



# Interfaces Gráficas Definidas pelo Utilizador

## ? EXERCÍCIO 2: RESPOSTA A EVENTOS

### INTERFACE GRÁFICA

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Windows.Forms;
namespace Gui2
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }

        private void Form1_Click(object sender, EventArgs e)
        {
            MessageBox.Show("Acabou de clicar sobre esta interface gráfica");
        }
    }
}
```

### PROGRAMA RESPONDENDO A CLIQUE

```
using System;
using System.Collections.Generic;
using System.Windows.Forms;
namespace Gui2
{
    static class RespondendoAClique
    {
        static void Main()
        {
            Form1 F = new Form1();
            Application.Run(F);
        }
    }
}
```

## ? EXERCÍCIO 3: MENSAGEM DE BOAS-VINDAS

### INTERFACE GRÁFICA

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
```

```
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Windows.Forms;
namespace Gui3
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }

        private void Form1_Load(object sender, EventArgs e)
        {
        }
    }
}
```

### PROGRAMA MENSAGEM

```
using System;
using System.Windows.Forms;
namespace Gui3
{
    static class Mensagem
    {
        static void Main()
        {
            Application.EnableVisualStyles();
            Application.SetCompatibleTextRenderingDefault(false);
            Application.Run(new Form1());
        }
    }
}
```

## ? EXERCÍCIO 4: BOAS-VINDAS DE RESPOSTA A CLIQUE

### INTERFACE GRÁFICA

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Windows.Forms;
namespace Gui4
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }

        private void Form1_Click(object sender, EventArgs e)
        {
        }
    }
}
```

### RESPOSTA AO CLIQUE

```
private void Form1_Click(object sender, EventArgs e)
{this.labell1.Text="Bem-vindo ao C#!";}
```

### PROGRAMA MENSAGEM

```
using System;
using System.Windows.Forms;
namespace Gui4
{static class Mensagem
{static void Main()
{Application.EnableVisualStyles();
Application.SetCompatibleTextRenderingDefault(false);
Application.Run(new Form1());}}}
```

## ? EXERCÍCIO 5: LISTAGEM DO CÓDIGO PARA INTERFACE GRÁFICA

```
using System;
using System.Windows.Forms;
namespace Gui4
{partial class Form1
{private System.ComponentModel.IContainer components = null;
protected override void Dispose(bool disposing)
{if (disposing && (components != null))
{components.Dispose();}
base.Dispose(disposing);}

#region Windows Form Designer generated code
private void InitializeComponent()
{this.labell1 = new System.Windows.Forms.Label();
this.SuspendLayout();
this.labell1.AutoSize = true;
this.labell1.Font = new System.Drawing.Font("Times New Roman",
14F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(0)));
this.labell1.Location = new System.Drawing.Point(31, 53);
this.labell1.Name = "labell1";
this.labell1.Size = new System.Drawing.Size(134, 33);
this.labell1.TabIndex = 0;
this.labell1.Text = "Mensagem";
// Form1
this.AutoScaleDimensions = new System.Drawing.SizeF(9F, 20F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleModeMode.Font;
this.ClientSize = new System.Drawing.Size(292, 238);
this.Controls.Add(this.labell1);
this.Name = "Form1";
```



```
this.Text = "Form1";
this.Click += new System.EventHandler(this.Form1_Click);
this.ResumeLayout(false);
this.PerformLayout();}
#endregion
private System.Windows.Forms.Label label1;}}
```

### ? EXERCÍCIO 6: INTERFACE PARA SAÍDA DE DADOS

#### INTERFACE GRÁFICA

```
using System;
using System.Windows.Forms;
namespace Gui6
{partial class Form1
{private System.ComponentModel.IContainer components = null;
protected override void Dispose(bool disposing)
{if (disposing && (components != null))
{components.Dispose();}
base.Dispose(disposing);}
private void InitializeComponent()
{this.Saida = new System.Windows.Forms.Label();
this.SuspendLayout();
// Saida
this.Saida.AutoSize = true;
this.Saida.Location = new System.Drawing.Point(35, 57);
this.Saida.Name = "Saida";
this.Saida.Size = new System.Drawing.Size(157, 20);
this.Saida.TabIndex = 0;
this.Saida.Font = new System.Drawing.Font("Times New Roman",
16.0f);
this.Saida.Text = "Segunda Mensagem";
// Form1
this.AutoScaleDimensions = new System.Drawing.SizeF(9F, 20F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
this.ClientSize = new System.Drawing.Size(250, 150);
this.Controls.Add(this.Saida);
this.Name = "Form1";
this.Text = "Mensagem2";
this.ResumeLayout(false);
this.PerformLayout();}

private System.Windows.Forms.Label Saida;}}
```

### PROGRAMA MENSAGEMDOIS

```
using System;
using System.Windows.Forms;
namespace Gui6
{
    static class MensagemDois
    {
        static void Main()
        {
            Application.EnableVisualStyles();
            Application.SetCompatibleTextRenderingDefault(false);
            Form1 F = new Form1();
            Application.Run(F);
        }
    }
}
```

## ? EXERCÍCIO 7: INTERFACE COM CAIXA E BOTÃO

### INTERFACE GRÁFICA

