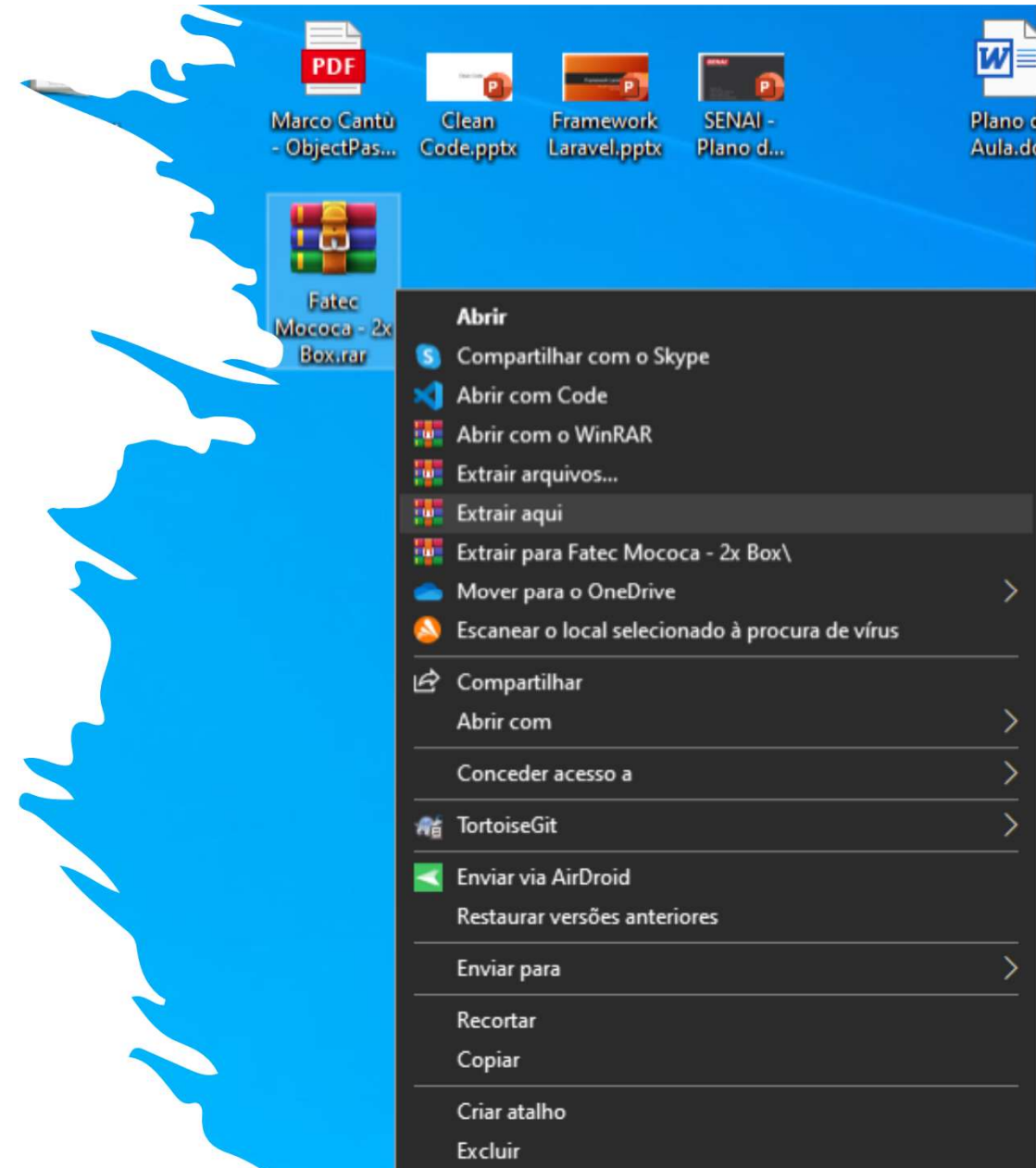
Professor: Maicon Pires

4ª Semana Tecnológica - 2023

Fatec Mococa

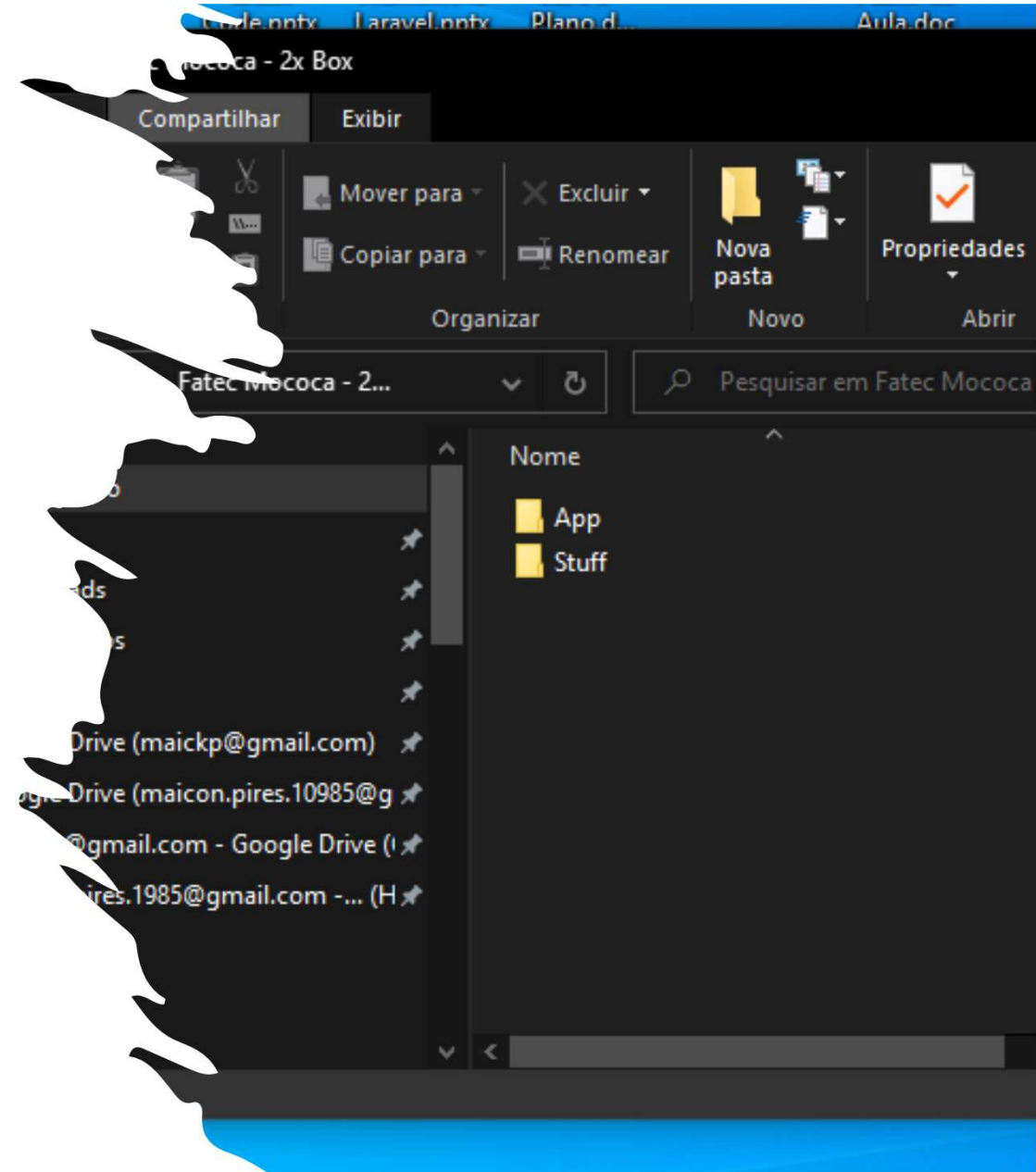
Criação das pastas do projeto

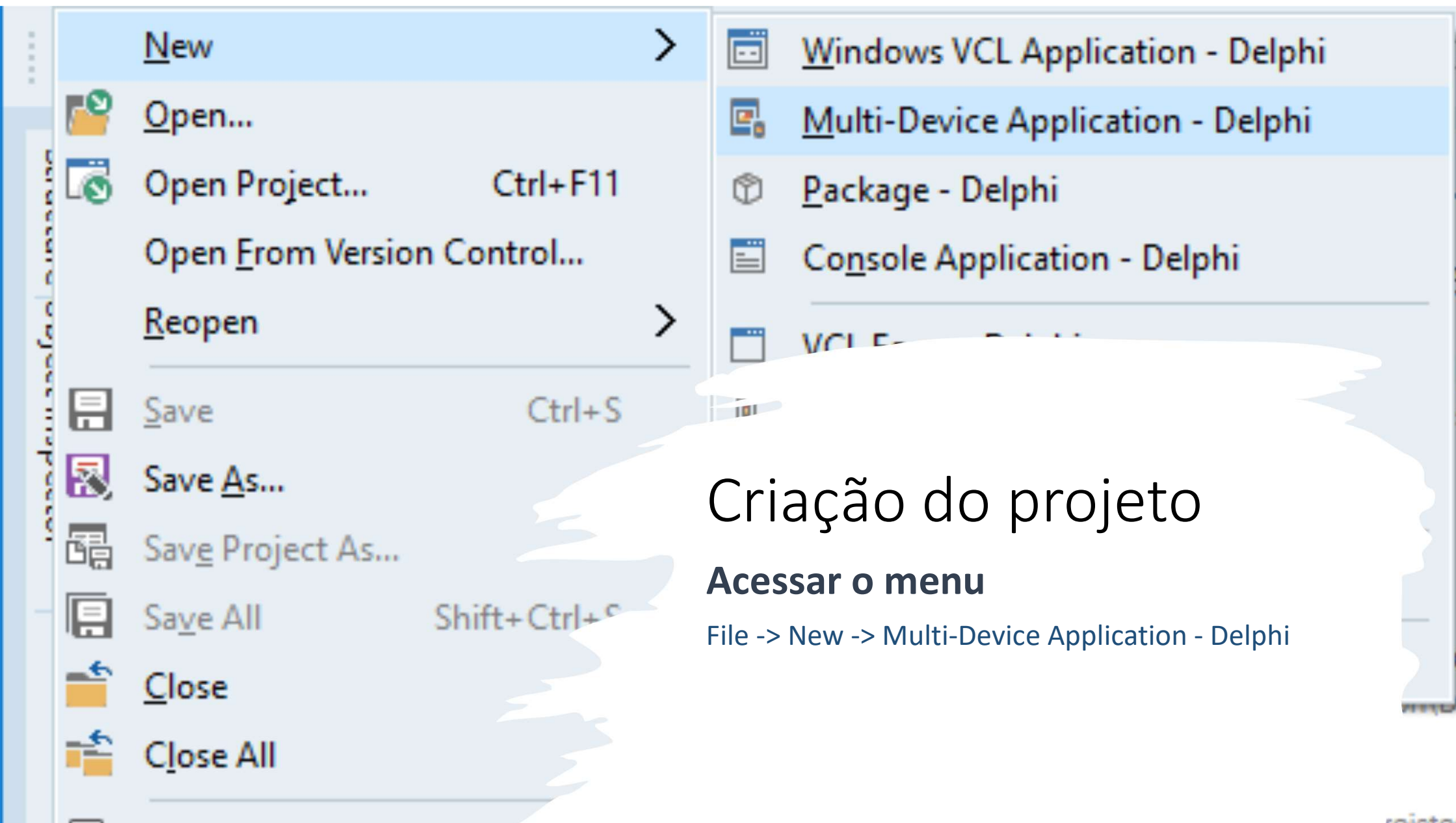
- Copie o arquivo compactado para Área de Trabalho
- Extraia o arquivo
- Confira as pastas



