

# Namespace ASE\_Assignment

## Classes

▼ Filter by title

### **AppCanvas (ASE\_Assignment.AppCanvas.html)**

Initialises drawing surface and provides methods for drawing and also manages the drawing surface.

AppCanvas

### **AppCommandFactory (ASE\_Assignment.AppCommandFactory.html)**

Factory class for creating instances of ASE\_Assignment and BOOSE commands.S

BooseInterpreter

### **BooseInterpreter (ASE\_Assignment.BooseInterpreter.html)**

Represents the main form of the application, handling user input and the drawing canvas.

MoveTo

### **Circle (ASE\_Assignment.Circle.html)**

Command to draw a circle on the canvas.

Rect (ASE\_Assignment.Rect.html)

### **MoveTo (ASE\_Assignment.MoveTo.html)**

Command which moves the pen to specified (x,y) coordinates.

### **+ ASE\_AssignmentTests**

### **PenColour (ASE\_Assignment.PenColour.html)**

Command which sets the pen colour to draw with using RGB values.

### **Rect (ASE\_Assignment.Rect.html)**

Command to draw a rectangle on the canvas.

### **WriteText (ASE\_Assignment.WriteText.html)**

Command to write a string on the canvas.

# Class AppCanvas

Initialises drawing surface and provides methods for drawing and also manages the drawing surface.

▼ Filter by title

## Inheritance

### ASE Assignment

↳ [Object \(https://learn.microsoft.com/dotnet/api/system.object\)](https://learn.microsoft.com/dotnet/api/system.object)

↳ [Canvas \(ASE\\_Assignment.html\)](#)

↳ [AppCanvas](#)

↳ [AppCanvas \(ASE\\_Assignment.AppCanvas.html\)](#)

↳ [AppCommandFactory](#)

↳ [AppCommandFactory \(ASE\\_Assignment.AppCommandFac](#)

### Inherited Members

↳ [BooseInterpreter](#)

↳ [BooseInterpreter \(ASE\\_Assignment.BooseInterpreter.](#)

↳ [Circle \(int, int\) \(https://learn.microsoft.com/dotnet/api/system.int32\)](#)

↳ [Circle \(ASE\\_Assignment.Circle.html\)](#)

↳ [Rectangle \(int, int, bool\) \(https://learn.microsoft.com/dotnet/api/system.int32\)](#)

↳ [MoveTo \(ASE\\_Assignment.MoveTo.html\)](#)

↳ [PenColour](#)

↳ [PenColour \(ASE\\_Assignment.PenColour.html\)](#)

↳ [Rect \(ASE\\_Assignment.Rect.html\)](#)

↳ [WriteText \(object, object\) \(https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object, system-object\)\)](#)

↳ [WriteText \(ASE\\_Assignment.WriteText.html\)](#)

↳ [GetHashCode\(\) \(https://learn.microsoft.com/dotnet/api/system.object.gethashcode\)](#)

↳ [GetType\(\) \(https://learn.microsoft.com/dotnet/api/system.object.gettype\)](#)

↳ [MemberwiseClone\(\) \(https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone\)](#)

↳ [ReferenceEquals\(object, object\) \(https://learn.microsoft.com/dotnet/api/system.object.referenceequals\)](#)

↳ [ToString\(\) \(https://learn.microsoft.com/dotnet/api/system.object.tostring\)](#)

**Namespace:** ASE\_Assignment (ASE\_Assignment.html)

**Assembly:** ASE\_Assignment.dll

## Syntax

```
public class AppCanvas : Canvas, ICanvas
```

## Constructors

### AppCanvas(int, int)

Initialises an instance of the AppCanvas class using the width and height provided.

## Declaration

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

Parameters

Type	Name	Description
int ( <a href="https://learn.microsoft.com/dotnet/api/system.int32">https://learn.microsoft.com/dotnet/api/system.int32</a> )	<i>width</i>	Width of the drawing surface
int ( <a href="https://learn.microsoft.com/dotnet/api/system.int32">https://learn.microsoft.com/dotnet/api/system.int32</a> )	<i>height</i>	Height of the drawing surface

**ASE\_Assignment**  
**(ASE\_Assignment.html)**

Examples

```
AppCanvas  
(ASE_Assignment.AppCanvas.html)  
AppCommandFactory  
(ASE_Assignment.AppCommandFac  
BooseInterpreter  
(ASE_Assignment.BooseInterpreter.  
Circle  
(ASE_Assignment.Circle.html)  
MoveTo  
(ASE_Assignment.MoveTo.html)  
PenColour  
(ASE_Assignment.PenColour.html)  
Sets the pen colour used when drawing on the canvas.  
Rect (ASE_Assignment.Rect.html)  
WriteText  
(ASE_Assignment.WriteText.html)  
public override object PenColour { get; set; }
```

**Properties**

**PenColour**

Sets the pen colour used when drawing on the canvas.

Declaration

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

**+ ASE\_AssignmentTests**

**(ASE\_AssignmentTests.html)**

Property Value

Type	Description
object ( <a href="https://learn.microsoft.com/dotnet/api/system.object">https://learn.microsoft.com/dotnet/api/system.object</a> )	

Overrides

BOOSE.Canvas.PenColour

**Methods**

**CheckWithinBounds(int, int)**

Checks if parameters given are within drawing surface bounds and throws BOOSE.CommandException if not.

Declaration

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

## Parameters

Type	Name	Description
int ( <a href="https://learn.microsoft.com/dotnet/api/system.int32">https://learn.microsoft.com/dotnet/api/system.int32</a> )	<i>x</i>	X position to be checked if within bounds.
int ( <a href="https://learn.microsoft.com/dotnet/api/system.int32">https://learn.microsoft.com/dotnet/api/system.int32</a> )	<i>y</i>	Y position to be checked if within bounds.



## Exceptions

Type	Condition
<b>ASE_Assignment</b> ( <a href="#">ASE_Assignment.html</a> ) <code>CommandException</code>	Thrown if X or Y provided are out of bounds.

`AppCanvas`  
([ASE\\_Assignment.AppCanvas.html](#))

`AppCommandFactory`  
([ASE\\_Assignment.AppCommandFac](#))

`BooselInterpreter`  
Draws a circle from the current position with the specified radius, filled or unfilled.  
([ASE\\_Assignment.BooselInterpreter](#).)

## Declaration

([ASE\\_Assignment.Circle.html](#))

`MoveTo` override void `Circle`(int radius, bool filled)  
([ASE\\_Assignment.MoveTo.html](#))

`PenColour`

`Parameters`  
([ASE\\_Assignment.PenColour.html](#))

Type	Name	Description
<code>Rect</code> ( <a href="#">ASE_Assignment.Rect.html</a> )		
<code>WriteText</code> int ( <a href="https://learn.microsoft.com/dotnet/api/system.int32">https://learn.microsoft.com/dotnet/api/system.int32</a> ) ( <a href="#">ASE_Assignment.WriteText.html</a> )	<i>radius</i>	Radius of the circle drawn
<code>bool</code> <b>+ ASE_AssignmentTests</b> ( <a href="https://learn.microsoft.com/dotnet/api/system.boolean">https://learn.microsoft.com/dotnet/api/system.boolean</a> ) ( <a href="#">ASE_AssignmentTests.html</a> )	<i>filled</i>	Bool representing if the circle should be filled

## Overrides

`Canvas.Circle`(int, bool) (<https://learn.microsoft.com/dotnet/api/system.int32>)

## Examples

```
appCanvas.Circle(100, true);
```

## Exceptions

Type	Condition
<code>CommandException</code>	Thrown if radius provided is less than or equal to zero

## Clear()

Clears the canvas by filling it with the current background colour.

## Declaration

```
public override void Clear()
```

#### Overrides

BOOSE.Canvas.Clear()

#### Examples

```
- ASE_Assignment  
  appCanvas.Clear();  
(ASE_Assignment.html)
```

```
AppCanvas  
(ASE_Assignment.AppCanvas.html)  
DrawTo(int, int)  
AppCommandFactory  
(ASE_Assignment.AppCommandFac  
BooseInterpreter  
(ASE_Assignment.BooseInterpreter.  
Declaration
```

Draws a line from the current position to the specified (x,y) coordinates and sets the current position to the (x,y) coordinates.

```
MoveTo  
public override void DrawTo(int x, int y)  
(ASE_Assignment.MoveTo.html)  
PenColour  
Parameters  
(ASE_Assignment.PenColour.html)  
Type  
Rect (ASE_Assignment.Rect.html)  
WriteText  
int (https://learn.microsoft.com/dotnet/api/system.int32)  
(ASE_Assignment.WriteText.html)  
+ ASE_AssignmentTests  
(ASE_AssignmentTests.html)
```

Type	Name	Description
int (https://learn.microsoft.com/dotnet/api/system.int32)	x	X coordinate to draw to
int (https://learn.microsoft.com/dotnet/api/system.int32)	y	Y coordinate to draw to

#### Examples

#### Overrides

Canvas.DrawTo(int, int) (https://learn.microsoft.com/dotnet/api/system.int32)

#### Examples

```
appCanvas.DrawTo(100, 100);
```

#### Exceptions

Type	Condition
CommandException	Thrown if the length of the line to be drawn will be zero

## MoveTo(int, int)

Moves pen position to given (x,y) coordinate.

#### Declaration

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

Parameters

Type	Name	Description
int (https://learn.microsoft.com/dotnet/api/system.int32)	<i>x</i>	X position to move to.
int (https://learn.microsoft.com/dotnet/api/system.int32)	<i>y</i>	Y position to move to.

⌵  
Overrides

Canvas.MoveTo(int, int) (https://learn.microsoft.com/dotnet/api/system.int32)

**ASE\_Assignment**

Example (ASE\_Assignment.html)

```
AppCanvas
appCanvas.MoveTo(100, 100);
(ASE_Assignment.AppCanvas.html)
AppCommandFactory
(ASE_Assignment.AppCommandFac
BooselInterpreter
(ASE_Assignment.BooselInterpreter.
```

**Rect(int, int, bool)**

Circle  
Draws a rectangle with the specified width and height, filled or unfilled.  
(ASE\_Assignment.Circle.html)

**MoveTo**

```
(ASE_Assignment.MoveTo.html)
PenColour
public override void Rect(int width, int height, bool filled)
(ASE_Assignment.PenColour.html)
Rect (ASE_Assignment.Rect.html)
```

Parameters

Type	Name	Description
(ASE_Assignment.WriteText.html)		
<b>ASE_AssignmentTests</b> (ASE_AssignmentTests.html)	<i>width</i>	Width of the rectangle
int (https://learn.microsoft.com/dotnet/api/system.int32)	<i>height</i>	Height of the rectangle
bool (https://learn.microsoft.com/dotnet/api/system.boolean) )	<i>filled</i>	Bool representing if the rectangle should be filled

Overrides

Canvas.Rect(int, int, bool) (https://learn.microsoft.com/dotnet/api/system.int32)

Examples

```
appCanvas.Rect(width, height, true);
```

Exceptions

Type	Condition
CommandException	Thrown if either width or height are less than or equal to 0

## Set(int, int)

Initialises then sets the default conditions of the canvas, such as background colour and pen colour.