```
using System;
using System.Windows.Forms;
namespace Gui7
{
    partial class Form1
    {
        private void InitializeComponent()
        {
            this.CxTextol = new System.Windows.Forms.TextBox();
            this.Bot1 = new System.Windows.Forms.Button();
            this.SuspendLayout();
            // CxTextol
            this.CxTextol.Location = new System.Drawing.Point(50, 30);
            this.CxTextol.Name = "Nome";
            this.CxTextol.Size = new System.Drawing.Size(250, 50);
            this.CxTextol.Font = new System.Drawing.Font("Times New Roman", 16.0f);
            // Bot1
            this.Bot1.Location = new System.Drawing.Point(357, 116);
            this.Bot1.Name = "Continuar";
            this.Bot1.Size = new System.Drawing.Size(62, 39);
            this.Bot1.Text = "OK";
            this.Bot1.UseVisualStyleBackColor = true;
            this.Bot1.Click += new System.EventHandler(this.Bot1_Click);
            // Form1
            this.AutoScaleDimensions = new System.Drawing.SizeF(9F, 20F);
            this.AutoScaleMode = System.Windows.Forms.AutoScaleModeMode.Font;
            this.ClientSize = new System.Drawing.Size(430, 170);
            this.Controls.Add(this.Bot1);
            this.Controls.Add(this.CxTextol);
            this.Name = "Form1";
            this.Text = "Nome do utilizador";
            this.ResumeLayout(false);
            this.PerformLayout();
        }
    }
}
```

```
private System.Windows.Forms.TextBox CxTextol;  
private System.Windows.Forms.Button Botl;}}
```

### **FUNCIONALIDADE DA INTERFACE GRÁFICA**

```
using System;  
using System.Windows.Forms;  
namespace Gui7  
{public partial class Form1 : Form  
{public Form1()  
{InitializeComponent();}  
private void Form1_Load(object sender, EventArgs e)  
{  
}  
private void Botl_Click(object sender, EventArgs e)  
{MessageBox.Show(this.CxTextol.Text);}}}
```

### **PROGRAMA NOME DO UTILIZADOR**

```
using System;  
using System.Windows.Forms;  
namespace Gui7  
{static class NomeDoUtilizador  
{static void Main()  
{Form1 F= new Form1();  
Application.EnableVisualStyles();  
Application.Run(F);}}}
```

## **? EXERCÍCIO 8: MENSAGEM SEM CÓDIGO GERADO AUTOMATICAMENTE**

```
using System;  
using System.Windows.Forms;  
namespace Gui8  
{public class FormSemAjuda : Form  
{private System.Windows.Forms.Label Etiqueta;  
private System.Windows.Forms.Button Botao;  
  
public FormSemAjuda()  
{this.Etiqueta = new System.Windows.Forms.Label();  
this.Botao = new System.Windows.Forms.Button();  
Etiqueta.Text = "Bem-vindo aos Açores";  
Etiqueta.Size = new System.Drawing.Size(250, 24);  
Etiqueta.Font = new System.Drawing.Font("Times New Roman",  
12.0f);  
Etiqueta.Location = new System.Drawing.Point(20, 24);  
Botao.Location = new System.Drawing.Point(200, 100);  
Botao.Size = new System.Drawing.Size(90, 32);
```

```

        Botao.Text = "OK";
        Botao.Click += new System.EventHandler(this.Botao_Click);
        this.ClientSize = new System.Drawing.Size(300, 150);
        this.Controls.Add(this.Botao);
        this.Controls.Add(this.Etiqueta);}

protected void Botao_Click(object sender, System.EventArgs e)
{Application.Exit();}

public static void Main()
{Application.Run(new FormSemAjuda());}}

```

## ? EXERCÍCIO 9: EMULAÇÃO DA CAIXA DE *INPUTBOX*

### CLASSE CAIXALEITURA

```

using System;
using System.Drawing;
using System.Windows.Forms;
namespace Gui9
{public class CaixaLeitura : System.Windows.Forms.Form
{private System.Windows.Forms.TextBox Resp;
private System.Windows.Forms.Label Perg;
private System.Windows.Forms.Button BOk;
private System.Windows.Forms.Button BCancel;
public static string Var;

public CaixaLeitura(string Titulo, string Pergunta)
{this.Perg = new System.Windows.Forms.Label();
this.Resp = new System.Windows.Forms.TextBox();
this.BOk=new System.Windows.Forms.Button();
this.BCancel=new System.Windows.Forms.Button();
// Perg
this.Perg.AutoSize = true;
this.Perg.Location = new System.Drawing.Point(23, 23);
this.Perg.Size = new System.Drawing.Size(20, 10);
this.Perg.Font = new System.Drawing.Font("Times New Roman",
12.0f);
this.Perg.Text = Pergunta;
// resposta
this.Resp.Font = new System.Drawing.Font("Times New Roman",
12F);
this.Resp.Location = new System.Drawing.Point(23, 50);
this.Resp.Name = "Resp";
this.Resp.Size = new System.Drawing.Size(160, 70);
// Botoes

```

