Namespace Libs.TLV

Classes

<u>TlvObject</u>

Represents a node in a parsed TLV (Tag-Length-Value) structure. Provides access to nested TLV elements via an indexer and exposes the value of a primitive TLV element as a hexadecimal string.

<u>TlvParser</u>

TreePrinter

Provides functionality to generate an ASCII-art representation of a tree stored in a nested Dictionary<string, object> structure.

Class TlvObject

Namespace: Libs.TLV

Assembly: NfcTerminal.dll

Represents a node in a parsed TLV (Tag-Length-Value) structure. Provides access to nested TLV elements via an indexer and exposes the value of a primitive TLV element as a hexadecimal string.

```
public class TlvObject
```

Inheritance

<u>object</u>

✓ TlvObject

Inherited Members

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

Constructors

TlvObject(Dictionary < string, object >)

Initializes a new instance of the <u>TlvObject</u> class that wraps a constructed TLV node (with child elements).

```
public TlvObject(Dictionary<string, object> source)
```

Parameters

```
source <u>Dictionary</u> ♂ < <u>string</u> ♂, <u>object</u> ♂ >
```

A <u>Dictionary < TKey</u>, <u>TValue > </u> containing the nested TLV structure. Each key is a tag name (or raw tag hex), and each value is either a string (primitive hex value) or another dictionary for further nesting.

Properties

IsEmpty

```
public bool IsEmpty { get; }
```

Property Value

bool ♂

this[string]

Indexer to access a child TLV element by its tag name.

```
public TlvObject this[string index] { get; }
```

Parameters

index <u>string</u>♂

The tag name (or raw tag hex) of the desired child element.

Property Value

TlvObject

A <u>TlvObject</u> representing the nested TLV element: • If the specified tag does not exist, an empty <u>Tlv Object</u> is returned. • If the specified tag is a primitive element, the returned object's <u>Value</u> property contains that element's hex string. • If the specified tag is constructed (has children), the returned object wraps the nested dictionary of child elements.

Source

```
public Dictionary<string, object> Source { get; }
```

Property Value

<u>Dictionary</u> ♂ < <u>string</u> ♂, <u>object</u> ♂ >

Value

Gets the primitive value of this TLV object as a hexadecimal string. If the instance represents a constructed node (i.e., has children), this property will be null.

```
public string Value { get; }
```

Property Value

Class TlvParser

Namespace: Libs.TLV

Assembly: NfcTerminal.dll

```
public static class TlvParser
```

Inheritance

Inherited Members

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

Fields

TagNames

Maps hex tag key to it name

```
public static Dictionary<string, string> TagNames
```

Field Value

<u>Dictionary</u> ♂ < <u>string</u> ♂, <u>string</u> ♂ >

Methods

HexStringToBytes(string)

Converts a hexadecimal string into a byte array. Removes any whitespace characters (spaces, tabs, newlines) and dashes ('-') before parsing.

```
public static byte[] HexStringToBytes(string hex)
```

hex <u>string</u> □

A string of hexadecimal characters (must have even length after cleaning). Examples of valid inputs: • "9F020600000000100" • "9F02 06 00000000100" • "9F02-06-00000000-0100"

Returns

<u>byte</u> []

A byte array where each pair of hex characters is parsed into one byte.

Exceptions

<u>ArgumentNullException</u> ☑

Thrown if hex is null.

Thrown if the cleaned hex string has an odd length (cannot form complete bytes), or if any two-character chunk is not a valid hex byte (e.g. contains non-hex characters).

Parse(byte[])

Parses a raw byte array containing TLV-encoded data into a nested Dictionary < string, object >.

```
public static Dictionary<string, object> Parse(byte[] data)
```

Parameters

data <u>byte</u> []

A byte array where each element represents one byte of TLV-encoded data. This method starts at index 0 and attempts to consume the entire array as TLV.

Returns

<u>Dictionary</u> ♂ < <u>string</u> ♂, <u>object</u> ♂ >

A Dictionary where each key is the tag name (or raw tag hex if no friendly name exists) and each value is either: • A nested Dictionary<string, object> for constructed (sub-TLV) tags, or • A string (hexencoded) for primitive tag values.

Parse(string)

Parses a hexadecimal-encoded TLV string into a nested Dictionary < string, object >. Internally, the method:

- 1. Cleans the input string of whitespace and hyphens.
- 2. Converts every two hex characters into one byte.
- 3. Invokes ParseTlv(byte[], ref int, int) on the resulting byte array.

```
public static Dictionary<string, object> Parse(string hexTlv)
```

Parameters

hexTlv <u>string</u> ☐

A string containing TLV data represented as hexadecimal characters. It may include spaces, tabs, newlines, or dashes ("-") between bytes, all of which will be ignored. Example: "9F02 06 00000000100" or "9F02-0600000000100".

Returns

<u>Dictionary</u> ♂ < <u>string</u> ♂, <u>object</u> ♂ >

A Dictionary mapping each tag name (or raw tag hex if no friendly name exists) to: • a nested <u>Dictionary < TKey, TValue > </u> for constructed (sub-TLV) tags, or • a <u>string</u> (hex-encoded) for primitive tag values.

Exceptions

Thrown if the cleaned hex string has an odd length (cannot form complete bytes), or if any two-character chunk is not a valid hex byte. Any FormatException thrown by HexStringToBytes(string) bubbles up here.

ParseTlv(byte[], ref int, int)

Parses a TLV (Tag-Length-Value) buffer beginning at index i and ending at limit. If a tag is "constructed" (bit-5 of the first tag byte is set), its value is interpreted as a nested TLV sequence. Otherwise, the value is returned as a hexadecimal string.

```
public static Dictionary<string, object> ParseTlv(byte[] buf, ref int i, int limit)
```

Parameters

buf <u>byte</u> []

The complete TLV-encoded byte array.

i int♂

Reference to the current read index in buf. On return, i will point immediately past the last byte consumed for this TLV block.

limit int♂

The exclusive upper bound inside buf up to which parsing is valid. Must be between 0 and buf.Length.

Returns

<u>Dictionary</u> ♂ < <u>string</u> ♂, <u>object</u> ♂ >

A Dictionary mapping tag names (or raw tag hex strings if not found in TagNames) to either: • string – for primitive (non-constructed) tag values, encoded as a hex string without "-" separators • Dictionary < string, object > – for constructed tags, representing a nested TLV subtree.

Exceptions

<u>ArgumentOutOfRangeException</u> ☑

Thrown if i or limit are outside the valid range of buf.

Thrown whenever the TLV structure is invalid. Examples: • Unexpected end of buffer while reading a tag or length • Invalid length (negative or exceeding available bytes) • Any error thrown by ReadTag or ReadLength is wrapped in a FormatException with context.

ToJson(Dictionary < string, object >)

Serializes a nested Dictionary < string, object > (as produced by Parse or ParseTlv) into a prettified JSON string with indentation.

```
public static string ToJson(Dictionary<string, object> dict)
```

Parameters

dict <u>Dictionary</u> ♂ < string ♂, <u>object</u> ♂ >

The Dictionary < string, object > to serialize. Each value may itself be another Dictionary < string, object > or a primitive string. The serializer will automatically recurse into nested dictionaries.

Returns

A JSON-formatted string with indented formatting, making the structure human-readable. Example output: { "TagName1": "A1B2C3", "TagName2": { "SubTag1": "00FF" } }

Class TreePrinter

Namespace: <u>Libs.TLV</u>

Assembly: NfcTerminal.dll

Provides functionality to generate an ASCII-art representation of a tree stored in a nested Dictionary < string, object > structure.

```
public static class TreePrinter
```

Inheritance

object

← TreePrinter

Inherited Members

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

Methods

GenerateTreeString(Dictionary < string, object >)

Generates a string containing an ASCII-art diagram of the tree.

```
public static string GenerateTreeString(Dictionary<string, object> tree)
```

Parameters

tree <u>Dictionary</u> < <u>string</u> < , <u>object</u> < > >

A Dictionary < string, object > where each key is a node label. If the associated value is a string, it is treated as a leaf ("key: value"). If the value is another Dictionary < string, object >, it represents an internal node whose children will be rendered recursively.

Returns

<u>string</u> ☑

A multi-line string, using connectors (" ——", " ——") and indent-prefixes (" | " or spaces) to visualize the hierarchy.

Namespace Lin

Classes

<u>LinInterpreter</u>

A very small expression-language interpreter featuring variables, arithmetic/bitwise operators, user-defined functions and simple control flow constructs (if, for, return).

Class LinInterpreter

Namespace: Lin

Assembly: NfcTerminal.dll

A very small expression-language interpreter featuring variables, arithmetic/bitwise operators, user-defined functions and simple control flow constructs (if, for, return).

```
public class LinInterpreter
```

Inheritance

object ← LinInterpreter

Inherited Members

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

Properties

this[string]

Read-only accessor for a variable. Returns null when not defined.

```
public object this[string varName] { get; }
```

Parameters

varName <u>string</u>♂

Property Value

Methods

Execute(string)

Executes a single line or a multi-line compound statement. An expression returns its value; assignments return the assigned value; statements that do not produce a value return null.

```
public object Execute(string line)
```

Parameters

line <u>string</u> ♂

A line read from the REPL.

Returns

<u>object</u> ☑

The result of the executed line or null.

SetFunction(string, Func<List<object>, object>)

Set or add, build-in function to language

public void SetFunction(string name, Func<List<object>, object> function)

Parameters

 $name \ \underline{string} \square$

name of build in function

function Func < <a>List <a>c <a>c<

function itself

Namespace NfcDemo

Classes

<u>Apdu</u>

<u>App</u>

<u>AppDelegate</u>

<u>AppShell</u>

<u>LinScriptPage</u>

A page that allows users to write and execute LIN scripts, displaying output and interacting with NFC tags.

<u>LinTerminalPage</u>

<u>MauiProgram</u>

MessageOptions

Represents a set of context-specific options presented to the user via an action sheet.

Program

TLVPage

Page that parses a TLV-encoded hex string, displays its tree representation, and allows copying the tree or JSON representation to the clipboard.