### Declaration

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

### Parameters

Type	Name	Description
int ( <a href="https://learn.microsoft.com/dotnet/api/system.int32">https://learn.microsoft.com/dotnet/api/system.int32</a> ) (ASE_Assignment.AppCanvas.html)	<i>width</i>	Width of the drawing surface
int ( <a href="https://learn.microsoft.com/dotnet/api/system.int32">https://learn.microsoft.com/dotnet/api/system.int32</a> ) (ASE_Assignment.AppCommandFac	<i>height</i>	Height of the drawing surface

### Overrides

BooseInterpreter  
(ASE\_Assignment.BooseInterpreter.html)  
Canvas.Set(int, int) (<https://learn.microsoft.com/dotnet/api/system.int32>)  
Circle  
(ASE\_Assignment.Circle.html)

### Examples

```
MoveTo  
appCanvas.Set(width, height);  
PenColour  
(ASE_Assignment.PenColour.html)  
Rect (ASE_Assignment.Rect.html)
```

## SetColour(int, int, int)

WriteText  
(ASE\_Assignment.WriteText.html)  
Sets the pen colour using RGB values.

### ASE AssignmentTests

#### Declaration

```
(ASE_AssignmentTests.html)  
public override void SetColour(int red, int green, int blue)
```

### Parameters

Type	Name	Description
int ( <a href="https://learn.microsoft.com/dotnet/api/system.int32">https://learn.microsoft.com/dotnet/api/system.int32</a> )	<i>red</i>	Red value of pen colour
int ( <a href="https://learn.microsoft.com/dotnet/api/system.int32">https://learn.microsoft.com/dotnet/api/system.int32</a> )	<i>green</i>	Green value of pen colour
int ( <a href="https://learn.microsoft.com/dotnet/api/system.int32">https://learn.microsoft.com/dotnet/api/system.int32</a> )	<i>blue</i>	Blue value of pen colour

### Overrides

Canvas.SetColour(int, int, int) (<https://learn.microsoft.com/dotnet/api/system.int32>)

### Examples

```
appCanvas.SetColour(255, 255, 255);
```

## WriteText(string)

Writes text on the canvas using the provided string (<https://learn.microsoft.com/dotnet/api/system.string>).

Declaration

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

Parameters

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	text	Text to be written on the canvas

AppCanvas  
Overrides ASE\_Assignment.AppCanvas.html  
CanvasAppWriteText(string text) (https://learn.microsoft.com/dotnet/api/system.string)  
(ASE\_Assignment.AppCommandFace.html)  
BooseInterpreter  
(ASE\_Assignment.BooseInterpreter.html)  
appCanvas.WriteText("hello");  
Circle  
(ASE\_Assignment.Circle.html)  
MoveTo  
(ASE\_Assignment.MoveTo.html)

Exceptions

Type	Condition
PenColour (ASE_Assignment.PenColour.html) CommandException Rect (ASE_Assignment.Rect.html)	Thrown if the string provided has a length of zero or less

WriteText  
(ASE\_Assignment.WriteText.html)

getBitmap()

+ ASE\_AssignmentTests

Used to retrieve the bitmap of the AppCanvas drawing surface  
(ASE\_AssignmentTests.html)

Declaration

```
public override object getBitmap()
```

Returns

Type	Description
object (https://learn.microsoft.com/dotnet/api/system.object)	Object of the drawing surface

Overrides

BOOSE.Canvas.getBitmap()

Examples

```
Bitmap updatedBitmap = (Bitmap)appCanvas.getBitmap();
```

Implements

BOOSE.ICanvas





**- ASE\_Assignment**  
**(ASE\_Assignment.html)**

AppCanvas  
(ASE\_Assignment.AppCanvas.html)  
AppCommandFactory  
(ASE\_Assignment.AppCommandFac  
BooseInterpreter  
(ASE\_Assignment.BooseInterpreter.  
Circle  
(ASE\_Assignment.Circle.html)  
MoveTo  
(ASE\_Assignment.MoveTo.html)  
PenColour  
(ASE\_Assignment.PenColour.html)  
Rect (ASE\_Assignment.Rect.html)  
WriteText  
(ASE\_Assignment.WriteText.html)

**+ ASE\_AssignmentTests**  
**(ASE\_AssignmentTests.html)**

# Class AppCommandFactory

Factory class for creating instances of ASE\_Assignment and BOOSE commands.S

▼ Filter by title

## Inheritance

↳ **ASE\_Assignment**  
(ASE\_Assignment.html)

↳ **AppCommandFactory**  
(ASE\_Assignment.AppCanvas.html)

↳ **AppCommandFactory**  
(ASE\_Assignment.AppCommandFac

## Inherited Members

object.Equals(Object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object))  
object.Equals(Object, Object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object))  
object.GetHashCode() (https://learn.microsoft.com/dotnet/api/system.object.gethashcode)  
object.GetType() (https://learn.microsoft.com/dotnet/api/system.object.gettype)  
object.MemberwiseClone() (https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone)  
object.ReferenceEquals(Object, Object) (https://learn.microsoft.com/dotnet/api/system.object.referenceequals)  
object.ToString() (https://learn.microsoft.com/dotnet/api/system.object.tostring)  
(ASE\_Assignment.WriteText.html)  
Namespace: ASE\_Assignment (ASE\_Assignment.html)

## ASE\_AssignmentTests

## (ASE\_AssignmentTests.html)

Syntax

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

## Methods

### MakeCommand(string)

Creates an instance of specified command based on commandType provided.

#### Declaration

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

#### Parameters

Type	Name	Description
string ( <a href="https://learn.microsoft.com/dotnet/api/system.string">https://learn.microsoft.com/dotnet/api/system.string</a> )	<i>commandType</i>	String correlating to class constructor to be initialised. If commandType is not recognised BOOSE.CommandFactory is called to determine if the command exists within BOOSE library.



Returns

Type	Description
<b>ASE_Assignment</b> ( <a href="#">ASE_Assignment.html</a> )	
ICommand AppCanvas	Returns ICommand object corresponding to the commandType

([ASE\\_Assignment.AppCanvas.html](#))

Overrides

AppCommandFactory  
CommandFactory.MakeCommand(string) (<https://learn.microsoft.com/dotnet/api/system.string>)

See Also

BooseInterpreter  
([ASE\\_Assignment.BooseInterpreter.html](#))  
ICommand  
Circle

([ASE\\_Assignment.Circle.html](#))

Implements

MoveTo  
([ASE\\_Assignment.MoveTo.html](#))  
BOOSE.ICommandFactory  
PenColour  
([ASE\\_Assignment.PenColour.html](#))  
Rect ([ASE\\_Assignment.Rect.html](#))  
WriteText  
([ASE\\_Assignment.WriteText.html](#))

+ **ASE\_AssignmentTests**  
([ASE\\_AssignmentTests.html](#))

# Class BoosInterpreter

Represents the main form of the application, handling user input and the drawing canvas.

▼ Filter by title

## Inheritance

ASE Assignment  
(ASE\_Assignment.html)  
↳ Object (https://learn.microsoft.com/dotnet/api/system.object)  
↳ MarshalByRefObject (https://learn.microsoft.com/dotnet/api/system.marshalbyrefobject)  
↳ Component (https://learn.microsoft.com/dotnet/api/system.componentmodel.component)  
↳ AppCanvas (https://learn.microsoft.com/dotnet/api/system.windows.forms.control)  
(ASE\_Assignment.AppCanvas.html)  
↳ ScrollableControl (https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol)  
(ASE\_Assignment.ScrollableControl.html)  
↳ ContainerControl (https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol)  
(ASE\_Assignment.ContainerControl.html)  
↳ Form (https://learn.microsoft.com/dotnet/api/system.windows.forms.form)  
BoosInterpreter  
(ASE\_Assignment.BoosInterpreter.html)  
BoosInterpreter

## Implements

Circle  
(ASE\_Assignment.Circle.html)  
IDropTarget (https://learn.microsoft.com/dotnet/api/system.windows.forms.idroptarget)  
MoveTo  
(ASE\_Assignment.MoveTo.html)  
IWin32Window (https://learn.microsoft.com/dotnet/api/system.windows.forms.iwin32window)  
PenColour  
IBindableComponent (https://learn.microsoft.com/dotnet/api/system.windows.forms.ibindablecomponent)  
(ASE\_Assignment.PenColour.html)  
IComponent (https://learn.microsoft.com/dotnet/api/system.componentmodel.icomponent)  
Rect (ASE\_Assignment.Rect.html)  
IDisposable (https://learn.microsoft.com/dotnet/api/system.idisposable)  
WriteText  
IContainerControl (https://learn.microsoft.com/dotnet/api/system.windows.forms.icontainercontrol)  
(ASE\_Assignment.WriteText.html)

## Inherited Members

+ ASE AssignmentTests  
(ASE\_AssignmentTests.html)  
Form.SetVisibleCore(bool) (https://learn.microsoft.com/dotnet/api/system.windows.forms.form.setvisiblecore)  
Form.Activated (https://learn.microsoft.com/dotnet/api/system.windows.forms.form.activate)  
Form.ActivateMdiChild(Form)  
(https://learn.microsoft.com/dotnet/api/system.windows.forms.form.activatemdichild)  
Form.AddOwnedForm(Form) (https://learn.microsoft.com/dotnet/api/system.windows.forms.form.addownedform)  
Form.AdjustFormScrollbars(bool)  
(https://learn.microsoft.com/dotnet/api/system.windows.forms.form.adjustformscrollbars)  
Form.Close() (https://learn.microsoft.com/dotnet/api/system.windows.forms.form.close)  
Form.CreateAccessibilityInstance()  
(https://learn.microsoft.com/dotnet/api/system.windows.forms.form.createaccessibilityinstance)  
Form.CreateControlsInstance()  
(https://learn.microsoft.com/dotnet/api/system.windows.forms.form.createcontrolsinstance)  
Form.CreateHandle() (https://learn.microsoft.com/dotnet/api/system.windows.forms.form.createhandle)  
Form.DefWndProc(ref Message) (https://learn.microsoft.com/dotnet/api/system.windows.forms.form.defwndproc)  
Form.ProcessMnemonic(char)  
(https://learn.microsoft.com/dotnet/api/system.windows.forms.form.processmnemonic)  
Form.CenterToParent() (https://learn.microsoft.com/dotnet/api/system.windows.forms.form.centertoparent)  
Form.CenterToScreen() (https://learn.microsoft.com/dotnet/api/system.windows.forms.form.centertoscreen)  
Form.LayoutMdi(MdiLayout) (https://learn.microsoft.com/dotnet/api/system.windows.forms.form.layoutmdi)  
Form.OnActivated(EventArgs) (https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onactivated)  
Form.OnBackgroundImageChanged(EventArgs)  
(https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onbackgroundimagechanged)