```
this.BOk.Location = new System.Drawing.Point(210, 40);
this.BOk.Size = new System.Drawing.Size(75, 25);
this.BOk.Text = "OK";
this.BOk.Click += new System.EventHandler(this.BOk_Click);
this.BCancel.Location = new System.Drawing.Point(210, 70);
this.BCancel.Size = new System.Drawing.Size(75, 25);
this.BCancel.Text = "Cancel";
this.BCancel.Click += new
System.EventHandler(this.BCancel_Click);
// Form1
this.AutoScaleDimensions = new System.Drawing.SizeF(9F, 20F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
this.ClientSize = new System.Drawing.Size(300, 110);
this.Controls.Add(this.Perg);
this.Controls.Add(this.Resp);
this.Controls.Add(this.BOk);
this.Controls.Add(this.BCancel);
this.Name = "Form1";
this.SizeGripStyle = System.Windows.Forms.SizeGripStyle.Show;
this.Text = Titulo;
this.ResumeLayout(false);
this.PerformLayout(); }

private void BOk_Click(object sender, EventArgs e)
{Var = Resp.Text;
  this.Close();}
private void BCancel_Click(object sender, EventArgs e)
{Var = "";
  this.Close();}}
```

### PROGRAMA LEITURA

```
using System;
using System.Windows.Forms;
namespace Gui9
{public class Leitura
  {static void Main()
  {CaixaLeitura F = new CaixaLeitura("Dados Pessoais", "Digite o
    seu nome");
    Application.Run(F);
    string Lido = CaixaLeitura.Var;
    if (Lido!="")
      MessageBox.Show(Lido);MessageBox.Show(Lido);}}}
```



## ? EXERCÍCIO 10: INTERFACE PARA LEITURA E ESCRITA DE DADOS

### CLASSE LEITESC

```
using System;
using System.Drawing;
using System.Windows.Forms;
namespace Gui10
{
    public class LeitEsc: System.Windows.Forms.Form
    {
        private System.Windows.Forms.TextBox TBNome;
        private System.Windows.Forms.TextBox TBApel;
        private System.Windows.Forms.Label Saida;
        private System.Windows.Forms.Button BOk;
        private System.Windows.Forms.Button BFim;

        public LeitEsc()
        {
            this.TBNome = new System.Windows.Forms.TextBox();
            this.TBApel = new System.Windows.Forms.TextBox();
            this.BOk = new System.Windows.Forms.Button();
            this.BFim = new System.Windows.Forms.Button();
            this.Saida = new System.Windows.Forms.Label();
            // TBNome
            this.TBNome.Font = new System.Drawing.Font("Times New Roman",
            16F);
            this.TBNome.Location = new System.Drawing.Point(40, 30);
            this.TBNome.Name = "TBNome";
            this.TBNome.Size = new System.Drawing.Size(125, 44);
            this.TBNome.TabIndex = 1;
            // TBApel
            this.TBApel.Font = new System.Drawing.Font("Times New Roman",
            16F);
            this.TBApel.Location = new System.Drawing.Point(190, 32);
            this.TBApel.Name = "TBApel";
            this.TBApel.Size = new System.Drawing.Size(125, 44);
            this.TBApel.TabIndex = 2;
            // BOk
            this.BOk.Location = new System.Drawing.Point(90, 105);
            this.BOk.Name = "BOk";
            this.BOk.Size = new System.Drawing.Size(180, 39);
            this.BOk.TabIndex = 0;
            this.BOk.Text = "OK";
            this.BOk.UseVisualStyleBackColor = true;
            this.BOk.Click += new System.EventHandler(this.BOk_Click);
            // BFim
            this.BFim.Location = new System.Drawing.Point(290, 215);
            this.BFim.Name = "BFim";
            this.BFim.Size = new System.Drawing.Size(46, 37);
        }
    }
}
```

```
this.BFim.TabIndex = 4;
this.BFim.Text = "Fim";

this.BFim.UseVisualStyleBackColor = true;
this.BFim.Click += new System.EventHandler(this.BFim_Click);
// Saida
this.Saida.AutoSize = true;
this.Saida.Font = new System.Drawing.Font("Times New Roman",
16F);
this.Saida.Location = new System.Drawing.Point(30, 186);
this.Saida.Name = "Saida";
this.Saida.Size = new System.Drawing.Size(0, 36);
this.Saida.TabIndex = 3;
// Form1
this.AutoScaleDimensions = new System.Drawing.SizeF(9F, 20F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
this.ClientSize = new System.Drawing.Size(350, 260);
this.Controls.Add(this.BFim);
this.Controls.Add(this.Saida);
this.Controls.Add(this.TBApel);
this.Controls.Add(this.BOk);
this.Controls.Add(this.TBNome);
this.Name = "Form1";
this.Text = "Utilizador";
this.ResumeLayout(false);
this.PerformLayout();}

private void BOk_Click(object sender, EventArgs e)
{string n = this.TBNome.Text;
string a = this.TBApel.Text;
this.Saida.Text = a + ", " + n;}
private void BFim_Click(object sender, EventArgs e)
{this.Close();}}
```

### **PROGRAMA UTILIZADOR**

```
using System;
using System.Windows.Forms;
namespace Gui10
{static class Utilizador
{static void Main()
{LeitEsc F= new LeitEsc();
Application.EnableVisualStyles();
Application.Run(F);}}}
```

## ? EXERCÍCIO 11: INTERFACE COM CAIXA DE ATIVAÇÃO

### CLASSE ETNEGRITO