TerminalPage

Class Apdu

```
Namespace: <u>NfcDemo</u>
Assembly: NfcTerminal.dll
```

```
public static class Apdu
```

Inheritance

Inherited Members

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

Methods

SelectByAid(byte[], byte, byte, byte, byte)

```
public static byte[] SelectByAid(byte[] aid, byte _class = 0, byte _inst = 0, byte _p1 = 0,
byte _p2 = 0)
```

Parameters

aid <u>byte</u>戊[] _class <u>byte</u>戊

_inst <u>byte</u>♂

_p1 <u>byte</u>♂

_p2 <u>byte</u>♂

Returns

<u>byte</u>[]

SplitResponse(byte[])

Extract form response status code and data

```
public static (byte[] Data, ushort SW) SplitResponse(byte[] resp)
```

Parameters

resp <u>byte</u>d[]

Returns

(<u>byte</u> ☑ [] <u>Data</u> ☑, <u>ushort</u> ☑ <u>SW</u> ☑)

Exceptions

<u>ArgumentException</u>

☑

Class App

```
Namespace: <u>NfcDemo</u>
Assembly: NfcTerminal.dll
```

```
[XamlFilePath("App.xaml")]
public class App : Application, INotifyPropertyChanged, IElementController,
IEffectControlProvider, IToolTipElement, IContextFlyoutElement, IApplicationController,
IElementConfiguration
Application
, IVisualTreeElement, IApplication, IElement
```

Inheritance

<u>object</u> ♂ ← <u>BindableObject</u> ♂ ← <u>Element</u> ♂ ← <u>Application</u> ♂ ← App

Implements

INotifyPropertyChanged ☑, IElementController ☑, IEffectControlProvider ☑, IToolTipElement ☑, IContextFlyoutElement ☑, IApplicationController ☑, IElementConfiguration ☑ < Application ☑ >, IVisualTreeElement ☑, IApplication ☑, IElement ☑

Inherited Members

```
<u>Application.ControlsApplicationMapper</u> ✓ , <u>Application.Quit()</u> ✓ , <u>Application.SavePropertiesAsync()</u> ✓ ,
Application.On<T>() ☑ , Application.OnAppLinkRequestReceived(Uri) ☑ , Application.OnParentSet() ☑ ,
<u>Application.OnResume()</u> description.OnSleep() description.OnStart() description.OnStart() description.OnSleanUp() descriptio
Application.OpenWindow(Window) , Application.CloseWindow(Window) ,
Application.CreateWindow(IActivationState) , Application.AppLinks , Application.Current ,
Application.MainPage ☑, Application.Properties ☑, Application.Resources ☑,
Application.UserAppThemed, Application.PlatformAppThemed, Application.RequestedThemed,
<u>Application.AccentColor</u> do , <u>Application.Windows</u> do , <u>Application.RequestedThemeChanged</u> do ,
Application.ModalPopped ☑, Application.ModalPopping ☑, Application.ModalPushed ☑,
Application.ModalPushing , Application.PageAppearing , Application.PageDisappearing ,
<u>Element.AutomationIdProperty</u> ✓ , <u>Element.ClassIdProperty</u> ✓ , <u>Element.ControlsElementMapper</u> ✓ ,
Element.SetDynamicResource(BindableProperty, string) . , Element.OnBindingContextChanged() . ,
Element.OnChildAdded(Element) , Element.OnChildRemoved(Element, int) ,
Element.OnPropertyChanged(string) / Element.OnParentChanging(ParentChangingEventArgs) / ,
<u>Element.OnHandlerChanged()</u> □ ,
Element.MapAutomationPropertiesIsInAccessibleTree(IElementHandler, Element) ,
Element.MapAutomationPropertiesExcludedWithChildren(IElementHandler, Element) ,
Element.AutomationId , Element.ClassId , Element.Effects , Element.Id , Element.StyleId ,
```

<u>Element.Parent</u> de , <u>Element.Handler</u> de , <u>Element.ChildAdded</u> de , <u>Element.ChildRemoved</u> de ,

```
Element.DescendantAdded , Element.DescendantRemoved , Element.ParentChanging , Element.ParentChanged , Element.HandlerChanging , Element.HandlerChanged , Element.ParentChanged , Object.Equals(Object.Dispatcher , DindableObject.BindingContext , DindableObject.PropertyChanged , Object.Equals(Object, Object) , Object.GetType() , Object.GetType() , Object.GetType() , Object.MemberwiseClone() , Object.ReferenceEquals(Object, Object) , Object.ToString()
```

Constructors

App()

public App()

Class AppDelegate

Namespace: NfcDemo
Assembly: NfcTerminal.dll

```
[Register("AppDelegate")]
public class AppDelegate : MauiUIApplicationDelegate, IEquatable<NSObject>,
INSObjectProtocol, IUIActivityItemsConfigurationProviding, IUIPasteConfigurationSupporting,
IUIResponderStandardEditActions, IUIUserActivityRestoring, IUIApplicationDelegate,
INativeObject, IDisposable, IPlatformApplication
```

Inheritance

<u>object</u> ✓ ← NSObject ← UIResponder ← <u>MauiUIApplicationDelegate</u> ✓ ← AppDelegate

Implements

<u>IEquatable</u> < NSObject>, INSObjectProtocol, IUIActivityItemsConfigurationProviding, IUIPasteConfigurationSupporting, IUIResponderStandardEditActions, IUIUserActivityRestoring, IUIApplicationDelegate, INativeObject, <u>IDisposable</u>, <u>IPlatformApplication</u>

■

Inherited Members

 $\underline{MauiUIApplicationDelegate.WillFinishLaunching}(\underline{UIApplication,\,NSDictionary}) \, \square \ ,$

MauiUIApplicationDelegate.FinishedLaunching(UIApplication, NSDictionary) ,

<u>MauiUIApplicationDelegate.RespondsToSelector(Selector)</u> □,

<u>MauiUIApplicationDelegate.GetConfiguration(UIApplication, UISceneSession, UISceneConnection Options)</u> ,

 $\underline{MauiUIApplicationDelegate.PerformActionForShortcutItem}(\underline{UIApplication,UIApplicationShortcutItem},\underline{UIOperationHandler}) \square,$

MauiUIApplicationDelegate.OpenUrl(UIApplication, NSUrl, NSDictionary) □,

MauiUIApplicationDelegate.ContinueUserActivity(UIApplication, NSUserActivity, UIApplication

RestorationHandler) □ ,

<u>MauiUIApplicationDelegate.OnActivated(UIApplication)</u>

✓ ,

 $\underline{MauiUIApplicationDelegate.OnResignActivation(\underline{UIApplication})} {}_{\square} \ ,$

 $\underline{MauiUIApplicationDelegate.WillTerminate(\underline{UIApplication})} \square \ ,$

MauiUIApplicationDelegate.DidEnterBackground(UIApplication) □,

 $\underline{MauiUIApplicationDelegate.WillEnterForeground(\underline{UIApplication})} \square \ \ \textbf{,}$

 $\underline{MauiUIApplicationDelegate.ApplicationSignificantTimeChange(\underline{UIApplication})} \square \ \ ,$

 $\underline{MauiUIApplicationDelegate.BuildMenu(\underline{IUIMenuBuilder})} \square \ ,$

 $\underline{MauiUIApplicationDelegate.CanPerform(Selector, NSObject)} \ {}^{\underline{\square}} \ , \ \underline{MauiUIApplicationDelegate.Current} \$

 $\underline{MauiUIApplicationDelegate.Window} \boxdot \ , \ \underline{MauiUIApplicationDelegate.Services} \boxdot \ , \\$

```
UIResponder.AccessibilityElementDidBecomeFocused(),
UIResponder.AccessibilityElementDidLoseFocus(), UIResponder.AccessibilityElementIsFocused(),
UIResponder.AccessibilityIncrement(), UIResponder.AccessibilityPerformEscape(),
UIResponder.AccessibilityPerformMagicTap(),
UIResponder.AccessibilityScroll(UIAccessibilityScrollDirection), UIResponder.BecomeFirstResponder(),
UIResponder.CanPaste(NSItemProvider[]), UIResponder.CaptureTextFromCamera(NSObject),
UIResponder.ClearTextInputContextIdentifier(NSString), UIResponder.Copy(NSObject),
UIResponder.Cut(NSObject), UIResponder.DecreaseSize(NSObject), UIResponder.Delete(NSObject),
UIResponder.Duplicate(NSObject), UIResponder.Export(NSObject), UIResponder.Find(NSObject),
UIResponder.FindAndReplace(NSObject), UIResponder.FindNext(NSObject),
UIResponder.FindPrevious(NSObject), UIResponder.GetTargetForAction(Selector, NSObject),
UIResponder.IncreaseSize(NSObject), UIResponder.MakeTextWritingDirectionLeftToRight(NSObject),
UIResponder.MakeTextWritingDirectionRightToLeft(NSObject),
UIResponder.MotionBegan(UIEventSubtype, UIEvent),
UIResponder.MotionCancelled(UIEventSubtype, UIEvent),
UIResponder.MotionEnded(UIEventSubtype, UIEvent), UIResponder.Move(NSObject),
UIResponder.Paste(NSObject), UIResponder.Paste(NSItemProvider[]),
UIResponder.PasteAndGo(NSObject), UIResponder.PasteAndMatchStyle(NSObject),
UIResponder.PasteAndSearch(NSObject), UIResponder.PressesBegan(NSSet<UIPress>, UIPressesEvent),
UIResponder.PressesCancelled(NSSet<UIPress>, UIPressesEvent),
UIResponder.PressesChanged(NSSet<UIPress>, UIPressesEvent),
UIResponder.PressesEnded(NSSet<UIPress>, UIPressesEvent), UIResponder.Print(NSObject),
UIResponder.ReloadInputViews(), UIResponder.RemoteControlReceived(UIEvent),
UIResponder.Rename(NSObject), UIResponder.ResignFirstResponder(),
UIResponder.RestoreUserActivityState(NSUserActivity), UIResponder.Select(NSObject),
UIResponder.SelectAll(NSObject), UIResponder.ToggleBoldface(NSObject),
UIResponder.ToggleItalics(NSObject), UIResponder.ToggleUnderline(NSObject),
UIResponder.TouchesBegan(NSSet, UIEvent), UIResponder.TouchesCancelled(NSSet, UIEvent),
UIResponder.TouchesEnded(NSSet, UIEvent), UIResponder.TouchesEstimatedPropertiesUpdated(NSSet),
UIResponder.TouchesMoved(NSSet, UIEvent),
UIResponder.UpdateTextAttributes(UITextAttributesConversionHandler),
UIResponder.UpdateUserActivityState(NSUserActivity), UIResponder.UseSelectionForFind(NSObject),
UIResponder. Validate Command (UICommand), UIResponder. Class Handle,
UIResponder. Accessibility Assistive Technology Focused Identifiers,
UIResponder.AccessibilityCustomActions, UIResponder.AccessibilityDragSourceDescriptors,
UIResponder.AccessibilityDropPointDescriptors, UIResponder.ActivityItemsConfiguration,
UIResponder.CanBecomeFirstResponder, UIResponder.CanResignFirstResponder,
UIResponder.EditingInteractionConfiguration, UIResponder.InputAccessoryView,
UIResponder.InputAccessoryViewController, UIResponder.InputAssistantItem, UIResponder.InputView,
UIResponder.InputViewController, UIResponder.IsFirstResponder, UIResponder.KeyCommands,
```