Form.OnBackgroundImageLayoutChanged(EventArgs)  
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onbackgroundimagelayoutchanged>)  
 Form.OnClosing(CancelEventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onclosing>)  
 Form.OnClosed(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onclosed>)  
 Form.OnFormClosing(FormClosingEventArgs)  
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onformclosing>)  
 Form.OnFormClosed(FormClosedEventArgs)  
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onformclosed>)  
 Form.OnHandleCreated(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.oncreatecontrol>)  
 Form.OnDeactivate(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.ondeactivate>)  
 Form.OnEnabledChanged(EventArgs)  
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onenabledchanged>)  
 Form.OnEnter(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onenter>)  
 Form.OnFontChanged(EventArgs)  
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onfontchanged>)  
 Form.OnGotFocus(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.ongotfocus>)  
 Form.OnHandleDestroyed(EventArgs)  
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onhandlecreated>)  
 Form.OnHandleDestroyed(EventArgs)  
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onhandledestroyed>)  
 Form.OnHelpButtonClicked(CancelEventArgs)  
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onhelpbuttonclicked>)  
 Form.OnLayout(LayoutEventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onlayout>)  
 Form.OnLoad(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onload>)  
 Form.OnMaximizedBoundsChanged(EventArgs)  
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onmaximizedboundschanged>)  
 Form.OnMaximumSizeChanged(EventArgs)  
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onmaximumsizechanged>)  
 Form.OnMinimumSizeChanged(EventArgs)  
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onminimumsizechanged>)  
 Form.OnInputLanguageChanged(InputLanguageChangedEventArgs)  
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.oninputlanguagechanged>)  
 Form.OnInputLanguageChanging(InputLanguageChangingEventArgs)  
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.oninputlanguagechanging>)  
 Form.OnVisibleChanged(EventArgs)  
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onvisiblechanged>)  
 Form.OnMdiChildActivate(EventArgs)  
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onmdichildactivate>)  
 Form.OnMenuStart(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onmenustart>)  
 Form.OnMenuComplete(EventArgs)  
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onmenucomplete>)  
 Form.OnPaint(PaintEventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onpaint>)  
 Form.OnResize(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onresize>)  
 Form.OnDpiChanged(DpiChangedEventArgs)  
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.ondpichanged>)  
 Form.OnGetDpiScaledSize(int, int, ref Size)  
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.ongetdpiscaledsize>)  
 Form.OnRightToLeftLayoutChanged(EventArgs)  
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onrighttoleftlayoutchanged>)

Form.OnShown(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onshown>)

Form.OnTextChanged(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.ontextchanged>)

Form.ProcessCmdKey(ref Message, Keys) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.processcmdkey>)

Form.ProcessDialogKey(Keys) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.processdialogkey>)

Form.ProcessDialogChar(char) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.processdialogchar>)

**ASE Assignment**  
**(ASE Assignment.html)**

Form.ProcessKeyPreview(ref Message) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.processkeypreview>)

AppCanvas  
 Form.ProcessTabKey(bool) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.processtabkey>)

(ASE Assignment.AppCanvas.html)

Form.RemoveOwnedForm(Form) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.removeownedform>)

AppCommandFactory  
 (ASE Assignment.AppCommandFactory.html)

Form.Select(bool, bool) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.select>)

BooseInterpreter  
 Form.ScaleMinMaxSize(float, float, bool) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.scaleminmaxsize>)

(ASE Assignment.BooseInterpreter.html)

Circle  
 Form.GetScaledBounds(Rectangle, SizeF, BoundsSpecified) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.getscaledbounds>)

(ASE Assignment.Circle.html)

MoveTo  
 Form.ScaleControl(SizeF, BoundsSpecified) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.scalecontrol>)

(ASE Assignment.MoveTo.html)

PenColour  
 Form.SetBoundsCore(int, int, int, int, BoundsSpecified) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.setboundscore>)

(ASE Assignment.PenColour.html)

Rect (ASE Assignment.Rect.html)

Form.SetClientSizeCore(int, int) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.setclientsizecore>)

WriteText  
 (ASE Assignment.WriteText.html)

Form.SetDesktopBounds(int, int, int, int) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.setdesktopbounds>)

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**(ASE AssignmentTests.html)**

Form.SetDesktopLocation(int, int) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.setdesktoplocation>)

Form.Show(IWin32Window) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.show>)

Form.ShowDialog() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.showdialog#system-windows-forms-form-showdialog>)

Form.ShowDialog(IWin32Window) ([https://learn.microsoft.com/dotnet/api/system.windows.forms.form.showdialog#system-windows-forms-form-showdialog\(system-windows-forms-iwin32window\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.form.showdialog#system-windows-forms-form-showdialog(system-windows-forms-iwin32window)))

Form.ToString() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.tostring>)

Form.UpdateDefaultButton() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.updatedefaultbutton>)

Form.OnResizeBegin(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onresizebegin>)

Form.OnResizeEnd(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onresizeend>)

Form.OnStyleChanged(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onstylechanged>)

Form.ValidateChildren() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.validatechildren#system-windows-forms-form-validatechildren>)

Form.ValidateChildren(ValidationConstraints) ([https://learn.microsoft.com/dotnet/api/system.windows.forms.form.validatechildren#system-windows-forms-form-validatechildren\(system-windows-forms-validationconstraints\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.form.validatechildren#system-windows-forms-form-validatechildren(system-windows-forms-validationconstraints)))

Form.WndProc(ref Message) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.wndproc>)

Form.AcceptButton (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.acceptbutton>)

Form.ActiveForm (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.activeform>)

Form.ActiveMdiChild (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.activemdichild>)

Form.AllowTransparency (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.allowtransparency>)

Form.AutoScroll (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.autoscroll>)

Form.AutoSize (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.autosize>)

Form.AutoSizeMode (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.autosizemode>)

Form.AutoValidate (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.autovalidate>)

**Form.BackColor** (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.backcolor>)  
**(ASE Assignment.html)**

Form.FormBorderStyle (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.formborderstyle>)

Form.AppCanvas (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.cancelbutton>)  
**(ASE Assignment.AppCanvas.html)**

Form.CancelButton (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.clientsize>)

Form.ClientSize (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.controlbox>)

Form.AppCommandFactory (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.createparams>)

Form.ControlBox (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.defaulttimemode>)

Form.CreateParams (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.defaultsize>)

Form.BooSelInterpreter (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.desktopbounds>)

Form.DefaultTimeMode (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.desktoplocation>)

Form.DefaultSize (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.desktoplocation>)

Form.Circle (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.dialogresult>)

Form.DesktopBounds (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.dialogresult>)

Form.DesktopLocation (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.dialogresult>)

Form.MoveTo (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.dialogresult>)

Form.DialogResult (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.dialogresult>)

Form.HelpButton (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.dialogresult>)

Form.PenColour (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.dialogresult>)

Form.Icon (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.dialogresult>)

Form.IsMdiChild (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.dialogresult>)

Form.Rect (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.dialogresult>)

Form.IsMdiContainer (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.dialogresult>)

Form.WriteText (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.dialogresult>)

Form.IsRestrictedWindow (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.dialogresult>)

Form.KeyPreview (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.dialogresult>)

**Form.Location** (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.location>)  
**(ASE AssignmentTests.html)**

Form.MaximizedBounds (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.maximizedbounds>)

Form.MaximumSize (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.maximumsize>)

Form.MainMenuStrip (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.mainmenustrip>)

Form.MinimumSize (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.minimumsize>)

Form.MaximizeBox (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.maximizeBox>)

Form.MdiChildren (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.mdichildren>)

Form.MdiChildrenMinimizedAnchorBottom (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.mdichildrenminimizedanchorbottom>)

Form.MdiParent (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.mdiparent>)

Form.MinimizeBox (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.minimizeBox>)

Form.Modal (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.modal>)

Form.Opacity (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.opacity>)

Form.OwnedForms (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.ownedforms>)

Form.Owner (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.owner>)

Form.RestoreBounds (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.restorebounds>)

Form.RightToLeftLayout (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.righttoleftlayout>)

Form.ShowInTaskbar (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.showintaskbar>)

Form.ShowIcon (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.showicon>)

Form.ShowWithoutActivation (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.showwithoutactivation>)

Form.Size (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.size>)

Form.SizeGripStyle (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.sizegripstyle>)

Form.StartPosition (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.startposition>)

Form.Text (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.text>)

Form.TopLevel (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.toplevel>)

Form.TopMost (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.topmost>)

Form.TransparencyKey (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.transparencykey>)

Form.WindowState (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.windowstate>)

Form.AutoSizeChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.autosizechanged>)

Form.AutoValidateChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.autovalidatechanged>)

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Form.HelpButtonClicked (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.helpbuttonclicked>)

Form.MaximizedBoundsChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.maximizedboundschanged>)

AppCanvas  
([ASE\\_Assignment.AppCanvas.html](#))

Form.MaximumSizeChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.maximumsizechanged>)

AppCommandFactory  
([ASE\\_Assignment.AppCommandFactory.html](#))

Form.MinimumSizeChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.minimumsizechanged>)

BooSelInterpreter  
([ASE\\_Assignment.BooSelInterpreter.html](#))

Form.Activated (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.activated>)

Circle  
([ASE\\_Assignment.Circle.html](#))

Form.Deactivate (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.deactivate>)

Form.FormClosing (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.formclosing>)

MoveTo  
([ASE\\_Assignment.MoveTo.html](#))

Form.FormClosed (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.formclosed>)

Form.Load (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.load>)

PenColour  
([ASE\\_Assignment.PenColour.html](#))

Form.MdiChildActivate (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.mdichildactivate>)

Form.MenuComplete (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.menucomplete>)

Rect ([ASE\\_Assignment.Rect.html](#))

Form.MenuStart (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.menustart>)

WriteText  
([ASE\\_Assignment.WriteText.html](#))

Form.InputLanguageChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.inputlanguagechanged>)

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([ASE\\_AssignmentTests.html](#))

Form.InputLanguageChanging (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.inputlanguagechanging>)

Form.RightToLeftLayoutChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.righttoleftlayoutchanged>)

Form.Shown (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.shown>)

Form.DpiChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.dpchanged>)

Form.ResizeBegin (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.resizebegin>)

Form.ResizeEnd (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.resizeend>)

ContainerControl.OnAutoValidateChanged(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.onautovalidatechanged>)

ContainerControl.OnMove(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.onmove>)

ContainerControl.OnParentChanged(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.onparentchanged>)

ContainerControl.PerformAutoScale() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.performautoscale>)

ContainerControl.RescaleConstantsForDpi(int, int) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.rescaleconstantsfordpi>)

ContainerControl.Validate() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.validate#system-windows-forms-containercontrol-validate>)

ContainerControl.Validate(bool) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.validate#system-windows-forms-containercontrol-validate>)



containercontrol-validate(system-boolean))

ContainerControl.AutoScaleDimensions

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.autoscaledimensions>)

