Namespace BOOSE_assignment

Classes

Canvas

Form1

<u>MyParser</u>

<u>MyTriangle</u>

<u>MyWrite</u>

<u>myCommandFactory</u>

Class Canvas

Namespace: <u>BOOSE assignment</u>
Assembly: BOOSE-assignment.dll

```
public class Canvas : ICanvas
```

Inheritance

object ← Canvas

Implements

ICanvas

Inherited Members

Constructors

Canvas()

Creates new <u>Canvas</u> object with default settings. Setting up up the resolution/ size of the canvas starting with a black pen.

```
public Canvas()
```

Properties

PenColour

There is a getter that gets the current pen colour. There also is a setter that helps change the current pen colour,

```
public object PenColour { get; set; }
```

Xpos

A setter and getter for the X coordinate that are called by different methods related to moving the pen and drawing on the canvas.

```
public int Xpos { get; set; }
```

Property Value

<u>int</u>♂

Ypos

A setter and getter for the Y coordinate that are called by different methods related to moving the pen and drawing on the canvas.

```
public int Ypos { get; set; }
```

Property Value

<u>int</u>♂

Methods

Circle(int, bool)

Draws a circle with the given radius at the current pen position, if radius is negative it handles the exception.

```
public void Circle(int radius, bool filled)
```

Parameters

radius int♂

filled bool ♂

Exceptions

CanvasException

If the radius provided value is negative.

Clear()

Clears the canvas by filling it with its background color which is currently set to ControlDark (light grey) in its properties.

```
public void Clear()
```

DrawTo(int, int)

It draws a line from the current pen position to the X (mvX), (mvY) coordinates, that the user wants to draw the line to. When the line is drawn, it updates the current pen position to the one it has moved to.

```
public void DrawTo(int mvX, int mvY)
```

Parameters

mvX <u>int</u>♂

mvY int♂

Exceptions

CanvasException

Checks that the given coordinates are within the canvas size bounds, otherwise handles exception and notifies the user within the exception

MoveTo(int, int)

Move the pen to the given coordinates position on the canvas but without drawing on the canvas.

```
public void MoveTo(int x, int y)
```

Parameters

x <u>int</u>♂

The given X coordinate the current pen position will be updated to.

y <u>int</u>♂

The given Y coordinate the current pen position will be updated to.

Exceptions

CanvasException

Thrown if given coordinates are out of canvas bounds (outside the visible screen).

Rect(int, int, bool)

Draws a rectangle at the current pen position with the width and height values that it is given.

```
public void Rect(int width, int height, bool filled)
```

Parameters

width int♂

The width of the rectangle.

height <u>int</u>♂

The height of the rectangle

filled <u>bool</u>♂

If true, fill in the rectangle with the current pen colour. Else only draw the rectangle's outline with the current pen thickness.

Reset()

Resets the current pen position to origin.

```
public void Reset()
```

Set(int, int)

Sets canvas size to the provided width and height. Resets the pen position to origin, and and sets up the Graphics object to allow drawing directly on the bitmap.

```
public void Set(int width, int height)
```

Parameters

width int♂

The canvas width.

height <u>int</u>♂

The canvas height.

SetColour(int, int, int)

Set the pen colour with the given RGB values. Check the RGB values are within possible range/ valid and fully visible.

```
public void SetColour(int red, int green, int blue)
```

Parameters

red <u>int</u>♂

green int♂

Exceptions

CanvasException

If invalid RGB values are provided, the exception is reported through the form's exception label.

Tri(int, int)

Draws a triangle on the canvas based on the provided width and height values. It is drawn with the current pen position being its top point.

```
public void Tri(int width, int height)
```

Parameters

width <u>int</u>♂

The triangle's base width.

height <u>int</u>♂

The triangle's height.

WriteText(string)

```
public void WriteText(string text)
```

Parameters

text <u>string</u> ☑

getBitmap()

Get the current state of the canvas.

```
public object getBitmap()
```

Returns

<u>object</u>♂

The bitmap object that has the current canvas state.