UIResponder.NextResponder, UIResponder.PasteConfiguration, UIResponder. TextInputContextIdentifier, UIResponder. TextInputMode, UIResponder. UndoManager, UIResponder.UserActivity, NSObject.PlatformAssembly, NSObject.Dispose(), NSObject.MarkDirty(), NSObject.ConformsToProtocol(NativeHandle), NSObject.DangerousRelease(), NSObject.DangerousRetain(), NSObject.DangerousAutorelease(), NSObject.BeginInvokeOnMainThread(Selector, NSObject), NSObject.InvokeOnMainThread(Selector, NSObject), nsobject.BeginInvokeOnMainThread(Action) \(\textit{\textit{d}} \) , NSObject.InvokeOnMainThread(Action) , NSObject.FromObject(object) , NSObject.SetValueForKeyPath(NativeHandle, NSString), NSObject.GetHashCode(), NSObject.Equals(object) , NSObject.Equals(NSObject) , NSObject.ToString() , NSObject.Invoke(Action, double) ☑, NSObject.Invoke(Action, TimeSpan) ☑, NSObject.Dispose(bool) ☑, NSObject.AddObserver(string, NSKeyValueObservingOptions, Action < NSObservedChange >) \(\text{\text{\$\sigma}} \) , NSObject.AddObserver(NSString, NSKeyValueObservingOptions, Action < NSObservedChange >) & , NSObject.Alloc(Class), NSObject.Init(), NSObject.InvokeInBackground(Action), , NSObject.AddObserver(NSObject, NSString, NSKeyValueObservingOptions, nint) , NSObject.AddObserver(NSObject, string, NSKeyValueObservingOptions, nint) , NSObject.AutomaticallyNotifiesObserversForKey(string) , NSObject.AwakeFromNib(), NSObject.CancelPreviousPerformRequest(NSObject), NSObject.CancelPreviousPerformRequest(NSObject, Selector, NSObject), NSObject.Copy(), NSObject.DidChange(NSKeyValueChange, NSIndexSet, NSString), NSObject.DidChange(NSString, NSKeyValueSetMutationKind, NSSet), NSObject.DidChangeValue(string) , NSObject.DoesNotRecognizeSelector(Selector), NSObject.GetDictionaryOfValuesFromKeys(NSString[]), NSObject.GetKeyPathsForValuesAffecting(NSString), NSObject.GetMethodForSelector(Selector), NSObject.GetNativeHash(), NSObject.IsEqual(NSObject), NSObject.IsKindOfClass(Class), NSObject.IsMemberOfClass(Class), NSObject.MutableCopy(), NSObject.ObserveValue(NSString, NSObject, NSDictionary, nint) , NSObject.PerformSelector(Selector, NSObject, double, NSString[]) , NSObject.PerformSelector(Selector, NSObject, double) , NSObject.PerformSelector(Selector, NSThread, NSObject, bool) , NSObject.PerformSelector(Selector, NSThread, NSObject, bool, NSString[]) \(\text{\overline} \) , NSObject.PerformSelector(Selector), NSObject.PerformSelector(Selector, NSObject), NSObject.PerformSelector(Selector, NSObject, NSObject), NSObject.PrepareForInterfaceBuilder(), NSObject.RemoveObserver(NSObject, NSString, nint) , NSObject.RemoveObserver(NSObject, string, nint) , NSObject.RemoveObserver(NSObject, NSString) , NSObject.RemoveObserver(NSObject, string) , NSObject.SetNilValueForKey(NSString), NSObject.SetValueForKey(NSObject, NSString), NSObject.SetValueForKeyPath(NSObject, NSString), NSObject.SetValueForUndefinedKey(NSObject, NSString), NSObject.SetValuesForKeysWithDictionary(NSDictionary), NSObject.ValueForKey(NSString), NSObject.ValueForKeyPath(NSString), NSObject.ValueForUndefinedKey(NSString),

NSObject.WillChange(NSKeyValueChange, NSIndexSet, NSString),
NSObject.WillChange(NSString, NSKeyValueSetMutationKind, NSSet),
NSObject.WillChangeValue(string), NSObject.IsDirectBinding, NSObject.SuperHandle,
NSObject.Handle, NSObject.AccessibilityAttributedUserInputLabels,
NSObject.AccessibilityRespondsToUserInteraction, NSObject.AccessibilityTextualContext,
NSObject.AccessibilityUserInputLabels, NSObject.Class, NSObject.DebugDescription,
NSObject.Description, NSObject.IsProxy, NSObject.RetainCount, NSObject.Self, NSObject.Superclass,
NSObject.Zone, NSObject.ChangeIndexesKey, NSObject.ChangeKindKey, NSObject.ChangeNewKey,
NSObject.ChangeNotificationIsPriorKey, NSObject.ChangeOldKey, object.Equals(object, object),
object.GetType(), object.MemberwiseClone(), object.ReferenceEquals(object, object),

Methods

CreateMauiApp()

When overridden in a derived class, creates the <u>MauiApp</u> to be used in this application. Typically a <u>MauiApp</u> is created by calling <u>CreateBuilder(bool)</u>, configuring the returned <u>MauiAppBuilder</u>, and returning the built app by calling <u>Build()</u>.

protected override MauiApp CreateMauiApp()

Returns

Class AppShell

Namespace: NfcDemo
Assembly: NfcTerminal.dll

```
[XamlFilePath("AppShell.xaml")]
public class AppShell : Shell, INotifyPropertyChanged, IVisualTreeElement,
IEffectControlProvider, IToolTipElement, IContextFlyoutElement, IAnimatable, ITitledElement,
IToolbarElement, ILayout, IElementConfiguration<Page>, ISafeAreaView, IFlyoutView, IView,
IElement, ITransform, IShellController, IPageController, IVisualElementController,
IElementController, IPageContainer<Page>
```

Inheritance

 $\underline{object} \square \leftarrow \underline{BindableObject} \square \leftarrow \underline{Element} \square \leftarrow \underline{NavigableElement} \square \leftarrow \underline{VisualElement} \square \leftarrow \underline{Page} \square \leftarrow \underline{Shell} \square \leftarrow \underline{AppShell}$

Implements

INotifyPropertyChanged ☑, IVisualTreeElement ☑, IEffectControlProvider ☑, IToolTipElement ☑, IContextFlyoutElement ☑, IAnimatable ☑, ITitledElement ☑, IToolbarElement ☑, ILayout ☑, IElementConfiguration ☑ < Page ☑ >, ISafeAreaView ☑, IFlyoutView ☑, IView ☑, IElement ☑, ITransform ☑, IShellController ☑, IPageController ☑, IVisualElementController ☑, IElementController ☑, IPageContainer ☑ < Page ☑ >