Criação das pastas do projeto

- Copie o arquivo compactado para Área de Trabalho
- Extraia o arquivo
- Confira as pastas





Criação do projeto

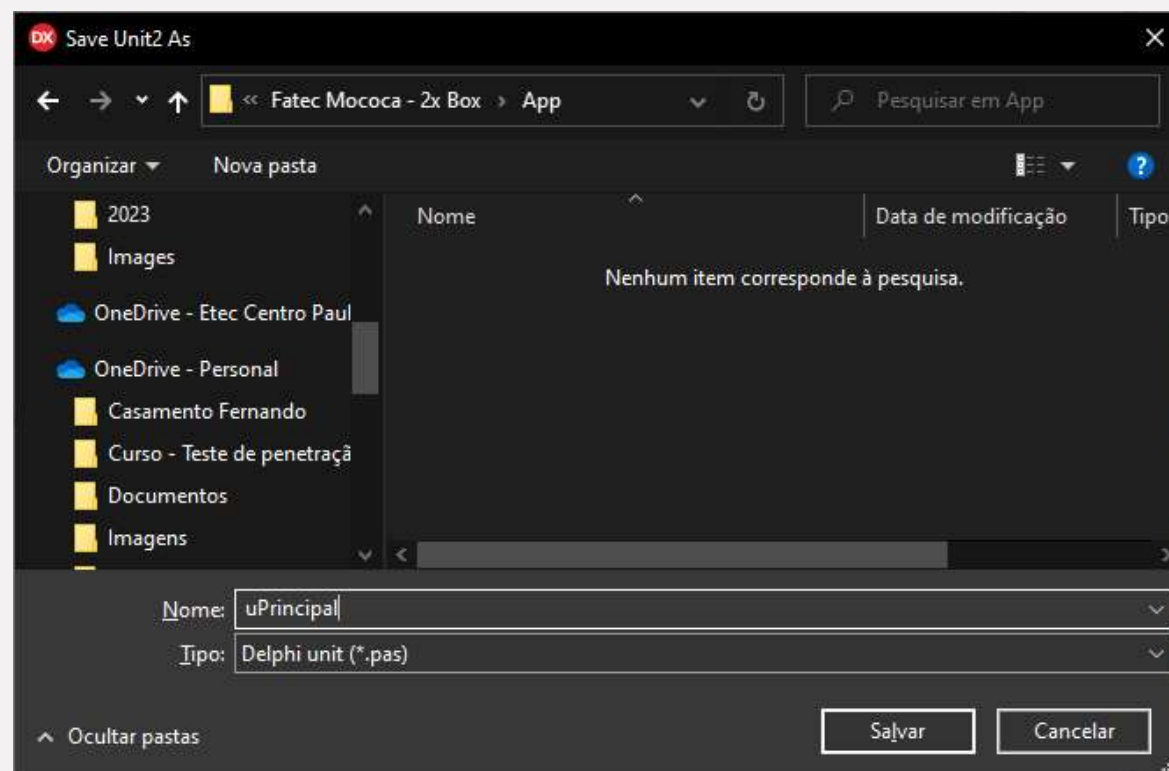
Acessar o menu

File -> New -> Multi-Device Application - Delphi

Salvar Projeto

Acesse o menu

File -> Save All

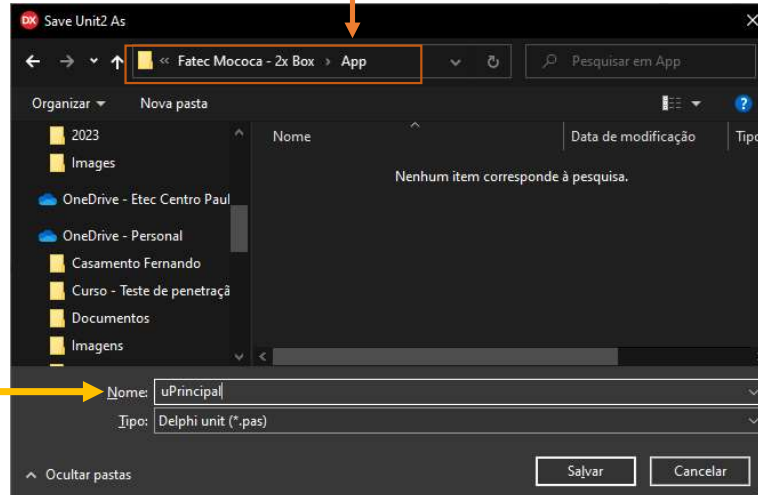


Salvar Projeto

UNIT: uPrincipal.pas

Pasta do projeto

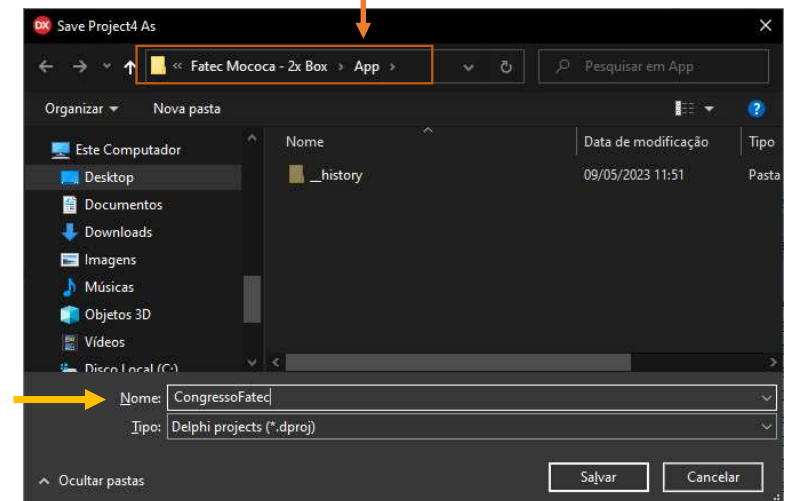
Nome da Unit



Projeto: CongressoFatec.dproj

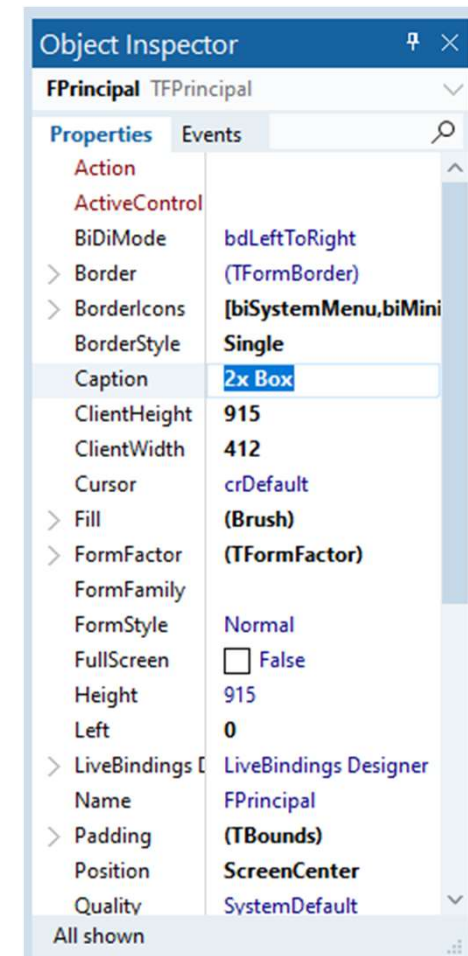
Pasta do projeto

Nome do Projeto



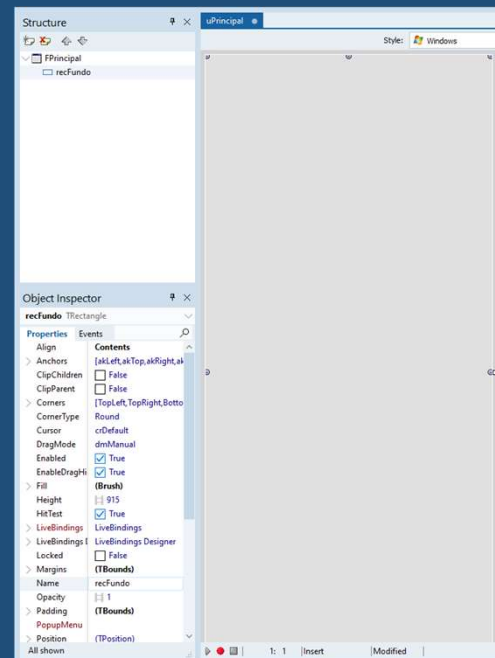
Formatação do Formulário

- Formate a formulário conforme abaixo listado:
- FPrincipal: TFPrincipal
 - Caption = '2x Box'
 - BorderIcons = [biSystemMenu, biMinimize]
 - BorderStyle = Single
 - ClientHeight = 915
 - ClientWidth = 412
 - Position = ScreenCenter



