Namespace ASE_Assignment

Classes

AppCanvas

Class that implements the ICanvas interface and provides the functionality to draw on a canvas.

AppCommandFactory

Factory class for creating commands for the application.

AppTriangle

A command to draw a triangle with specified width and height.

BOOSEInterpreter

Main form for the BOOSE interpreter.

Class AppCanvas

Namespace: <u>ASE Assignment</u>
Assembly: ASE Assignment.dll

Class that implements the ICanvas interface and provides the functionality to draw on a canvas.

```
public class AppCanvas : ICanvas
```

Inheritance

<u>object</u> < AppCanvas

Implements

ICanvas

Inherited Members

Constructors

AppCanvas()

Initializes a new instance of the **AppCanvas** class.

```
public AppCanvas()
```

Properties

PenColour

Gets or sets the color of the pen.

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

Property Value

Xpos

Gets or sets the X position of the pen.

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

Property Value

<u>int</u>♂

Ypos

Gets or sets the Y position of the pen.

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

Property Value

<u>int</u>♂

Methods

Circle(int, bool)

Draws a circle on the canvas.

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

Parameters

radius <u>int</u>♂

The radius of the circle.

filled bool⊡

If is set to true, the cricle will be filled.

Exceptions

$\underline{ArgumentOutOfRangeException} \boxdot$

Exception thrown when radius is equal to 0 or less.

Clear()

Clears the canvas to orginial state.

```
public void Clear()
```

DrawTo(int, int)

Draws a line from the current position to the specified position.

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

Parameters

x int♂

The X coordinate to draw line to.

y <u>int</u>♂

The Y coordinate to draw line to.

Exceptions

<u>ArgumentOutOfRangeException</u> ☑

Exception thrown when the coordinates given is out of the canvas size.

MoveTo(int, int)

Moves the pen to specified position without drawing on canvas.

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

Parameters

x <u>int</u>♂

The X coordinate to move the pen to.

y <u>int</u>♂

The Y coordinate to move the pen to.

Exceptions

Exception thrown when coordinates given is out of the canvas size

Rect(int, int, bool)

Draw a rectangle on the canvas.

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

Parameters

width <u>int</u>♂

The width of the rectangle.

height \underline{int}

The height of the rectangle.

filled bool♂

If is set to true, rectangle will be filled.

Exceptions

<u>ArgumentOutOfRangeException</u> ☑

Exception thrown when width or height is set to 0 or less.

Reset()

Resets the pen position to original coordinates 0,0.

```
public void Reset()
```

Set(int, int)

Sets the size of the canvas.

```
public void Set(int xsize, int ysize)
```

Parameters

```
xsize <u>int</u>♂
```

The width of the canvas.

```
ysize <u>int</u>♂
```

The height of the canvas.

SetColour(int, int, int)

Sets the color of the pen.

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

Parameters

```
red <u>int</u>♂
```

Value of red component of the color

green int♂

Value of green component of the color

blue <u>int</u>♂

Value of blue component of the color

Exceptions

Exception thrown when any of the component values are set above 255.

Tri(int, int)

Draws a triangle on the canvas

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

Parameters

width <u>int</u>♂

The width of the triangle.

height <u>int</u>♂

The height of the triangle.

Exceptions

Exception thrown because the method is not implemented.

WriteText(string)

Writes the text on the canvas.

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

Parameters

text <u>string</u> ☑

The text to write.

Exceptions

 $\underline{NotImplementedException} \, \square$

Exception thrown because the method is not implemented.

getBitmap()

Gets the bitmap of the canvas.

public object getBitmap()

Returns

<u>object</u> ☑

The bitmap of the canvas.

