Namespace ASE_Abhishek_Poudel

Classes

AppArray
Represents an application-specific array that extends the functionality of the BOOSE.Array class.

AppCanvas
Represents a canvas for drawing shapes

AppCommandFactory
Represents an application-specific implementation of the BOOSE.CommandFactory class.

AppFor
Represents an application-specific implementation of the BOOSE.For class.

AppIf
Represents an application-specific implementation of the BOOSE.If class.

AppInt
Represents an application-specific implementation of the BOOSE.Int class.

AppReal
Represents an application-specific implementation of the BOOSE.Real class.

AppReset
Represents an application-specific implementation of the BOOSE.CanvasCommand class to reset the canvas.

AppStoredProgram
Represents an application-specific implementation of the BOOSE.StoredProgram class.

AppWhile
Represents an application-specific implementation of the BOOSE.While class.

AppWrite
Represents an application-specific implementation of the BOOSE.CanvasCommand class to write text on the canvas.

BooseInterpreter
Represents the main form of the application.

Class AppArray

Namespace: ASE_Abhishek_Poudel

Assembly: ASE Abhishek Poudel.dll

Represents an application-specific array that extends the functionality of the BOOSE.Array class.

```
public class AppArray : Array, ICommand
```

Inheritance

object ← Command ← Evaluation ← Array ← AppArray

Implements

ICommand

Inherited Members

Array.PEEK , Array.POKE , Array.type , Array.rows , Array.columns , Array.valueInt , Array.valueReal , Array.intArray , Array.realArray , Array.pokeValue , Array.peekVar , Array.rowS , Array.columnS , Array.row , Array.column , Array.ArrayRestrictions() , Array.ReduceRestrictionCounter() , Array.Compile() , Array.CheckParameters(string[]) , Array.Execute() , Array.ProcessArrayParametersCompile(bool) , Array.ProcessArrayParametersExecute(bool) , Array.SetIntArray(int, int, int) , Array.SetRealArray(double, int, int) , Array.GetIntArray(int, int) , Array.GetRealArray(int, int) , Array.Rows , Array.Columns , Evaluation.expression , Evaluation.evaluatedExpression , Evaluation.varName , Evaluation.value , Evaluation.ProcessExpression(string) , Evaluation.Expression , Evaluation.VarName , Evaluation.Value , Evaluation.Local , Command.program , Command.parameterList , Command.parameters , Command.paramsint , Command.Set(StoredProgram, string) , 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

AppArray()

Initializes a new instance of the AppArray class. This constructor reduces the restriction counter upon instantiation.

```
public AppArray()
```

Class AppCanvas

Namespace: ASE_Abhishek_Poudel

Assembly: ASE Abhishek Poudel.dll

Represents a canvas for drawing shapes

```
public class AppCanvas : ICanvas
```

Inheritance

object ← AppCanvas

Implements

ICanvas

Inherited Members

object.Equals(object) , object.Equals(object, object) , object.GetHashCode() , object.GetType() , object.MemberwiseClone() , object.ReferenceEquals(object, object) , object.ToString()

Constructors

AppCanvas()

Initializes a new instance of the AppCanvas class.

```
public AppCanvas()
```

Properties

PenColour

Gets or sets the pen color.

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

Property Value

object

Xpos

Gets or sets the X position on the canvas.

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

Property Value

int

Exceptions

CanvasException

Thrown when the X position is out of canvas bounds.

Ypos

Gets or sets the Y position on the canvas.

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

Property Value

int

Exceptions

CanvasException

Thrown when the Y position is out of canvas bounds.

Methods

Circle(int, bool)

Draws a circle on the canvas.

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

Parameters

`radius` int

The radius of the circle.

`filled` bool

If set to `true` the circle will be filled.

Exceptions

CanvasException

Thrown when the radius is invalid or graphics object is not initialized.

Clear()

Clears the canvas.

```
public void Clear()
```

Exceptions

CanvasException

Thrown when graphics object is not initialized.

DrawTo(int, int)

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

```
public void DrawTo(int toX, int toY)
```

Parameters

`toX` int

The X coordinate to draw to.

`toY` int

The Y coordinate to draw to.

Exceptions

CanvasException

Thrown when the specified position is out of canvas bounds or graphics object is not initialized.

MoveTo(int, int)

Moves the current position to the specified coordinates.

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

Parameters

`x` int

The X coordinate to move to.

`y` int

The Y coordinate to move to.