Cor de fundo

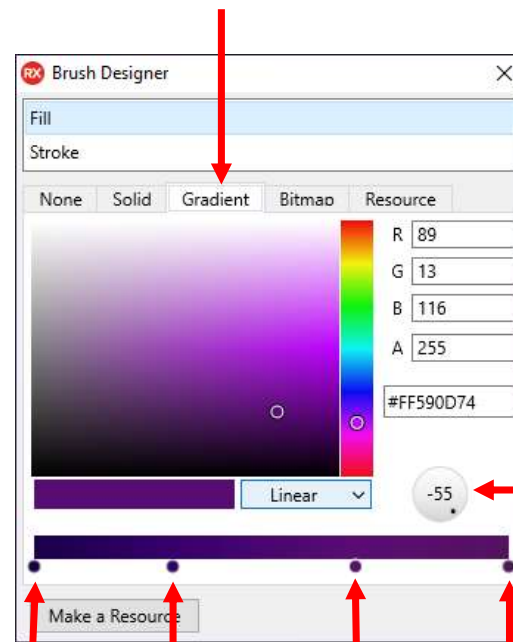
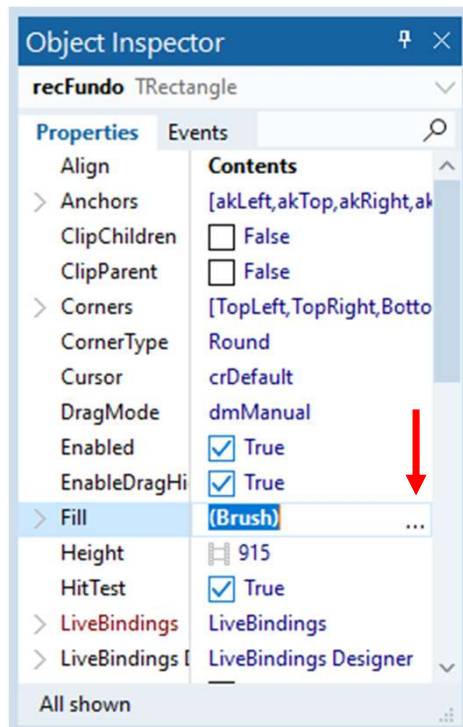
- Adicione um TRectangle e configure conforme abaixo
- recFundo: Trectangle
 - Align = Contents
 - Stroke.Kind = None



Cor de Fundo

Altere a propriedade **Fill**

Tipo do preenchimento



#FF190049

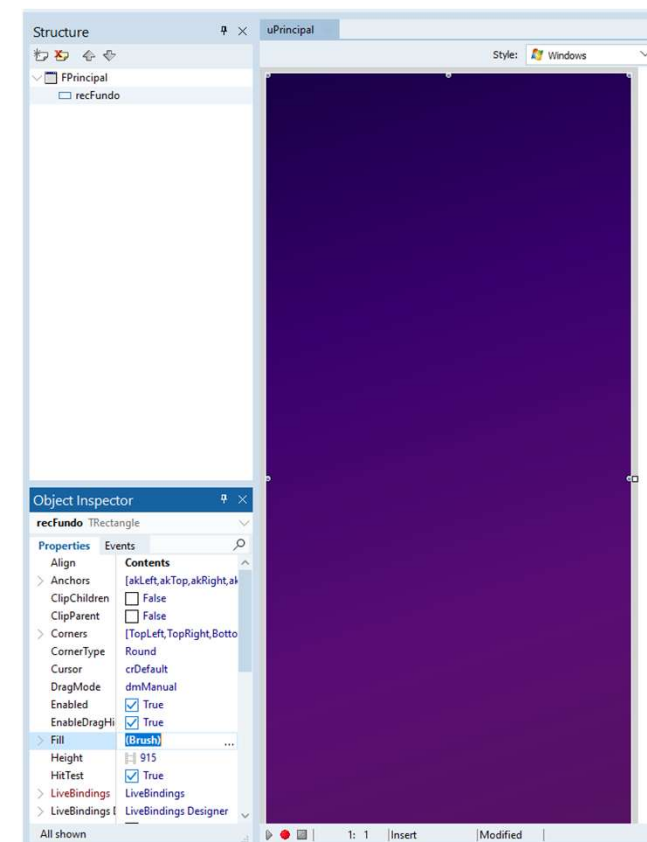
#FF38006C

#FF590D74

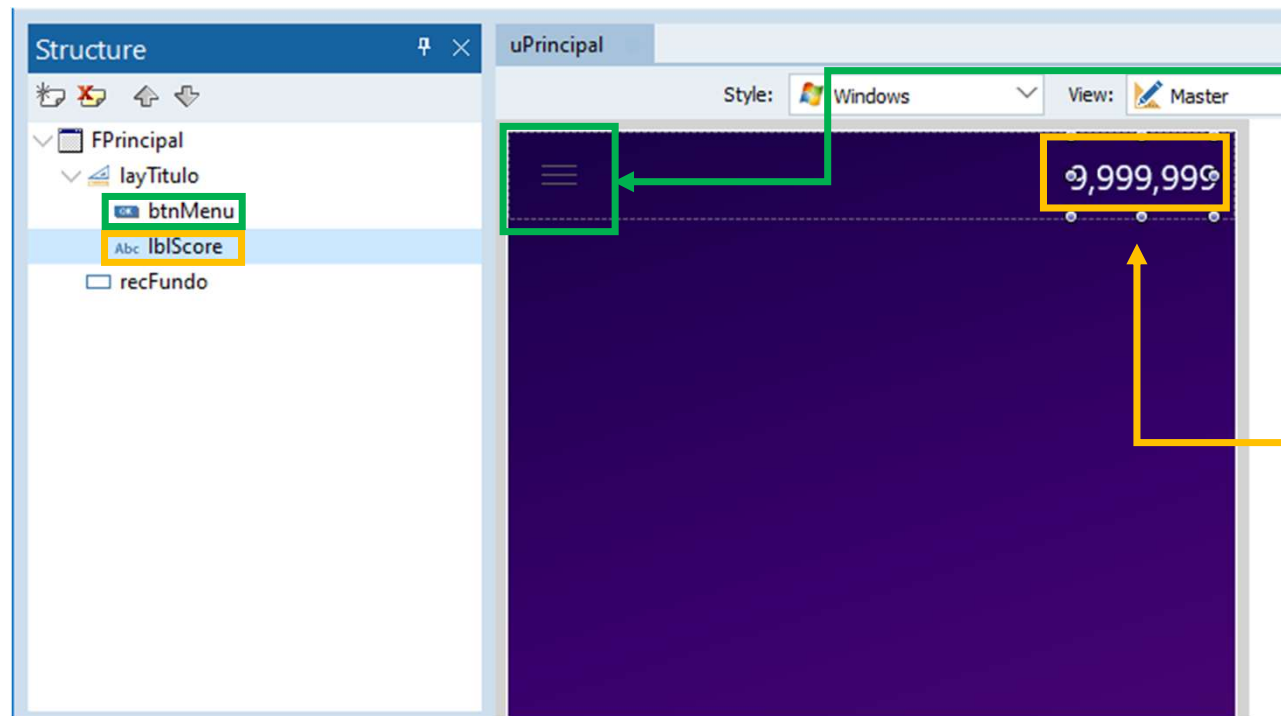
#FF551360

Tipo do preenchimento

Tipo do preenchimento



Barra de Título



- **layTitulo: TLayout**

- Align = Top
- Size.Width = 412
- Size.Height = 50

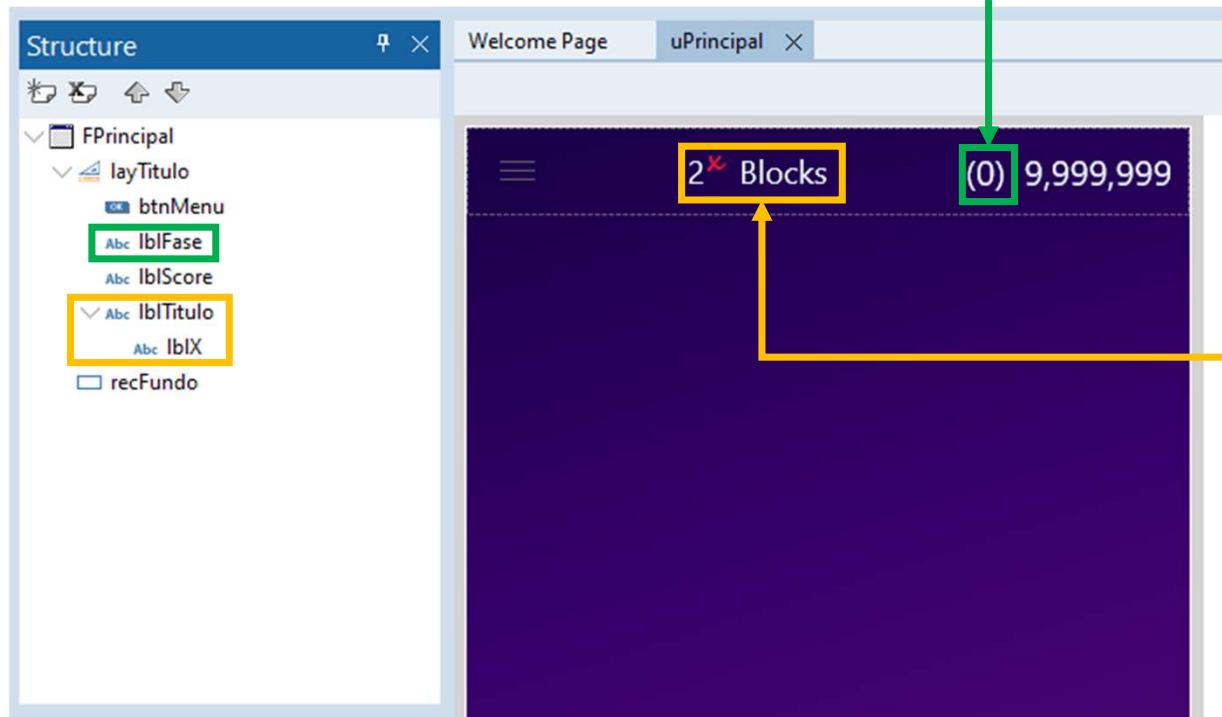
- **btnMenu: TButton**

- Align = Left
- Margins.Left = 5
- Size.Width = 48
- Size.Height = 50
- StyleLookup = 'detailstoolbutton'
- Text = 'btnMenu'