Class AppCommandFactory

Namespace: <u>ASE Assignment</u>
Assembly: ASE Assignment.dll

Factory class for creating commands for the application.

```
public class AppCommandFactory : CommandFactory, ICommandFactory
```

Inheritance

<u>object</u>

✓ CommandFactory ← AppCommandFactory

Implements

ICommandFactory

Inherited Members

<u>object.Equals(object)</u> <u>object.Equals(object, object)</u> <u>object.GetHashCode()</u> <u>object.GetType()</u> <u>object.MemberwiseClone()</u> <u>object.ReferenceEquals(object, object)</u> <u>object.ToString()</u> <u>object.ToString() object.ToString() ob</u>

Constructors

AppCommandFactory()

Initializes a new instance of the <u>AppCommandFactory</u> class.

```
public AppCommandFactory()
```

Methods

MakeCommand(string)

Creates a command based on the specified command type.

```
public override ICommand MakeCommand(string commandType)
```

Parameters

commandType <u>string</u>♂

The type of command to be created.

Returns

ICommand

A instance of BOOSE.ICommandcorresponding to the specified command type.

Class AppTriangle

Namespace: <u>ASE Assignment</u>
Assembly: ASE Assignment.dll

A command to draw a triangle with specified width and height.

```
public class AppTriangle : ICommand
```

Inheritance

<u>object</u> ∠ ← AppTriangle

Implements

ICommand

Inherited Members

<u>object.Equals(object)</u> <u>object.Equals(object, object)</u> <u>object.GetHashCode()</u> <u>object.GetType()</u> <u>object.MemberwiseClone()</u> <u>object.ReferenceEquals(object, object)</u> <u>object.ToString()</u> <u>object.ToString() object.ToString() ob</u>

Constructors

AppTriangle(int, int)

Initializes a new instance of the AppTriangle class.

```
public AppTriangle(int width, int height)
```

Parameters

width <u>int</u>♂

The width of the triangle.

height <u>int</u>♂

The height of the triangle.

Methods

CheckParameters(string[])

Check the parameters for the triangle command.

```
public void CheckParameters(string[] Parameters)
```

Parameters

Parameters <u>string</u> □ []

The parameters that have to be checked.

Exceptions

Exception is thrown because this method is not implemented.

Compile()

Compiles the triangle command

```
public void Compile()
```

Execute()

Executes the triangle command.

```
public void Execute()
```

Exceptions

Exception is thrown because this method is not implemented.

Set(StoredProgram, string)

Sets the parameters for the triangle command.

```
public void Set(StoredProgram Program, string Params)
```

Parameters

Program StoredProgram

The stored program

Params <u>string</u> ☑

The parameters for the triangle command.

Exceptions

Exception thrown when there is less than 2 parameters given.

Exception thrown when the width or height of the triangle is equal to 0 or less.

Class BOOSEInterpreter

Namespace: <u>ASE Assignment</u>
Assembly: ASE Assignment.dll

Main form for the BOOSE interpreter.

```
public class BOOSEInterpreter : Form, IDropTarget, ISynchronizeInvoke, IWin32Window,
IBindableComponent, IComponent, IDisposable, IContainerControl
```

Inheritance

Implements

<u>IDropTarget</u> ☑, <u>ISynchronizeInvoke</u> ☑, <u>IWin32Window</u> ☑, <u>IBindableComponent</u> ☑, <u>IComponent</u> ☑, <u>IDisposable</u> ☑, <u>IContainerControl</u> ☑