ContainerControl.AutoScaleFactor

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.autoscalefactor>)

ContainerControl.AutoScaleMode

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.autoscalemode>)

ContainerControl.BindingContext

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.bindingcontext>)

ContainerControl.CanEnableIme

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.canenableime>)

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ContainerControl.ActiveControl

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.activecontrol>)

ContainerControl.CurrentAutoScaleDimensions

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.currentautoscaledimensions>)

ContainerControl.ParentForm

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.parentform>)

ScrollableControl.ScrollStateAutoScrolling

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.scrollstateautoscrolling>)

ScrollableControl.ScrollStateHScrollVisible

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.scrollstatehscrollvisible>)

ScrollableControl.ScrollStateVScrollVisible

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.scrollstatevscrollvisible>)

ScrollableControl.ScrollStateUserHasScrolled

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.scrollstateuserhasscrolled>)

ScrollableControl.ScrollStateFullDrag

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.scrollstatefulldrag>)

ScrollableControl.GetScrollState(int)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.getscrollstate>)

ScrollableControl.OnMouseWheel(MouseEventArgs)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.onmousewheel>)

ScrollableControl.OnRightToLeftChanged(EventArgs)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.onrighttoleftchanged>)

ScrollableControl.OnPaintBackground(PaintEventArgs)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.onpaintbackground>)

ScrollableControl.OnPaddingChanged(EventArgs)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.onpaddingchanged>)

ScrollableControl.SetDisplayRectLocation(int, int)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.setdisplayrectlocation>)

ScrollableControl.ScrollControlIntoView(Control)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.scrollcontrolintoview>)

ScrollableControl.ScrollToControl(Control)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.scrolltocontrol>)

ScrollableControl.OnScroll(ScrollEventArgs)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.onscroll>)

ScrollableControl.SetAutoScrollMargin(int, int)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.setautoscrollmargin>)

ScrollableControl.SetScrollState(int, bool)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.setscrollstate>)

ScrollableControl.AutoScrollMargin

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.autoscrollmargin>)

ScrollableControl.AutoScrollPosition

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.autoscrollposition>)

ScrollableControl.AutoScrollMinSize

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.autoscrollminsize>)

ScrollableControl.DisplayRectangle

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.displayrectangle>)

ScrollableControl.HScroll (<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.hscroll>)

ScrollableControl.HorizontalScroll

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.horizontalscroll>)

ScrollableControl.VScroll

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.vscroll>)

ScrollableControl.VerticalScroll

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.verticalscroll>)

ScrollableControl.Scroll

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.scroll>)

Control.GetAccessibilityObjectById(int)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.getaccessibilityobjectbyid>)

Control.SetAutoSizeMode(AutoSizeMode)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.setautosizemode>)

Control.GetAutoSizeMode()

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.getautosizemode>)

Control.GetPreferredSize(Size)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.getpreferredsize>)

Control.AccessibilityNotifyClients(AccessibleEvents, int)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.accessibilitynotifyclients>)

Control.AccessibilityNotifyClients(AccessibleEvents, int, int)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.accessibilitynotifyclients>)

Control.BeginInvoke(Delegate)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.begininvoke>)

Control.BeginInvoke(Action)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.begininvoke>)

Control.BeginInvoke(Delegate, params object[])

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.begininvoke>)

Control.BeginInvoke(Delegate, params object[])

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.begininvoke>)

Control.BringToFront()

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.bringtofront>)

Control.Contains(Control)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.contains>)

Control.CreateGraphics()

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.creategraphics>)

Control.CreateControl()

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.createcontrol>)

Control.DestroyHandle()

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.destroyhandle>)

Control.DoDragDrop(object, DragDropEffects)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dodragdrop>)

Control.DoDragDrop(object, DragDropEffects, Bitmap, Point, bool)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dodragdrop>)

Control.DoDragDrop(object, DragDropEffects, Bitmap, Point, bool)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dodragdrop>)

control-dodragdrop(system-object-system-windows-forms-dragdropeffects-system-drawing-bitmap-system-drawing-point-system-boolean))

Control.DrawToBitmap(Bitmap, Rectangle)  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.drawtobitmap>)

Control.EndInvoke(IAsyncResult)  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.endinvoke>)

Control.FindForm() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.findform>)

Control.GetTopLevel() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.gettoplevel>)

Control.Invoke(object, EventArgs)  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.raisekeyevent>)

Control.RaiseMouseEvent(object, MouseEventArgs)  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.raisemouseevent>)

Control.Focus() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.focus>)

Control.FromChildHandle(IntPtr)  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.fromchildhandle>)

Control.FromHandle(IntPtr) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.fromhandle>)

Control.GetChildAtPoint(Point, GetChildAtPointSkip)  
([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.getchildatpoint#system-windows-forms-control-getchildatpoint\(system-drawing-point-system-windows-forms-getchildatpointskip\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.getchildatpoint#system-windows-forms-control-getchildatpoint(system-drawing-point-system-windows-forms-getchildatpointskip))))

Control.GetChildAtPoint(Point)  
([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.getchildatpoint#system-windows-forms-control-getchildatpoint\(system-drawing-point\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.getchildatpoint#system-windows-forms-control-getchildatpoint(system-drawing-point))))

Control.GetContainerControl()  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.getcontainercontrol>)

Control.GetNextControl(Control, bool)  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.getnextcontrol>)

Control.GetStyle(ControlStyles) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.getstyle>)

Control.Hide() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.hide>)

Control.InitLayout() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.initlayout>)

Control.Invalidate(Region)  
([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invalidate#system-windows-forms-control-invalidate\(system-drawing-region\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invalidate#system-windows-forms-control-invalidate(system-drawing-region))))

Control.Invalidate(Region, bool)  
([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invalidate#system-windows-forms-control-invalidate\(system-drawing-region-system-boolean\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invalidate#system-windows-forms-control-invalidate(system-drawing-region-system-boolean))))

Control.Invalidate() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invalidate#system-windows-forms-control-invalidate>)

Control.Invalidate(bool) ([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invalidate#system-windows-forms-control-invalidate\(system-boolean\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invalidate#system-windows-forms-control-invalidate(system-boolean))))

Control.Invalidate(Rectangle)  
([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invalidate#system-windows-forms-control-invalidate\(system-drawing-rectangle\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invalidate#system-windows-forms-control-invalidate(system-drawing-rectangle))))

Control.Invalidate(Rectangle, bool)  
([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invalidate#system-windows-forms-control-invalidate\(system-drawing-rectangle-system-boolean\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invalidate#system-windows-forms-control-invalidate(system-drawing-rectangle-system-boolean))))

Control.Invoke(Action) ([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invoke#system-windows-forms-control-invoke\(system-action\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invoke#system-windows-forms-control-invoke(system-action))))

Control.Invoke(Delegate) ([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invoke#system-windows-forms-control-invoke\(system-delegate\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invoke#system-windows-forms-control-invoke(system-delegate))))

Control.Invoke(Delegate, params object[])  
[https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invoke#system-windows-forms-control-invoke\(system-delegate-system-object\(\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invoke#system-windows-forms-control-invoke(system-delegate-system-object())))

Control.Invoke<T>(Func<T>)  
[https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invoke#system-windows-forms-control-invoke-1\(system-func\(\(-0\)\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invoke#system-windows-forms-control-invoke-1(system-func((-0)))))

Control.InvokePaint(Control, PaintEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invokepaint>)

Control.InvokePaintBackground(Control, PaintEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invokepaintbackground>)

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Control.IsKeyLocked(Keys) <https://learn.microsoft.com/dotnet/api/system.windows.forms.control.iskeylocked>)

AppCanvas  
Control.IsInputChar(char) <https://learn.microsoft.com/dotnet/api/system.windows.forms.control.isinputchar>)

(ASE Assignment.AppCanvas.html)

Control.IsInputKey(Keys) <https://learn.microsoft.com/dotnet/api/system.windows.forms.control.isinputkey>)

AppCommandFactory  
Control.IsMnemonic(char, string)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.ismnemonic>)

(ASE Assignment.AppCommandFac)

BooSelInterpreter  
Control.LogicalToDeviceUnits(int)  
[https://learn.microsoft.com/dotnet/api/system.windows.forms.control.logicaltodeviceunits#system-windows-forms-control-logicaltodeviceunits\(system-int32\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.logicaltodeviceunits#system-windows-forms-control-logicaltodeviceunits(system-int32))))

(ASE Assignment.Circle.html)

Circle  
Control.LogicalToDeviceUnits(Size)  
[https://learn.microsoft.com/dotnet/api/system.windows.forms.control.logicaltodeviceunits#system-windows-forms-control-logicaltodeviceunits\(system-drawing-size\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.logicaltodeviceunits#system-windows-forms-control-logicaltodeviceunits(system-drawing-size))))

(ASE Assignment.MoveTo.html)

MoveTo  
PenColour  
Control.ScaleBitmapLogicalToDevice(ref Bitmap)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.scalebitmaplogicaltodevice>)

(ASE Assignment.PenColour.html)

Rect (ASE Assignment.Rect.html)

Control.NotifyInvalidade(Rectangle)  
WriteText  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.notifyinvalidate>)

(ASE Assignment.WriteText.html)

Control.InvokeOnClick(Control, EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invokeonclick>)

**ASE AssignmentTests**  
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Control.OnAutoSizeChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onautosizechanged>)

Control.OnBackColorChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onbackcolorchanged>)

Control.OnBindingContextChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onbindingcontextchanged>)

Control.OnCausesValidationChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.oncausesvalidationchanged>)

Control.OnContextMenuStripChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.oncontextmenustripchanged>)

Control.OnCursorChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onsursorchanged>)

Control.OnDataContextChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.ondatacontextchanged>)

Control.OnDockChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.ondockchanged>)

Control.OnForeColorChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onforecolorchanged>)

Control.OnNotifyMessage(Message)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onnotifymessage>)

Control.OnParentBackColorChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onparentbackcolorchanged>)

Control.OnParentBackgroundImageChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onparentbackgroundimagechanged>)

Control.OnParentBindingContextChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onparentbindingcontextchanged>)

Control.OnParentCursorChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onparentcursorchanged>)

Control.OnParentDataContextChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onparentdatacontextchanged>)

Control.OnParentEnabledChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onparentenabledchanged>)

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Control.OnParentFontChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onparentfontchanged>)

AppCanvas  
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Control.OnParentForeColorChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onparentforecolorchanged>)

AppCommandFactory  
**(ASE\_Assignment.AppCommandFactory.html)**

Control.OnParentRightToLeftChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onparentrighttoleftchanged>)

BoosterInterpreter  
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Control.OnParentVisibleChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onparentvisiblechanged>)

Circle  
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Control.OnPrint(PaintEventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onprint>)

MoveTo  
**(ASE\_Assignment.MoveTo.html)**

Control.OnTabIndexChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.ontabindexchanged>)