- **lblScore: TLabel**

- Align = Right
- AutoSize = True
- StyledSettings = [Family, Style]
- Margins.Right = 10
- Size.Width = 85
- Size.Height = 50
- TextSettings.Font.Size = 20
- TextSettings.FontColor = claAzure
- TextSettings.HorzAlign = Trailing
- TextSettings.WordWrap = False
- Text = '9,999,999'

Barra de Título



- **IblFase: TLabel**

- Align = Right
- AutoSize = True
- Margins.Right = 10
- TextSettings.Font.Size = 20
- TextSettings.FontColor = claAzure
- TextSettings.HorzAlign = Trailing
- TextSettings.WordWrap = False
- StyledSettings = [Family, Style]
- Text = '(0)'

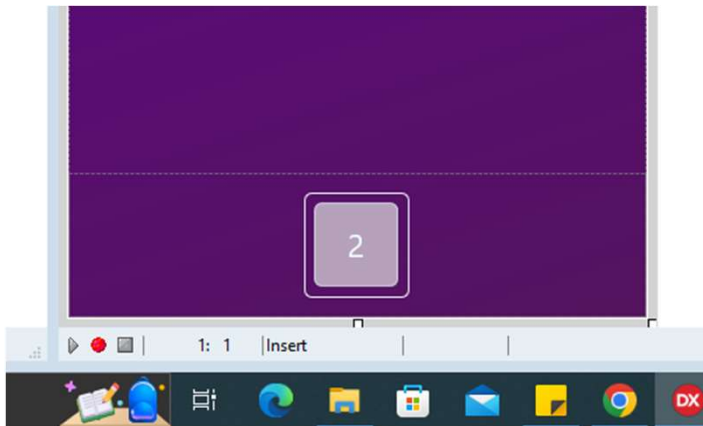
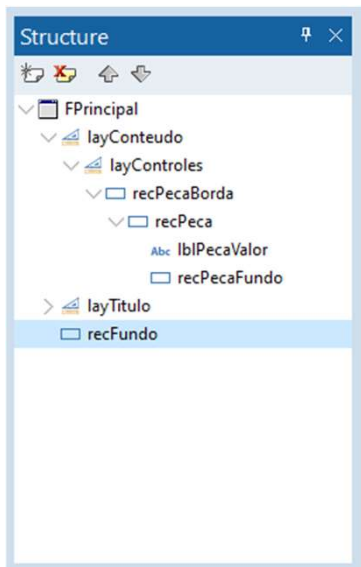
- **IblTitulo: TLabel**

- Align = Center
- StyledSettings = [Family, Style]
- Locked = True
- Size.Width = 85
- Size.Height = 25
- TextSettings.Font.Size = 18
- TextSettings.FontColor = claAzure
- Text = '2 Blocks'

- **IblX: TLabel**

- StyledSettings = []
- Position.X = 10
- Position.Y = -2
- Size.Width = 13
- Size.Height = 18
- TextSettings.Font.Family = 'Segoe Script'
- TextSettings.Font.Size = 16
- TextSettings.Font.Style = Bold
- TextSettings.FontColor = claCrimson
- Text = 'x'

Barra de Controles



- layConteudo: TLayout

- Align = Client
- layControles: TLayout

- Align = Bottom
- Position.Y = 762
- Size.Height = 103
- recPecaBorda: TRectangle
 - Align = Center
 - Fill.Kind = None
 - Size.Width = 75
 - Size.Height = 75
 - Stroke.Color = claAliceblue
 - XRadius = 5
 - YRadius = 5

- recPeca: TRectangle

- Tag = 2
- Align = Center
- Fill.Kind = None
- Size.Width = 60
- Size.Height = 60
- Stroke.Kind = None

- layConteudo: TLayout

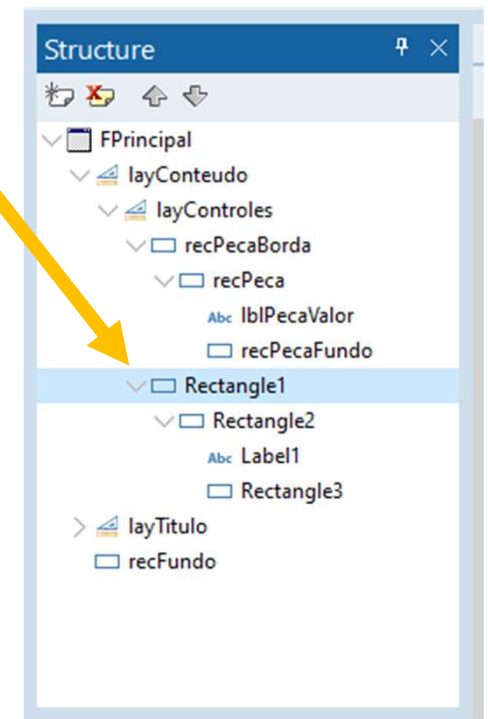
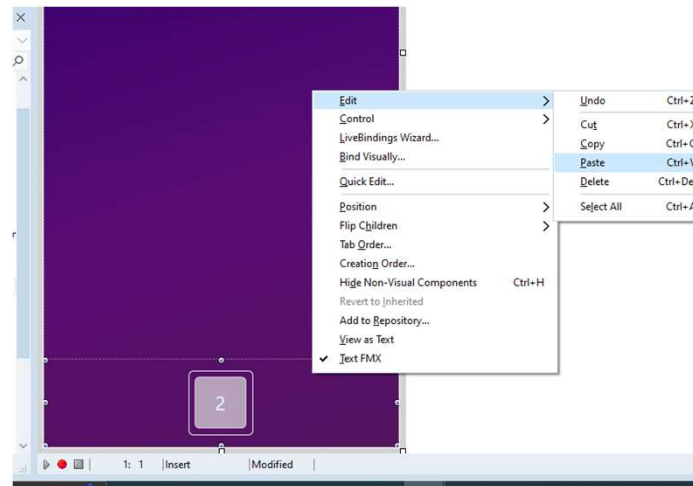
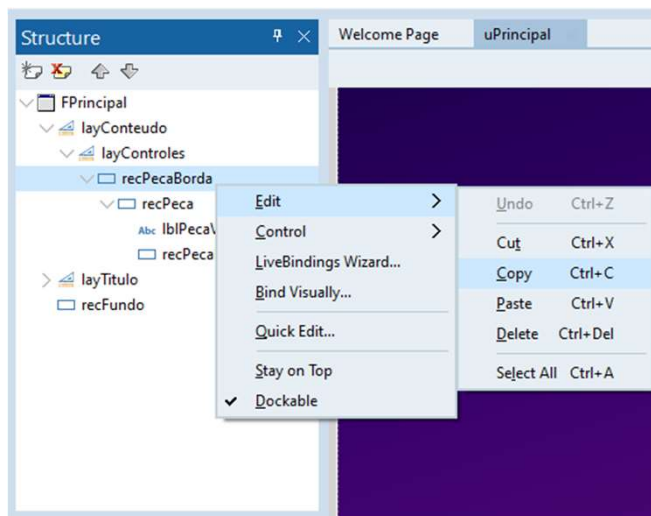
- Align = Client
- layControles: TLayout

- recPecaFundo: TRectangle
 - Align = Contents
 - HitTest = False
 - Opacity = 0.7
 - Size.Width = 60
 - Size.Height = 60
 - Stroke.Color = claAzure
 - XRadius = 5
 - YRadius = 5
- IblPecaValor: TLabel
 - Align = Center
 - Size.Width = 50
 - Size.Height = 30
 - TextSettings.Font.Size = 22
 - TextSettings.FontColor = claAzure
 - TextSettings.HorzAlign = Center
 - StyledSettings = [Family, Style]
 - Text = '2'