Inherited Members

```
Form.SetVisibleCore(bool) ☑ , Form.Activate() ☑ , Form.ActivateMdiChild(Form) ☑ ,
Form.AddOwnedForm(Form) . Form.AdjustFormScrollbars(bool) . Form.Close() . ,
<u>Form.DefWndProc(ref Message)</u> ☑ , <u>Form.ProcessMnemonic(char)</u> ☑ , <u>Form.CenterToParent()</u> ☑ ,
Form.CenterToScreen() d , Form.LayoutMdi(MdiLayout) d , Form.OnActivated(EventArgs) d ,
Form.OnBackgroundImageLayoutChanged(EventArgs) d, Form.OnClosing(CancelEventArgs) d,
Form.OnClosed(EventArgs) <a>rd</a> , Form.OnFormClosing(FormClosingEventArgs) <a>rd</a> ,
<u>Form.OnFormClosed(FormClosedEventArgs)</u> 

☑ , <u>Form.OnCreateControl()</u> 
☑ ,
Form.OnDeactivate(EventArgs) ☑ , Form.OnEnabledChanged(EventArgs) ☑ , Form.OnEnter(EventArgs) ☑ ,
<u>Form.OnFontChanged(EventArgs)</u> □ , <u>Form.OnGotFocus(EventArgs)</u> □ ,
Form.OnHandleCreated(EventArgs) ☑, Form.OnHandleDestroyed(EventArgs) ☑,
Form.OnHelpButtonClicked(CancelEventArgs) d, Form.OnLayout(LayoutEventArgs) d,
<u>Form.OnLoad(EventArgs)</u> ✓, <u>Form.OnMaximizedBoundsChanged(EventArgs)</u> ✓,
Form.OnMaximumSizeChanged(EventArgs) , Form.OnMinimumSizeChanged(EventArgs) ,
Form.OnInputLanguageChanged(InputLanguageChangedEventArgs) ,
Form.OnInputLanguageChanging(InputLanguageChangingEventArgs)

,
Form.OnVisibleChanged(EventArgs) , Form.OnMdiChildActivate(EventArgs) , ,
Form.OnMenuStart(EventArgs) , Form.OnMenuComplete(EventArgs) ,
<u>Form.OnPaint(PaintEventArgs)</u>  

✓ , <u>Form.OnResize(EventArgs)</u>  
✓ ,
```