Exceptions

CanvasException

Thrown when the specified position is out of canvas bounds.

Rect(int, int, bool)

Draws a rectangle on the canvas.

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

Parameters

`width` int

The width of the rectangle.

`height` int

The height of the rectangle.

`filled` bool

If set to `true` the rectangle will be filled.

Exceptions

CanvasException

Thrown when the width or height is invalid or graphics object is not initialized.

Reset()

Resets the current position to (0, 0).

```
public void Reset()
```

Set(int, int)

Sets the size of the canvas and initializes the graphics object.

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

Parameters

`xsize` int

The width of the canvas.

`ysize` int

The height of the canvas.

SetColour(int, int, int)

Sets the pen color using RGB values.

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

Parameters

`red` int

The red component of the color.

`green` int

The green component of the color.

`blue` int

The blue component of the color.

Exceptions

CanvasException

Thrown when the RGB values are out of range.

Tri(int, int)

Draws a triangle on the canvas.

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

Parameters

`width` int

The width of the triangle.

`height` int

The height of the triangle.

Exceptions

CanvasException

Thrown when the width or height is invalid or graphics object is not initialized.

WriteExceptionMessage(string)

Writes an exception message on the canvas.

```
public void WriteExceptionMessage(string message)
```

Parameters

`message` string

The exception message to write.

WriteText(string)

Writes text on the canvas.

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

Parameters

`text` string

The text to write.

Exceptions

CanvasException

Thrown when the text is null or empty or graphics object is not initialized.

getBitmap()

Gets the bitmap of the canvas.

```
public object getBitmap()
```

Returns

object

The bitmap of the canvas.

Class AppCommandFactory

Namespace: ASE_Abhishek_Poudel

Assembly: ASE Abhishek Poudel.dll

Represents an application-specific implementation of the BOOSE.CommandFactory class.

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

Inheritance

object ← CommandFactory ← AppCommandFactory

Implements

ICommandFactory

Inherited Members

object.Equals(object) , object.Equals(object, object) , object.GetHashCode() , object.GetType() , object.MemberwiseClone() , object.ReferenceEquals(object, object) , object.ToString()

Constructors

AppCommandFactory()

Initializes a new instance of the AppCommandFactory class.

```
public AppCommandFactory()
```

Methods

MakeCommand(string)

Creates an instance of a command based on the specified command type.

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

Parameters

`commandType` string

The type of command to create.

Returns

ICommand

An instance of the specified command type, or the base command if the type is not recognized.

Class AppFor

Namespace: ASE_Abhishek_Poudel

Assembly: ASE Abhishek Poudel.dll

Represents an application-specific implementation of the BOOSE.For class.

```
public class AppFor : For, ICommand
```

Inheritance

object ← Command ← Evaluation ← Boolean ← ConditionalCommand ← For ← AppFor

Implements

ICommand

Inherited Members

For.Compile() , For.Execute() , For.LoopControlV , For.From , For.To , For.Step , ConditionalCommand.endLineNumber , ConditionalCommand.EndLineNumber , ConditionalCommand.Condition , ConditionalCommand.LineNumber , ConditionalCommand.CondType , ConditionalCommand.ReturnLineNumber , Boolean.BoolValue , Evaluation.expression , Evaluation.evaluatedExpression , Evaluation.varName , Evaluation.value , Evaluation.CheckParameters(string[]) , Evaluation.ProcessExpression(string) , Evaluation.Expression , Evaluation.VarName , Evaluation.Value , Evaluation.Local , Command.program , Command.parameterList , Command.parameters , Command.paramsint , Command.Set(StoredProgram, string) , 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

AppFor()

Initializes a new instance of the AppFor class. This constructor outputs a message to the console indicating that the class is working.

```
public AppFor()
```

Methods

Restrictions()

Overrides the For.Restrictions method to provide custom restriction logic. This method outputs a message to the console indicating that the method is working.

```
public override void Restrictions()
```

Class AppIf

Namespace: ASE_Abhishek_Poudel

Assembly: ASE Abhishek Poudel.dll

Represents an application-specific implementation of the BOOSE.If class.

```
public class AppIf : If, ICommand
```

Inheritance

object ← Command ← Evaluation ← Boolean ← ConditionalCommand ← CompoundCommand ← If ← AppIf