Barra de Controles

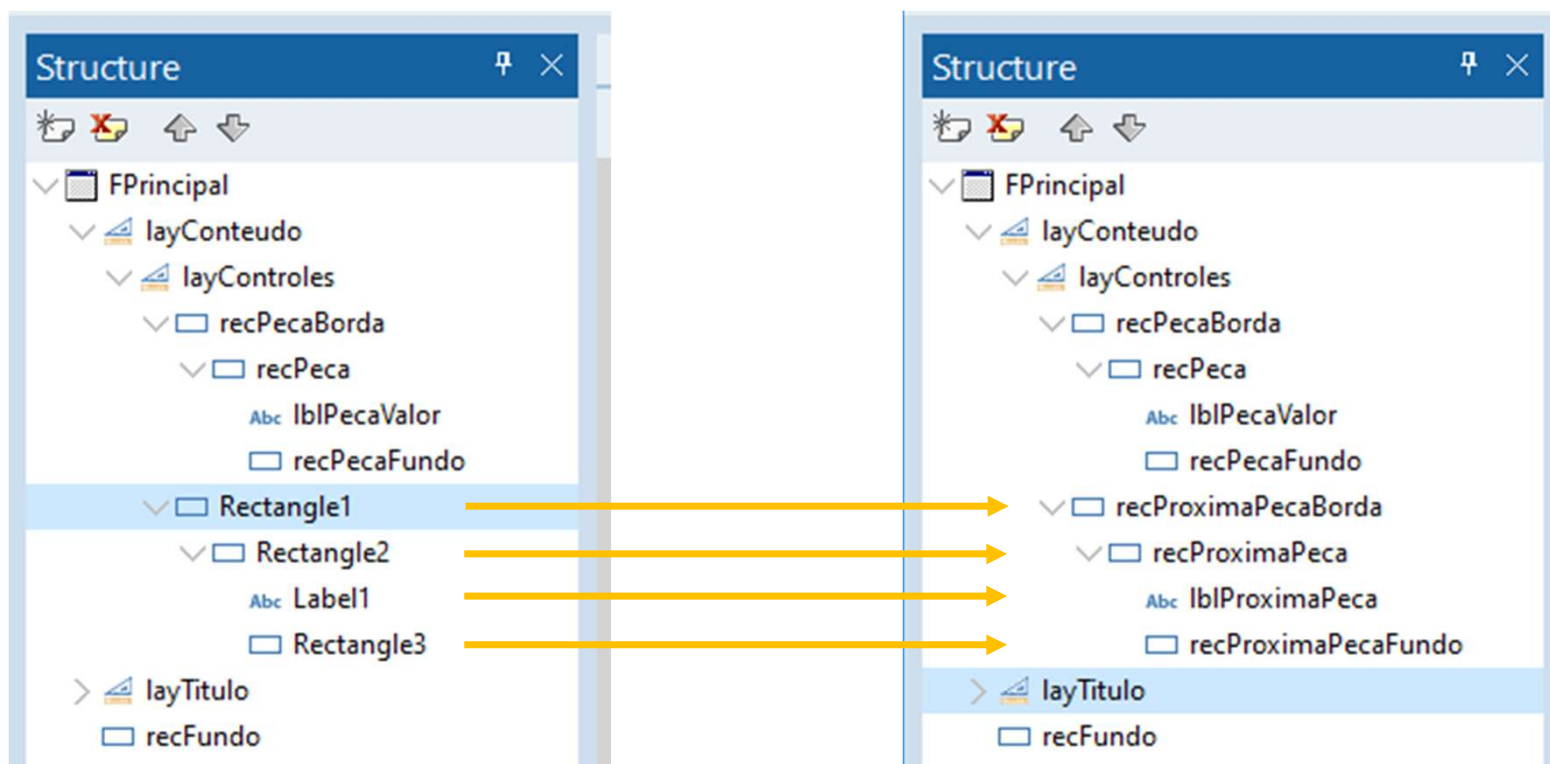
Cole **recPecaBorda** dentro de **layControles**

Copie **recPecaBorda**



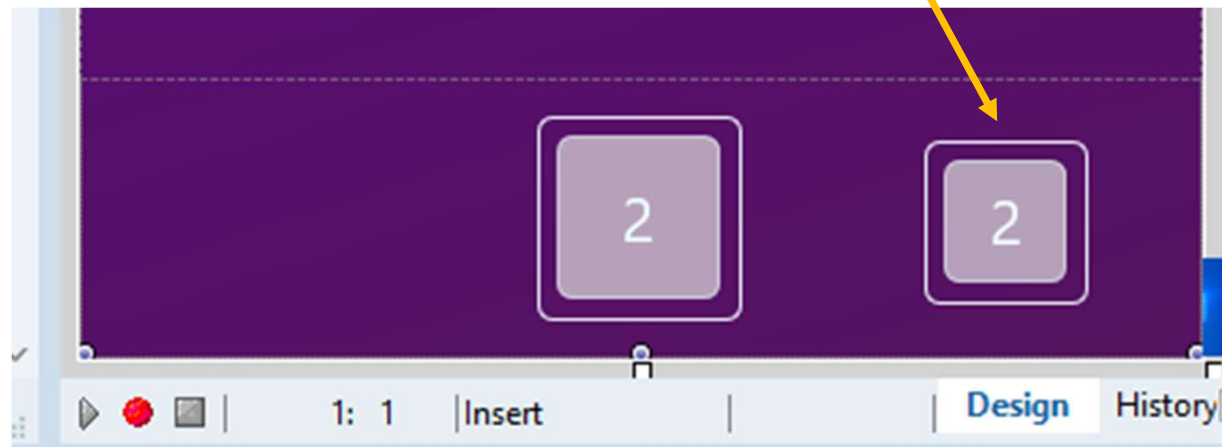
Barra de Controles

Altere os nomes dos componentes conforme abaixo



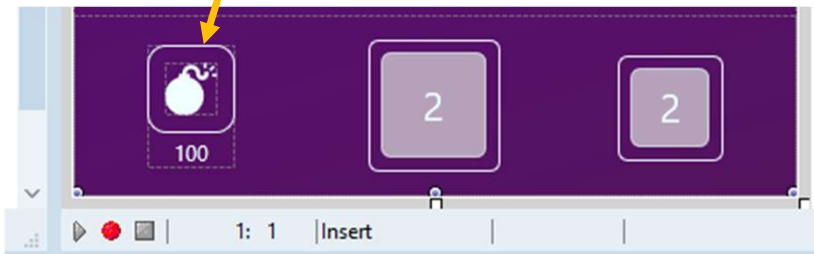
Barra de Controles

Altere os tamanhos e posições de **recProximaPecaBorda** e **recProximaPeca**, conforme imagem abaixo.



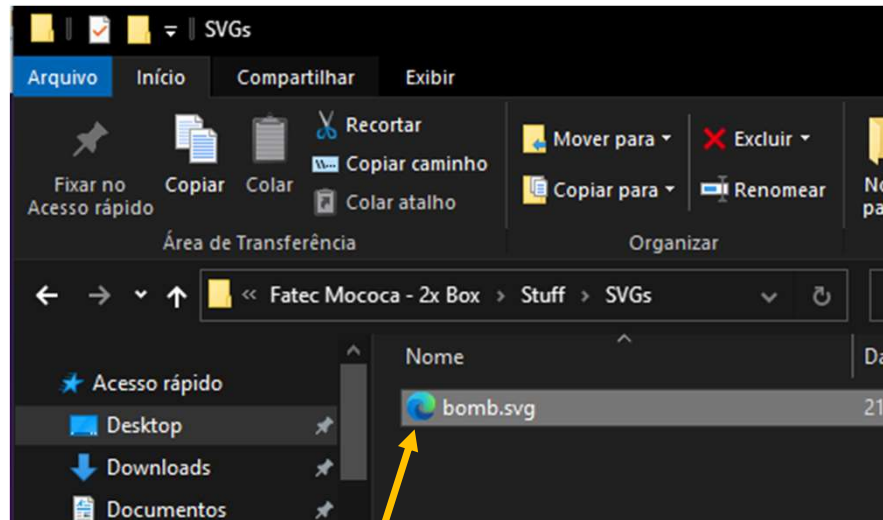
Barra de Controles

Adicione o poder de Bomba, conforme mostrado



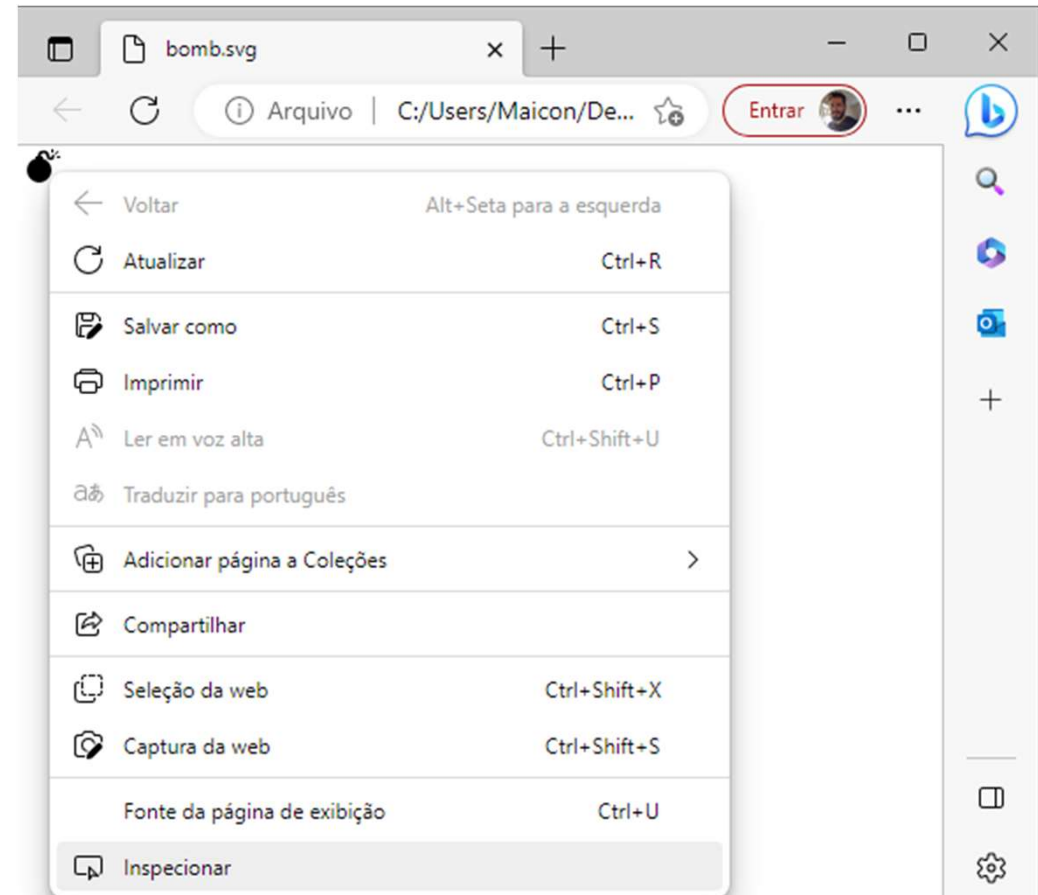
- **layBomba: TLayout**
 - HitTest = True
 - Position.X = 42
 - Position.Y = 17
 - Size.Width = 50
 - Size.Height = 70
- **recBomba: TRectangle**
 - Align = Top
 - Fill.Kind = None
 - HitTest = False
 - Size.Width = 50
 - Size.Height = 50
 - Size.PlatformDefault = False
 - Stroke.Color = claAzure
 - XRadius = 10
 - YRadius = 10
- **layBomba: TLayout**
 - **recBomba: TRectangle**
 - pthBomba: Tpath
 - Align = Contents
 - Fill.Color = claAzure
 - HitTest = False
 - Margins.Left = 10
 - Margins.Top = 10
 - Margins.Right = 10
 - Margins.Bottom = 10
 - Size.Width = 30
 - Size.Height = 30
 - Stroke.Kind = None
 - **lblBomba: TLabel**
 - Align = Bottom
 - StyledSettings = [Family, Size, Style]
 - Position.Y = 53
 - Size.Width = 50
 - Size.Height = 17
 - TextSettings.FontColor = claAzure
 - TextSettings.HorzAlign = Center
 - Text = '100'