Form.OnDpiChanged(DpiChangedEventArgs) , Form.OnGetDpiScaledSize(int, int, ref Size) ,

```
<u>Form.OnRightToLeftLayoutChanged(EventArgs)</u> ∠, <u>Form.OnShown(EventArgs)</u> ∠,
Form.OnTextChanged(EventArgs) , Form.ProcessCmdKey(ref Message, Keys) ,
Form.ProcessDialogKey(Keys) , Form.ProcessDialogChar(char) , ,
Form.RemoveOwnedForm(Form) □ , Form.Select(bool, bool) □ ,
Form.ScaleMinMaxSize(float, float, 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 d, Form.ActiveMdiChild d, Form.AllowTransparency d, Form.AutoScroll d,
Form.AutoSize ♂, Form.AutoSizeMode ♂, Form.AutoValidate ♂, Form.BackColor ♂,
Form.FormBorderStyled, Form.CancelButtond, Form.ClientSized, Form.ControlBoxd,
Form.CreateParams☑, Form.DefaultImeMode☑, Form.DefaultSize☑, Form.DesktopBounds☑,
Form.DesktopLocation , Form.DialogResult , Form.HelpButton , Form.Icon , Form.IsMdiChild ,
Form.IsMdiContainer ☑, Form.IsRestrictedWindow ☑, Form.KeyPreview ☑, Form.Location ☑,
Form.MaximizedBounds , Form.MaximumSize , Form.MainMenuStrip , Form.MinimumSize ,
Form.MaximizeBox 7, Form.MdiChildren 7, Form.MdiChildrenMinimizedAnchorBottom 7,
Form.MdiParent , Form.MinimizeBox , Form.Modal , Form.Opacity , Form.OwnedForms ,
Form.Owner d, Form.RestoreBounds d, Form.RightToLeftLayout d, Form.ShowInTaskbar d,
Form.Showlcong, Form.ShowWithoutActivationg, Form.Sizeg, Form.SizeGripStyleg,
Form.StartPosition ☑, Form.Text ☑, Form.TopLevel ☑, Form.TopMost ☑, Form.TransparencyKey ☑,
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) ,
<u>ContainerControl.OnMove(EventArgs)</u> ♂, <u>ContainerControl.OnParentChanged(EventArgs)</u> ♂,
ContainerControl.PerformAutoScale() ☑ , ContainerControl.RescaleConstantsForDpi(int, int) ☑ ,
ContainerControl.Validate() ☑ , ContainerControl.Validate(bool) ☑ ,
ContainerControl.AutoScaleDimensions ☑, ContainerControl.AutoScaleFactor ☑,
ContainerControl.CanEnableImed, ContainerControl.ActiveControld,
ContainerControl.CurrentAutoScaleDimensions , ContainerControl.ParentForm ,
```

```
<u>ScrollableControl.ScrollStateAutoScrolling</u> , <u>ScrollableControl.ScrollStateHScrollVisible</u> ,
ScrollableControl.ScrollStateVScrollVisible , ScrollableControl.ScrollStateUserHasScrolled ,
ScrollableControl.ScrollStateFullDragg, ScrollableControl.GetScrollState(int)g,
ScrollableControl.OnMouseWheel(MouseEventArgs) ☑,
<u>ScrollableControl.OnRightToLeftChanged(EventArgs)</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>
ScrollableControl.OnScroll(ScrollEventArgs) , ScrollableControl.SetAutoScrollMargin(int, int) ,
ScrollableControl.SetScrollState(int, bool) , ScrollableControl.AutoScrollMargin ,
ScrollableControl.AutoScrollPosition

, ScrollableControl.AutoScrollMinSize

,
<u>ScrollableControl.DisplayRectangle</u> do , <u>ScrollableControl.HScroll</u> do , <u>ScrollableControl.HorizontalScroll</u> do ,
ScrollableControl.VScrolld, ScrollableControl.VerticalScrolld, ScrollableControl.Scrolld,
<u>Control.GetAccessibilityObjectById(int)</u> , <u>Control.SetAutoSizeMode(AutoSizeMode)</u> , ,
<u>Control.GetAutoSizeMode()</u> □ , <u>Control.GetPreferredSize(Size)</u> □ ,
Control.AccessibilityNotifyClients(AccessibleEvents, int) ,
Control.AccessibilityNotifyClients(AccessibleEvents, int, int) , Control.BeginInvoke(Delegate) ,
<u>Control.BeginInvoke(Action)</u> ♂, <u>Control.BeginInvoke(Delegate, params object[])</u> ♂,
<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() ☑ , Control.RaiseKeyEvent(object, KeyEventArgs) ☑ ,
Control.RaiseMouseEvent(object, MouseEventArgs) ≥ , Control.Focus() ≥ ,
<u>Control.FromChildHandle(nint)</u> ♂, <u>Control.FromHandle(nint)</u> ♂,
<u>Control.GetChildAtPoint(Point, GetChildAtPointSkip)</u> ♂, <u>Control.GetChildAtPoint(Point)</u> ♂,
Control.GetContainerControl() □ , Control.GetNextControl(Control, bool) □ ,
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[]) ☑ ,
<u>Control.Invoke<T>(Func<T>)</u> ♂, <u>Control.InvokePaint(Control, PaintEventArgs)</u> ♂,
Control.InvokePaintBackground(Control, PaintEventArgs) ☐, Control.IsKeyLocked(Keys) ☐,
Control.IsInputChar(char) ♂, Control.IsInputKey(Keys) ♂, Control.IsMnemonic(char, string) ♂,