Class Form1

```
Namespace: BOOSE assignment
Assembly: BOOSE-assignment.dll
 public class Form1 : Form, IDropTarget, ISynchronizeInvoke, IWin32Window,
 IBindableComponent, IComponent, IDisposable, IContainerControl
Inheritance
<u>object</u> ∠ ← <u>MarshalByRefObject</u> ← <u>Component</u> ← <u>Control</u> ← <u>ScrollableControl</u> ←
ContainerControl  ← Form  ← Form 1
Implements
IDropTarget ☑, ISynchronizeInvoke ☑, IWin32Window ☑, IBindableComponent ☑, IComponent ☑,
Inherited Members
Form.SetVisibleCore(bool) □ , Form.Activate() □ , Form.ActivateMdiChild(Form) □ ,
Form.AddOwnedForm(Form) . Form.AdjustFormScrollbars(bool) . Form.Close() . ,
Form.CreateAccessibilityInstance() ☑ , Form.CreateControlsInstance() ☑ , Form.CreateHandle() ☑ ,
Form.DefWndProc(ref Message) ☑ , Form.ProcessMnemonic(char) ☑ , Form.CenterToParent() ☑ ,
Form.CenterToScreen() , Form.LayoutMdi(MdiLayout) , Form.OnActivated(EventArgs) ,
Form.OnBackgroundImageChanged(EventArgs) ,
<u>Form.OnBackgroundImageLayoutChanged(EventArgs)</u> 

☑ , <u>Form.OnClosing(CancelEventArgs)</u> 
☑ ,
Form.OnClosed(EventArgs) ☑, Form.OnFormClosing(FormClosingEventArgs) ☑,
Form.OnFormClosed(FormClosedEventArgs) ☑ , Form.OnCreateControl() ☑ ,
Form.OnDeactivate(EventArgs) ☑ , Form.OnEnabledChanged(EventArgs) ☑ , Form.OnEnter(EventArgs) ☑ ,
Form.OnFontChanged(EventArgs) d, Form.OnGotFocus(EventArgs) d,
Form.OnHandleCreated(EventArgs) ☑, Form.OnHandleDestroyed(EventArgs) ☑,
Form.OnHelpButtonClicked(CancelEventArgs) ☑ , Form.OnLayout(LayoutEventArgs) ☑ ,
Form.OnLoad(EventArgs) , Form.OnMaximizedBoundsChanged(EventArgs) ,
Form.OnMaximumSizeChanged(EventArgs) , Form.OnMinimumSizeChanged(EventArgs) ,
Form.OnInputLanguageChanged(InputLanguageChangedEventArgs) ,
Form.OnInputLanguageChanging(InputLanguageChangingEventArgs) ,
<u>Form.OnVisibleChanged(EventArgs)</u>  ♂, <u>Form.OnMdiChildActivate(EventArgs)</u> ♂,
Form.OnMenuStart(EventArgs) , Form.OnMenuComplete(EventArgs) ,
Form.OnPaint(PaintEventArgs) □ , Form.OnResize(EventArgs) □ ,
Form.OnDpiChanged(DpiChangedEventArgs) ♂, Form.OnGetDpiScaledSize(int, int, ref Size) ♂,
```