Barra de Controles



Abra o arquivo **bomb.svg** com o navegador de Internet

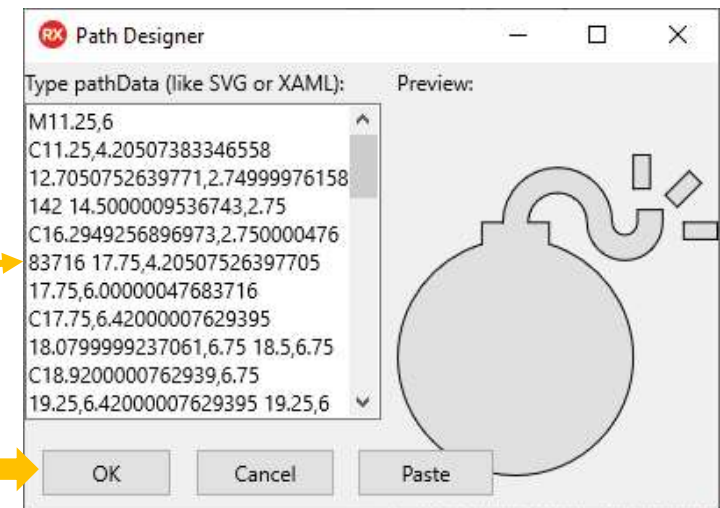
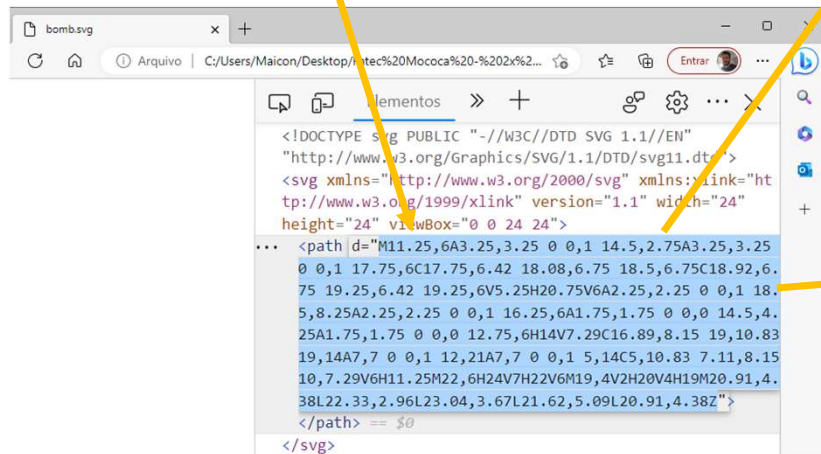
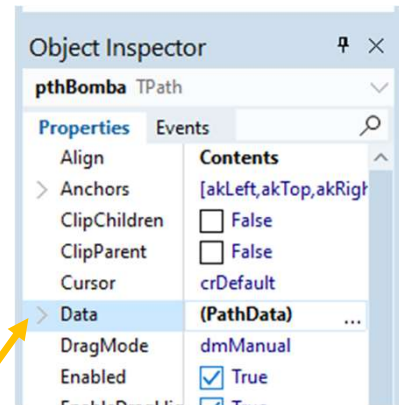
Inspeção a imagem



Barra de Controles

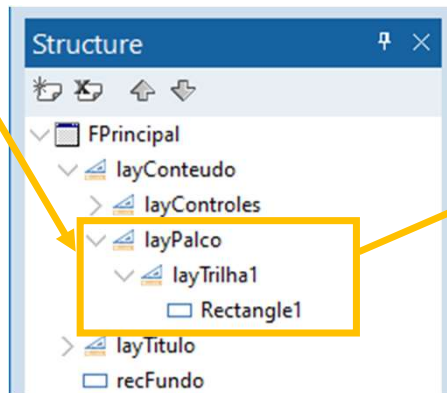
Cole o conteúdo na propriedade **Data** do **TPath**

Copie todo o conteúdo do atributo **D** da tag **Path**



Palco e Trilhas

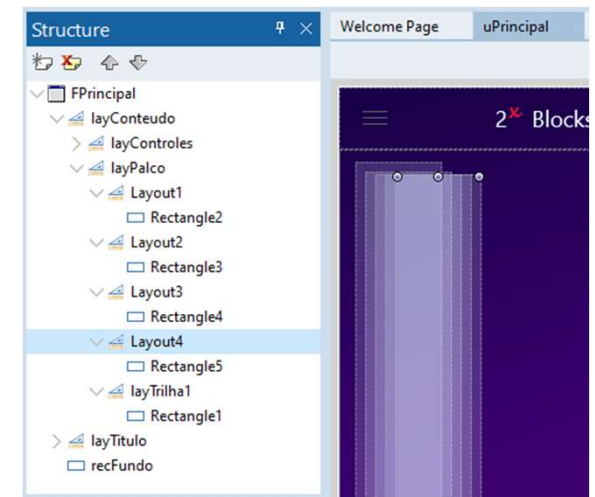
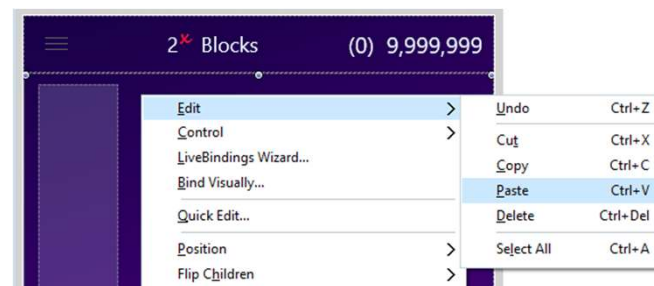
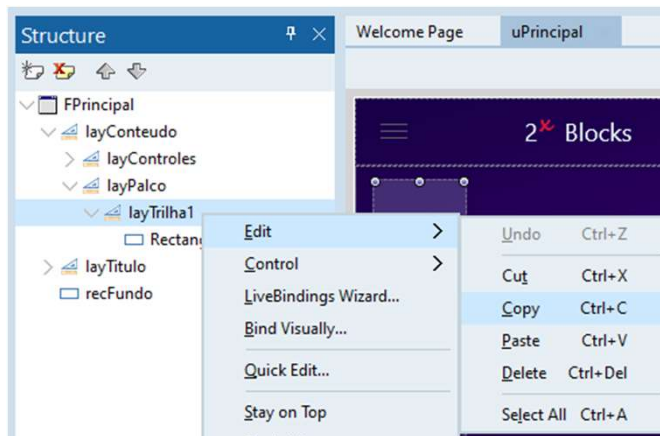
Crie o layout de **Palco** e o layout da **Trilha 1**



- **layPalco: TLayout**
 - Align = Client
 - Padding.Left = 10
 - Padding.Top = 10
 - Padding.Right = 10
 - Padding.Bottom = 10
- **layTrilha1: TLayout**
 - Align = Scale
 - HitTest = True
 - Margins.Left = 4
 - Margins.Right = 4
 - Position.X = 13
 - Position.Y = 10
 - Size.Width = 70
 - Size.Height = 742
 - Tag = 1
- **Rectangle1: TRectangle**
 - Align = Contents
 - Fill.Color = xFFD6E0FF
 - HitTest = False
 - Opacity = 0.2
 - Size.Width = 70
 - Size.Height = 742
 - Stroke.Kind = None