Inherited Members

```
Shell.BackButtonBehaviorProperty, , Shell.PresentationModeProperty, ,
Shell.FlyoutBehaviorProperty, , Shell.NavBarlsVisibleProperty, , Shell.NavBarHasShadowProperty, ,
Shell.SearchHandlerProperty , Shell.FlyoutItemIsVisibleProperty , Shell.TabBarIsVisibleProperty ,
Shell.TitleViewProperty, Shell.MenuItemTemplateProperty, Shell.ItemTemplateProperty,
Shell.BackgroundColorProperty, , Shell.DisabledColorProperty, , Shell.ForegroundColorProperty, ,
Shell.TabBarBackgroundColorProperty, , Shell.TabBarDisabledColorProperty, ,
Shell.TabBarForegroundColorProperty, , Shell.TabBarTitleColorProperty, ,
Shell.TabBarUnselectedColorProperty,, Shell.TitleColorProperty,, Shell.UnselectedColorProperty,,
Shell.FlyoutBackdropProperty,, Shell.FlyoutWidthProperty,, Shell.FlyoutHeightProperty,,
Shell.CurrentItemProperty, , Shell.CurrentStateProperty, , Shell.FlyoutBackgroundImageProperty, ,
Shell.FlyoutBackgroundImageAspectProperty , Shell.FlyoutBackgroundColorProperty ,
Shell.FlyoutBackgroundProperty , Shell.FlyoutHeaderBehaviorProperty ,
Shell.FlyoutHeaderProperty, , Shell.FlyoutFooterProperty, , Shell.FlyoutHeaderTemplateProperty, ,
Shell.FlyoutFooterTemplateProperty, , Shell.FlyoutIsPresentedProperty, , Shell.ItemsProperty, ,
<u>Shell.FlyoutIconProperty</u> , <u>Shell.FlyoutVerticalScrollModeProperty</u> , <u>Shell.FlyoutContentProperty</u> ,
Shell.FlyoutContentTemplateProperty , Shell.OnPropertyChanged(string) ,
```

```
Shell.GetFlyoutItemIsVisible(BindableObject) , Shell.SetFlyoutItemIsVisible(BindableObject, bool) ,
Shell.SetMenuItemTemplate(BindableObject, DataTemplate) ,
Shell.GetItemTemplate(BindableObject) , Shell.SetItemTemplate(BindableObject, DataTemplate) ,
<u>Shell.GetBackButtonBehavior(BindableObject)</u> □ ,
Shell.SetBackButtonBehavior(BindableObject, BackButtonBehavior) ,
<u>Shell.GetPresentationMode(BindableObject)</u> ✓,
<u>Shell.SetPresentationMode(BindableObject, PresentationMode)</u> ,
Shell.GetFlyoutBehavior(BindableObject) d., Shell.SetFlyoutBehavior(BindableObject, FlyoutBehavior) d.,
Shell.GetFlyoutWidth(BindableObject)  

✓ , Shell.SetFlyoutWidth(BindableObject, double)  

✓ ,
Shell.GetFlyoutHeight(BindableObject) , Shell.SetFlyoutHeight(BindableObject, double) ,
Shell.GetNavBarlsVisible(BindableObject) , Shell.SetNavBarlsVisible(BindableObject, bool) ,
Shell.GetNavBarHasShadow(BindableObject) d, Shell.SetNavBarHasShadow(BindableObject, bool) d,
Shell.GetSearchHandler(BindableObject) , Shell.SetSearchHandler(BindableObject, SearchHandler) ,
Shell.GetTabBarlsVisible(BindableObject) , Shell.SetTabBarlsVisible(BindableObject, bool) ,
Shell.GetTitleView(BindableObject) , Shell.SetTitleView(BindableObject, View) ,
Shell.GetBackgroundColor(BindableObject) , Shell.SetBackgroundColor(BindableObject, Color) ,
<u>Shell.GetDisabledColor(BindableObject)</u> , <u>Shell.SetDisabledColor(BindableObject, Color)</u> ,
Shell.GetForegroundColor(BindableObject) , Shell.SetForegroundColor(BindableObject, Color) ,
<u>Shell.SetTabBarDisabledColor(BindableObject, Color)</u> 

✓ ,
Shell.SetTabBarForegroundColor(BindableObject, Color) , Shell.GetTabBarTitleColor(BindableObject) , ,
Shell.SetTabBarTitleColor(BindableObject, Color) , Shell.GetTabBarUnselectedColor(BindableObject) ,
Shell.SetTabBarUnselectedColor(BindableObject, Color) , Shell.GetTitleColor(BindableObject) ,
Shell.SetTitleColor(BindableObject, Color) , Shell.GetUnselectedColor(BindableObject) ,
Shell.SetUnselectedColor(BindableObject, Color) , Shell.GetFlyoutBackdrop(BindableObject) ,
Shell.SetFlyoutBackdrop(BindableObject, Brush) , Shell.GoToAsync(ShellNavigationState) ,
Shell.GoToAsync(ShellNavigationState, bool) ,
Shell.GoToAsync(ShellNavigationState, IDictionary<string, object>) \( \text{\text{\text{\text{o}}}} \)
Shell.GoToAsync(ShellNavigationState, bool, IDictionary < string, object >) \( \text{\text{\text{\text{o}}}} \) \( \text{\text{\text{\text{\text{o}}}} \)
Shell.AddLogicalChild(Element) , Shell.RemoveLogicalChild(Element) ,
Shell.OnBindingContextChanged() . Shell.OnBackButtonPressed() . ,
Shell.OnNavigated(ShellNavigatedEventArgs) , Shell.OnNavigating(ShellNavigatingEventArgs) ,
Shell.LayoutChildren(double, double, double, double) , Shell.CurrentPage , Shell.Current ,
Shell.FlyoutVerticalScrollMode , Shell.FlyoutIcon , Shell.CurrentItem , Shell.CurrentState ,
Shell.FlyoutBackgroundImage2, Shell.FlyoutBackgroundImageAspect2,
Shell.FlyoutBackgroundColor , Shell.FlyoutBackground , Shell.FlyoutBackdrop , Shell.FlyoutWidth ,
```

```
Shell.FlyoutHeight , Shell.FlyoutBehavior , Shell.FlyoutHeader , Shell.FlyoutFooter ,
Shell.FlyoutHeaderBehavior down , Shell.FlyoutHeaderTemplate down , Shell.FlyoutFooterTemplate down ,
Shell.FlyoutIsPresented, , Shell.Items, , Shell.ItemTemplate, , Shell.MenuItemTemplate, ,
Shell.FlyoutItems : , Shell.FlyoutContent : , Shell.FlyoutContentTemplate : , Shell.Navigated : ,
Shell.Navigating , Page.BusySetSignalName , Page.AlertSignalName , Page.PromptSignalName ,
Page.ActionSheetSignalNamed, Page.BackgroundImageSourcePropertyd, Page.IsBusyPropertyd,
Page.PaddingProperty , Page.TitleProperty , Page.IconImageSourceProperty ,
Page.OnNavigatedTo(NavigatedToEventArgs) , Page.OnNavigatingFrom(NavigatingFromEventArgs) ,
Page.OnNavigatedFrom(NavigatedFromEventArgs) □ , Page.GetParentWindow() □ ,
Page.DisplayActionSheet(string, string, string, params string[]) ,
Page.DisplayActionSheet(string, string, string, FlowDirection, params string[]) \( \textstyle \),
Page.DisplayAlert(string, string, string) \rightarrow , Page.DisplayAlert(string, string, string, string) \rightarrow ,
Page.DisplayAlert(string, string, string, FlowDirection) ,
Page.DisplayAlert(string, string, string, string, FlowDirection) ,
Page.DisplayPromptAsync(string, string, string, string, string, int, Keyboard, string) ,
Page.ForceLayout() ☑ , Page.SendBackButtonPressed() ☑ , Page.OnAppearing() ☑ ,
Page.OnChildMeasureInvalidated(object, EventArgs) , Page.OnDisappearing() , Page.OnParentSet() ,
Page.OnSizeAllocated(double, double) ♂, Page.UpdateChildrenLayout() ♂, Page.On<T>() ♂,
Page.BackgroundImageSource , Page.IconImageSource , Page.IsBusy , Page.Padding ,
Page.Title ♂, Page.ToolbarItems ♂, Page.MenuBarItems ♂, Page.NavigatedTo ♂, Page.NavigatingFrom ♂,
Page.NavigatedFrom , Page.LayoutChanged , Page.Appearing , Page.Disappearing ,
<u>VisualElement.ControlsVisualElementMapper</u> , <u>VisualElement.ShadowProperty</u>,
<u>VisualElement.ZIndexProperty</u> do disualElement.NavigationProperty do disualElement.StyleProperty do disualElement.StylePro
<u>VisualElement.InputTransparentProperty</u> , <u>VisualElement.IsEnabledProperty</u> ,
VisualElement.XProperty , VisualElement.YProperty , VisualElement.AnchorXProperty ,
VisualElement.AnchorYProperty , VisualElement.TranslationXProperty ,
VisualElement.TranslationYProperty , VisualElement.WidthProperty , VisualElement.HeightProperty ,
VisualElement.RotationProperty ☑, VisualElement.RotationXProperty ☑,
<u>VisualElement.RotationYProperty</u> ✓, <u>VisualElement.ScaleProperty</u> ✓, <u>VisualElement.ScaleXProperty</u> ✓,
VisualElement.ScaleYProperty 7, VisualElement.ClipProperty 7, VisualElement.VisualProperty 7,
VisualElement.IsVisibleProperty , VisualElement.OpacityProperty ,
<u>VisualElement.BackgroundProperty</u> , <u>VisualElement.BehaviorsProperty</u> ,
VisualElement.TriggersProperty , VisualElement.WidthRequestProperty ,
VisualElement.HeightRequestProperty , VisualElement.MinimumWidthRequestProperty ,
VisualElement.MinimumHeightRequestProperty , VisualElement.MaximumWidthRequestProperty ,
VisualElement.MaximumHeightRequestProperty, VisualElement.IsFocusedProperty, ,
<u>VisualElement.FlowDirectionProperty</u> , <u>VisualElement.WindowProperty</u> ,
VisualElement.MapBackgroundImageSource(IViewHandler, IView)  
☐ , VisualElement.Arrange(Rect)  
☐ ,
<u>VisualElement.ArrangeOverride(Rect)</u>  , <u>VisualElement.Layout(Rect)</u>  , ,
```

```
VisualElement.InvalidateMeasureOverride() □ , VisualElement.MeasureOverride(double, double) □ ,
VisualElement.BatchBegin() ☑ , VisualElement.BatchCommit() ☑ , VisualElement.Focus() ☑ ,
VisualElement.Measure(double, double, MeasureFlags) ☑, VisualElement.Unfocus() ☑,
VisualElement.InvalidateMeasure() □ , VisualElement.OnChildAdded(Element) □ ,
VisualElement.OnChildRemoved(Element, int) // , VisualElement.OnChildrenReordered() // ,
VisualElement.OnMeasure(double, double) ☑, VisualElement.SizeAllocated(double, double) ☑,
VisualElement.Shadow , VisualElement.ZIndex , VisualElement.DesiredSize ,
VisualElement.IsLoaded ☑, VisualElement.Visual ☑, VisualElement.FlowDirection ☑,
VisualElement.Window down , VisualElement.AnchorX down , VisualElement.AnchorY down , VisualElement.AnchorY down , VisualElement.AnchorX down , VisualElement.An
VisualElement.BackgroundColor □ , VisualElement.Background □ , VisualElement.Behaviors □ ,
<u>VisualElement.Bounds</u> , <u>VisualElement.Height</u> , <u>VisualElement.HeightRequest</u> ,
VisualElement.InputTransparent ☑, VisualElement.IsEnabled ☑, VisualElement.IsFocused ☑,
VisualElement.IsVisible ☑, VisualElement.MinimumHeightReguest ☑,
VisualElement.MinimumWidthRequest / , VisualElement.MaximumHeightRequest / ,
<u>VisualElement.MaximumWidthRequest</u> ∠ , <u>VisualElement.Opacity</u> ∠ , <u>VisualElement.Rotation</u> ∠ ,
VisualElement.RotationX♂, VisualElement.RotationY♂, VisualElement.Scale♂, VisualElement.ScaleX♂,
VisualElement.ScaleY □, VisualElement.Translation X □, VisualElement.Translation Y □,
<u>VisualElement.Triggers</u> derivation , <u>VisualElement.Width</u> derivation , <u>VisualElement.WidthRequest</u> der , <u>VisualElement.X</u> der , <u>VisualElement.X</u> der , <u>VisualElement.Width</u> der , VisualElement.Width der , VisualE
VisualElement.Y☑, VisualElement.Clip☑, VisualElement.Resources☑, VisualElement.Loaded☑,
VisualElement.Unloaded ☑, VisualElement.ChildrenReordered ☑, VisualElement.Focused ☑,
<u>VisualElement.MeasureInvalidated</u> domain description of the visualElement. VisualElement description of the visualElement description of the visualElement. VisualElement description of the visualElement description description of the visualElement description descript
NavigableElement.Navigation ☑, NavigableElement.Style ☑, NavigableElement.StyleClass ☑,
NavigableElement.class , Element.AutomationIdProperty , Element.ClassIdProperty ,
Element.ControlsElementMapper □ , Element.FindByName(string) □ ,
<u>Element.RemoveDynamicResource(BindableProperty)</u>  

✓ ,
Element.OnParentChanging(ParentChangingEventArgs)  . Element.OnParentChanged()  . ,
Element.OnHandlerChanging(HandlerChangingEventArgs) d, Element.OnHandlerChanged() d,
Element.MapAutomationPropertiesIsInAccessibleTree(IElementHandler, Element) ,
Element.MapAutomationPropertiesExcludedWithChildren(IElementHandler, Element) ,
Element.AutomationIda, Element.ClassIda, Element.Effectsa, Element.Ida, Element.StyleIda,
Element.Parent , Element.ChildAdded , Element.ChildRemoved , Element.DescendantAdded ,
Element.DescendantRemoved ☑, Element.ParentChanging ☑, Element.ParentChanged ☑,
Element.HandlerChanging d., Element.HandlerChanged d., BindableObject.BindingContextProperty d.,
BindableObject.ClearValue(BindableProperty) , BindableObject.ClearValue(BindablePropertyKey) ,
BindableObject.GetValue(BindableProperty) , BindableObject.IsSet(BindableProperty) ,
BindableObject.RemoveBinding(BindableProperty) . ,
<u>BindableObject.SetBinding(BindableProperty, BindingBase)</u> 
☑ , <u>BindableObject.ApplyBindings()</u> ☑ ,
BindableObject.OnPropertyChanging(string) , BindableObject.UnapplyBindings() ,
```

```
BindableObject.SetValue(BindableProperty, object). ,
BindableObject.SetValue(BindablePropertyKey, object). ,
BindableObject.CoerceValue(BindableProperty). , BindableObject.CoerceValue(BindablePropertyKey). ,
BindableObject.Dispatcher. , BindableObject.BindingContext. , BindableObject.PropertyChanged. ,
BindableObject.PropertyChanging. , BindableObject.BindingContextChanged. ,
BindableObject.PropertyChanging. , BindableObject.BindingContextChanged. ,
Object.Equals(object). , Object.Equals(object, object). , Object.GetHashCode(). , Object.GetType(). ,
Object.MemberwiseClone(). , Object.ReferenceEquals(object, object). , Object.ToString(). }
```