Form.OnRightToLeftLayoutChanged(EventArgs) □ , Form.OnShown(EventArgs) □ ,

```
Form.ProcessDialogKey(Keys) , Form.ProcessDialogChar(char) ,
Form.ProcessKeyPreview(ref Message) □ , Form.ProcessTabKey(bool) □ ,
Form.RemoveOwnedForm(Form) ♂, Form.Select(bool, bool) ♂,
Form.GetScaledBounds(Rectangle, SizeF, BoundsSpecified) ,
Form.SetClientSizeCore(int, int) , Form.SetDesktopBounds(int, int, int, int) , ,
Form.SetDesktopLocation(int, int) , Form.Show(IWin32Window) , Form.ShowDialog() ,
Form.ShowDialog(IWin32Window) . Form.ToString() . Form.UpdateDefaultButton() . ,
Form.OnResizeBegin(EventArgs) , Form.OnResizeEnd(EventArgs) ,
Form.OnStyleChanged(EventArgs) , Form.ValidateChildren() , ,
Form.ValidateChildren(ValidationConstraints)  , Form.WndProc(ref Message)  , Form.AcceptButton  ,
Form.ActiveForm , Form.ActiveMdiChild , Form.AllowTransparency , Form.AutoScroll ,
Form.AutoSized, Form.AutoSizeModed, Form.AutoValidated, Form.BackColord,
Form.CreateParams☑, Form.DefaultImeMode☑, Form.DefaultSize☑, Form.DesktopBounds☑,
Form.DesktopLocation , Form.DialogResult , Form.HelpButton , Form.Icon , Form.IsMdiChild ,
Form.lsMdiContainer ♂, Form.lsRestrictedWindow ♂, Form.KeyPreview ♂, Form.Location ♂,
Form.MaximizedBounds , Form.MaximumSize , Form.MainMenuStrip , Form.MinimumSize ,
Form.MaximizeBox day, Form.MdiChildren day, Form.MdiChildrenMinimizedAnchorBottom day,
Form.MdiParent , Form.MinimizeBox , Form.Modal , Form.Opacity , Form.OwnedForms ,
Form.Owner ☑ , Form.RestoreBounds ☑ , Form.RightToLeftLayout ☑ , Form.ShowInTaskbar ☑ ,
Form.Showlcong, Form.ShowWithoutActivationg, Form.Sizeg, Form.SizeGripStyleg,
Form.StartPosition☑, Form.Text☑, Form.TopLevel☑, Form.TopMost☑, Form.TransparencyKey☑,
Form.WindowState , Form.AutoSizeChanged , Form.AutoValidateChanged ,
Form.HelpButtonClicked , Form.MaximizedBoundsChanged , Form.MaximumSizeChanged ,
Form.MinimumSizeChanged , Form.Activated , Form.Deactivate , Form.FormClosing ,
Form.FormClosed , Form.Load , Form.MdiChildActivate , Form.MenuComplete ,
Form.MenuStart d, Form.InputLanguageChanged d, Form.InputLanguageChanging d,
Form.RightToLeftLayoutChanged , Form.Shown , Form.DpiChanged , Form.ResizeBegin , Form.ResizeBegin ,
Form.ResizeEnd , ContainerControl.OnAutoValidateChanged(EventArgs) ,
ContainerControl.OnMove(EventArgs) ☑ , ContainerControl.OnParentChanged(EventArgs) ☑ ,
ContainerControl.PerformAutoScale() , ContainerControl.RescaleConstantsForDpi(int, int) ,
ContainerControl.Validate() □ , ContainerControl.Validate(bool) □ ,
ContainerControl.AutoScaleDimensions ☑, ContainerControl.AutoScaleFactor ☑,
ContainerControl.AutoScaleMode de , ContainerControl.BindingContext de ,
ContainerControl.CurrentAutoScaleDimensions , ContainerControl.ParentForm ,
<u>ScrollableControl.ScrollStateAutoScrolling</u> , <u>ScrollableControl.ScrollStateHScrollVisible</u> ,
```

```
ScrollableControl.ScrollStateFullDragg, ScrollableControl.GetScrollState(int)g,
ScrollableControl.OnMouseWheel(MouseEventArgs) ,
<u>ScrollableControl.OnRightToLeftChanged(EventArgs)</u>

☑ ,
<u>ScrollableControl.OnPaintBackground(PaintEventArgs)</u> ,