PenColour  
**(ASE\_Assignment.PenColour.html)**

Control.OnTabStopChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.ontabstopchanged>)

Rect (ASE\_Assignment.Rect.html)

Control.OnClick(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onclick>)

WriteText  
**(ASE\_Assignment.WriteText.html)**

Control.OnClientSizeChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onclientsizechanged>)

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Control.OnControlAdded(ControlEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.oncontroladded>)

Control.OnControlRemoved(ControlEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.oncontrolremoved>)

Control.OnLocationChanged(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onlocationchanged>)

Control.OnDoubleClick(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.ondoubleclick>)

Control.OnDragEnter(DragEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.ondragenter>)

Control.OnDragOver(DragEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.ondragover>)

Control.OnDragLeave(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.ondragleave>)

Control.OnDragDrop(DragEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.ondragdrop>)

Control.OnGiveFeedback(GiveFeedbackEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.ongivefeedback>)

Control.InvokeGotFocus(Control, EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invokegotfocus>)

Control.OnHelpRequested(HelpEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onhelprequested>)

Control.OnInvalidated(InvalidateEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.oninvalidated>

Control.OnKeyDown(KeyEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onkeydown>

Control.OnKeyPress(KeyPressEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onkeypress>

Control.OnKeyUp(KeyEventArgs) <https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onkeyup>

Control.OnLeave(EventEventArgs) <https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onleave>

**ASE Assignment**  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invokelostfocus>  
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Control.OnLostFocus(EventEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onlostfocus>  
**AppCanvas**  
**(ASE\_Assignment.AppCanvas.html)**

Control.OnMarginChanged(EventEventArgs)  
**AppCommandFactory**  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onmarginchanged>  
**(ASE\_Assignment.AppCommandFactory.html)**

Control.OnMouseDown(MouseEventArgs)  
**BooselInterpreter**  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onmousedown>  
**(ASE\_Assignment.BooselInterpreter.html)**

Control.OnMouseDoubleClick(MouseEventArgs)  
**Circle**  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onmousedoubleclick>  
**(ASE\_Assignment.Circle.html)**

Control.OnMouseClick(MouseEventArgs)  
**MoveTo**  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onmouseclick>  
**(ASE\_Assignment.MoveTo.html)**

Control.OnMouseCaptureChanged(EventEventArgs)  
**PenColour**  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onmousecapturechanged>  
**(ASE\_Assignment.PenColour.html)**

Control.OnMouseDown(MouseEventArgs)  
**Rect**  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onmousedown>  
**(ASE\_Assignment.Rect.html)**

Control.OnMouseEnter(EventEventArgs)  
**WriteText**  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onmouseenter>  
**(ASE\_Assignment.WriteText.html)**

Control.OnMouseLeave(EventEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onmouseleave>

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<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.ondpichangedbeforeparent>  
**(ASE\_AssignmentTests.html)**

Control.OnDpiChangedBeforeParent(EventEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.ondpichangedbeforeparent>

Control.OnDpiChangedAfterParent(EventEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.ondpichangedafterparent>

Control.OnMouseHover(EventEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onmouseover>

Control.OnMouseMove(MouseEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onmousemove>

Control.OnMouseUp(MouseEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onmouseup>

Control.OnQueryContinueDrag(QueryContinueDragEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onquerycontinuedrag>

Control.OnRegionChanged(EventEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onregionchanged>

Control.OnPreviewKeyDown(PreviewKeyDownEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onpreviewkeydown>

Control.OnSizeChanged(EventEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onsizechanged>

Control.OnChangeUICues(UICuesEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onchangeuicues>

Control.OnSystemColorsChanged(EventEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onsystemcolorschanged>

Control.OnValidating(CancelEventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onvalidating>)

Control.OnValidated(EventArgs)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onvalidated>)

Control.PerformLayout()  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.performlayout#system-windows-forms-control-performlayout>)

Control.PerformLayout(Control, string)  
[https://learn.microsoft.com/dotnet/api/system.windows.forms.control.performlayout#system-windows-forms-control-performlayout\(system-windows-forms-control-system-string\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.performlayout#system-windows-forms-control-performlayout(system-windows-forms-control-system-string)))

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Control.PointToClient(Point) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.pointtoclient>)

AppCanvas  
Control.PointToScreen(Point)  
**(ASE Assignment AppCanvas.html)**  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.pointtoscreen>)

AppCommandFactory  
Control.PreProcessMessage(ref Message)  
**(ASE Assignment AppCommandFactory.html)**  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.preprocessmessage>)

BooSelInterpreter  
Control.PreProcessControlMessage(ref Message)  
**(ASE Assignment BooSelInterpreter.html)**  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.preprocesscontrolmessage>)

Circle  
Control.ProcessKeyEventArgs(ref Message)  
**(ASE Assignment Circle.html)**  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.processkeyeventargs>)

MoveTo  
Control.ProcessKeyMessage(ref Message)  
**(ASE Assignment MoveTo.html)**  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.processkeymessage>)

PenColour  
Control.RaiseDragEvent(object, EventArgs)  
**(ASE Assignment PenColour.html)**  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.raisedragevent>)

Rect  
**(ASE Assignment Rect.html)**  
Control.RaisePaintEvent(object, EventArgs)  
**WriteText**  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.raisepaintevent>)

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Control.RecreateHandle() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.recreatehandle>)

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Control.RectangleToClient(Rectangle)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.rectangletoclient>)

Control.RectangleToScreen(Rectangle)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.rectangletoscreen>)

Control.ReflectMessage(nint, ref Message)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.reflectmessage>)

Control.Refresh() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.refresh>)

Control.ResetMouseEventArgs()  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.resetmouseeventargs>)

Control.ResetText() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.resettext>)

Control.ResumeLayout()  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.resumelayout#system-windows-forms-control-resumelayout>)

Control.ResumeLayout(bool)  
[https://learn.microsoft.com/dotnet/api/system.windows.forms.control.resumelayout#system-windows-forms-control-resumelayout\(system-boolean\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.resumelayout#system-windows-forms-control-resumelayout(system-boolean)))

Control.Scale(SizeF) ([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.scale#system-windows-forms-control-scale\(system-drawing-sizef\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.scale#system-windows-forms-control-scale(system-drawing-sizef)))

Control.Select() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.select#system-windows-forms-control-select>)

Control.SelectNextControl(Control, bool, bool, bool, bool)  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.selectnextcontrol>)

Control.SendToBack() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.sendtoback>)

Control.SetBounds(int, int, int, int)

([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.setbounds#system-windows-forms-control-setbounds\(system-int32-system-int32-system-int32-system-int32\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.setbounds#system-windows-forms-control-setbounds(system-int32-system-int32-system-int32-system-int32))))

Control.SetBounds(int, int, int, int, BoundsSpecified)

([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.setbounds#system-windows-forms-control-setbounds\(system-int32-system-int32-system-int32-system-int32-system-windows-forms-boundsspecified\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.setbounds#system-windows-forms-control-setbounds(system-int32-system-int32-system-int32-system-int32-system-windows-forms-boundsspecified))))

Control.SizeFromClientSize(Size)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.sizefromclientsize>)

Control.SetStyle(ControlStyles bool)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.setstyle>)

Control.SetTopLevel(bool) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.settoplevel>)

Control.RtlTranslateAlignment(HorizontalAlignment)

([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.rtltranslatealignment#system-windows-forms-control-rtltranslatealignment\(system-windows-forms-horizontalalignment\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.rtltranslatealignment#system-windows-forms-control-rtltranslatealignment(system-windows-forms-horizontalalignment))))

Control.RtlTranslateAlignment(LeftRightAlignment)

([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.rtltranslatealignment#system-windows-forms-control-rtltranslatealignment\(system-windows-forms-leftrightalignment\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.rtltranslatealignment#system-windows-forms-control-rtltranslatealignment(system-windows-forms-leftrightalignment))))

Control.RtlTranslateAlignment(ContentAlignment)

([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.rtltranslatealignment#system-windows-forms-control-rtltranslatealignment\(system-drawing-contentalignment\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.rtltranslatealignment#system-windows-forms-control-rtltranslatealignment(system-drawing-contentalignment))))

Control.RtlTranslateHorizontal(HorizontalAlignment)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.rtltranslatehorizontal>)

Control.RtlTranslateLeftRight(LeftRightAlignment)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.rtltranslateleftright>)

Control.RtlTranslateContent(ContentAlignment)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.rtltranslatecontent>)

Control.Show() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.show>)

Control.SuspendLayout() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.suspendlayout>)

Control.Update() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.update>)

Control.UpdateBounds()

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.updatebounds#system-windows-forms-control-updatebounds>)

Control.UpdateBounds(int, int, int, int)

([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.updatebounds#system-windows-forms-control-updatebounds\(system-int32-system-int32-system-int32-system-int32\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.updatebounds#system-windows-forms-control-updatebounds(system-int32-system-int32-system-int32-system-int32))))

Control.UpdateBounds(int, int, int, int, int, int)

([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.updatebounds#system-windows-forms-control-updatebounds\(system-int32-system-int32-system-int32-system-int32-system-int32-system-int32\)\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.updatebounds#system-windows-forms-control-updatebounds(system-int32-system-int32-system-int32-system-int32-system-int32-system-int32))))

Control.UpdateZOrder() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.updatezorder>)

Control.UpdateStyles() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.updatestyles>)

Control.OnImeModeChanged(EventArgs)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onimemodechanged>)

Control.AccessibilityObject

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.accessibilityobject>)

Control.AccessibleDefaultActionDescription

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.accessibledefaultactiondescription>)

Control.AccessibleDescription

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.accessibledescription>)



Control.AccessibleName (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.accessiblename>)

Control.AccessibleRole (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.accessiblerole>)

Control.AllowDrop (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.allowdrop>)

Control.Anchor (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.anchor>)

Control.AutoScrollOffset (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.autoscrolloffset>)

Control.LayoutEngine (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.layoutengine>)

Control.DataContext (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.datacontext>)

Control.BackgroundImage (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.backgroundimage>)

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Control.BackgroundImageLayout (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.backgroundimagelayout>)

Control.Bottom (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.bottom>)

Control.Bounds (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.bounds>)

Control.CanFocus (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.canfocus>)

Control.CanRaiseEvents (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.canraiseevents>)

Control.CanSelect (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.canselect>)

Control.Capture (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.capture>)

Control.CausesValidation (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.causesvalidation>)

Control.CheckForIllegalCrossThreadCalls (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.checkforillegalcrossthreadcalls>)

Control.ClientRectangle (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.clientrectangle>)

Control.CompanyName (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.companyname>)

Control.ContainsFocus (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.containsfocus>)

Control.ContextMenuStrip (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.contextmenustrip>)

Control.Controls (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.controls>)

Control.Created (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.created>)

Control.Cursor (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.cursor>)

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Control.DataBindings (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.databindings>)

Control.DefaultBackColor (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.defaultbackcolor>)

Control.DefaultCursor (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.defaultcursor>)

Control.DefaultFont (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.defaultfont>)