Constructors

AppShell()

public AppShell()

Class LinScriptPage

Namespace: NfcDemo
Assembly: NfcTerminal.dll

A page that allows users to write and execute LIN scripts, displaying output and interacting with NFC tags.

```
[XamlFilePath("LinScriptPage.xaml")]

public class LinScriptPage: ContentPage, INotifyPropertyChanged, IVisualTreeElement,

IEffectControlProvider, IToolTipElement, IContextFlyoutElement, IAnimatable, ITitledElement,

IToolbarElement, ILayout, IPageController, IVisualElementController, IElementController,

IElementConfiguration<Page>, ISafeAreaView, IContentView, IPadding, IHotReloadableView,

IView, IElement, ITransform, IReplaceableView
```

Inheritance

Implements

INotifyPropertyChanged ☑, IVisualTreeElement ☑, IEffectControlProvider ☑, IToolTipElement ☑, IContextFlyoutElement ☑, IAnimatable ☑, ITitledElement ☑, IToolbarElement ☑, ILayout ☑, IPageController ☑, IVisualElementController ☑, IElementController ☑, IElementConfiguration ☑ < Page ☑ >, ISafeAreaView ☑, IContentView ☑, IPadding ☑, IHotReloadableView ☑, IView ☑, IElement ☑, ITransform ☑, IReplaceableView ☑

Inherited Members

```
ContentPage.ContentProperty, ContentPage.OnBindingContextChanged(), ContentPage.MeasureOverride(double, double), ContentPage.ArrangeOverride(Rect), ContentPage.InvalidateMeasureOverride(), ContentPage.Content, ContentPage.InvalidateMeasureOverride(), ContentPage.Content, ContentPage.ControlTemplateProperty, TemplatedPage.Content, ContentPage.ControlTemplateProperty, TemplatedPage.Content, ContentPage.ControlTemplateProperty, TemplatedPage.GetTemplateChild(string), TemplatedPage.ControlTemplate, Page.BusySetSignalName, Page.AlertSignalName, Page.Page.PromptSignalName, Page.BusySetSignalName, Page.BackgroundImageSourceProperty, Page.PromptSignalName, Page.Page.BackgroundImageSourceProperty, Page.IttleProperty, Page.BackgroundImageSourceProperty, Page.IttleProperty, Page.ConlmageSourceProperty, Page.ConNavigatedTo(NavigatedToEventArgs), Page.OnNavigatingFrom(NavigatingFromEventArgs), Page.OnNavigatedFrom(NavigatedFromEventArgs), Page.GetParentWindow(), Page.DisplayActionSheet(string, string, string, params string[]), Page.DisplayActionSheet(string, string, string, FlowDirection, params string[]), Page.DisplayActionSheet(string, string, FlowDirection, params string[]), Page.DisplayActionSheet(string, string, FlowDirectio
```

```
Page.DisplayAlert(string, string, string) ☑, Page.DisplayAlert(string, string, string, string) ☑,
Page.DisplayAlert(string, string, string, FlowDirection) ,
Page.DisplayAlert(string, string, string, string, FlowDirection), ,
Page.DisplayPromptAsync(string, string, string, string, string, int, Keyboard, string) ,
Page.ForceLayout() r , Page.SendBackButtonPressed() r ,
Page.LayoutChildren(double, double, double, double) ☑, Page.OnBackButtonPressed() ☑,
Page.OnChildMeasureInvalidated(object, EventArgs)  , Page.OnParentSet()  , ,
Page.OnSizeAllocated(double, double) ♂, Page.UpdateChildrenLayout() ♂, Page.On<T>() ♂,
Page.BackgroundImageSource , Page.IconImageSource , Page.IsBusy , Page.Padding ,
Page.Title , Page.Toolbarltems , Page.MenuBarltems , Page.Navigated To , Page.Navigating From ,
Page.NavigatedFrom , Page.LayoutChanged , Page.Appearing , Page.Disappearing ,
<u>VisualElement.ControlsVisualElementMapper</u> , <u>VisualElement.ShadowProperty</u>,
<u>VisualElement.ZIndexProperty</u> downward, <u>VisualElement.NavigationProperty</u> downward, <u>VisualElement.StyleProperty</u> downward, <u>VisualElement.StyleProperty</u> downward, <u>VisualElement.NavigationProperty</u> downward, <u>VisualElement.StyleProperty</u> downward, <u>VisualEl</u>
VisualElement.InputTransparentProperty 7, VisualElement.IsEnabledProperty 7,
VisualElement.XProperty , VisualElement.YProperty , VisualElement.AnchorXProperty ,
VisualElement.AnchorYProperty , VisualElement.TranslationXProperty ,
VisualElement.TranslationYProperty ☑, VisualElement.WidthProperty ☑, VisualElement.HeightProperty ☑,
<u>VisualElement.RotationProperty</u> ✓ , <u>VisualElement.RotationXProperty</u> ✓ ,
VisualElement.RotationYProperty , VisualElement.ScaleProperty , VisualElement.ScaleXProperty ,
VisualElement.ScaleYProperty , VisualElement.ClipProperty , VisualElement.VisualProperty ,
VisualElement.IsVisibleProperty , VisualElement.OpacityProperty ,
VisualElement.BackgroundColorProperty 7, VisualElement.BackgroundProperty 7,
<u>VisualElement.BehaviorsProperty</u> , <u>VisualElement.TriggersProperty</u> ,
VisualElement.WidthRequestProperty 7, VisualElement.HeightRequestProperty 7,
<u>VisualElement.MinimumWidthRequestProperty</u> ✓, <u>VisualElement.MinimumHeightRequestProperty</u> ✓,
VisualElement.MaximumWidthRequestProperty, VisualElement.MaximumHeightRequestProperty, ,
VisualElement.IsFocusedProperty , VisualElement.FlowDirectionProperty ,
VisualElement.WindowProperty ☑, VisualElement.MapBackgroundColor(IViewHandler, IView) ☑,
VisualElement.Layout(Rect) , VisualElement.BatchBegin() , VisualElement.BatchCommit() ,
VisualElement.Focus() ♂, VisualElement.Measure(double, double, MeasureFlags) ♂,
VisualElement.Unfocus() ♂, VisualElement.InvalidateMeasure() ♂,
VisualElement.OnChildAdded(Element) ☑, VisualElement.OnChildrenReordered() ☑,
<u>VisualElement.OnMeasure(double, double)</u> , <u>VisualElement.SizeAllocated(double, double)</u> ,
VisualElement.ChangeVisualState() ♂, VisualElement.Frame ♂, VisualElement.Handler ♂,
VisualElement.Shadow , VisualElement.ZIndex , VisualElement.DesiredSize ,
<u>VisualElement.IsLoaded</u> document. Visual document. Visual document. Flow Direction document. Visual Element. Visual Element. Flow Direction document. Visual Element. Visual
<u>VisualElement.Window</u> , <u>VisualElement.AnchorX</u> , <u>VisualElement.AnchorY</u> , <u>VisualElement.AnchorY</u> ,
VisualElement.BackgroundColor □ , VisualElement.Background □ , VisualElement.Behaviors □ ,
<u>VisualElement.Bounds</u> , <u>VisualElement.Height</u> , <u>VisualElement.HeightRequest</u> ,
```

```
<u>VisualElement.InputTransparent</u> ✓, <u>VisualElement.IsEnabled</u> ✓, <u>VisualElement.IsFocused</u> ✓,
<u>VisualElement.IsVisible</u> ♂, <u>VisualElement.MinimumHeightRequest</u> ♂,
<u>VisualElement.MinimumWidthRequest</u> ♂, <u>VisualElement.MaximumHeightRequest</u> ♂,
<u>VisualElement.MaximumWidthRequest</u> ✓, <u>VisualElement.Opacity</u> ✓, <u>VisualElement.Rotation</u> ✓,
<u>VisualElement.RotationX</u> , <u>VisualElement.RotationY</u> , <u>VisualElement.Scale</u> , <u>VisualElement.ScaleX</u> ,
VisualElement.ScaleY □, VisualElement.Translation X □, VisualElement.Translation Y □,
<u>VisualElement.Triggers</u> derivation , <u>VisualElement.Width</u> derivation , <u>VisualElement.WidthRequest</u> der , <u>VisualElement.X</u> der , <u>VisualElement.X</u> der , <u>VisualElement.Width</u> der , VisualElement.Width der , VisualE
<u>VisualElement.Y</u> , <u>VisualElement.Clip</u> , <u>VisualElement.Resources</u> , <u>VisualElement.Loaded</u> ,
VisualElement.Unloaded ☑, VisualElement.ChildrenReordered ☑, VisualElement.Focused ☑,
<u>VisualElement.MeasureInvalidated</u> domain description of the visualElement. VisualElement description of the visualElement description of the visualElement. VisualElement description of the visualElement description description of the visualElement description descript
NavigableElement.Navigation ☑, NavigableElement.Style ☑, NavigableElement.StyleClass ☑,
NavigableElement.class ☑, Element.AutomationIdProperty ☑, Element.ClassIdProperty ☑,
<u>Element.ControlsElementMapper</u> , <u>Element.FindByName(string)</u> , ,
<u>Element.RemoveDynamicResource(BindableProperty)</u>  

✓ ,
Element.SetDynamicResource(BindableProperty, string) , Element.OnPropertyChanged(string) , ,
Element.OnParentChanging(ParentChangingEventArgs) , Element.OnParentChanged() , ,
Element.OnHandlerChanging(HandlerChangingEventArgs) d, Element.OnHandlerChanged() d,
Element.MapAutomationPropertiesIsInAccessibleTree(IElementHandler, Element) ,
<u>Element.MapAutomationPropertiesExcludedWithChildren(IElementHandler, Element)</u> ,
Element.AutomationId , Element.ClassId , Element.Effects , Element.Id , Element.StyleId ,
<u>Element.Parent</u> ♂, <u>Element.ChildAdded</u> ♂, <u>Element.ChildRemoved</u> ♂, <u>Element.DescendantAdded</u> ♂,
Element.DescendantRemoved , Element.ParentChanging , Element.ParentChanged ,
Element.HandlerChanging ☑ , Element.HandlerChanged ☑ , BindableObject.BindingContextProperty ☑ ,
BindableObject.ClearValue(BindableProperty) , BindableObject.ClearValue(BindablePropertyKey) ,
BindableObject.GetValue(BindableProperty) □ , BindableObject.IsSet(BindableProperty) □ ,
BindableObject.SetBinding(BindableProperty, BindingBase)  , BindableObject.ApplyBindings()  , ,
BindableObject.OnPropertyChanging(string)  , BindableObject.UnapplyBindings()  ,
BindableObject.SetValue(BindableProperty, object) ,
BindableObject.Dispatcher ☑, BindableObject.BindingContext ☑, BindableObject.PropertyChanged ☑,
BindableObject.PropertyChanging d, BindableObject.BindingContextChanged d,
object.Equals(object) ♂, object.Equals(object, object) ♂, object.GetHashCode() ♂, object.GetType() ♂,
```