ScrollableControl.OnPaddingChanged(EventArgs) , ScrollableControl.SetDisplayRectLocation(int, int) ,
<u>ScrollableControl.ScrollControlIntoView(Control)</u> dots, <u>ScrollableControl.ScrollToControl(Control)</u> dots, <u>ScrollableControl(ScrollToControl)</u> dots, <u>ScrollableControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToControl(ScrollToContr</u>
<u>ScrollableControl.OnScroll(ScrollEventArgs)</u> , <u>ScrollableControl.SetAutoScrollMargin(int, int)</u> ,
ScrollableControl.SetScrollState(int, bool) , ScrollableControl.AutoScrollMargin ,
ScrollableControl.AutoScrollPosition

, ScrollableControl.AutoScrollMinSize

,
ScrollableControl.DisplayRectangle , ScrollableControl.HScroll , ScrollableControl.HorizontalScroll ,
Control.GetAccessibilityObjectByld(int) , Control.SetAutoSizeMode(AutoSizeMode) ,
Control.GetAutoSizeMode() □ , Control.GetPreferredSize(Size) □ ,
Control.AccessibilityNotifyClients(AccessibleEvents, int) <a>□</a> ,
Control.AccessibilityNotifyClients(AccessibleEvents, int, int) , Control.BeginInvoke(Delegate) ,
Control.BeginInvoke(Action) ☑ , Control.BeginInvoke(Delegate, params object[]) ☑ ,
<u>Control.BringToFront()</u> ☑ , <u>Control.Contains(Control)</u> ☑ , <u>Control.CreateGraphics()</u> ☑ ,
Control.CreateControl() ☑ , Control.DestroyHandle() ☑ , Control.DoDragDrop(object, DragDropEffects) ☑ ,
Control.DoDragDrop(object, DragDropEffects, Bitmap, Point, bool) ,
Control.DrawToBitmap(Bitmap, Rectangle) ♂, Control.EndInvoke(IAsyncResult) ♂, Control.FindForm() ♂,
Control.GetTopLevel() de , Control.RaiseKeyEvent(object, KeyEventArgs) de ,
Control.RaiseMouseEvent(object, MouseEventArgs) de , Control.Focus() de ,
Control.FromChildHandle(nint) □ , Control.FromHandle(nint) □ ,
Control.GetChildAtPoint(Point, GetChildAtPointSkip) d., Control.GetChildAtPoint(Point) d.,
<u>Control.GetContainerControl()</u> □ , <u>Control.GetNextControl(Control, bool)</u> □ ,
Control.GetStyle(ControlStyles) ☑, Control.Hide() ☑, Control.InitLayout() ☑, Control.Invalidate(Region) ☑,
Control.Invalidate(Region, bool) ☑, Control.Invalidate() ☑, Control.Invalidate(bool) ☑,
Control.Invalidate(Rectangle) ☑ , Control.Invalidate(Rectangle, bool) ☑ , Control.Invoke(Action) ☑ ,
Control.Invoke(Delegate) ☑ , Control.Invoke(Delegate, params object[]) ☑ ,
Control.Invoke<T>(Func<T>)♂, Control.InvokePaint(Control, PaintEventArgs)♂,
Control.InvokePaintBackground(Control, PaintEventArgs) 

☐ , Control.IsKeyLocked(Keys) 
☐ ,
Control.IsInputChar(char) ♂, Control.IsInputKey(Keys) ♂, Control.IsMnemonic(char, string) ♂,
<u>Control.LogicalToDeviceUnits(int)</u> , <u>Control.LogicalToDeviceUnits(Size)</u> ,
Control.ScaleBitmapLogicalToDevice(ref Bitmap) . Control.NotifyInvalidate(Rectangle) . ,
Control.InvokeOnClick(Control, EventArgs) ☑, Control.OnAutoSizeChanged(EventArgs) ☑,
<u>Control.OnBackColorChanged(EventArgs)</u> doi: 1. <u>Control.OnBindingContextChanged(EventArgs)</u> doi: 1. Control.OnBindingContextChanged(EventArgs) doi: 1. Control.OnBindChanged(EventArgs) doi: 1. Control.OnB
<u>Control.OnCausesValidationChanged(EventArgs)</u> , <u>Control.OnContextMenuStripChanged(EventArgs)</u>, ,