Control.LogicalToDeviceUnits(int) □, Control.LogicalToDeviceUnits(Size) □,
Control.ScaleBitmapLogicalToDevice(ref Bitmap) \( \text{\texts} \) , Control.NotifyInvalidate(Rectangle) \( \text{\texts} \) ,
Control.InvokeOnClick(Control, EventArgs) degree , Control.OnAutoSizeChanged(EventArgs) degree ,
Control.OnBackColorChanged(EventArgs) ☑, Control.OnBindingContextChanged(EventArgs) ☑,
<u>Control.OnCausesValidationChanged(EventArgs)</u> , <u>Control.OnContextMenuStripChanged(EventArgs)</u>, ,
<u>Control.OnCursorChanged(EventArgs)</u> doi: 1. , <u>Control.OnDataContextChanged(EventArgs)</u> doi: 1. , <u>Control.OnDataContext</u>
```

```
<u>Control.OnDockChanged(EventArgs)</u> ✓, <u>Control.OnForeColorChanged(EventArgs)</u> ✓,
Control.OnNotifyMessage(Message) ☑, Control.OnParentBackColorChanged(EventArgs) ☑,
Control.OnParentBackgroundImageChanged(EventArgs) ☑,
<u>Control.OnParentBindingContextChanged(EventArgs)</u> ♂, <u>Control.OnParentCursorChanged(EventArgs)</u> ♂,
Control.OnParentFontChanged(EventArgs) ☑, Control.OnParentForeColorChanged(EventArgs) ☑,
<u>Control.OnParentRightToLeftChanged(EventArgs)</u> ∠, <u>Control.OnParentVisibleChanged(EventArgs)</u> ∠,
<u>Control.OnPrint(PaintEventArgs)</u> ✓ , <u>Control.OnTabIndexChanged(EventArgs)</u> ✓ ,
Control.OnTabStopChanged(EventArgs) ☑, Control.OnClick(EventArgs) ☑,
Control.OnClientSizeChanged(EventArgs) ☑, Control.OnControlAdded(ControlEventArgs) ☑,
<u>Control.OnControlRemoved(ControlEventArgs)</u> ✓, <u>Control.OnLocationChanged(EventArgs)</u> ✓,
\underline{Control.OnDoubleClick(\underline{EventArgs})} \, \underline{r} \,\, , \, \underline{Control.OnDragEnter(\underline{DragEventArgs})} \, \underline{r} \,\, , \, \underline{Control.O
Control.OnDragOver(DragEventArgs) down, Control.OnDragLeave(EventArgs) down,
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
Control.OnKeyPress(KeyPressEventArgs) ♂, Control.OnKeyUp(KeyEventArgs) ♂,
<u>Control.OnLeave(EventArgs)</u> ✓, <u>Control.InvokeLostFocus(Control, EventArgs)</u> ✓,
Control.OnLostFocus(EventArgs) ♂, Control.OnMarginChanged(EventArgs) ♂,
Control.OnMouseDoubleClick(MouseEventArgs) ☑, Control.OnMouseClick(MouseEventArgs) ☑,
Control.OnMouseCaptureChanged(EventArgs) ☑ , Control.OnMouseDown(MouseEventArgs) ☑ ,
<u>Control.OnMouseEnter(EventArgs)</u> ☑, <u>Control.OnMouseLeave(EventArgs)</u> ☑,
<u>Control.OnDpiChangedBeforeParent(EventArgs)</u>  , <u>Control.OnDpiChangedAfterParent(EventArgs)</u>  , ,
Control.OnMouseHover(EventArgs) ☑, Control.OnMouseMove(MouseEventArgs) ☑,
Control.OnMouseUp(MouseEventArgs) ♂,
<u>Control.OnQueryContinueDrag(QueryContinueDragEventArgs)</u> □,
Control.OnRegionChanged(EventArgs) ☑, Control.OnPreviewKeyDown(PreviewKeyDownEventArgs) ☑,
Control.OnSizeChanged(EventArgs) ♂, Control.OnChangeUlCues(UlCuesEventArgs) ♂,
<u>Control.OnSystemColorsChanged(EventArgs)</u> 

✓ , <u>Control.OnValidating(CancelEventArgs)</u> 

✓ ,
Control.OnValidated(EventArgs) ☑, Control.PerformLayout() ☑, Control.PerformLayout(Control, string) ☑,
Control.PointToClient(Point) ☑, Control.PointToScreen(Point) ☑,
<u>Control.PreProcessMessage(ref Message)</u> ♂, <u>Control.PreProcessControlMessage(ref Message)</u> ♂,
Control.ProcessKeyEventArgs(ref Message) down , Control.ProcessKeyMessage(ref Message) down ,
Control.RaiseDragEvent(object, DragEventArgs) ♂, Control.RaisePaintEvent(object, PaintEventArgs) ♂,
Control.RecreateHandle() □ , Control.RectangleToClient(Rectangle) □ ,
<u>Control.RectangleToScreen(Rectangle)</u> do , <u>Control.ReflectMessage(nint, ref Message)</u> do ,
<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) 
☐, Control.SendToBack() ☐,
Control.SetBounds(int, int, int, int) ♂, Control.SetBounds(int, int, int, BoundsSpecified) ♂,
```

```
<u>Control.SizeFromClientSize(Size)</u> ✓ , <u>Control.SetStyle(ControlStyles, bool)</u> ✓ , <u>Control.SetTopLevel(bool)</u> ✓ ,
Control.RtlTranslateAlignment(LeftRightAlignment) d ,
<u>Control.RtlTranslateHorizontal(HorizontalAlignment)</u> ,
Control.RtlTranslateLeftRight(LeftRightAlignment) , Control.RtlTranslateContent(ContentAlignment) ,