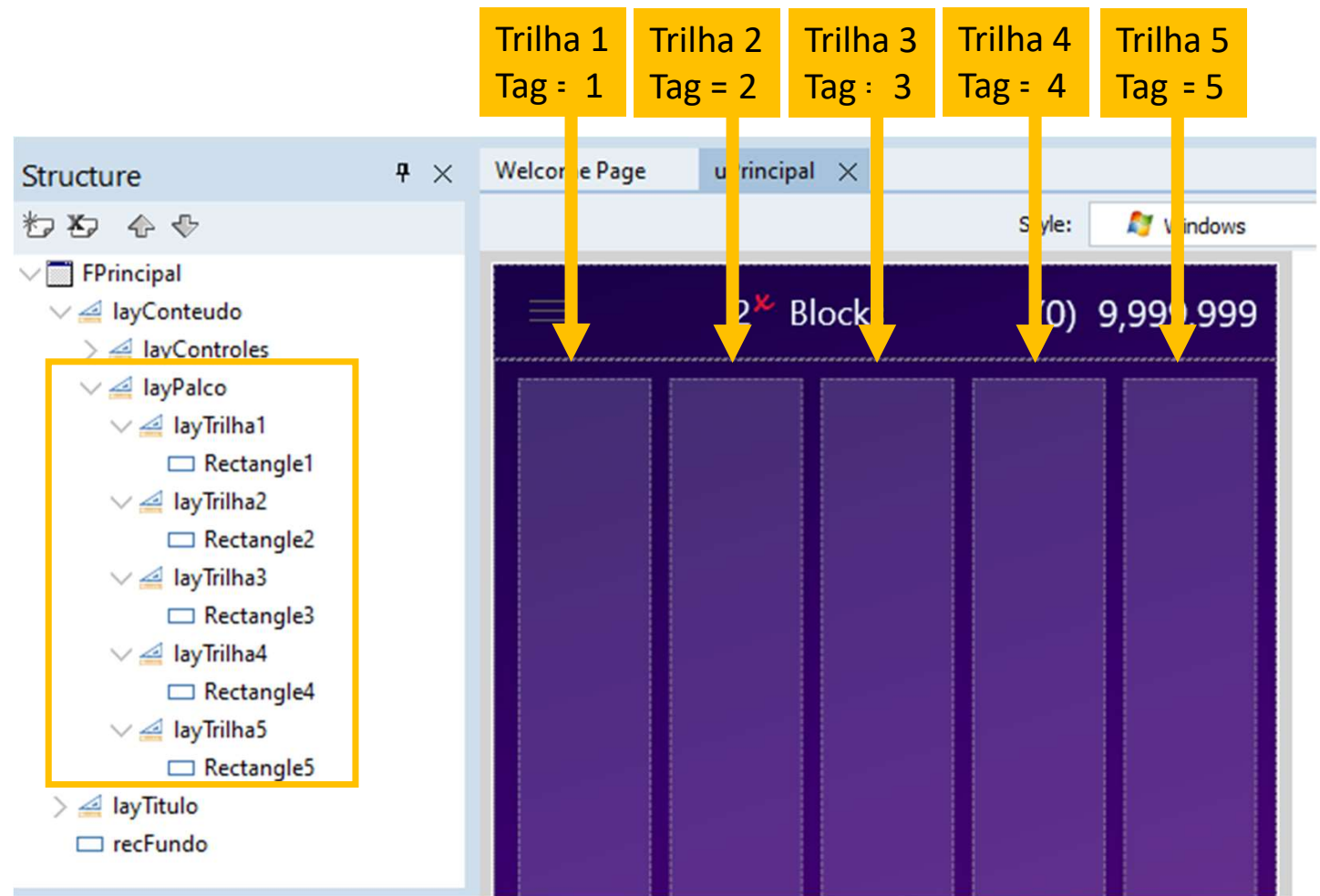
Palco e Trilhas

- Copie a Trilha 1 e cole 4 vezes para criar as demais trilhas



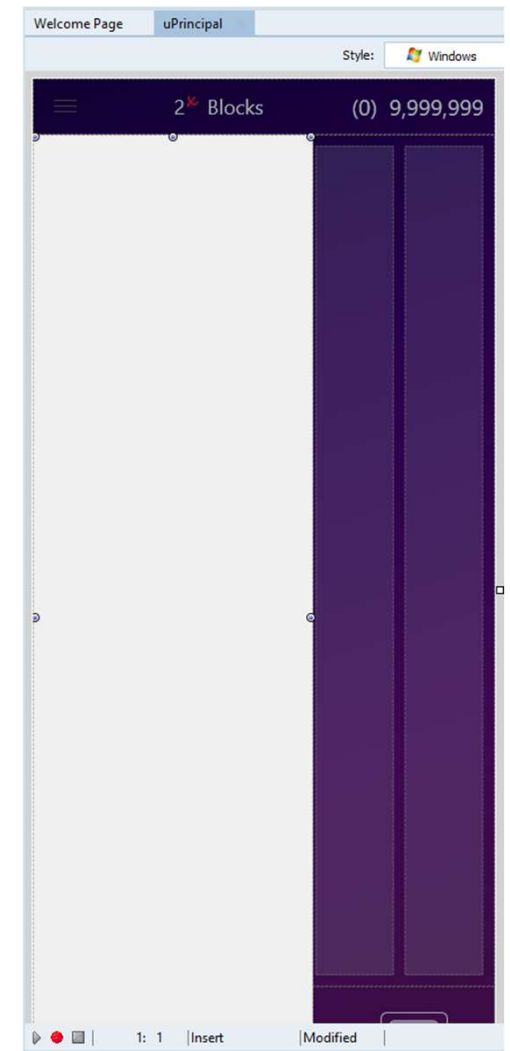
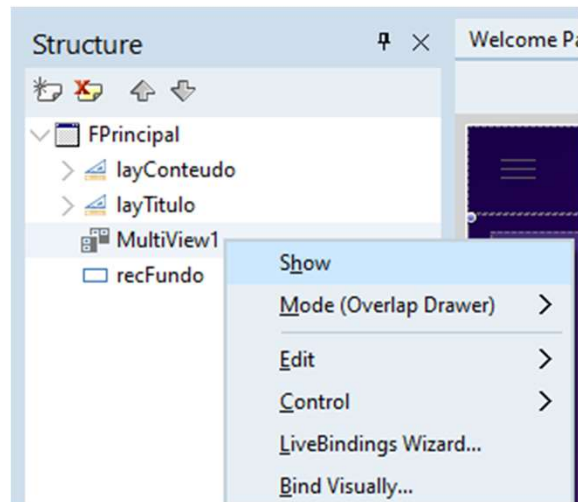
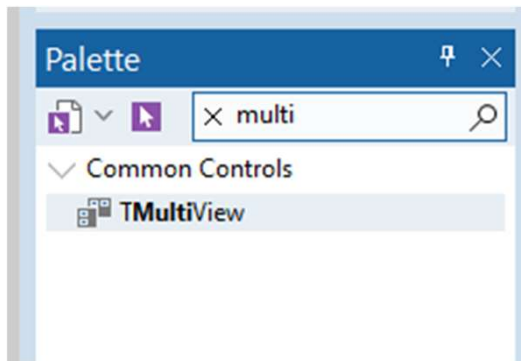
Palco e Trilhas