```
using System;
using System.Drawing;
using System.Windows.Forms;
namespace Guill
{
    public class ETNegrito : System.Windows.Forms.Form
    {
        private System.Windows.Forms.Label Etiq;
        private System.Windows.Forms.CheckBox ActivaN;
        public ETNegrito()
        {
            this.Etiq = new System.Windows.Forms.Label();
            this.ActivaN = new System.Windows.Forms.CheckBox();
            // Etiq
            this.Etiq.AutoSize = true;
            this.Etiq.Location = new System.Drawing.Point(40, 40);
            this.Etiq.Name = "Etiq";
            this.Etiq.Size = new System.Drawing.Size(71, 20);
            this.Etiq.TabIndex = 0;
            this.Etiq.Text = "Bom dia!";
            // ActivaN
            this.ActivaN.AutoSize = true;
            this.ActivaN.Location = new System.Drawing.Point(40, 90);
            this.ActivaN.Name = "ActivaN";
            this.ActivaN.Size = new System.Drawing.Size(82, 24);
            this.ActivaN.TabIndex = 1;
            this.ActivaN.Text = "Negrito";
            this.ActivaN.UseVisualStyleBackColor = true;
            this.ActivaN.CheckedChanged += new
            System.EventHandler(this.ActivaN_CheckedChanged);
            // Form1
            this.AutoScaleDimensions = new System.Drawing.SizeF(9F, 20F);
            this.AutoScaleMode = System.Windows.Forms.AutoScaleModeMode.Font;
            this.ClientSize = new System.Drawing.Size(220, 140);
            this.Controls.Add(this.ActivaN);
            this.Controls.Add(this.Etiq);
            this.Name = "Form1";
            this.Text = "Efeito Especial";
            this.ResumeLayout(false);
            this.PerformLayout();
        }

        private void ActivaN_CheckedChanged(object sender, EventArgs e)
        {
            this.Etiq.Font = new Font(Etiq.Font.Name, Etiq.Font.Size,
            Etiq.Font.Style ^ FontStyle.Bold);
        }
    }
}
```

## PROGRAMA ACTIVACAO

```
using System;
using System.Windows.Forms;
namespace Guil1
{
    static class Activacao
    {
        static void Main()
        {
            ETNegrito F = new ETNegrito();
            Application.Run(F);
        }
    }
}
```

## ? EXERCÍCIO 12: INTERFACE COM INTERRUPTOR

### CLASSE GUICOMINTERRUPTOR

```
using System;
using System.Drawing;
using System.Windows.Forms;
namespace Guil2
{
    public class GuiComInterruptor : Form
    {
        private Button Interruptor;

        public GuiComInterruptor ()
        {
            this.Interruptor = new System.Windows.Forms.Button();
            // Interruptor
            this.Interruptor.BackColor = System.Drawing.Color.Red;
            this.Interruptor.Font = new System.Drawing.Font("Times New Roman", 16F);
            //System.Drawing.GraphicsUnit.Point, ((byte)(0)));
            this.Interruptor.Location = new System.Drawing.Point(30, 40);
            this.Interruptor.Name = "Interruptor";
            this.Interruptor.Size = new System.Drawing.Size(187, 67);
            this.Interruptor.TabIndex = 0;
            this.Interruptor.Text = "Desligado";
            this.Interruptor.UseVisualStyleBackColor = false;
            this.Interruptor.Click += new
                System.EventHandler(this.Interruptor_Click);
            // Form1
            this.AutoScaleDimensions = new System.Drawing.SizeF(9F, 20F);
            this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
            this.ClientSize = new System.Drawing.Size(240, 190);
            this.Controls.Add(this.Interruptor);
            this.Name = "Form1";
            this.Text = "Interruptor";
            this.ResumeLayout(false);
            this.PerformLayout();
        }

        private void Interruptor_Click(object sender, EventArgs e)
        {
        }
    }
}
```

```
{if (this.Interruptor.BackColor == System.Drawing.Color.Red)
{this.Interruptor.BackColor = System.Drawing.Color.Lime;
this.Interruptor.Text = "Ligado";}
else
{this.Interruptor.BackColor = System.Drawing.Color.Red;
this.Interruptor.Text = "Desligado";}}}}
```

### PROGRAMA INTERRUPTOR

```
using System;
using System.Windows.Forms;
namespace Guil2
{static class Interruptor
{static void Main()
{GuiComInterruptor F= new GuiComInterruptor();
Application.EnableVisualStyles();
Application.Run(F);}}}}
```

## ? EXERCÍCIO 13: INTERFACE PARA INQUÉRITO

### CLASSE INQ

```
using System;
using System.Drawing;
using System.Windows.Forms;
namespace Guil3
{public class Inq:Form
{private System.Windows.Forms.Button BProx;
private System.Windows.Forms.Button BFim;
private System.Windows.Forms.GroupBox GEtarios;
private System.Windows.Forms.RadioButton Esc3;
private System.Windows.Forms.RadioButton Esc2;
private System.Windows.Forms.RadioButton Esc1;
public Inq()
{this.BProx = new System.Windows.Forms.Button();
this.BFim = new System.Windows.Forms.Button();
this.GEtarios = new System.Windows.Forms.GroupBox();
this.Esc3 = new System.Windows.Forms.RadioButton();
this.Esc2 = new System.Windows.Forms.RadioButton();
this.Esc1= new System.Windows.Forms.RadioButton();
this.GEtarios.SuspendLayout();
this.SuspendLayout();
// BProx
this.BProx.Location = new System.Drawing.Point(234, 53);
this.BProx.Name = "BProx";
this.BProx.Size = new System.Drawing.Size(85, 40);
```