\underline{Control.OnCursorChanged(\underline{EventArgs})} \, \underline{\square} \, \, , \, \underline{Control.OnDataContextChanged(\underline{EventArgs})} \, \underline{\square} \, \, , \, \, \underline{\square} \,
Control.OnDockChanged(EventArgs) ♂, Control.OnForeColorChanged(EventArgs) ♂,
```

```
<u>Control.OnNotifyMessage(Message)</u> ♂, <u>Control.OnParentBackColorChanged(EventArgs)</u> ♂,
Control.OnParentBackgroundImageChanged(EventArgs) □,
Control.OnParentBindingContextChanged(EventArgs) ☑, Control.OnParentCursorChanged(EventArgs) ☑,
Control.OnParentDataContextChanged(EventArgs)  

✓ , Control.OnParentEnabledChanged(EventArgs)  

✓ ,
<u>Control.OnParentFontChanged(EventArgs)</u> ✓ , <u>Control.OnParentForeColorChanged(EventArgs)</u> ✓ ,
Control.OnParentRightToLeftChanged(EventArgs) ≥ , Control.OnParentVisibleChanged(EventArgs) ≥ ,
<u>Control.OnPrint(PaintEventArgs)</u> ✓ , <u>Control.OnTabIndexChanged(EventArgs)</u> ✓ ,
Control.OnTabStopChanged(EventArgs) ♂, Control.OnClick(EventArgs) ♂,
Control.OnClientSizeChanged(EventArgs) ♂, Control.OnControlAdded(ControlEventArgs) ♂,
Control.OnControlRemoved(ControlEventArgs) ☑, Control.OnLocationChanged(EventArgs) ☑,
<u>Control.OnDoubleClick(EventArgs)</u> □, <u>Control.OnDragEnter(DragEventArgs)</u> □,
<u>Control.OnDragOver(DragEventArgs)</u> ♂, <u>Control.OnDragLeave(EventArgs)</u> ♂,
Control.OnDragDrop(DragEventArgs) , Control.OnGiveFeedback(GiveFeedbackEventArgs) , ,
Control.InvokeGotFocus(Control, EventArgs) ♂, Control.OnHelpRequested(HelpEventArgs) ♂,
<u>Control.OnInvalidated(InvalidateEventArgs)</u> documentary documentary described in the control of the control o
<u>Control.OnKeyPress(KeyPressEventArgs)</u> ♂, <u>Control.OnKeyUp(KeyEventArgs)</u> ♂,
Control.OnLeave(EventArgs) ♂, Control.InvokeLostFocus(Control, EventArgs) ♂,
<u>Control.OnLostFocus(EventArgs)</u> ✓, <u>Control.OnMarginChanged(EventArgs)</u> ✓,
<u>Control.OnMouseDoubleClick(MouseEventArgs)</u> doubleClick(MouseEventArgs) doubleClick(
Control.OnMouseCaptureChanged(EventArgs) ☑, Control.OnMouseDown(MouseEventArgs) ☑,
Control.OnMouseEnter(EventArgs) ☑, Control.OnMouseLeave(EventArgs) ☑,
<u>Control.OnDpiChangedBeforeParent(EventArgs)</u>  , <u>Control.OnDpiChangedAfterParent(EventArgs)</u>  , ,
<u>Control.OnMouseHover(EventArgs)</u> ☑, <u>Control.OnMouseMove(MouseEventArgs)</u> ☑,
Control.OnMouseUp(MouseEventArgs) ♂,
<u>Control.OnQueryContinueDrag(QueryContinueDragEventArgs)</u> 

✓ ,
Control.OnRegionChanged(EventArgs) ☑, Control.OnPreviewKeyDown(PreviewKeyDownEventArgs) ☑,
Control.OnSizeChanged(EventArgs) ☑, Control.OnChangeUlCues(UlCuesEventArgs) ☑,
Control.OnSystemColorsChanged(EventArgs) □ , Control.OnValidating(CancelEventArgs) □ ,
Control.OnValidated(EventArgs) ☑, Control.PerformLayout() ☑, Control.PerformLayout(Control, string) ☑,
<u>Control.PointToClient(Point)</u> ♂, <u>Control.PointToScreen(Point)</u> ♂,
Control.PreProcessMessage(ref Message) □ , Control.PreProcessControlMessage(ref Message) □ ,
Control.ProcessKeyEventArgs(ref Message) □ , Control.ProcessKeyMessage(ref Message) □ ,