Constructors

LinScriptPage()

Initializes a new instance of the <u>LinScriptPage</u> class. Sets up the NFC service, LIN interpreter, and default script content.

```
public LinScriptPage()
```

Methods

AppendLine(string, Color?)

Appends a line of text with an optional color to the output label and scrolls to the bottom.

```
public void AppendLine(string text, Color? color = null)
```

Parameters

text <u>string</u> ☑

The text to append.

color <u>Color</u>♂

The color of the text. Defaults to white if null.

OnAppearing()

Called when the page appears. Resumes NFC tag discovery.

```
protected override void OnAppearing()
```

OnDisappearing()

Called when the page is no longer visible. Pauses NFC tag discovery.

```
protected override void OnDisappearing()
```

SelectLine(Editor, int)

Selects and highlights the specified line number in the given Editor ☑.

```
public static void SelectLine(Editor editor, int lineNumber)
```

Parameters

```
editor <u>Editor</u>♂
```

The editor control whose text will be updated.

lineNumber <u>int</u>♂

The 1-based line number to select and highlight.

Class LinTerminalPage

Namespace: NfcDemo
Assembly: NfcTerminal.dll

```
[XamlFilePath("LinTerminalPage.xaml")]

public class LinTerminalPage: ContentPage, INotifyPropertyChanged, IVisualTreeElement,

IEffectControlProvider, IToolTipElement, IContextFlyoutElement, IAnimatable, ITitledElement,

IToolbarElement, ILayout, IPageController, IVisualElementController, IElementController,

IElementConfiguration<Page>, ISafeAreaView, IContentView, IPadding, IHotReloadableView,

IView, IElement, ITransform, IReplaceableView
```

Inheritance

Implements

INotifyPropertyChanged ☑, IVisualTreeElement ☑, IEffectControlProvider ☑, IToolTipElement ☑, IContextFlyoutElement ☑, IAnimatable ☑, ITitledElement ☑, IToolbarElement ☑, ILayout ☑, IPageController ☑, IVisualElementController ☑, IElementController ☑, IElementConfiguration ☑ < Page ☑ >, ISafeAreaView ☑, IContentView ☑, IPadding ☑, IHotReloadableView ☑, IView ☑, IElement ☑, ITransform ☑, IReplaceableView ☑

Inherited Members

ContentPage.ContentProperty. ContentPage.OnBindingContextChanged(). ContentPage.MeasureOverride(double, double). ContentPage.ArrangeOverride(Rect). ContentPage.InvalidateMeasureOverride(). ContentPage.Content. TemplatedPage.ControlTemplateProperty. TemplatedPage.OnApplyTemplate(). TemplatedPage.OnChildRemoved(Element, int). TemplatedPage.GetTemplateChild(string). TemplatedPage.ControlTemplate. Page.BusySetSignalName. Page.AlertSignalName. Page.AlertSignalName. Page.PromptSignalName. Page.ActionSheetSignalName. Page.BackgroundImageSourceProperty. Page.IsBusyProperty. Page.PaddingProperty. Page.TitleProperty. Page.BackgroundImageSourceProperty. Page.IconImageSourceProperty. Page.OnNavigatedTo(NavigatedToEventArgs). Page.OnNavigatingFrom(NavigatingFromEventArgs). Page.GetParentWindow(). Page.OnNavigatedFrom(NavigatedFromEventArgs). Page.GetParentWindow(). Page.DisplayActionSheet(string, string, string, params string[]). Page.DisplayActionSheet(string, string, string, FlowDirection, params string, strin