```
this.BProx.TabIndex = 3;
this.BProx.Text = "Próximo";
this.BProx.UseVisualStyleBackColor = true;
this.BProx.Click += new
System.EventHandler(this.BProx_Click);
// BFim
this.BFim.Location = new System.Drawing.Point(244, 115);
this.BFim.Name = "BFim";
this.BFim.Size = new System.Drawing.Size(75, 40);
this.BFim.TabIndex = 4;
this.BFim.Text = "Fim";
this.BFim.UseVisualStyleBackColor = true;
this.BFim.Click += new System.EventHandler(this.BFim_Click);
// GETarios
this.GETarios.Controls.Add(this.Esc3);
this.GETarios.Controls.Add(this.Esc2);
this.GETarios.Controls.Add(this.Esc1);
this.GETarios.Location = new System.Drawing.Point(21, 27);
this.GETarios.Name = "GETarios";
this.GETarios.Size = new System.Drawing.Size(180, 170);
this.GETarios.TabIndex = 5;
this.GETarios.TabStop = false;
this.GETarios.Text = "Idade";
// Esc1
this.Esc1.AutoSize = true;
this.Esc1.Location = new System.Drawing.Point(11, 34);
this.Esc1.Name = "Esc2";
this.Esc1.Size = new System.Drawing.Size(65, 24);
this.Esc1.TabIndex = 0;
this.Esc1.Text = "<20 anos ";
this.Esc1.UseVisualStyleBackColor = true;
// Esc2
this.Esc2.AutoSize = true;
this.Esc2.Location = new System.Drawing.Point(11, 120);
this.Esc2.Name = "Esc2";
this.Esc2.Size = new System.Drawing.Size(65, 24);
this.Esc2.TabIndex = 1;

this.Esc2.Text = ">35 anos ";
this.Esc2.UseVisualStyleBackColor = true;
// Esc3
this.Esc3.AutoSize = true;
this.Esc3.Location = new System.Drawing.Point(11, 77);
this.Esc3.Name = "Esc3";
this.Esc3.Size = new System.Drawing.Size(79, 24);
this.Esc3.TabIndex = 2;
this.Esc3.Text = "20-35 anos ";
this.Esc3.UseVisualStyleBackColor = true;
// Form1
```

```

this.AutoScaleDimensions = new System.Drawing.SizeF(9F, 20F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
this.ClientSize = new System.Drawing.Size(331, 239);
this.Controls.Add(this.GEtarios);
this.Controls.Add(this.BFim);
this.Controls.Add(this.BProx);
this.Name = "Form1";
this.Text = "Inquérito";
this.GEtarios.ResumeLayout(false);
this.GEtarios.PerformLayout();
this.ResumeLayout(false);}

private void BFim_Click(object sender, EventArgs e)
{this.Close();}
private void BProx_Click(object sender, EventArgs e)
{foreach (RadioButton O in this.GEtarios.Controls )
if(O.Checked == true)
    MessageBox.Show(O.Text);}}}

```

### PROGRAMA INQUERITOS

```

using System;
using System.Windows.Forms;
namespace Guil3
{static class Inqueritos
{static void Main()
{Inq F= new Inq();
Application.EnableVisualStyles();
Application.Run(F);}}}

```

## ? EXERCÍCIO 14: REVISÃO DO CÓDIGO PARA INQUÉRITO

### CLASSE INQ

```

using System;
using System.Collections;
using System.Drawing;
using System.Windows.Forms;
namespace Guil4
{public class Inq:Form
{private System.Windows.Forms.Button[] Botoes=new
System.Windows.Forms.Button[2];
private System.Windows.Forms.GroupBox GEtarios=new
System.Windows.Forms.GroupBox() ;
private System.Windows.Forms.RadioButton[] Radios = new
System.Windows.Forms.RadioButton[3];

```

```
public Inq()
{
    // botoes de comando
    int Topo=53;
    string[] Btit={"Próximo", "Fim"};
    string[] Bnome = { "BProx", "BFim" };
    for (int C=0; C<=1; C++)
    {
        this.Botoes[C]=new System.Windows.Forms.Button();
        this.Controls.Add(this.Botoes[C]);
        this.Botoes[C].Location=new System.Drawing.Point(234,Topo);
        this.Botoes[C].Name = Bnome[C];
        this.Botoes[C].Size = new System.Drawing.Size(85, 40);
        this.Botoes[C].TabIndex = C+1;
        this.Botoes[C].Text = Btit[C];
        this.Botoes[C].UseVisualStyleBackColor = true;
        Topo = 115;}
    this.Botoes[0].Click += new
    System.EventHandler(this.BProx_Click);
    this.Botoes[1].Click += new
    System.EventHandler(this.BFim_Click);
    //Três radioButtons
    string[] RBtit={"<20 anos ", "20-35 anos ", ">35 anos"};
    string[] RBnome = { "Ec1", "Esc2", "Esc3" };
    Topo = 34;
    for (int C = 0; C <= 2; C++)
    {
        this.Radios[C] = new System.Windows.Forms.RadioButton();
        this.Radios[C].AutoSize = true;
        this.Radios[C].Location=new System.Drawing.Point(11, Topo);
        this.Radios[C].Name = RBnome[C];
        this.Radios[C].Size = new System.Drawing.Size(100, 24);
        this.Radios[C].TabIndex = C;
        this.Radios[C].Text = RBtit[C];
        this.Radios[C].UseVisualStyleBackColor = true;
        Topo += 43;}
    // groupBox1
    for (int C = 0; C <= 2; C++)
        this.GETarios.Controls.Add(this.Radios[C]);
    this.GETarios.Location = new System.Drawing.Point(21, 27);
    this.GETarios.Name = "GETarios";
    this.GETarios.Size = new System.Drawing.Size(120, 158);
    this.GETarios.TabIndex = 5;
    this.GETarios.TabStop = false;
    this.GETarios.Text = "Idade";
    // Form1
    this.AutoScaleDimensions = new System.Drawing.SizeF(9F, 20F);
    this.AutoScaleMode = System.Windows.Forms.AutoScaleModeMode.Font;
    this.ClientSize = new System.Drawing.Size(230, 210);
    this.Controls.Add(this.GETarios);
    for (int C=0; C<2; C++)
```