Control.DefaultForeColor (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.defaultforecolor>)

Control.DefaultMargin (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.defaultmargin>)

Control.DefaultMaximumSize (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.defaultmaximumsize>)

Control.DefaultMinimumSize (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.defaultminimumsize>)

Control.DefaultPadding (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.defaultpadding>)

Control.DeviceDpi (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.devicedpi>)

Control.IsDisposed (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.isdisposed>)

Control.Disposing (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.disposing>)

Control.Dock (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dock>)

Control.DoubleBuffered (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.doublebuffered>)

Control.Enabled (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.enabled>)

Control.Focused (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.focused>)

Control.Font (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.font>)

Control.FontHeight (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.fontheight>)

Control.ForeColor (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.forecolor>)

Control.Handle (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.handle>)

Control.HasChildren (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.haschildren>)

Control.Height (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.height>)

Control.IsHandleCreated (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.ishandlecreated>)

Control.InvokeRequired (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invokerequired>)

Control.IsAccessible (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.isaccessible>)

Control.IsAncestorSiteInDesignMode  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.isancestorsiteindesignmode>)

Control.IsMirrored (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.ismirrored>)

Control.Left (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.left>)

Control.Margin (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.margin>)

Control.ModifierKeys (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.modifierkeys>)

Control.MouseButtons (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mousebuttons>)

Control.MousePosition (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mouseposition>)

Control.Name (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.name>)

Control.Parent (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.parent>)

Control.ProductName (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.productname>)

Control.ProductVersion (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.productversion>)

Control.RecreatingHandle  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.recreatinghandle>)

Control.Region (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.region>)

Control.RenderRightToLeft  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.renderrighttopleft>)

Control.ResizeRedraw (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.resizedraw>)

Control.Right (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.right>)

Control.RightToLeft (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.righttopleft>)

Control.ScaleChildren (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.scalechildren>)

Control.Site (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.site>)

Control.TabIndex (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.tabindex>)

Control.TabStop (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.tabstop>)

Control.Tag (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.tag>)

Control.Top (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.top>)

Control.TopLevelControl (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.toplevelcontrol>)

Control.ShowKeyboardCues  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.showkeyboardcues>)

Control.ShowFocusCues (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.showfocuscues>)

Control.UseWaitCursor (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.usewaitcursor>)

Control.Visible (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.visible>)

Control.Width (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.width>)

Control.PreferredSize (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.preferredsize>)

Control.Padding (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.padding>)

Control.ImeMode (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.imebase>)

Control.ImeModeBase (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.imemodebase>)

Control.PropagatingImeMode  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.propagatingimemode>)

Control.BackColorChanged  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.backcolorchanged>)

Control.BackgroundImageChanged  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.backgroundimagechanged>)

Control.BackgroundImageLayoutChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.backgroundimagelayoutchanged>)

Control.BindingContextChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.bindingcontextchanged>)

Control.CausesValidationChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.causesvalidationchanged>)

Control.ClientSizeChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.clientsizechanged>)

Control.ContextMenuStripChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.contextmenustripchanged>)

Control.CursorChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.cursorchanged>)

Control.DockChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dockchanged>)

Control.EnabledChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.enabledchanged>)

Control.FontChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.fontchanged>)

Control.ForeColorChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.forecolorchanged>)

Control.LocationChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.locationchanged>)

Control.MarginChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.marginchanged>)

Control.RegionChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.regionchanged>)

Control.RightToLeftChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.righttoleftchanged>)

Control.SizeChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.sizechanged>)

Control.TabIndexChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.tabindexchanged>)

Control.TabStopChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.tabstopchanged>)

Control.TextChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.textchanged>)

Control.VisibleChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.visiblechanged>)

Control.Click  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.click>)

Control.ControlAdded  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.controladded>)

Control.ControlRemoved  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.controlremoved>)

Control.DataContextChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.datacontextchanged>)

Control.DragDrop  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dragdrop>)

Control.DragEnter  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dragenter>)

Control.DragOver  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dragover>)

Control.DragLeave  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dragleave>)

Control.GiveFeedback  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.givefeedback>)

Control.HandleCreated  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.handlecreated>)

Control.HandleDestroyed  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.handledestroyed>)

Control.HelpRequested  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.helprequested>)

Control.Invalidated  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invalidated>)

Control.PaddingChanged  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.paddingchanged>)

Control.Paint  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.paint>)

Control.QueryContinueDrag  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.querycontinuedrag>)

Control.QueryAccessibilityHelp  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.queryaccessibilityhelp>)

Control.DoubleClick  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.doubleclick>)

Control.Enter  
<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.enter>)

Control.GotFocus (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.gotfocus>)

Control.KeyDown (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.keydown>)

Control.KeyPress (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.keypress>)

Control.KeyUp (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.keyup>)

Control.Layout (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.layout>)

Control.Leave (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.leave>)

Control.LostFocus (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.lostfocus>)

Control.MouseClick (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mouseclick>)

**Control.MouseDown**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mousedown>)

**Control.MouseDoubleClick**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mousedoubleclick>)

Control.MouseCaptureChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mousecapturechanged>)

**AppCanvas**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mousecapturechanged>)

**Control.MouseDown**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mousedown>)

**AppCommandFactory**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mouseenter>)

**Control.MouseEnter**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mouseenter>)

**Control.MouseLeave**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mouseleave>)

**BooelInterpreter**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dpichangedbeforeparent>)

**Control.DpiChangedBeforeParent**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dpichangedbeforeparent>)

**Circle**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dpichangedafterparent>)

**Control.DpiChangedAfterParent**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dpichangedafterparent>)

**MoveTo**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mousehover>)

**Control.MouseHover**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mousehover>)

**Control.MouseMove**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mousemove>)

**PenColour**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mouseup>)

**Control.MouseUp**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mouseup>)

**Control.MouseWheel**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mousewheel>)

**Rect**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.move>)

**Control.Move**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.move>)

**WriteText**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.previewkeydown>)

**Control.PreviewKeyDown**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.previewkeydown>)

**Control.Resize**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.resize>)

**Control.ChangeUIControl**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.changeuicues>)

**Control.StyleChanged**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.stylechanged>)

**Control.SystemColorsChanged**  
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.systemcolorschanged>)

Control.Validating (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.validating>)

Control.Validated (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.validated>)

Control.ParentChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.parentchanged>)

Control.ImeModeChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.imemodechanged>)

Component.Dispose() (<https://learn.microsoft.com/dotnet/api/system.componentmodel.component.dispose#system-componentmodel-component-dispose>)

Component.GetService(Type) (<https://learn.microsoft.com/dotnet/api/system.componentmodel.component.getservice>)

Component.Container (<https://learn.microsoft.com/dotnet/api/system.componentmodel.component.container>)

Component.DesignMode (<https://learn.microsoft.com/dotnet/api/system.componentmodel.component.designmode>)

Component.Events (<https://learn.microsoft.com/dotnet/api/system.componentmodel.component.events>)

Component.Disposed (<https://learn.microsoft.com/dotnet/api/system.componentmodel.component.disposed>)

MarshalByRefObject.GetLifetimeService() (<https://learn.microsoft.com/dotnet/api/system.marshalbyrefobject.getlifetimeservice>)

MarshalByRefObject.InitializeLifetimeService() (<https://learn.microsoft.com/dotnet/api/system.marshalbyrefobject.initializelifetimeservice>)

MarshalByRefObject.MemberwiseClone(bool)

(<https://learn.microsoft.com/dotnet/api/system.marshalbyrefobject.memberwiseclone>)

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

Namespace: ASE\_Assignment (ASE\_Assignment.html)

Assembly: ASE\_Assignment.dll (ASE\_Assignment.dll)

Syntax

AppCanvas

AppCommandFactory

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

Circle

(ASE\_Assignment.Circle.html)

MoveTo

Constructors

PenColour

(ASE\_Assignment.PenColour.html)

BooselInterpreter()

Rect (ASE\_Assignment.Rect.html)

WriteText

Initialises new instance of BooselInterpreter (ASE\_Assignment.BooselInterpreter.html) class. Initialises the application and sets up the canvas.

± ASE\_AssignmentTests

Declaration

(ASE\_AssignmentTests.html)

public BooselInterpreter()

## Methods

### Dispose(bool)

Clean up any resources being used.

Declaration

protected override void Dispose(bool disposing)

Parameters

Type	Name	Description
bool ( <a href="https://learn.microsoft.com/dotnet/api/system.boolean">https://learn.microsoft.com/dotnet/api/system.boolean</a> )	<i>disposing</i>	true if managed resources should be disposed; otherwise, false.

▼  
**Overrides**

Form.Dispose(bool) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.dispose>)

- **ASE\_Assignment**

**(ASE\_Assignment.html)**  
**UpdatePictureBox()**

AppCanvas  
Initializes a PictureBox of the AppCanvas by invalidating its current state.

**Declaration**  
(ASE\_Assignment.AppCommandFactory)

BooselInterpreter  
public void UpdatePictureBox()

Circle  
(ASE\_Assignment.Circle.html)

**Implements**  
MoveTo  
(ASE\_Assignment.MoveTo.html)

IDropTarget (<https://learn.microsoft.com/dotnet/api/system.windows.forms.idroptarget>)

ISynchronizeInvoke (<https://learn.microsoft.com/dotnet/api/system.componentmodel.isynchronizeinvoke>)

ISynchronizeInvoke (<https://learn.microsoft.com/dotnet/api/system.componentmodel.isynchronizeinvoke>)

IWin32Window (<https://learn.microsoft.com/dotnet/api/system.windows.forms.iwin32window>)

IBindableComponent (<https://learn.microsoft.com/dotnet/api/system.windows.forms.ibindablecomponent>)

IBindableComponent (<https://learn.microsoft.com/dotnet/api/system.windows.forms.ibindablecomponent>)

IDisposable (<https://learn.microsoft.com/dotnet/api/system.idisposable>)

+ **ASE\_AssignmentTests**  
IContainerControl (<https://learn.microsoft.com/dotnet/api/system.windows.forms.icontainercontrol>)

**(ASE\_AssignmentTests.html)**

# Class Circle

Command to draw a circle on the canvas.