Control.RaiseDragEvent(object, DragEventArgs) ♂, Control.RaisePaintEvent(object, PaintEventArgs) ♂,
<u>Control.RecreateHandle()</u> □ , <u>Control.RectangleToClient(Rectangle)</u> □ ,
Control.RectangleToScreen(Rectangle) □ , Control.ReflectMessage(nint, ref Message) □ ,
<u>Control.Refresh()</u> ♂, <u>Control.ResetMouseEventArgs()</u> ♂, <u>Control.ResetText()</u> ♂, <u>Control.ResumeLayout()</u> ♂,
<u>Control.ResumeLayout(bool)</u> ✓, <u>Control.Scale(SizeF)</u> ✓, <u>Control.Select()</u> ✓,
Control.SelectNextControl(Control, bool, bool, bool, bool, bool) 

☐ , Control.SendToBack() ☐ ,
Control.SizeFromClientSize(Size) ☑, Control.SetStyle(ControlStyles, bool) ☑, Control.SetTopLevel(bool) ☑,
```

```
<u>Control.RtlTranslateAlignment(HorizontalAlignment)</u> ,
Control.RtlTranslateAlignment(LeftRightAlignment) d ,
Control.RtlTranslateAlignment(ContentAlignment) d ,
<u>Control.RtlTranslateHorizontal(HorizontalAlignment)</u> ,
<u>Control.RtlTranslateLeftRight(LeftRightAlignment)</u> ♂, <u>Control.RtlTranslateContent(ContentAlignment)</u> ♂,
Control.Show() ☑ , Control.SuspendLayout() ☑ , Control.Update() ☑ , Control.UpdateBounds() ☑ ,
Control.UpdateBounds(int, int, int, int, int) do , Control.UpdateBounds(int, int, int, int, int, int) do ,
<u>Control.UpdateZOrder()</u> ☑ , <u>Control.UpdateStyles()</u> ☑ , <u>Control.OnImeModeChanged(EventArgs)</u> ☑ ,
Control.AccessibilityObject dotd, Control.AccessibleDefaultActionDescription dotd,
Control.AccessibleDescription ☑, Control.AccessibleName ☑, Control.AccessibleRole ☑,
Control.AllowDrop do , Control.Anchor do , Control.AutoScrollOffset do , Control.LayoutEngine do ,
Control.DataContext darkground lmage darkground lmage layout darkground lmageLayout darkground lmageLayout darkground lmageLayout darkground lmageLayout darkground lmage layout darkground layout darkgrou
Control.Bottom☑, Control.Bounds☑, Control.CanFocus☑, Control.CanRaiseEvents☑,
Control.CanSelect ♂, Control.Capture ♂, Control.Causes Validation ♂,
Control.CheckForIllegalCrossThreadCalls dots, Control.ClientRectangle dots, Control.CompanyName dots, Control.CheckForIllegalCrossThreadCalls dots, Control.ClientRectangle dots, Control.CheckForIllegalCrossThreadCalls dots, Control.ClientRectangle dots, Control.CheckForIllegalCrossThreadCalls dot
Control.ContainsFocus description , Control.ContextMenuStrip description , Control.Controls description , Control.Created des
Control.Cursor dark , Control.DataBindings dark , Control.DefaultBackColor dark , Control.DefaultCursor dark ,
Control.DefaultFont defaultForeColor defaultForeColor defaultMargin defaultMargin defaultMargin defaultForeColor defaultFore
Control.DefaultMaximumSize day, Control.DefaultMinimumSize day, Control.DefaultPadding day,
Control.DeviceDpi

□ , Control.IsDisposed

□ , Control.Disposing

□ , Control.Dock

□ ,
Control.DoubleBuffered ☑, Control.Enabled ☑, Control.Focused ☑, Control.Font ☑,
Control.FontHeight ♂, Control.ForeColor ♂, Control.Handle ♂, Control.HasChildren ♂, Control.Height ♂,
Control.IsHandleCreated ☑, Control.InvokeRequired ☑, Control.IsAccessible ☑,