```

        this.Controls.Add(this.Botoes[C]);
        this.Name = "Form1";
        this.Text = "Inquérito";
        this.GETarios.ResumeLayout(false);
        this.GETarios.PerformLayout();
        this.ResumeLayout(false);}

private void BFim_Click(object sender, EventArgs e)
{this.Close();}
private void BProx_Click(object sender, EventArgs e)
{foreach (RadioButton O in this.GETarios.Controls)
    if(O.Checked == true)
        MessageBox.Show(O.Text);}}

```

### PROGRAMA INQUERITOS

```

using System;
using System.Windows.Forms;
namespace Guil4
{static class Inqueritos
    {static void Main()
        {Inq F= new Inq();
        Application.EnableVisualStyles();
        Application.Run(F);}}}

```

## ? EXERCÍCIO 15: INTERFACE PARA INQUÉRITO – 2.ª VERSÃO

### CLASSE INQALARGADO

```

using System;
using System.Drawing;
using System.Windows.Forms;
namespace Guil5
{public class InqAlargado: Form
    {private System.Windows.Forms.Button[] Botoes=new
        System.Windows.Forms.Button[3];
        private System.Windows.Forms.GroupBox GETarios=new
        System.Windows.Forms.GroupBox();
        private System.Windows.Forms.RadioButton[] Radios = new
        System.Windows.Forms.RadioButton[6];
        public InqAlargado()
        {// botoes de comando
            int Topo=300, Esq=40, Altura = 40;
            string[] Btit={"Próximo", "Fim", "Mais"};
            string[] Bnome = { "BProx", "BFim", "BMaisMenos" };
            for (int C=0; C<=2; C++)

```

```
{ this.Botoes[C]=new System.Windows.Forms.Button();
this.Controls.Add(this.Botoes[C]);
if (C == 2)
{Esq = 150; Topo = 90; Altura=145;}
this.Botoes[C].Location = new System.Drawing.Point(Esq,
Topo);
this.Botoes[C].Name = Bnome[C];
this.Botoes[C].Size = new System.Drawing.Size(85, Altura);
this.Botoes[C].TabIndex = C+1;
this.Botoes[C].Text = Btit[C];
this.Botoes[C].UseVisualStyleBackColor = true;
Esq = 150;}
this.Botoes[0].Click += new
System.EventHandler(this.BProx_Click);
this.Botoes[1].Click += new
System.EventHandler(this.BFim_Click);
this.Botoes[2].Click += new
System.EventHandler(this.BMaisMenos_Click);
//seis radioButtons
string[] RBtit = {"<20  ", "20-35  ", "36-45  ", "46-59
", "60-70  ", ">70  " };
string[] RBnome = { "OP1", "OP2", "OP3", "OP4", "OP5",
"OP6"};
Topo = 34;
Esq = 11;
for (int C = 0; C <= 5; C++)
{if (C == 3)
{Esq = 155;
Topo = 34;}
this.Radios[C] = new System.Windows.Forms.RadioButton();
this.Radios[C].AutoSize = true;
this.Radios[C].Location = new System.Drawing.Point(Esq,
Topo);
this.Radios[C].Name = RBnome[C];
this.Radios[C].Size = new System.Drawing.Size(60, 34);
this.Radios[C].TabIndex = C;
this.Radios[C].Text = RBtit[C];
this.Radios[C].UseVisualStyleBackColor = true;
Topo += 40;}
// GETarios
for (int C = 0; C <= 5; C++)
{this.GETarios.Controls.Add(this.Radios[C]);}
// this.GETarios.Controls.Add(this.Botoes[2]);
this.GETarios.Location = new System.Drawing.Point(21, 27);
this.GETarios.Name = "GETarios";
this.GETarios.Size = new System.Drawing.Size(150, 150);
//grande 340x178
this.GETarios.TabIndex = 5;
this.GETarios.TabStop = false;
```