- Altere os nomes e posições das trilhas conforme ao lado



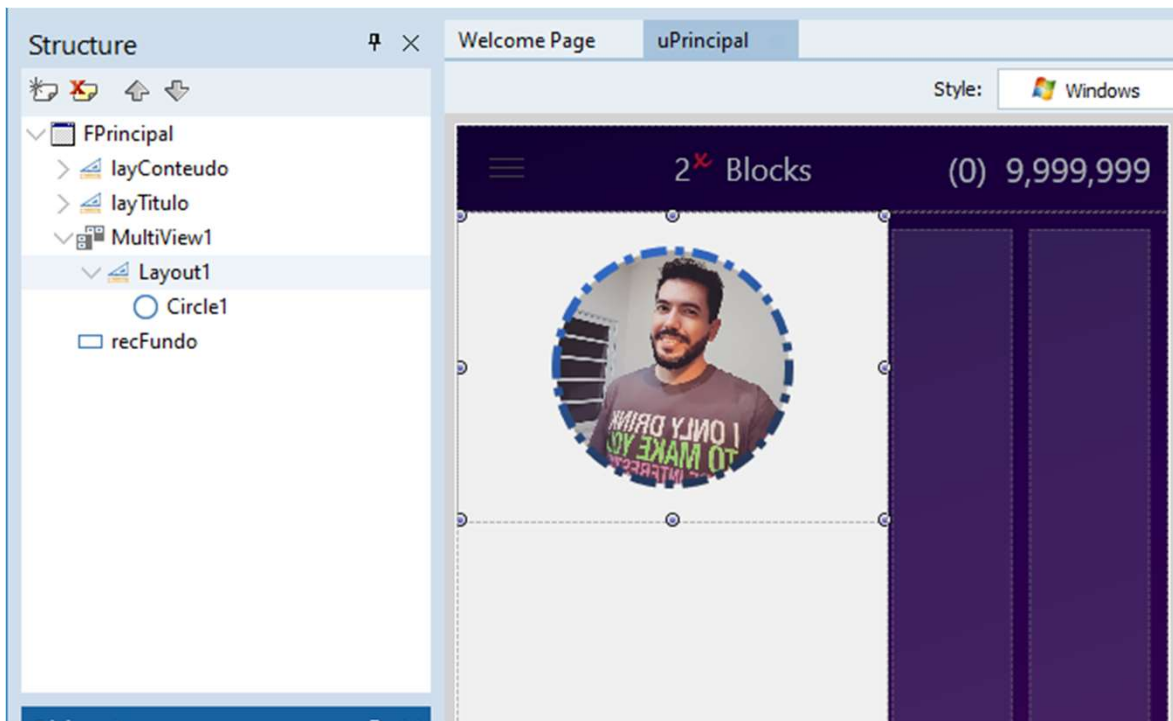
Opções e MultiView

**Adicione um Multiview
ao formulário**



Opções e MultiView

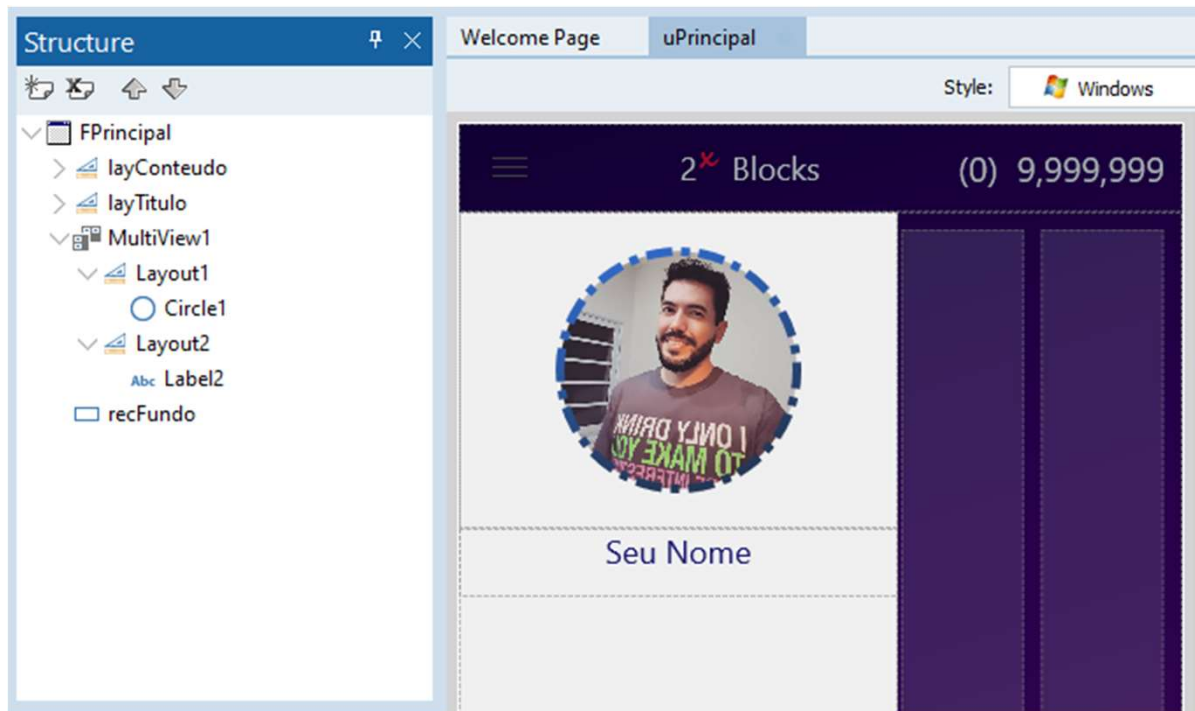
Adicione um layout, um circle e carregue sua foto de perfil



- **MultiView1: TMultiView**
 - Mode = Drawer
 - Size.Width = 250
 - Size.Height = 865
 - MasterButton = btnMenu
- **Layout1: TLayout**
 - Align = Top
 - Size.Width = 250
 - Size.Height = 180
- **Circle1: TCircle**
 - Align = Center
 - Fill.Bitmap.WrapMode = TileStretch
 - Fill.Kind = Bitmap
 - Size.Width = 154
 - Size.Height = 140
 - Stroke.Kind = Gradient
 - Stroke.Thickness = 5
 - Stroke.Dash = DashDot

Opções e MultiView

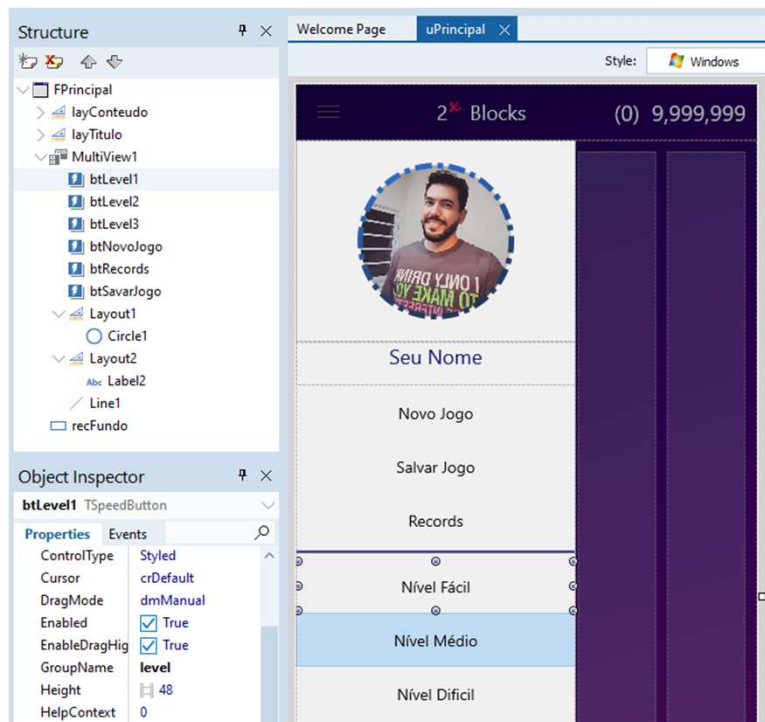
Adicione um layout, um label com seu nome



- **Layout2: TLayout**
 - Align = Top
 - Size.Width = 250
 - Size.Height = 39
- **Label2: TLabel**
 - Align = Top
 - StyledSettings = [Family, Style]
 - Size.Width = 250
 - Size.Height = 25
 - TextSettings.Font.Size = 18
 - TextSettings.FontColor = claMidnightblue
 - TextSettings.HorzAlign = Center
 - Text = 'Seu Nome'

Opções e MultiView

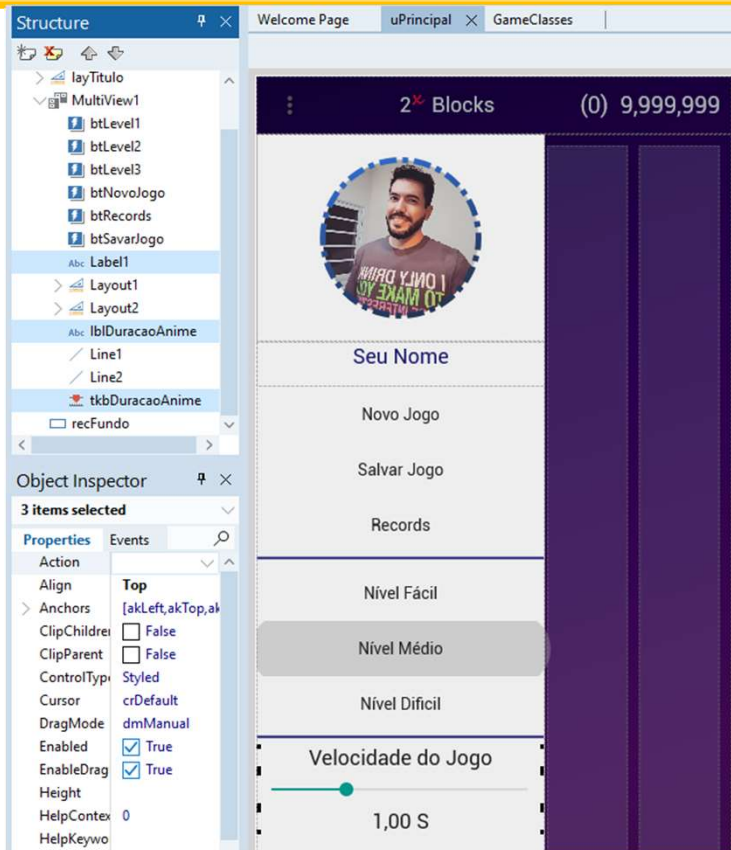
Adicione os botões Novo Jogo, Salvar Jogo, Records, Nível Fácil, Nível Médio, Nível Difícil



- **btNovoJogo: TSpeedButton**
 - Align = Top
 - StyledSettings = [Family, Style, FontColor]
 - Size.Height = 48
 - Text = 'Novo Jogo'
 - TextSettings.Font.Size = 14
- **btSavarJogo: TSpeedButton**
 - Align = Top
 - StyledSettings = [Family, Style, FontColor]
 - Size.Height = 48
 - Text = 'Salvar Jogo'
 - TextSettings.Font.Size = 14
- **btRecords: TSpeedButton**
 - Align = Top
 - StyledSettings = [Family, Style, FontColor]
 - Size.Height = 48
 - Text = 'Records'
 - TextSettings.Font.Size = 14
- **Line1: TLine**
 - Align = Top
 - LineType = Top
 - Margins.Top = 4
 - Size.Height = 7
 - Stroke.Color = claMidnightblue
 - Stroke.Thickness = 2
- **btLevel1: TSpeedButton**
 - StaysPressed = True
 - Align = Top
 - GroupName = 'level'
 - StyledSettings = [Family, Style, FontColor]
 - Size.Height = 48
 - Text = 'Nível Fácil'
 - TextSettings.Font.Size = 14
- **btLevel2: TSpeedButton**
 - StaysPressed = True
 - Align = Top
 - GroupName = 'level'
 - StyledSettings = [Family, Style, FontColor]
 - IsPressed = True
 - Size.Height = 48
 - Text = 'Nível Médio'
 - TextSettings.Font.Size = 14
- **btLevel3: TSpeedButton**
 - StaysPressed = True
 - Align = Top
 - GroupName = 'level'
 - StyledSettings = [Family, Style, FontColor]
 - Size.Height = 48
 - Text = 'Nível Difícil'
 - TextSettings.Font.Size = 14

Opções e MultiView

Adicione os labels e trackbar Novo Jogo, Salvar Jogo, Records, Nível Fácil, Nível Médio, Nível Difícil



- **Line2: TLine**
 - Align = Top
 - LineType = Top
 - Margins.Top = 4
 - Size.Height = 7
 - Stroke.Color = claMidnightblue
 - Stroke.Thickness = 2
- **Label1: TLabel**
 - Align = Top
 - Size.Height = 23
 - TextSettings.HorzAlign = Center
 - Text = 'Velocidade do Jogo'
- **tkbDuracaoAnime: TTrackBar**
 - Align = Top
 - Max = 3
 - Min = 0.2
 - Orientation = Horizontal
 - Size.Height = 32
 - Value = 1
- **lblDuracaoAnime: TLabel**
 - Align = Top
 - Size.Height = 23
 - TextSettings.HorzAlign = Center
 - Text = '1,00 S'