Implements

ICommand

Inherited Members

CompoundCommand.ReduceRestrictions() , CompoundCommand.CheckParameters(string[]) , CompoundCommand.Compile() , CompoundCommand.CorrespondingCommand , ConditionalCommand.endLineNumber , ConditionalCommand.Execute() , ConditionalCommand.EndLineNumber , ConditionalCommand.Condition , ConditionalCommand.LineNumber , ConditionalCommand.CondType , ConditionalCommand.ReturnLineNumber , Boolean.BoolValue , Evaluation.expression , Evaluation.evaluatedExpression , Evaluation.varName , Evaluation.value , Evaluation.ProcessExpression(string) , Evaluation.Expression , Evaluation.VarName , Evaluation.Value , Evaluation.Local , Command.program , Command.parameterList , Command.parameters , Command.paramsint , Command.Set(StoredProgram, string) , 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

AppIf()

Initializes a new instance of the AppIf class. This constructor outputs a message to the console indicating that the class is working.

```
public AppIf()
```

Methods

Restrictions()

Overrides the If.Restrictions method to provide custom restriction logic. This method outputs a message to the console indicating that the method is working.

```
public override void Restrictions()
```

Class AppInt

Namespace: ASE_Abhishek_Poudel

Assembly: ASE Abhishek Poudel.dll

Represents an application-specific implementation of the BOOSE.Int class.

```
public class AppInt : Int, ICommand
```

Inheritance

object ← Command ← Evaluation ← Int ← AppInt

Implements

ICommand

Inherited Members

Int.Compile() , Int.Execute() , Evaluation.expression , Evaluation.evaluatedExpression , Evaluation.varName , Evaluation.value , Evaluation.CheckParameters(string[]) , Evaluation.ProcessExpression(string) , Evaluation.Expression , Evaluation.VarName , Evaluation.Value , Evaluation.Local , Command.program , Command.parameterList , Command.parameters , Command.paramsint , Command.Set(StoredProgram, string) , 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

AppInt()

Initializes a new instance of the AppInt class. This constructor outputs a message to the console indicating that the class is working.

```
public AppInt()
```

Methods

Restrictions()

Overrides the BOOSE.Int.Restrictions() method to provide custom restriction logic. This method outputs a message to the debug console indicating that the method is working.

```
public override void Restrictions()
```

Class AppReal

Namespace: ASE_Abhishek_Poudel

Assembly: ASE Abhishek Poudel.dll

Represents an application-specific implementation of the BOOSE.Real class.

```
public class AppReal : Real, ICommand
```

Inheritance

object ← Command ← Evaluation ← Real ← AppReal

Implements

ICommand

Inherited Members

Real.Compile() , Real.Execute() , Real.Value , Evaluation.expression , Evaluation.evaluatedExpression , Evaluation.varName , Evaluation.value , Evaluation.CheckParameters(string[]) , Evaluation.ProcessExpression(string) , Evaluation.Expression , Evaluation.VarName , Evaluation.Local , Command.program , Command.parameterList , Command.parameters , Command.paramsint , Command.Set(StoredProgram, string) , 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

AppReal()

Initializes a new instance of the AppReal class. This constructor outputs a message to the debug console indicating that the class is working.

```
public AppReal()
```

Methods

Restrictions()

Overrides the BOOSE.Real.Restrictions() method to provide custom restriction logic. This method outputs a message to the debug console indicating that the method is working.

```
public override void Restrictions()
```

Class AppReset

Namespace: ASE_Abhishek_Poudel

Assembly: ASE Abhishek Poudel.dll

Represents an application-specific implementation of the BOOSE.CanvasCommand class to reset the canvas.

```
public class AppReset : CanvasCommand, ICommand
```

Inheritance

object ← Command ← CanvasCommand ← AppReset

Implements

ICommand

Inherited Members

CanvasCommand.yPos , CanvasCommand.xPos , CanvasCommand.canvas , CanvasCommand.Canvas , Command.program , Command.parameterList , Command.parameters , Command.paramsint , 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

AppReset()

Initializes a new instance of the AppReset class.

```
public AppReset()
```

AppReset(AppCanvas)

Initializes a new instance of the AppReset class with the specified canvas.

```
public AppReset(AppCanvas canvas)
```

Parameters

`canvas` AppCanvas

The canvas to be reset.

Methods

CheckParameters(string[])

Checks the parameters for the reset command.

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

Parameters

`parameter` string[]

An array of parameters to check.