▼ Filter by title

## Inheritance

Object (https://learn.microsoft.com/dotnet/api/system.object)  
**ASE Assignment**  
(ASE\_Assignment.html)

CanvasCommand  
AppCanvas  
CommandOneParameter  
(ASE\_Assignment.AppCanvas.html)  
AppCommandFactory  
(ASE\_Assignment.AppCommandFac

**Implements**  
BooselInterpreter  
ICommand  
(ASE\_Assignment.BooselInterpreter.

## Inherited Members

(ASE\_Assignment.Circle.html)  
CommandOneParameter.param1  
MoveTo  
CommandOneParameter.param1unprocessed  
(ASE\_Assignment.MoveTo.html)  
CanvasCommand.yPos  
BenColour  
(ASE\_Assignment.BenColour.html)  
CanvasCommand.canvas  
Rect (ASE\_Assignment.Rect.html)  
CanvasCommand.Canvas  
WriteProgram  
(ASE\_Assignment.WriteText.html)  
Command.parameterList

## + ASE AssignmentTests

(ASE\_AssignmentTests.html)  
Command.paramsint  
Command.Set(StoredProgram, string) (https://learn.microsoft.com/dotnet/api/system.string)

Command.Compile()  
Command.ProcessParameters(string) (https://learn.microsoft.com/dotnet/api/system.string)  
Command.ToString()  
Command.Program  
Command.Name  
Command.ParameterList  
Command.Parameters  
Command.Paramsint  
object.Equals(object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object))  
object.Equals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object))  
object.GetHashCode() (https://learn.microsoft.com/dotnet/api/system.object.gethashcode)  
object.GetType() (https://learn.microsoft.com/dotnet/api/system.object.gettype)  
object.MemberwiseClone() (https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone)  
object.ReferenceEquals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.referenceequals)

**Namespace:** ASE\_Assignment (ASE\_Assignment.html)

**Assembly:** ASE\_Assignment.dll

## Syntax

```
public class Circle : CommandOneParameter, ICommand
```

# Constructors

## Circle() - ASE\_Assignment

Initialises new instance of Circle (ASE\_Assignment.Circle.html) with no parameters.

```
AppCanvas
(ASE_Assignment.AppCanvas.html)
AppCommandFactory
public Circle()
(ASE_Assignment.AppCommandFac
BooselInterpreter
(ASE_Assignment.BooselInterpreter.
```

## Circle(Canvas, int)

Initialises new instance of Circle (ASE\_Assignment.Circle.html) with a specified canvas and radius.

```
MoveTo
(ASE_Assignment.MoveTo.html)
Declaration
PenColour
(ASE_Assignment.PenColour.html)
public Circle(Canvas c, int radius)
Rect (ASE_Assignment.Rect.html)
WriteText
(ASE_Assignment.WriteText.html)
```

Type	Name	Description
ASE_AssignmentTests (ASE_AssignmentTests.html)	c	Canvas that the circle is to be drawn on.
int (https://learn.microsoft.com/dotnet/api/system.int32)	radius	The radius of the circle that will be drawn.

# Methods

## CheckParameters(string[])

Checks if Circle command has been called with the correct amount of parameters.

Declaration

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

Parameters



Type	Name	Description
string ( <a href="https://learn.microsoft.com/dotnet/api/system.string">https://learn.microsoft.com/dotnet/api/system.string</a> ) []	<i>parameterList</i>	String array to be checked to ensure the correct number of parameters has been passed.

Overrides

Command.Execute() (ASE\_Assignment.Command.html)

(ASE\_Assignment.html)

Exceptions

Type	Condition
AppCanvas (ASE_Assignment.AppCanvas.html)	
CommandException (ASE_Assignment.CommandException.html)	Thrown if the number of parameters is not 1.

BooseInterpreter

(ASE\_Assignment.BooseInterpreter.html)

Execute()

(ASE\_Assignment.Circle.html)  
Calls BOOSE.Command.Execute(), then draws a circle with specified radius.

MoveTo

(ASE\_Assignment.MoveTo.html)

PenColour

(ASE\_Assignment.PenColour.html)

Rect (ASE\_Assignment.Rect.html)

WriteText

(ASE\_Assignment.WriteText.html)

BOOSE.Command.Execute()

+ ASE\_AssignmentTests

(ASE\_AssignmentTests.html)

Implements

BOOSE.ICommand

# Class MoveTo

Command which moves the pen to specified (x,y) coordinates.

▼ Filter by title

## Inheritance

Object (https://learn.microsoft.com/dotnet/api/system.object)  
**ASE Assignment**  
(ASE\_Assignment.html)

AppCanvas  
(ASE\_Assignment.AppCanvas.html)  
AppCommandFactory  
(ASE\_Assignment.AppCommandFactory.html)  
AppCommandOneParameter  
(ASE\_Assignment.AppCommandOneParameter.html)  
AppCommandTwoParameters  
(ASE\_Assignment.AppCommandTwoParameters.html)  
AppCommandMoveTo  
(ASE\_Assignment.AppCommandMoveTo.html)

BooseInterpreter  
(ASE\_Assignment.BooseInterpreter.html)  
Circle  
(ASE\_Assignment.Circle.html)

**Inherited Members**  
(ASE\_Assignment.Circle.html)

CommandTwoParameters.param2  
(ASE\_Assignment.MoveTo.html)  
CommandTwoParameters.param2Unprocessed  
(ASE\_Assignment.MoveTo.html)  
CommandTwoParameters.CheckParameters(string[]) (https://learn.microsoft.com/dotnet/api/system.string)  
(ASE\_Assignment.MoveTo.html)  
CommandOneParameter.param1  
(ASE\_Assignment.MoveTo.html)  
CommandOneParameter.param1Unprocessed  
(ASE\_Assignment.MoveTo.html)  
WriteText  
(ASE\_Assignment.MoveTo.html)  
CanvasCommand.yPos  
(ASE\_Assignment.MoveTo.html)  
CanvasCommand.xPos  
(ASE\_Assignment.MoveTo.html)

**+ ASE Assignment Tests**  
(ASE\_AssignmentTests.html)

CanvasCommand.canvas  
CanvasCommand.Canvas  
Command.program  
Command.parameterList  
Command.parameters  
Command.paramsint  
Command.Set(StoredProgram, string) (https://learn.microsoft.com/dotnet/api/system.string)  
Command.Compile()  
Command.ProcessParameters(string) (https://learn.microsoft.com/dotnet/api/system.string)  
Command.ToString()  
Command.Program  
Command.Name  
Command.ParameterList  
Command.Parameters  
Command.Paramsint  
object.Equals(object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object))  
object.Equals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object))  
object.GetHashCode() (https://learn.microsoft.com/dotnet/api/system.object.gethashcode)  
object.GetType() (https://learn.microsoft.com/dotnet/api/system.object.gettype)  
object.MemberwiseClone() (https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone)  
object.ReferenceEquals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.referenceequals)

**Namespace:** ASE\_Assignment (ASE\_Assignment.html)

**Assembly:** ASE\_Assignment.dll

## Syntax

```
public class MoveTo : CommandTwoParameters, ICommand
```



## - ASE\_Assignment

## Methods

AppCanvas

(ASE\_Assignment.AppCanvas.html)

## Execute()

AppCommandFactory

(ASE\_Assignment.AppCommandFactory.html)

Calls BOOSE.Command.Execute(), then moves the pen to specified (x,y) coordinates.

BooseInterpreter

## Declaration

(ASE\_Assignment.BooseInterpreter.html)

Circle

(ASE\_Assignment.Circle.html)

MoveTo

(ASE\_Assignment.MoveTo.html)

## Overrides

PenColour

BOOSE.Command.Execute()

(ASE\_Assignment.PenColour.html)

Rect (ASE\_Assignment.Rect.html)

WriteText

(ASE\_Assignment.WriteText.html)

BOOSE.ICommand

## + ASE\_AssignmentTests

## (ASE\_AssignmentTests.html)

## See Also

CommandTwoParameters

# Class PenColour

Command which sets the pen colour to draw with using RGB values.

▼ Filter by title

## Inheritance

↳ **ASE Assignment**  
(ASE\_Assignment.html)

↳ CanvasCommand  
AppCanvas  
(ASE\_Assignment.AppCanvas.html)  
↳ CommandOneParameter  
AppCommandFactory  
(ASE\_Assignment.AppCommandFactory.html)  
↳ CommandTwoParameters  
AppCommandThreeParameters  
BooseInterpreter  
(ASE\_Assignment.BooseInterpreter.html)

## Implements

ICircle  
(ASE\_Assignment.Circle.html)

## Inherited Members

MoveTo  
(ASE\_Assignment.MoveTo.html)  
CommandThreeParameters.param3  
PenColour  
CommandThreeParameters.param3unprocessed  
(ASE\_Assignment.PenColour.html)  
CommandThreeParameters.CheckParameters(string[]) (https://learn.microsoft.com/dotnet/api/system.string)  
Rect  
(ASE\_Assignment.Rect.html)  
CommandTwoParameters.param2  
WriteText  
CommandTwoParameters.param2unprocessed  
(ASE\_Assignment.WriteText.html)  
CommandOneParameter.param1unprocessed

## + ASE Assignment Tests

(ASE\_AssignmentTests.html)

CanvasCommand.yPos  
CanvasCommand.xPos  
CanvasCommand.canvas  
CanvasCommand.Canvas  
Command.program  
Command.parameterList  
Command.parameters  
Command.paramsint  
Command.Set(StoredProgram, string) (https://learn.microsoft.com/dotnet/api/system.string)  
Command.Compile()  
Command.ProcessParameters(string) (https://learn.microsoft.com/dotnet/api/system.string)  
Command.ToString()  
Command.Program  
Command.Name  
Command.ParameterList  
Command.Parameters  
Command.Paramsint  
object.Equals(object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object))  
object.Equals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object))  
object.GetHashCode() (https://learn.microsoft.com/dotnet/api/system.object.gethashcode)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

**Namespace:** ASE\_Assignment (ASE\_Assignment.html)

**Assembly:** ASE\_Assignment.dll

**Syntax**

- **ASE\_Assignment**

(ASE\_Assignment.html)

AppCanvas

(ASE\_Assignment.AppCanvas.html)

AppCommandFactory

(ASE\_Assignment.AppCommandFactory.html)

BooseInterpreter

**Execute()** (ASE\_Assignment.BooseInterpreter.html)

Circle

Calls BOOSE.Command.Execute(), then sets the pen colour to the specified RGB values.

(ASE\_Assignment.Circle.html)

**Declaration**

MoveTo

(ASE\_Assignment.MoveTo.html)

PenColour

public override void Execute()

(ASE\_Assignment.PenColour.html)

Rect (ASE\_Assignment.Rect.html)

**Override**

WriteText

(ASE\_Assignment.WriteText.html)

**BOOSE.Command.Execute()**

BOOSE.ICommand

BOOSE.ICommand

**+ ASE\_AssignmentTests**

(ASE\_AssignmentTests.html)

**Implement**

BOOSE.ICommand

BOOSE.ICommand

BOOSE.ICommand

BOOSE.ICommand

BOOSE.ICommand

BOOSE.ICommand

BOOSE.ICommand

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BOOSE.ICommand

BOOSE.ICommand

BOOSE.ICommand

BOOSE.ICommand

BOOSE.ICommand

## See Also

CommandThreeParameters

# Class Rect

Command to draw a rectangle on the canvas.