```

this.GETarios.Text = "Idade";
// Form1
this.AutoScaleDimensions = new System.Drawing.SizeF(9F, 20F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
this.ClientSize = new System.Drawing.Size(210, 240);
this.Controls.Add(this.GETarios);
this.Name = "Form1";
this.Text = "Inquérito";
this.GETarios.ResumeLayout(false);
this.GETarios.PerformLayout();
this.ResumeLayout(false);}
private void BFim_Click(object sender, EventArgs e)
{this.Close();}

private void BMaisMenos_Click(object sender, EventArgs e)
{if (this.Botoes[2].Text == "Mais")
{this.Botoes[2].Text = "Menos";
this.Width = 270;
this.GETarios.Width = 220;}
else
{this.Botoes[2].Text = "Mais";
this.Width = 210;
this.GETarios.Width = 150;}}}

private void BProx_Click(object sender, EventArgs e)
{foreach (RadioButton o in this.GETarios.Controls)
if (o.Checked == true)
MessageBox.Show(o.Text);}}}}

```

### PROGRAMA INQUERITOS

```

using System;
using System.Windows.Forms;
namespace Gui15
{static class Inquerito
{static void Main()
{InqAlargado F= new InqAlargado();
Application.EnableVisualStyles();
Application.Run(F);}}}

```

## ? EXERCÍCIO 16: LISTA DE PAÍSES

### CLASSE PAISES

```

using System;
using System.Collections.Generic;

```

```
using System.Drawing;
using System.Windows.Forms;
namespace Guil6
{
    public class Paises: Form
    {
        private System.Windows.Forms.ListBox LPaises= new
            System.Windows.Forms.ListBox();
        private System.Windows.Forms.Label Cabec = new
            System.Windows.Forms.Label();
        private System.Windows.Forms.Button BConf= new
            System.Windows.Forms.Button();
        private System.Windows.Forms.Label Saida= new
            System.Windows.Forms.Label();
        public Paises()
        {
            // LPaises
            string[] PaisNomes = { "Alemanha", "Áustria", "Espanha",
                "Holanda", "Portugal", "Reino Unido" };
            this.LPaises.FormattingEnabled = true;
            this.LPaises.ItemHeight = 20;
            this.LPaises.Location = new System.Drawing.Point(30, 46);
            this.LPaises.Name = "LPaises";
            this.LPaises.Size = new System.Drawing.Size(122, 120);
            for (int p = 0; p <= PaisNomes.Length - 1; p++)
                this.LPaises.Items.Add(PaisNomes[p]);
            this.LPaises.TabIndex = 0;
            this.LPaises.SelectedIndex = 4;
            this.LPaises.Click += new
                System.EventHandler(this.LPaises_Click);
            // Cabec
            this.Cabec.AutoSize = true;
            this.Cabec.Location = new System.Drawing.Point(26, 23);
            this.Cabec.Name = "Cabec";
            this.Cabec.Size = new System.Drawing.Size(51, 20);
            this.Cabec.TabIndex = 1;
            this.Cabec.Text = "País";
            // Bconf
            this.BConf.Location = new System.Drawing.Point(28, 160);
            this.BConf.Name = "Bconf";

            this.BConf.Size = new System.Drawing.Size(126, 36);
            this.BConf.TabIndex = 2;
            this.BConf.Text = "Confirmar";
            this.BConf.UseVisualStyleBackColor = true;
            this.BConf.Click += new System.EventHandler(this.BConf_Click);
            // Saida
            this.Saida.AutoSize = true;
            this.Saida.Location = new System.Drawing.Point(33, 202);
            this.Saida.Name = "Saida";
            this.Saida.Size = new System.Drawing.Size(51, 20);
            this.Saida.TabIndex = 3;
        }
    }
}
```

```

this.Saida.Text = "";
this.Saida.Font = new System.Drawing.Font("Times New Roman",
12.0f);
// Form1
this.AutoScaleDimensions = new System.Drawing.SizeF(9F, 20F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
this.ClientSize = new System.Drawing.Size(180, 240);
this.Controls.Add(this.Saida);
this.Controls.Add(this.BConf);
this.Controls.Add(this.Cabec);
this.Controls.Add(this.LPaises);
this.Name = "Form1";
this.Text = "Seleção de País";
this.ResumeLayout(false);
this.PerformLayout();

private void LPaises_Click(object sender, EventArgs e)
{this.Saida.Text = LPaises.SelectedItem.ToString(); }
private void BConf_Click(object sender, EventArgs e)
{MessageBox.Show(LPaises.SelectedIndex + 1 + " - " +
LPaises.SelectedItem);
this.Close();}}}

```

### PROGRAMA SELECCAO PAIS

```

using System;
using System.Windows.Forms;
namespace Guil6
{static class SeleccaoPais
{static void Main()
{Paises F= new Paises();
Application.EnableVisualStyles();
Application.Run(F);}}}

```

## ? EXERCÍCIO 17: CINCO RESPOSTAS A UM INQUÉRITO

### CLASSE INQ

```

using System;
using System.Collections.Generic;
using System.Drawing;
using System.Windows.Forms;
namespace Guil7
{public class Inq: Form
{private System.Windows.Forms.ListBox LPaises=new
System.Windows.Forms.ListBox();

```

```
private System.Windows.Forms.Label Cabec=new
System.Windows.Forms.Label();
private System.Windows.Forms.Button BConf= new
System.Windows.Forms.Button();
private System.Windows.Forms.Label Saida= new