Control.Show() ☑ , Control.SuspendLayout() ☑ , Control.Update() ☑ , Control.UpdateBounds() ☑ ,
Control.UpdateBounds(int, int, int, int, int) downward , Control.UpdateBounds(int, int, int, int, int, int) downward ,
Control.UpdateZOrder() ♂, Control.UpdateStyles() ♂, Control.OnImeModeChanged(EventArgs) ♂,
Control.AccessibilityObject ☑, Control.AccessibleDefaultActionDescription ☑,
Control.AccessibleDescription ☑, Control.AccessibleName ☑, Control.AccessibleRole ☑,
Control.AllowDrop ☑, Control.Anchor ☑, Control.AutoScrollOffset ☑, Control.LayoutEngine ☑,
Control.DataContext data, Control.BackgroundImage data, Control.BackgroundImageLayout data,
Control.Bottom♂, Control.Bounds♂, Control.CanFocus♂, Control.CanRaiseEvents♂,
Control.CanSelect do , Control.Capture do , Control.Causes Validation do ,
Control.CheckForIllegalCrossThreadCalls dots, Control.ClientRectangle dots, Control.CompanyName dots,
Control.ContainsFocus ♂, Control.ContextMenuStrip ♂, Control.Controls ♂, Control.Created ♂,
Control.Cursor dark , Control.DataBindings dark , Control.DefaultBackColor dark , Control.DefaultCursor dark ,
Control.DefaultFont domain , Control.DefaultForeColor domain , Control.DefaultMargin domain , Control.DefaultMargin domain , Control.DefaultMargin domain , Control.DefaultForeColor domain , Control domain , Co
Control.DefaultMaximumSized, Control.DefaultMinimumSized, Control.DefaultPaddingd,
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 ☑,
<u>Control.Parent</u> do , <u>Control.ProductName</u> do , <u>Control.ProductVersion</u> do , <u>Control.RecreatingHandle</u> do ,
Control.Region ♂, Control.RenderRightToLeft ♂, Control.ResizeRedraw ♂, Control.Right ♂,
Control.RightToLeft ♂, Control.ScaleChildren ♂, Control.Site ♂, Control.TabIndex ♂, Control.TabStop ♂,
Control.Tag ☑ , Control.Top ☑ , Control.TopLevelControl ☑ , 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.CausesValidationChanged ☑, Control.ClientSizeChanged ☑,
Control.ContextMenuStripChanged domain , Control.CursorChanged domain , Control.DockChanged domain , Control.CursorChanged domain , Control.DockChanged domain , Control.CursorChanged do
Control.EnabledChanged dorum , Control.FontChanged dorum , Control.ForeColorChanged dorum ,
Control.LocationChanged ☑, Control.MarginChanged ☑, Control.RegionChanged ☑,
Control.RightToLeftChanged ☑, Control.SizeChanged ☑, Control.TabIndexChanged ☑,
Control.TabStopChanged ☑, Control.TextChanged ☑, Control.VisibleChanged ☑, Control.Click ☑,
```

```
<u>Control.ControlAdded</u> ☑ , <u>Control.ControlRemoved</u> ☑ , <u>Control.DataContextChanged</u> ☑ ,
Control.DragDrop , Control.DragEnter , Control.DragOver , Control.DragLeave ,
Control.GiveFeedback do , Control.HandleCreated do , Control.HandleDestroyed do ,
Control.HelpRequested ♂, Control.Invalidated ♂, Control.PaddingChanged ♂, Control.Paint ♂,
Control.QueryContinueDrag ☑ , Control.QueryAccessibilityHelp ☑ , Control.DoubleClick ☑ ,
Control.Enter day, Control.GotFocus day, Control.KeyDown day, Control.KeyPress day, Control.KeyUp day,
Control.Layout dots, Control.Leave dots, Control.LostFocus dots, Control.MouseClick dots, Control.LostFocus dots, Control.Leave dots, Control.Lea
Control.MouseDoubleClick do , Control.MouseCaptureChanged do , Control.MouseDown do ,
Control.MouseEnter ☑, Control.MouseLeave ☑, Control.DpiChangedBeforeParent ☑,
Control.DpiChangedAfterParent ☑, Control.MouseHover ☑, Control.MouseMove ☑, Control.MouseUp ☑,
Control.MouseWheel ☑, Control.Move ☑, Control.PreviewKeyDown ☑, Control.Resize ☑,
Control. Validating ☑, Control. Validated ☑, Control. ParentChanged ☑, Control. ImeModeChanged ☑,
<u>Component.Dispose()</u> ¬, <u>Component.GetService(Type)</u> ¬, <u>Component.Container</u> ¬,
Component.DesignMode doda , Component.Events doda , Component.Disposed doda ,
<u>MarshalByRefObject.GetLifetimeService()</u> □ , <u>MarshalByRefObject.InitializeLifetimeService()</u> □ ,
MarshalByRefObject.MemberwiseClone(bool) ♂, object.Equals(object) ♂, object.Equals(object, object) ♂,
<u>object.GetHashCode()</u> □ , <u>object.GetType()</u> □ , <u>object.MemberwiseClone()</u> □ ,
object.ReferenceEquals(object, object). □
```