Execute()

Executes the reset command on the canvas.

```
public override void Execute()
```

Class AppStoredProgram

Namespace: ASE_Abhishek_Poudel

Assembly: ASE Abhishek Poudel.dll

Represents an application-specific implementation of the BOOSE.StoredProgram class.

```
public class AppStoredProgram : StoredProgram, IList, ICollection, IEnumerable,
ICloneable, IStoredProgram
```

Inheritance

object ← ArrayList ← StoredProgram ← AppStoredProgram

Implements

IList, ICollection, IEnumerable, ICloneable, IStoredProgram

Inherited Members

StoredProgram.SyntaxOk , StoredProgram.AddMethod(Method) , StoredProgram.GetMethod(string) , StoredProgram.AddVariable(Evaluation) , StoredProgram.GetVariable(string) , StoredProgram.GetVariable(int) , StoredProgram.FindVariable(Evaluation) , StoredProgram.FindVariable(string) , StoredProgram.VariableExists(string) , StoredProgram.GetVarValue(string) , StoredProgram.UpdateVariable(string, int) , StoredProgram.UpdateVariable(string, double) , StoredProgram.UpdateVariable(string, bool) , StoredProgram.DeleteVariable(string) , StoredProgram.IsExpression(string) , StoredProgram.EvaluateExpressionWithString(string) , StoredProgram.EvaluateExpression(string) , StoredProgram.Push(ConditionalCommand) , StoredProgram.Pop() , StoredProgram.Add(Command) , StoredProgram.NextCommand() , StoredProgram.ResetProgram() , StoredProgram.Commandsleft() , StoredProgram.PC , ArrayList.Adapter(IList) , ArrayList.Add(object) , ArrayList.AddRange(ICollection) , ArrayList.BinarySearch(int, int, object, IComparer) , ArrayList.BinarySearch(object) , ArrayList.BinarySearch(object, IComparer) , ArrayList.Clear() , ArrayList.Clone() , ArrayList.Contains(object) , ArrayList.CopyTo(Array) , ArrayList.CopyTo(Array, int) , ArrayList.CopyTo(int, Array, int, int) , ArrayList.FixedSize(ArrayList) , ArrayList.FixedSize(IList) , ArrayList.GetEnumerator() , ArrayList.GetEnumerator(int, int) , ArrayList.GetRange(int, int) , ArrayList.IndexOf(object) , ArrayList.IndexOf(object, int) , ArrayList.IndexOf(object, int, int) , ArrayList.Insert(int, object) , ArrayList.InsertRange(int, ICollection) , ArrayList.LastIndexOf(object) , ArrayList.LastIndexOf(object, int) , ArrayList.LastIndexOf(object, int, int) , ArrayList.ReadOnly(ArrayList) , ArrayList.ReadOnly(IList) , ArrayList.Remove(object) , ArrayList.RemoveAt(int) , ArrayList.RemoveRange(int, int) , ArrayList.Repeat(object, int) , ArrayList.Reverse() , ArrayList.Reverse(int, int) , ArrayList.SetRange(int, ICollection) ,

ArrayList.Sort() , ArrayList.Sort(IComparer) , ArrayList.Sort(int, int, IComparer) , ArrayList.Synchronized(ArrayList) , ArrayList.Synchronized(IList) , ArrayList.ToArray() , ArrayList.ToArray(Type) , ArrayList.TrimToSize() , ArrayList.Capacity , ArrayList.Count , ArrayList.IsFixedSize , ArrayList.IsReadOnly , ArrayList.IsSynchronized , ArrayList.this[int] , ArrayList.SyncRoot , object.Equals(object) , object.Equals(object, object) , object.GetHashCode() , object.GetType() , object.MemberwiseClone() , object.ReferenceEquals(object, object) , object.ToString()

Constructors

AppStoredProgram(ICanvas)

Initializes a new instance of the AppStoredProgram class with the specified canvas.

```
public AppStoredProgram(ICanvas canvas)
```

Parameters

`canvas` ICanvas

The canvas on which the stored program will execute.

Methods

Run()

Runs the stored program, executing each command in sequence.

```
public override void Run()
```

Exceptions

RestrictionException

Thrown when the execution cycle limit is exceeded.

StoredProgramException

Thrown when a BOOSEException occurs or the safe execution cycle threshold is exceeded.