Control.lsAncestorSiteInDesignMode ♂, Control.lsMirrored ♂, Control.Left ♂, Control.Margin ♂,
Control.ModifierKeys ♂, Control.MouseButtons ♂, Control.MousePosition ♂, Control.Name ♂,
Control.Parent☑, Control.ProductName☑, Control.ProductVersion☑, Control.RecreatingHandle☑,
Control.Region ☑, Control.RenderRightToLeft ☑, Control.ResizeRedraw ☑, Control.Right ☑,
Control.RightToLeft , Control.ScaleChildren , Control.Site , Control.TabIndex , Control.TabStop ,
Control.Tag ☑ , Control.Top ☑ , Control.Top LevelControl ☑ , Control.ShowKeyboardCues ☑ ,
Control.ShowFocusCues day, Control.UseWaitCursor day, Control.Visible day, Control.Width day,
Control.PreferredSize ♂, Control.Padding ♂, Control.ImeMode ♂, Control.ImeModeBase ♂,
Control.PropagatingImeMode ☑, Control.BackColorChanged ☑, Control.BackgroundImageChanged ☑,
Control.BackgroundImageLayoutChanged ☑, Control.BindingContextChanged ☑,
Control.ContextMenuStripChanged ♂, Control.CursorChanged ♂, Control.DockChanged ♂,
Control.EnabledChanged ♂, Control.FontChanged ♂, Control.ForeColorChanged ♂,
Control.LocationChanged ☑, Control.MarginChanged ☑, Control.RegionChanged ☑,
Control.RightToLeftChanged ☑, Control.SizeChanged ☑, Control.TabIndexChanged ☑,
Control.TabStopChanged ☑, Control.TextChanged ☑, Control.VisibleChanged ☑, Control.Click ☑,
Control.ControlAdded do , Control.ControlRemoved do , Control.DataContextChanged do ,
```

```
<u>Control.DragDrop</u> dontrol.DragEnter dontrol.DragOver dontrol.DragLeave dontrol.DragLeave dontrol.DragLeave dontrol.DragDrop dontrol.DragLeave dontrol.DragDrop dontrol.DragDro
 Control.GiveFeedback do , Control.HandleCreated do , Control.HandleDestroyed do ,
 Control. HelpRequested ☑, Control. Invalidated ☑, Control. Padding Changed ☑, Control. Paint ☑,
<u>Control.QueryContinueDrag</u> ♂, <u>Control.QueryAccessibilityHelp</u> ♂, <u>Control.DoubleClick</u> ♂,
Control.Enter dotal , Control.GotFocus dotal , Control.KeyDown dotal , Control.KeyPress dotal , Control.KeyUp dotal , Control.KeyUp
 Control.Layout do , Control.Leave do , Control.LostFocus do , Control.MouseClick do ,
Control.MouseDoubleClick dot , Control.MouseCaptureChanged dot , Control.MouseDown dot ,
 Control.MouseEnter d , Control.MouseLeave d , Control.DpiChangedBeforeParent d ,
Control.DpiChangedAfterParent ☑, Control.MouseHover ☑, Control.MouseMove ☑, Control.MouseUp ☑,
 Control.MouseWheel ☑, Control.Move ☑, Control.PreviewKeyDown ☑, Control.Resize ☑,
 Control.ChangeUlCues ☑, Control.StyleChanged ☑, Control.SystemColorsChanged ☑,
Control. Validating ☑ , Control. Validated ☑ , Control. ParentChanged ☑ , Control. ImeModeChanged ☑ ,
 Component.Dispose() ♂, Component.GetService(Type) ♂, Component.Container ♂,
 Component.DesignMode der , Component.Events der , Component.Disposed der ,
 <u>MarshalByRefObject.GetLifetimeService()</u> □ , <u>MarshalByRefObject.InitializeLifetimeService()</u> □ ,
 MarshalByRefObject.MemberwiseClone(bool) ♂, object.Equals(object) ♂, object.Equals(object, object, object) ♂,
 object.GetHashCode() ♂, object.GetType() ♂, object.MemberwiseClone() ♂,
object.ReferenceEquals(object, object) ≥
```