 Filter by title

## Inheritance

**ASE Assignment**  
 ↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)  
 (ASE Assignment.html)  
 ↳ Common

# La Canvas Command

(ASE\_Assignment.AppCanvas.html)

AppCommandFactory

```
(ASE, Assignment.AppCommandFac
```

## Implements

BooseInterpreter

```
(ASE_Assignment.BooseInterpreter.
```

## Inherited Members

(ASE Assignment Circle.html)

```
CommandOneParameter.param1unprocessed
```

(ASE Assignment MoveTo.html)  
CanvasCommand.VPos

CanvasCommand.xPos

CanvasCommand: canvas

Canvas Command: Canvas

## WriteText

Command: program:  
(ASE Assignment: WriteText.html)  
Command: parameter: is

## Command parameters

## ✚ ASE Assignment Tests

**(ASE AssignmentTests.html)**

Command.SetStoredProgram, string) (<https://learn.microsoft.com/dotnet/api/system.string>)

Command.Compile()

Command.ProcessParameters(string) (<https://learn.microsoft.com/dotnet/api/system.string>)

## Command.ToString()

Command.Program

Command.Name

Command.ParameterList

## Command Parameters

Command.Paramsint

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

**Namespace:** ASE\_Assignment (ASE\_Assignment.html)

**Assembly:** ASE Assignment.dll

## Syntax

```
public class Rect : CommandOneParameter, ICommand
```

# Constructors

## Rect() - ASE\_Assignment

Initialises a new instance of Rect (ASE\_Assignment.Rect.html) with no parameters.

```
AppCanvas
(ASE_Assignment.AppCanvas.html)
AppCommandFactory
public Rect()
(ASE_Assignment.AppCommandFac
BooselInterpreter
(ASE_Assignment.BooselInterpreter.
```

## Rect(int, int)

Initialises a new instance of Rect (ASE\_Assignment.Rect.html) using specified width and height.

```
MoveTo
(ASE_Assignment.MoveTo.html)
Declaration
PenColour
(ASE_Assignment.PenColour.html)
public Rect(int width, int height)
Rect (ASE_Assignment.Rect.html)
WriteText
(ASE_Assignment.WriteText.html)
```

## ASE\_AssignmentTests

Type	Name	Description
int ( <a href="https://learn.microsoft.com/dotnet/api/system.int32">https://learn.microsoft.com/dotnet/api/system.int32</a> )	width	Width of rectangle to be created
int ( <a href="https://learn.microsoft.com/dotnet/api/system.int32">https://learn.microsoft.com/dotnet/api/system.int32</a> )	height	Height of rectangle to be created

# Methods

## CheckParameters(string[])

Checks if the Rect command has been called with the correct amount of parameters.

Declaration

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

Parameters

Type	Name	Description
string ( <a href="https://learn.microsoft.com/dotnet/api/system.string">https://learn.microsoft.com/dotnet/api/system.string</a> ) []	<i>parameterList</i>	String array to be checked to ensure the correct number of parameters has been passed.

Overrides

CommandOneParameter.CheckParameters(string[]) (<https://learn.microsoft.com/dotnet/api/system.string>)

(ASE\_Assignment.html)

Exceptions

Type	Condition
AppCanvas (ASE_Assignment.AppCanvas.html)	
CommandExceptionFactory (ASE_Assignment.AppCommandFac	Thrown if the number of parameters is not 1.

BooseInterpreter

(ASE\_Assignment.BooseInterpreter.

Execute()

(ASE\_Assignment.Circle.html)

Calls BOOSE.Command.Execute(), then draws a rectangle with specified width and height.

MoveTo

(ASE\_Assignment.MoveTo.html)

PenColour

(ASE\_Assignment.PenColour.html)

Rect (ASE\_Assignment.Rect.html)

WriteText

(ASE\_Assignment.WriteText.html)

BOOSE.Command.Execute()

+ ASE\_AssignmentTests

(ASE\_AssignmentTests.html)

Implements

BOOSE.ICommand

See Also

CommandOneParameter



# Class WriteText

Command to write a string on the canvas.

▼ Filter by title

## Inheritance

Object (https://learn.microsoft.com/dotnet/api/system.object)  
(ASE\_Assignment.html)

CanvasCommand  
AppCanvas  
CommandOneParameter  
(ASE\_Assignment.AppCanvas.html)  
WriteText  
AppCommandFactory  
(ASE\_Assignment.AppCommandFactory.html)

BoosterInterpreter  
ICommand  
(ASE\_Assignment.BoosterInterpreter.html)

## Inherited Members

CommandOneParameter.param1  
MoveTo  
CommandOneParameter.param1unprocessed  
(ASE\_Assignment.MoveTo.html)  
CanvasCommand.Pos  
PenColour  
(ASE\_Assignment.PenColour.html)  
CanvasCommand.Canvas  
Rect  
(ASE\_Assignment.Rect.html)  
CanvasCommand.Canvas  
WriteText  
CommandProgram  
(ASE\_Assignment.WriteText.html)  
Command.parameterList

## + ASE\_AssignmentTests

Command.paramsint  
(ASE\_AssignmentTests.html)  
Command.Set(storedProgram, string) (https://learn.microsoft.com/dotnet/api/system.string)  
Command.Compile()  
Command.ProcessParameters(string) (https://learn.microsoft.com/dotnet/api/system.string)  
Command.ToString()  
Command.Program  
Command.Name  
Command.ParameterList  
Command.Parameters  
Command.Paramsint  
object.Equals(object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object))  
object.Equals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object))  
object.GetHashCode() (https://learn.microsoft.com/dotnet/api/system.object.gethashcode)  
object.GetType() (https://learn.microsoft.com/dotnet/api/system.object.gettype)  
object.MemberwiseClone() (https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone)  
object.ReferenceEquals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.referenceequals)

Namespace: ASE\_Assignment (ASE\_Assignment.html)

Assembly: ASE\_Assignment.dll

## Syntax

```
public class WriteText : CommandOneParameter, ICommand
```

# Constructors

## WriteText() - ASE\_Assignment

Initialises new instance of WriteText (ASE\_Assignment.WriteText.html) with no parameters.

```
AppCanvas
(ASE_Assignment.AppCanvas.html)
AppCommandFactory
public WriteText()
(ASE_Assignment.AppCommandFac
BooselInterpreter
(ASE_Assignment.BooselInterpreter.
```

## WriteText(Canvas, string) (ASE\_Assignment.Circle.html)

Initialises new instance of WriteText (ASE\_Assignment.WriteText.html) with a specified canvas and string.

```
MoveTo
(ASE_Assignment.MoveTo.html)
PenColour
(ASE_Assignment.PenColour.html)
public WriteText(Canvas c, string text)
Rect(ASE_Assignment.Rect.html)
WriteText
(ASE_Assignment.WriteText.html)
```

### ASE\_AssignmentTests

(ASE\_AssignmentTests.html)

Type	Name	Description
Canvas	c	
string ( <a href="https://learn.microsoft.com/dotnet/api/system.string">https://learn.microsoft.com/dotnet/api/system.string</a> )	text	

# Methods

## CheckParameters(string[])

Checks if WriteText (ASE\_Assignment.WriteText.html) has been called with the correct amount of parameters.

Declaration

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

Parameters

Type	Name	Description
string ( <a href="https://learn.microsoft.com/dotnet/api/system.string">https://learn.microsoft.com/dotnet/api/system.string</a> )	<i>parameterList</i>	String array to be checked to ensure the correct number of parameters has been passed.

Overrides Command.Execute() (https://learn.microsoft.com/dotnet/api/system.string) <b>(ASE_Assignment.html)</b> Exceptions	
---	--

Type	Condition
AppCanvas (ASE_Assignment.AppCanvas.html)	
AppCommandFactory (ASE_Assignment.AppCommandFactory.html)	Thrown if the number of parameters is not 1.

BooseInterpreter (ASE_Assignment.BooseInterpreter.html)	
<b>Execute()</b> Circle (ASE_Assignment.Circle.html)	

Calls BOOSE.Command.Execute(), then writes text using the specified string. MoveTo (ASE_Assignment.MoveTo.html)	
---	--

Declaration PenColour (ASE_Assignment.PenColour.html)	
Rect (ASE_Assignment.Rect.html)	
WriteText (ASE_Assignment.WriteText.html)	

Overrides BOOSE.Command.Execute()	
--------------------------------------	--

<b>+ ASE_AssignmentTests</b> <b>(ASE_AssignmentTests.html)</b> Implements	
---	--

BOOSE.ICommand	
----------------	--

# Namespace ASE\_AssignmentTests

## Classes

▼ Filter by title

**AppCanvasTests (ASE\_AssignmentTests.AppCanvasTests.html)**  
+ ASE\_Assignment (ASE\_Assignment.html)

- ASE\_AssignmentTests (ASE\_AssignmentTests.html)
  - AppCanvasTests (ASE\_AssignmentTests.AppCanvasT

# Class AppCanvasTests

## Inheritance

▼ Filter by title  
↳ [Object \(https://learn.microsoft.com/dotnet/api/system.object\)](https://learn.microsoft.com/dotnet/api/system.object)  
↳ AppCanvasTests

## ASE Assignment

(ASE\_Assignment.html)

[object.Equals\(object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object))

## ASE\_AssignmentTests

[object.Equals\(object, object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object))

[object.GetHashCode\(\)](https://learn.microsoft.com/dotnet/api/system.object.gethashcode) (https://learn.microsoft.com/dotnet/api/system.object.gethashcode)

[object.GetType\(\)](https://learn.microsoft.com/dotnet/api/system.object.gettype) (https://learn.microsoft.com/dotnet/api/system.object.gettype)

[object.MemberwiseClone\(\)](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone) (https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone)

[object.ReferenceEquals\(object, object\)](https://learn.microsoft.com/dotnet/api/system.object.referenceequals) (https://learn.microsoft.com/dotnet/api/system.object.referenceequals)

[object.ToString\(\)](https://learn.microsoft.com/dotnet/api/system.object.tostring) (https://learn.microsoft.com/dotnet/api/system.object.tostring)

**Namespace:** ASE\_AssignmentTests (ASE\_AssignmentTests.html)

**Assembly:** ASE\_AssignmentTests.dll

## Syntax

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

## Methods

### Setup()

Creates new canvas for testing purposes, uses specified width and height of 800px,800px.

#### Declaration

```
[TestInitialize]
public void Setup()
```

### TestDrawTo\_SetsPenPosition()

Test to ensure DrawTo command correctly sets pen X and Y position after drawing.

#### Declaration

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

## ▼ **TestMoveTo\_SetsPenPosition()**

Test to ensure MoveTo command correctly sets pen X and Y position.

+ **ASE\_Assignment**

Declaration  
(ASE\_Assignment.html)

- **ASE\_AssignmentTests**

[TestMethod]

(ASE\_AssignmentTests.html)

```
public void TestMoveTo_SetsPenPosition()
```

AppCanvasTests

(ASE\_AssignmentTests.AppCanvasT

## **TestMultilineProgram\_NoRestrictions()**

Test to ensure multiline programs can be run even if command parameters exceed BOOSE restrictions.

Declaration

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

## **TestMultilineProgram\_WithRestrictions()**

Test to ensure multiline programs can be run with command parameters that don't exceed BOOSE restrictions.

Declaration

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