Class AppWhile

Namespace: ASE_Abhishek_Poudel

Assembly: ASE Abhishek Poudel.dll

Represents an application-specific implementation of the BOOSE.While class.

```
public class AppWhile : While, ICommand
```

Inheritance

object ← Command ← Evaluation ← Boolean ← ConditionalCommand ← CompoundCommand ← While ← AppWhile

Implements

ICommand

Inherited Members

CompoundCommand.ReduceRestrictions() , CompoundCommand.CheckParameters(string[]) , CompoundCommand.Compile() , CompoundCommand.CorrespondingCommand , ConditionalCommand.endLineNumber , ConditionalCommand.Execute() , ConditionalCommand.EndLineNumber , ConditionalCommand.Condition , ConditionalCommand.LineNumber , ConditionalCommand.CondType , ConditionalCommand.ReturnLineNumber , Boolean.Restrictions() , Boolean.BoolValue , Evaluation.expression , Evaluation.evaluatedExpression , Evaluation.varName , Evaluation.value , Evaluation.ProcessExpression(string) , Evaluation.Expression , Evaluation.VarName , Evaluation.Value , Evaluation.Local , Command.program , Command.parameterList , Command.parameters , Command.paramsint , Command.Set(StoredProgram, string) , 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

AppWhile()

Initializes a new instance of the AppWhile class. This constructor reduces the restrictions upon instantiation.

```
public AppWhile()
```

Class AppWrite

Namespace: ASE_Abhishek_Poudel

Assembly: ASE Abhishek Poudel.dll

Represents an application-specific implementation of the BOOSE.CanvasCommand class to write text on the canvas.

```
public class AppWrite : CanvasCommand, ICommand
```

Inheritance

object ← Command ← CanvasCommand ← AppWrite

Implements

ICommand

Inherited Members

CanvasCommand.yPos , CanvasCommand.xPos , CanvasCommand.canvas , CanvasCommand.Canvas , Command.program , Command.parameterList , Command.parameters , Command.paramsint , 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

AppWrite()

Initializes a new instance of the AppWrite class.

```
public AppWrite()
```

AppWrite(Canvas, string)

Initializes a new instance of the AppWrite class with the specified canvas and number.

```
public AppWrite(Canvas c, string number)
```

Parameters

`c` Canvas

The canvas on which the text will be written.

`number` string

The number to be written on the canvas.

Methods

CheckParameters(string[])

Checks the parameters for the write command.

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

Parameters

`parameter` string[]

An array of parameters to check.

Execute()

Executes the write command, evaluating the expression and writing the result on the canvas.

```
public override void Execute()
```

Class BooseInterpreter

Namespace: ASE_Abhishek_Poudel

Assembly: ASE Abhishek Poudel.dll

Represents the main form of the application.

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

Inheritance

object ← MarshalByRefObject ← Component ← Control ← ScrollableControl ← ContainerControl ← Form ← BooseInterpreter

Implements

IDropTarget, ISynchronizeInvoke, IWin32Window, IBindableComponent, IComponent, IDisposable, IContainerControl

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) , Form.OnBackgroundImageLayoutChanged(EventArgs) , Form.OnClosing(CancelEventArgs) , Form.OnClosed(EventArgs) , Form.OnFormClosing(FormClosingEventArgs) , Form.OnFormClosed(FormClosedEventArgs) , Form.OnCreateControl() , Form.OnDeactivate(EventArgs) , Form.OnEnabledChanged(EventArgs) , Form.OnEnter(EventArgs) , Form.OnFontChanged(EventArgs) , Form.OnGotFocus(EventArgs) , 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) , Form.OnVisibleChanged(EventArgs) , Form.OnMdiChildActivate(EventArgs) , 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.OnTextChanged(EventArgs) , Form.ProcessCmdKey(ref Message, Keys) ,
Form.ProcessDialogKey(Keys) , Form.ProcessDialogChar(char) ,
Form.ProcessKeyPreview(ref Message) , Form.ProcessTabKey(bool) ,
Form.RemoveOwnedForm(Form) , Form.Select(bool, bool) ,
Form.ScaleMinMaxSize(float, float, bool) ,
Form.GetScaledBounds(Rectangle, SizeF, BoundsSpecified) ,
Form.ScaleControl(SizeF, BoundsSpecified) , Form.SetBoundsCore(int, int, int, int, 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.AutoSize , Form.AutoSizeMode , Form.AutoValidate , Form.BackColor ,
Form.FormBorderStyle , Form.CancelButton , Form.ClientSize , Form.ControlBox ,
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 , Form.MdiChildren , Form.MdiChildrenMinimizedAnchorBottom ,
Form.MdiParent , Form.MinimizeBox , Form.Modal , Form.Opacity , Form.OwnedForms ,
Form.Owner , Form.RestoreBounds , Form.RightToLeftLayout , Form.ShowInTaskbar ,
Form.ShowIcon , Form.ShowWithoutActivation , Form.Size , Form.SizeGripStyle ,
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 , Form.InputLanguageChanged , Form.InputLanguageChanging ,
Form.RightToLeftLayoutChanged , Form.Shown , Form.DpiChanged , 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 , ContainerControl.BindingContext ,
ContainerControl.CanEnableIme , ContainerControl.ActiveControl ,
ContainerControl.CurrentAutoScaleDimensions , ContainerControl.ParentForm ,