Page.DisplayAlert(string, string, string, string, FlowDirection) ,

```
Page.DisplayPromptAsync(string, string, string, string, string, int, Keyboard, string) ,
Page.ForceLayout() □ , Page.SendBackButtonPressed() □ ,
Page.OnChildMeasureInvalidated(object, EventArgs)  , Page.OnParentSet()  , ,
Page.OnSizeAllocated(double, double) ♂, Page.UpdateChildrenLayout() ♂, Page.On<T>() ♂,
Page.BackgroundImageSource , Page.IconImageSource , Page.IsBusy , Page.Padding ,
Page.Title down, Page.Toolbarltems down, Page.MenuBarltems down, Page.Navigated To down, Page.Navigating From down,
Page.NavigatedFrom , Page.LayoutChanged , Page.Appearing , Page.Disappearing ,
VisualElement.ControlsVisualElementMapper

☐ , VisualElement.ShadowProperty

☐ ,
<u>VisualElement.ZIndexProperty</u> downward, <u>VisualElement.NavigationProperty</u> downward, <u>VisualElement.StyleProperty</u> downward, <u>VisualElement.StyleProperty</u> downward, <u>VisualElement.NavigationProperty</u> downward, <u>VisualElement.StyleProperty</u> downward, <u>VisualEl</u>
VisualElement.InputTransparentProperty □ , VisualElement.IsEnabledProperty □ ,
VisualElement.XProperty , VisualElement.YProperty , VisualElement.AnchorXProperty ,
<u>VisualElement.AnchorYProperty</u> ♂, <u>VisualElement.TranslationXProperty</u> ♂,
<u>VisualElement.TranslationYProperty</u> , <u>VisualElement.WidthProperty</u> , <u>VisualElement.HeightProperty</u> ,
<u>VisualElement.RotationProperty</u> , <u>VisualElement.RotationXProperty</u> ,
<u>VisualElement.RotationYProperty</u> ✓, <u>VisualElement.ScaleProperty</u> ✓, <u>VisualElement.ScaleXProperty</u> ✓,
VisualElement.ScaleYProperty 7, VisualElement.ClipProperty 7, VisualElement.VisualProperty 7,
VisualElement.IsVisibleProperty , VisualElement.OpacityProperty ,
VisualElement.BackgroundColorProperty 7, VisualElement.BackgroundProperty 7,
VisualElement.BehaviorsProperty ☑, VisualElement.TriggersProperty ☑,
VisualElement.WidthRequestProperty , VisualElement.HeightRequestProperty ,
<u>VisualElement.MinimumWidthRequestProperty</u> ✓, <u>VisualElement.MinimumHeightRequestProperty</u> ✓,
VisualElement.MaximumWidthRequestProperty, VisualElement.MaximumHeightRequestProperty, ,
<u>VisualElement.IsFocusedProperty</u> , <u>VisualElement.FlowDirectionProperty</u> ,
<u>VisualElement.WindowProperty</u> ♂, <u>VisualElement.MapBackgroundColor(IViewHandler, IView)</u> ♂,
VisualElement.Layout(Rect) , VisualElement.BatchBegin() , VisualElement.BatchCommit() ,
VisualElement.Focus() ♂, VisualElement.Measure(double, double, MeasureFlags) ♂,
VisualElement.OnMeasure(double, double) ☑, VisualElement.SizeAllocated(double, double) ☑,
VisualElement.ChangeVisualState() ♂, VisualElement.Frame ♂, VisualElement.Handler ♂,
<u>VisualElement.IsLoaded</u> document. Visual document. Visual document. Flow Direction document. Visual Element. Visual Element. Flow Direction document. Visual Element. Visual
VisualElement.Window ☑, VisualElement.Anchor X ☑, VisualElement.Anchor Y ☑,
<u>VisualElement.BackgroundColor</u> , <u>VisualElement.Background</u> , <u>VisualElement.Behaviors</u> ,
<u>VisualElement.Bounds</u> , <u>VisualElement.Height</u> , <u>VisualElement.HeightRequest</u> ,
<u>VisualElement.InputTransparent</u> ☑ , <u>VisualElement.IsEnabled</u> ☑ , <u>VisualElement.IsFocused</u> ☑ ,
VisualElement.IsVisible ☑, VisualElement.MinimumHeightReguest ☑,
<u>VisualElement.MinimumWidthRequest</u> ♂, <u>VisualElement.MaximumHeightRequest</u> ♂,
```

```
<u>VisualElement.MaximumWidthRequest</u> ✓, <u>VisualElement.Opacity</u> ✓, <u>VisualElement.Rotation</u> ✓,
<u>VisualElement.RotationX</u> , <u>VisualElement.RotationY</u> , <u>VisualElement.Scale</u> , <u>VisualElement.Scale</u> ,
<u>VisualElement.ScaleY</u> , <u>VisualElement.TranslationX</u> , <u>VisualElement.TranslationY</u> ,
<u>VisualElement.Triggers</u> derivation , <u>VisualElement.Width</u> derivation , <u>VisualElement.WidthRequest</u> der , <u>VisualElement.X</u> der , <u>VisualElement.X</u> der , <u>VisualElement.Width</u> der , VisualElement.Width der , VisualE
VisualElement.Y♂, VisualElement.Clip♂, VisualElement.Resources♂, VisualElement.Loaded♂,
VisualElement.Unloaded ☑, VisualElement.ChildrenReordered ☑, VisualElement.Focused ☑,
<u>VisualElement.MeasureInvalidated</u> domain description of the visualElement. VisualElement description of the visualElement description of the visualElement. VisualElement description of the visualElement description description of the visualElement description descript
NavigableElement.Navigation ☑, NavigableElement.Style ☑, NavigableElement.StyleClass ☑,
NavigableElement.class ☑, Element.AutomationIdProperty ☑, Element.ClassIdProperty ☑,
Element.ControlsElementMapper □ , Element.FindByName(string) □ ,
<u>Element.RemoveDynamicResource(BindableProperty)</u>  

✓ ,
Element.SetDynamicResource(BindableProperty, string) , Element.OnPropertyChanged(string) , ,
Element.OnParentChanging(ParentChangingEventArgs) , Element.OnParentChanged() , ,
Element.OnHandlerChanging(HandlerChangingEventArgs) d, Element.OnHandlerChanged() d,
Element.MapAutomationPropertiesIsInAccessibleTree(IElementHandler, Element) ,
Element.MapAutomationPropertiesExcludedWithChildren(IElementHandler, Element) ,
Element.AutomationId, , Element.ClassId, , Element.Effects, , Element.Id, , Element.StyleId, ,
<u>Element.Parent</u> , <u>Element.ChildAdded</u> , <u>Element.ChildRemoved</u> , <u>Element.DescendantAdded</u> ,
<u>Element.DescendantRemoved</u> ☑ , <u>Element.ParentChanging</u> ☑ , <u>Element.ParentChanged</u> ☑ ,
Element.HandlerChanging d, Element.HandlerChanged d, BindableObject.BindingContextProperty d,
BindableObject.ClearValue(BindableProperty) , BindableObject.ClearValue(BindablePropertyKey) ,
BindableObject.GetValue(BindableProperty) , BindableObject.IsSet(BindableProperty) ,
BindableObject.SetBinding(BindableProperty, BindingBase)  , BindableObject.ApplyBindings() , ,
BindableObject.OnPropertyChanging(string) , BindableObject.UnapplyBindings() ,
BindableObject.SetValue(BindableProperty, object) ,
BindableObject.CoerceValue(BindableProperty) , BindableObject.CoerceValue(BindablePropertyKey) ,
BindableObject.Dispatcher ☑, BindableObject.BindingContext ☑, BindableObject.PropertyChanged ☑,
BindableObject.PropertyChanging d, BindableObject.BindingContextChanged d,
object.Equals(object) ☑ , object.Equals(object, object) ☑ , object.GetHashCode() ☑ , object.GetType() ☑ ,
```

Constructors

LinTerminalPage()

Initializes a new instance of the <u>LinTerminalPage</u> class. Subscribes to NFC tag discovery events and sets up the output scrolling behavior.

Methods

OnAppearing()

Called when the page appears. Resumes NFC tag discovery.

protected override void OnAppearing()

OnDisappearing()

Called when the page is no longer visible. Pauses NFC tag discovery.

protected override void OnDisappearing()

Class MauiProgram

Namespace: <u>NfcDemo</u>
Assembly: NfcTerminal.dll

public static class MauiProgram

Inheritance

Inherited Members

 $\underline{object.Equals(object)} \ \ \ \ \ \underline{object.Equals(object, object)} \ \ \ \ \ \ \underline{object.GetHashCode()} \ \ \ \ \ \underline{object.GetType()} \ \ \ \ \ \ \underline{object.MemberwiseClone()} \ \ \ \ \ \underline{object.ReferenceEquals(object, object)} \ \ \ \ \ \underline{object.ToString()} \ \ \ \ \underline{object.ToString()} \ \ \ \ \ \underline{object.ToString()} \ \ \ \underline{object.ToString()} \ \ \ \underline{object.ToString()} \ \ \underline{objec$

Methods

CreateMauiApp()

public static MauiApp CreateMauiApp()

Returns

Class MessageOptions

Namespace: NfcDemo

Assembly: NfcTerminal.dll

Represents a set of context-specific options presented to the user via an action sheet.

public class MessageOptions

Inheritance

<u>object</u> < MessageOptions

Inherited Members

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

Constructors

MessageOptions(object, string, params (string option, Action<object> callback)[])

Initializes a new instance of the MessageOptions class with the specified context, message, and options.

public MessageOptions(object context, string msg, params (string option, Action<object>
callback)[] options)

Parameters

context <u>object</u> □

An arbitrary object passed to each option's callback when invoked.

The base message text displayed or truncated in the action sheet title.

options (<u>string</u> option d, <u>Action</u> < <u>object</u> d > <u>callback</u> d)[]

A list of tuples, each containing an option label and a callback action taking the context as a parameter.

Methods

Invoke(Page)

Displays an action sheet on the specified Page with the defined options. When the user selects an option, invokes the corresponding callback with the provided context.

public void Invoke(Page page)

Parameters

page <u>Page</u> ☑

The <u>Page</u> on which to display the action sheet.

Class Program

Namespace: NfcDemo

Assembly: NfcTerminal.dll

public class Program

Inheritance

<u>object</u>

✓ Program

Inherited Members

Class TLVPage

Namespace: NfcDemo
Assembly: NfcTerminal.dll

Page that parses a TLV-encoded hex string, displays its tree representation, and allows copying the tree or JSON representation to the clipboard.

```
[XamlFilePath("TLVPage.xaml")]

public class TLVPage : ContentPage, INotifyPropertyChanged, IVisualTreeElement,

IEffectControlProvider, IToolTipElement, IContextFlyoutElement, IAnimatable, ITitledElement,

IToolbarElement, ILayout, IPageController, IVisualElementController, IElementController,

IElementConfiguration<Page>, ISafeAreaView, IContentView, IPadding, IHotReloadableView,

IView, IElement, ITransform, IReplaceableView
```

Inheritance

Implements

 INotifyPropertyChanged ☑, IVisualTreeElement ☑, IEffectControlProvider ☑, IToolTipElement ☑,

 IContextFlyoutElement ☑, IAnimatable ☑, ITitledElement ☑, IToolbarElement ☑, ILayout ☑,

 IPageController ☑, IVisualElementController ☑, IElementController ☑, IElementConfiguration ☑ < Page ☑ >,

 ISafeAreaView ☑, IContentView ☑, IPadding ☑, IHotReloadableView ☑, IView ☑, IElement ☑, ITransform ☑,