System.Windows.Forms.Label();
private static string Escolha;
public string Pescolha()
{return Escolha;}
public Inq(int R, string[] PaisNomes)
{
    // LPaises
    this.LPaises.FormattingEnabled = true;
    this.LPaises.ItemHeight = 20;
    this.LPaises.Location = new System.Drawing.Point(30, 46);
    this.LPaises.Name = "LPaises";
    this.LPaises.Size = new System.Drawing.Size(110, 115);
    for (int p = 0; p <= PaisNomes.Length - 1; p++)
        this.LPaises.Items.Add(PaisNomes[p]);
    this.LPaises.TabIndex = 0;
    this.LPaises.SelectedIndex = 4;
    this.LPaises.Click += new
    System.EventHandler(this.LPaises_Click);
    // Cabec
    this.Cabec.AutoSize = true;
    this.Cabec.Location = new System.Drawing.Point(26, 23);
    this.Cabec.Name = "Cabec";
    this.Cabec.Size = new System.Drawing.Size(51, 20);
    this.Cabec.TabIndex = 1;
    this.Cabec.Text = "País";
    // Bconf
    this.BConf.Location = new System.Drawing.Point(30, 165);
    this.BConf.Name = "Bconf";
    this.BConf.Size = new System.Drawing.Size(110, 36);
    this.BConf.TabIndex = 2;
    this.BConf.Text = "Confirmar";
    this.BConf.UseVisualStyleBackColor = true;
    this.BConf.Click +=new System.EventHandler(this.BConf_Click);
    // Saida
    this.Saida.AutoSize = true;
    this.Saida.Location = new System.Drawing.Point(33, 210);
    this.Saida.Name = "Saida";
    this.Saida.Size = new System.Drawing.Size(51, 20);
    this.Saida.TabIndex = 3;
    this.Saida.Text = "";
    this.Saida.Font = new System.Drawing.Font("Times New Roman",
    12.0f);
    // Form1
    this.AutoScaleDimensions = new System.Drawing.SizeF(9F, 20F);
```

```

this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
this.ClientSize = new System.Drawing.Size(170, 245);
this.Controls.Add(this.Saida);
this.Controls.Add(this.BConf);
this.Controls.Add(this.Cabec);

this.Controls.Add(this.LPaíses);
this.Name = "Form1";
this.Text = R.ToString() + "-Inquerito";
this.ResumeLayout(false);
this.PerformLayout();}

private void LPaíses_Click(object sender, EventArgs e)
{this.Saida.Text = LPaíses.SelectedItem.ToString();}
private void BConf_Click(object sender, EventArgs e)
{Escolha = LPaíses.SelectedItem.ToString();
this.Close();}}

```

### PROGRAMA CINCOINQUERITOS

```

using System;
using System.Windows.Forms;
namespace Gui17
{static class CincoInqueritos
{static void Main()
{string[] Resp = new string[5];
string[] Países = { "Alemanha", "Áustria", "Espanha",
"Holanda", "Portugal", "Reino Unido" };
for (int R = 0; R <= Resp.Length - 1; R++)
{Inq F = new Inq(R+1, Países);
Application.EnableVisualStyles();
Application.Run(F);
Resp[R] = F.Pescolha();}
string Respostas = "";
for (int R = 0; R <= Resp.Length - 1; R++)
{Respostas += (R + 1).ToString() + ". Resposta ---> ";
Respostas += Resp[R] + (char)13;}
MessageBox.Show(Respostas, "Países de origem");}}}

```

## ? EXERCÍCIO 18: CALENDÁRIO

### CLASSE CALENDARIO

```

using System;
using System.Drawing;
using System.Windows.Forms;
namespace Gui18

```

```
{public class Calendario:Form
{private System.Windows.Forms.MonthCalendar Calend=new
    System.Windows.Forms.MonthCalendar();
    private DateTime Selec;
    public Calendario()
    {
        // Calend
        this.Calend.Location = new System.Drawing.Point(0, 0);
        this.Calend.CalendarDimensions =new
        System.Drawing.Size(35,45);
        this.Calend.ShowToday = false;
        this.Calend.Name = "Calendario";
        this.Calend.TabIndex = 0;
        this.Calend.DateSelected += new
        System.Windows.Forms.DateRangeEventHandler(this.Calend_DateSe
        lected);
        // Form1
        this.AutoScaleDimensions = new System.Drawing.SizeF(9F, 20F);
        this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
        this.ClientSize = new System.Drawing.Size(670, 170);
        this.Controls.Add(this.Calend);
        this.Name = "Form1";
        this.Text = "Data de nascimento";
        this.ResumeLayout(false);}

    public string VerData()
    {string[] Meses = { "janeiro", "fevereiro", "marco", "abril"};
        return Selec.Day.ToString() + " de " + Meses[Selec.Month-1] +
        " de " + Selec.Year.ToString();}

    public void AtribuirData(DateTime DataEscolhida)
    {this.Selec = DataEscolhida;}

    private void Calend_DateSelected(object sender,
    System.Windows.Forms.DateRangeEventArgs e)
    {AtribuirData(Calend.SelectionStart);
        this.Close();}}}
```

### **PROGRAMA SELECCAO DATA**

```
using System;
using System.Collections.Generic;
using System.Windows.Forms;
namespace Gui18
{static class SeleccaoData
    {static void Main()
        {Calendario F = new Calendario();
            Application.EnableVisualStyles();
            Application.Run(F);
            MessageBox.Show(F.VerData(), "Nascido(a)");}}}
```