ScrollableControl.ScrollStateAutoScrolling , ScrollableControl.ScrollStateHScrollVisible ,
ScrollableControl.ScrollStateVScrollVisible , ScrollableControl.ScrollStateUserHasScrolled ,
ScrollableControl.ScrollStateFullDrag , ScrollableControl.GetScrollState(int) ,
ScrollableControl.OnMouseWheel(MouseEventArgs) ,
ScrollableControl.OnRightToLeftChanged(EventArgs) ,
ScrollableControl.OnPaintBackground(PaintEventArgs) ,
ScrollableControl.OnPaddingChanged(EventArgs) , ScrollableControl.SetDisplayRectLocation(int, int) ,
ScrollableControl.ScrollControlIntoView(Control) , ScrollableControl.ScrollToControl(Control) ,
ScrollableControl.OnScroll(ScrollEventArgs) , ScrollableControl.SetAutoScrollMargin(int, int) ,
ScrollableControl.SetScrollState(int, bool) , ScrollableControl.AutoScrollMargin ,
ScrollableControl.AutoScrollPosition , ScrollableControl.AutoScrollMinSize ,
ScrollableControl.DisplayRectangle , ScrollableControl.HScroll , ScrollableControl.HorizontalScroll ,
ScrollableControl.VScroll , ScrollableControl.VerticalScroll , ScrollableControl.Scroll ,
Control.GetAccessibilityObjectById(int) , Control.SetAutoSizeMode(AutoSizeMode) ,
Control.GetAutoSizeMode() , Control.GetPreferredSize(Size) ,
Control.AccessibilityNotifyClients(AccessibleEvents, int) ,
Control.AccessibilityNotifyClients(AccessibleEvents, int, int) , Control.BeginInvoke(Delegate) ,
Control.BeginInvoke(Action) , Control.BeginInvoke(Delegate, params object[]) ,
Control.BringToFront() , Control.Contains(Control) , Control.CreateGraphics() ,
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() ,
Control.FromChildHandle(nint) , Control.FromHandle(nint) ,
Control.GetChildAtPoint(Point, GetChildAtPointSkip) , Control.GetChildAtPoint(Point) ,
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[]) ,
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) ,
Control.LogicalToDeviceUnits(int) , Control.LogicalToDeviceUnits(Size) ,
Control.ScaleBitmapLogicalToDevice(ref Bitmap) , Control.NotifyInvalidate(Rectangle) ,
Control.InvokeOnClick(Control, EventArgs) , Control.OnAutoSizeChanged(EventArgs) ,
Control.OnBackColorChanged(EventArgs) , Control.OnBindingContextChanged(EventArgs) ,
Control.OnCausesValidationChanged(EventArgs) , Control.OnContextMenuStripChanged(EventArgs) ,
Control.OnCursorChanged(EventArgs) , Control.OnDataContextChanged(EventArgs) ,