Constructors

Form1()

public Form1()

Methods

Dispose(bool)

Clean up any resources being used.

protected override void Dispose(bool disposing)

Parameters

disposing <u>bool</u> □

true if managed resources should be disposed; otherwise, false.

WriteText(string)

Updates the exception label on the form notifying the user with detailso of any errors or exceptions that they are being faced with.

public void WriteText(string message)

Parameters

message <u>string</u>♂

Class MyParser

Namespace: <u>BOOSE assignment</u>
Assembly: BOOSE-assignment.dll

```
public class MyParser : IParser
```

Inheritance

Implements

IParser

Inherited Members

Constructors

MyParser(CommandFactory, StoredProgram)

```
public MyParser(CommandFactory factory, StoredProgram program)
```

Parameters

factory CommandFactory

program StoredProgram

Methods

ParseCommand(string)

```
public ICommand ParseCommand(string line)
```

line <u>string</u>♂

Returns

ICommand

ParseProgram(string)

public void ParseProgram(string ProgramText)

Parameters

 $\textbf{ProgramText} \ \underline{\textbf{string}} \, \underline{\textbf{d}}$

Class MyTriangle

Namespace: <u>BOOSE assignment</u>
Assembly: BOOSE-assignment.dll

```
public class MyTriangle : CommandTwoParameters, ICommand
```

Inheritance

Implements

ICommand

Inherited Members

CommandTwoParameters.param2, CommandTwoParameters.param2unprocessed,
CommandOneParameter.param1, CommandOneParameter.param1unprocessed,
CanvasCommand.yPos, CanvasCommand.xPos, CanvasCommand.canvas, CanvasCommand.Canvas,
Command.program, Command.parameterList, Command.parameters, Command.paramsint,
Command.Compile(), Command.ProcessParameters(string), Command.ToString(),
Command.Program, Command.Name, Command.ParameterList, Command.Parameters,
Command.Paramsint, object.Equals(object), object.Equals(object, object), object.GetHashCode(), object.GetType(), object.MemberwiseClone(), object.ReferenceEquals(object, object, object), object.

Constructors

MyTriangle(Canvas)

```
public MyTriangle(Canvas canvas)
```

Parameters

canvas Canvas

Methods

CheckParameters(string[])

```
public override void CheckParameters(string[] parameters)
```

Parameters

parameters <u>string</u> []

Execute()

public override void Execute()

Set(StoredProgram, string)

public void Set(StoredProgram Program, string Params)

Parameters

Program StoredProgram

Params <u>string</u>♂

Class MyWrite

Namespace: <u>BOOSE assignment</u>
Assembly: BOOSE-assignment.dll

```
public class MyWrite : CommandOneParameter, ICommand
```

Inheritance

<u>object</u> ← Command ← CanvasCommand ← CommandOneParameter ← MyWrite

Implements

ICommand

Inherited Members

CommandOneParameter.param1 , CommandOneParameter.param1unprocessed ,
CanvasCommand.yPos , CanvasCommand.xPos , CanvasCommand.canvas , CanvasCommand.Canvas ,
Command.program , Command.parameterList , Command.parameters , Command.parameters ,
Command.Set(StoredProgram, string) , Command.Compile() , Command.ProcessParameters(string) ,
Command.ToString() , Command.Program , Command.Name , Command.ParameterList ,
Command.Parameters , Command.Paramsint , object.Equals(object) , object.Equals(object, object) ,
object.GetHashCode() , object.GetType() , object.MemberwiseClone() ,
object.ReferenceEquals(object, object)

Constructors

MyWrite(Canvas)

```
public MyWrite(Canvas canvas)
```

Parameters

canvas Canvas

Methods

CheckParameters(string[])

```
public override void CheckParameters(string[] parameters)
```

Parameters

parameters <u>string</u> []

Execute()

public override void Execute()

Class myCommandFactory

Namespace: <u>BOOSE assignment</u>
Assembly: BOOSE-assignment.dll

public class myCommandFactory : CommandFactory, ICommandFactory

Inheritance

 $\underline{object} \, \underline{r} \leftarrow CommandFactory \leftarrow myCommandFactory$

Implements

ICommandFactory

Inherited Members

Constructors

myCommandFactory(Canvas)

public myCommandFactory(Canvas canvas)

Parameters

canvas Canvas

Methods

MakeCommand(string)

public override ICommand MakeCommand(string commandType)

Parameters

commandType <u>string</u> ☑

Returns

ICommand