Constructors

BOOSEInterpreter()

public BOOSEInterpreter()

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.

Namespace AppCanvasTests

Classes

<u>CommandsTest</u>

Unit test for the AppCanvas class.

Class CommandsTest

Namespace: <u>AppCanvasTests</u>
Assembly: AppCanvasTests.dll

Unit test for the **AppCanvas** class.

```
[TestClass]
public class CommandsTest
```

Inheritance

<u>object</u> < Commands Test

Inherited Members

<u>object.Equals(object)</u> dobject.Equals(object, object) dobject.GetHashCode() dobject.GetType() dobject.MemberwiseClone() dobject.ReferenceEquals(object, object) dobject.ToString() dob

Methods

Circle_Test_ValidRadius()

Test for / Test for Circle(int, bool) method with valid radius.

```
[TestMethod]
public void Circle_Test_ValidRadius()
```

DrawTo_Test()

Test for the AppCanvas.DrawLineTo(int, int) method with valid coordinates.

```
[TestMethod]
public void DrawTo Test()
```

DrawTo_Test_Negative_Coords()

Test for the AppCanvas.DrawLineTo(int, int) method with negative coordinates. Exception <u>ArgumentOut</u> <u>OfRangeException</u> expected to be thrown.

```
[TestMethod]
[ExpectedException(typeof(ArgumentOutOfRangeException))]
public void DrawTo_Test_Negative_Coords()
```

MoveTo_Test()

Test for the MoveTo(int, int) method with valid coordinates.

```
[TestMethod]
public void MoveTo_Test()
```

MoveTo_Test_Negative_Coords()

Test for the <u>MoveTo(int, int)</u> method with negative coordinates. Exception <u>ArgumentOutOfRange</u> <u>Exception</u> expected to be thrown.

```
[TestMethod]
[ExpectedException(typeof(ArgumentOutOfRangeException))]
public void MoveTo_Test_Negative_Coords()
```