Control.OnDockChanged(EventArgs) , Control.OnForeColorChanged(EventArgs) ,
Control.OnNotifyMessage(Message) , Control.OnParentBackColorChanged(EventArgs) ,
Control.OnParentBackgroundImageChanged(EventArgs) ,
Control.OnParentBindingContextChanged(EventArgs) , Control.OnParentCursorChanged(EventArgs) ,
Control.OnParentDataContextChanged(EventArgs) , Control.OnParentEnabledChanged(EventArgs) ,
Control.OnParentFontChanged(EventArgs) , Control.OnParentForeColorChanged(EventArgs) ,
Control.OnParentRightToLeftChanged(EventArgs) , Control.OnParentVisibleChanged(EventArgs) ,
Control.OnPrint(PaintEventArgs) , Control.OnTabIndexChanged(EventArgs) ,
Control.OnTabStopChanged(EventArgs) , Control.OnClick(EventArgs) ,
Control.OnClientSizeChanged(EventArgs) , Control.OnControlAdded(ControlEventArgs) ,
Control.OnControlRemoved(ControlEventArgs) , Control.OnLocationChanged(EventArgs) ,
Control.OnDoubleClick(EventArgs) , Control.OnDragEnter(DragEventArgs) ,
Control.OnDragOver(DragEventArgs) , Control.OnDragLeave(EventArgs) ,
Control.OnDragDrop(DragEventArgs) , Control.OnGiveFeedback(GiveFeedbackEventArgs) ,
Control.InvokeGotFocus(Control, EventArgs) , Control.OnHelpRequested(HelpEventArgs) ,
Control.OnInvalidated(InvalidateEventArgs) , Control.OnKeyDown(KeyEventArgs) ,
Control.OnKeyPress(KeyPressEventArgs) , Control.OnKeyUp(KeyEventArgs) ,
Control.OnLeave(EventArgs) , Control.InvokeLostFocus(Control, EventArgs) ,
Control.OnLostFocus(EventArgs) , Control.OnMarginChanged(EventArgs) ,
Control.OnMouseDoubleClick(MouseEventArgs) , Control.OnMouseClick(MouseEventArgs) ,
Control.OnMouseCaptureChanged(EventArgs) , Control.OnMouseDown(MouseEventArgs) ,
Control.OnMouseEnter(EventArgs) , Control.OnMouseLeave(EventArgs) ,
Control.OnDpiChangedBeforeParent(EventArgs) , Control.OnDpiChangedAfterParent(EventArgs) ,
Control.OnMouseHover(EventArgs) , Control.OnMouseMove(MouseEventArgs) ,
Control.OnMouseUp(MouseEventArgs) ,
Control.OnQueryContinueDrag(QueryContinueDragEventArgs) ,
Control.OnRegionChanged(EventArgs) , Control.OnPreviewKeyDown(PreviewKeyDownEventArgs) ,
Control.OnSizeChanged(EventArgs) , Control.OnChangeUICues(UICuesEventArgs) ,
Control.OnSystemColorsChanged(EventArgs) , Control.OnValidating(CancelEventArgs) ,
Control.OnValidated(EventArgs) , Control.PerformLayout() , Control.PerformLayout(Control, string) ,
Control.PointToClient(Point) , Control.PointToScreen(Point) ,
Control.PreProcessMessage(ref Message) , Control.PreProcessControlMessage(ref Message) ,
Control.ProcessKeyEventArgs(ref Message) , Control.ProcessKeyMessage(ref Message) ,
Control.RaiseDragEvent(object, DragEventArgs) , Control.RaisePaintEvent(object, PaintEventArgs) ,
Control.RecreateHandle() , Control.RectangleToClient(Rectangle) ,
Control.RectangleToScreen(Rectangle) , Control.ReflectMessage(nint, ref Message) ,
Control.Refresh() , Control.ResetMouseEventArgs() , Control.ResetText() , Control.ResumeLayout() ,
Control.ResumeLayout(bool) , Control.Scale(SizeF) , Control.Select() ,
Control.SelectNextControl(Control, bool, bool, bool, bool) , Control.SendToBack() ,
Control.SetBounds(int, int, int, int) , Control.SetBounds(int, int, int, int, BoundsSpecified) ,

Control.SizeFromClientSize(Size) , Control.SetStyle(ControlStyles, bool) , Control.SetTopLevel(bool) ,
Control.RtlTranslateAlignment(HorizontalAlignment) ,
Control.RtlTranslateAlignment(LeftRightAlignment) ,
Control.RtlTranslateAlignment(ContentAlignment) ,
Control.RtlTranslateHorizontal(HorizontalAlignment) ,
Control.RtlTranslateLeftRight(LeftRightAlignment) , Control.RtlTranslateContent(ContentAlignment) ,
Control.Show() , Control.SuspendLayout() , Control.Update() , Control.UpdateBounds() ,
Control.UpdateBounds(int, int, int, int) , Control.UpdateBounds(int, int, int, int, int, int) ,
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 , Control.BackgroundImage , Control.BackgroundImageLayout ,
Control.Bottom , Control.Bounds , Control.CanFocus , Control.CanRaiseEvents ,
Control.CanSelect , Control.Capture , Control.CausesValidation ,
Control.CheckForIllegalCrossThreadCalls , Control.ClientRectangle , Control.CompanyName ,
Control.ContainsFocus , Control.ContextMenuStrip , Control.Controls , Control.Created ,
Control.Cursor , Control.DataBindings , Control.DefaultBackColor , Control.DefaultCursor ,
Control.DefaultFont , Control.DefaultForeColor , Control.DefaultMargin ,
Control.DefaultMaximumSize , Control.DefaultMinimumSize , Control.DefaultPadding ,
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.IsAncestorSiteInDesignMode , Control.IsMirrored , 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.TopLevelControl , Control.ShowKeyboardCues ,
Control.ShowFocusCues , Control.UseWaitCursor , Control.Visible , Control.Width ,
Control.PreferredSize , Control.Padding , Control.ImeMode , Control.ImeModeBase ,
Control.PropagatingImeMode , Control.BackColorChanged , Control.BackgroundImageChanged ,
Control.BackgroundImageLayoutChanged , Control.BindingContextChanged ,
Control.CausesValidationChanged , Control.ClientSizeChanged ,
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 , Control.ControlRemoved , Control.DataContextChanged , Control.DragDrop , Control.DragEnter , Control.DragOver , Control.DragLeave , Control.GiveFeedback , Control.HandleCreated , Control.HandleDestroyed , Control.HelpRequested , Control.Invalidated , Control.PaddingChanged , Control.Paint , Control.QueryContinueDrag , Control.QueryAccessibilityHelp , Control.DoubleClick , Control.Enter , Control.GotFocus , Control.KeyDown , Control.KeyPress , Control.KeyUp , Control.Layout , Control.Leave , Control.LostFocus , Control.MouseClick , Control.MouseDoubleClick , Control.MouseCaptureChanged , Control.MouseDown , Control.MouseEnter , Control.MouseLeave , Control.DpiChangedBeforeParent , Control.DpiChangedAfterParent , Control.MouseHover , Control.MouseMove , Control.MouseUp , Control.MouseWheel , Control.Move , Control.PreviewKeyDown , Control.Resize , Control.ChangeUICues , Control.StyleChanged , Control.SystemColorsChanged , Control.Validating , Control.Validated , Control.ParentChanged , Control.ImeModeChanged , Component.Dispose() , Component.GetService(Type) , Component.Container , Component.DesignMode , Component.Events , Component.Disposed , MarshalByRefObject.GetLifetimeService() , MarshalByRefObject.InitializeLifetimeService() , MarshalByRefObject.MemberwiseClone(bool) , object.Equals(object) , object.Equals(object, object) , object.GetHashCode() , object.GetType() , object.MemberwiseClone() , object.ReferenceEquals(object, object)

Constructors

BooseInterpreter()

Initializes a new instance of the BooseInterpreter class.

```
public BooseInterpreter()
```

Methods

Dispose(bool)

Clean up any resources being used.

```
protected override void Dispose(bool disposing)
```

Parameters

`disposing` bool

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

Namespace ASE_Abhishek_Poudel.Tests

Classes

AppCanvasTests

Contains unit tests for the AppCanvas class.

Class AppCanvasTests

Namespace: ASE_Abhishek_Poudel.Tests

Assembly: ASE Abhishek Poudel Tests.dll

Contains unit tests for the AppCanvas class.

```
[TestClass]
public class AppCanvasTests
```

Inheritance

object ← AppCanvasTests

Inherited Members

object.Equals(object) , object.Equals(object, object) , object.GetHashCode() , object.GetType() , object.MemberwiseClone() , object.ReferenceEquals(object, object) , object.ToString()

Methods

DrawTo_UpdatesPenPosition_Test()

Tests that the DrawTo(int, int) method updates the pen position correctly.

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

MoveTo_Test_UpdatesPenPosition()

Tests that the MoveTo(int, int) method updates the pen position correctly.

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

Multi_line_method()

Tests multiple canvas operations sequentially for integration testing.

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

Test_AddIntegers()

Tests a method that adds two integers.

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

Test_AllPositive_IfStatement()

Tests that all elements in an integer array are positive.

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

Test_AverageRealArray()

Tests calculating the average of elements in a real number array.

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

Test_AverageRealNumbers()

Tests a method that calculates the average of two real numbers.

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

Test_MaxValue_WhileLoop()

Tests finding the maximum value in a real array using a while loop.

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

Test_SumArray_ForLoop()

Tests summing all elements in an integer array using a for loop.

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

Test_SumIntegerArray()

Tests summing all elements in an integer array.

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