 IReplaceableView ☑

Inherited Members

ContentPage.ContentProperty, ContentPage.OnBindingContextChanged(), ContentPage.MeasureOverride(double, double), ContentPage.ArrangeOverride(Rect), ContentPage.InvalidateMeasureOverride(), ContentPage.Content, TemplatedPage.ControlTemplateProperty, TemplatedPage.OnApplyTemplate(), TemplatedPage.OnChildRemoved(Element, int), TemplatedPage.GetTemplateChild(string), TemplatedPage.ControlTemplate, Page.BusySetSignalName, Page.AlertSignalName, Page.AlertSignalName, Page.PromptSignalName, Page.ActionSheetSignalName, Page.BackgroundImageSourceProperty, Page.IsBusyProperty, Page.PaddingProperty, Page.TitleProperty, Page.BackgroundImageSourceProperty, Page.IconImageSourceProperty, Page.OnNavigatedTo(NavigatedToEventArgs), Page.OnNavigatingFrom(NavigatingFromEventArgs), Page.GetParentWindow(), Page.OnNavigatedFrom(NavigatedFromEventArgs), Page.GetParentWindow(), Page.DisplayActionSheet(string, string, string, params string[]), Page.DisplayActionSheet(string, string, string, FlowDirection, params string[]), Page.DisplayActionSheet(string, string, string, string, string

```
Page.DisplayAlert(string, string, string) ☑, Page.DisplayAlert(string, string, string) ☑,
Page.DisplayAlert(string, string, string, FlowDirection) ,
Page.DisplayAlert(string, string, string, string, FlowDirection), ,
Page.DisplayPromptAsync(string, string, string, string, string, int, Keyboard, string) ,
Page.ForceLayout() r , Page.SendBackButtonPressed() r ,
Page.LayoutChildren(double, double, double, double) double) double) double) double) double) double) double, double) do
Page.OnBackButtonPressed() , Page.OnChildMeasureInvalidated(object, EventArgs) ,
Page.OnDisappearing() ♂, Page.OnParentSet() ♂, Page.OnSizeAllocated(double, double) ♂,
Page.UpdateChildrenLayout() ☑ , Page.On<T>() ☑ , Page.BackgroundImageSource ☑ ,
Page.IconImageSource ♂, Page.IsBusy ♂, Page.Padding ♂, Page.Title ♂, Page.ToolbarItems ♂,
Page.MenuBarItems 7, Page.Navigated To 7, Page.Navigating From 7, Page.Navigated From 7,
Page.LayoutChanged ☑, Page.Appearing ☑, Page.Disappearing ☑,
<u>VisualElement.ControlsVisualElementMapper</u> , <u>VisualElement.ShadowProperty</u>,
<u>VisualElement.ZIndexProperty</u> down in the interest of the visualElement. Navigation Property down in the visualElement of the visualE
VisualElement.InputTransparentProperty 7, VisualElement.IsEnabledProperty 7,
VisualElement.XProperty , VisualElement.YProperty , VisualElement.AnchorXProperty ,
VisualElement.AnchorYProperty , VisualElement.TranslationXProperty ,
<u>VisualElement.TranslationYProperty</u> , <u>VisualElement.WidthProperty</u> , <u>VisualElement.HeightProperty</u> ,
<u>VisualElement.RotationProperty</u> , <u>VisualElement.RotationXProperty</u> ,
<u>VisualElement.RotationYProperty</u> , <u>VisualElement.ScaleProperty</u> , <u>VisualElement.ScaleXProperty</u> ,
VisualElement.ScaleYProperty 7, VisualElement.ClipProperty 7, VisualElement.VisualProperty 7,
VisualElement.IsVisibleProperty , VisualElement.OpacityProperty ,
VisualElement.BackgroundColorProperty 7, VisualElement.BackgroundProperty 7,
<u>VisualElement.BehaviorsProperty</u> , <u>VisualElement.TriggersProperty</u> ,
VisualElement.WidthRequestProperty 7, VisualElement.HeightRequestProperty 7,
VisualElement.MinimumWidthRequestProperty , VisualElement.MinimumHeightRequestProperty ,
VisualElement.MaximumWidthRequestProperty, VisualElement.MaximumHeightRequestProperty, ,
VisualElement.IsFocusedProperty , VisualElement.FlowDirectionProperty ,
<u>VisualElement.WindowProperty</u> down in the interest of the in
VisualElement.Layout(Rect) ☑, VisualElement.BatchBegin() ☑, VisualElement.BatchCommit() ☑,
VisualElement.Focus() ♂, VisualElement.Measure(double, double, MeasureFlags) ♂,
VisualElement.Unfocus() □ , VisualElement.InvalidateMeasure() □ ,
VisualElement.OnChildAdded(Element) . VisualElement.OnChildrenReordered() . , visualElement.OnChildrenReordered().
VisualElement.OnMeasure(double, double) ☑, VisualElement.SizeAllocated(double, double) ☑,
VisualElement.Shadow , VisualElement.ZIndex , VisualElement.DesiredSize ,
<u>VisualElement.IsLoaded</u> ♂, <u>VisualElement.Visual</u> ♂, <u>VisualElement.FlowDirection</u> ♂,
VisualElement.Window ☑, VisualElement.Anchor X ☑, VisualElement.Anchor Y ☑,
<u>VisualElement.BackgroundColor</u> , <u>VisualElement.Background</u> , <u>VisualElement.Behaviors</u> ,
```

```
<u>VisualElement.Bounds</u> , <u>VisualElement.Height</u> , <u>VisualElement.HeightRequest</u> ,
<u>VisualElement.InputTransparent</u> ♂, <u>VisualElement.IsEnabled</u> ♂, <u>VisualElement.IsFocused</u> ♂,
VisualElement.IsVisible ☑, VisualElement.MinimumHeightReguest ☑,
VisualElement.MinimumWidthRequest ☑, VisualElement.MaximumHeightRequest ☑,
VisualElement.MaximumWidthRequest , VisualElement.Opacity , VisualElement.Rotation ,
VisualElement.RotationX♂, VisualElement.RotationY♂, VisualElement.Scale♂, VisualElement.ScaleX♂,
<u>VisualElement.ScaleY</u> , <u>VisualElement.TranslationX</u> , <u>VisualElement.TranslationY</u> ,
<u>VisualElement.Triggers</u> derivation , <u>VisualElement.Width</u> derivation , <u>VisualElement.WidthRequest</u> der , <u>VisualElement.X</u> der , <u>VisualElement.X</u> der , <u>VisualElement.Width</u> der , VisualElement.Width der , VisualE
VisualElement.Y☑, VisualElement.Clip☑, VisualElement.Resources☑, VisualElement.Loaded☑,
VisualElement.Unloaded ☑, VisualElement.ChildrenReordered ☑, VisualElement.Focused ☑,
VisualElement.MeasureInvalidated ☑, VisualElement.SizeChanged ☑, VisualElement.Unfocused ☑,
NavigableElement.Navigation ☑, NavigableElement.Style ☑, NavigableElement.StyleClass ☑,
NavigableElement.class ☑ , Element.AutomationIdProperty ☑ , Element.ClassIdProperty ☑ ,
Element.ControlsElementMapper □ , Element.FindByName(string) □ ,
<u>Element.RemoveDynamicResource(BindableProperty)</u>  

✓ ,
Element.SetDynamicResource(BindableProperty, string) , Element.OnPropertyChanged(string) ,
Element.OnParentChanging(ParentChangingEventArgs)  . Element.OnParentChanged()  . ,
Element.OnHandlerChanging(HandlerChangingEventArgs) d, Element.OnHandlerChanged() d,
Element.MapAutomationPropertiesIsInAccessibleTree(IElementHandler, Element) ,
Element.MapAutomationPropertiesExcludedWithChildren(IElementHandler, Element) ,
Element.AutomationId , Element.ClassId , Element.Effects , Element.Id , Element.StyleId ,
<u>Element.Parent</u> , <u>Element.ChildAdded</u> , <u>Element.ChildRemoved</u> , <u>Element.DescendantAdded</u> ,
Element.DescendantRemoved , Element.ParentChanging , Element.ParentChanged ,
Element.HandlerChanging ☑, Element.HandlerChanged ☑, BindableObject.BindingContextProperty ☑,
BindableObject.ClearValue(BindableProperty) , BindableObject.ClearValue(BindablePropertyKey) ,
BindableObject.GetValue(BindableProperty) □ , BindableObject.IsSet(BindableProperty) □ ,
BindableObject.RemoveBinding(BindableProperty) . ,
BindableObject.SetBinding(BindableProperty, BindingBase)  , BindableObject.ApplyBindings()  ,
BindableObject.OnPropertyChanging(string) , BindableObject.UnapplyBindings() ,
<u>BindableObject.SetValue(BindableProperty, object)</u> 

✓ ,
BindableObject.SetValue(BindablePropertyKey, object) ≥ ,
BindableObject.CoerceValue(BindableProperty) , BindableObject.CoerceValue(BindablePropertyKey), ,
BindableObject.Dispatcher ☑, BindableObject.BindingContext ☑, BindableObject.PropertyChanged ☑,
BindableObject.PropertyChanging d, BindableObject.BindingContextChanged d,
object.Equals(object) ♂, object.Equals(object, object) ♂, object.GetHashCode() ♂, object.GetType() ♂,
```

Constructors

TLVPage()

Initializes a new instance of the <u>TLVPage</u> class with a default TLV input.

```
public TLVPage()
```

TLVPage(string)

Initializes a new instance of the <u>TLVPage</u> class with a provided TLV input string.

```
public TLVPage(string inputText)
```

Parameters

inputText <u>string</u>♂

The TLV-encoded hex string to parse and display.

Class TerminalPage

Namespace: NfcDemo
Assembly: NfcTerminal.dll

```
[XamlFilePath("TerminalPage.xaml")]
public class TerminalPage : ContentPage, INotifyPropertyChanged, IVisualTreeElement,
IEffectControlProvider, IToolTipElement, IContextFlyoutElement, IAnimatable, ITitledElement,
IToolbarElement, ILayout, IPageController, IVisualElementController, IElementController,
IElementConfiguration<Page>, ISafeAreaView, IContentView, IPadding, IHotReloadableView,
IView, IElement, ITransform, IReplaceableView
```

Inheritance

<u>object</u> $\[\sigma \in BindableObject \] \$ ← <u>Element</u> $\[\sigma \in AvigableElement \] \$ ← <u>VisualElement</u> $\[\sigma \in Bvector \] \$ ← <u>V</u>

Implements

INotifyPropertyChanged ☑, IVisualTreeElement ☑, IEffectControlProvider ☑, IToolTipElement ☑, IContextFlyoutElement ☑, IAnimatable ☑, ITitledElement ☑, IToolbarElement ☑, ILayout ☑, IPageController ☑, IVisualElementController ☑, IElementController ☑, IElementConfiguration ☑ < Page ☑ >, ISafeAreaView ☑, IContentView ☑, IPadding ☑, IHotReloadableView ☑, IView ☑, IElement ☑, ITransform ☑, IReplaceableView ☑

Inherited Members

ContentPage.ContentProperty. ContentPage.OnBindingContextChanged(). ContentPage.MeasureOverride(double, double). ContentPage.ArrangeOverride(Rect). ContentPage.InvalidateMeasureOverride(). ContentPage.Content. TemplatedPage.ControlTemplateProperty. TemplatedPage.OnApplyTemplate(). TemplatedPage.OnChildRemoved(Element, int). TemplatedPage.GetTemplateChild(string). TemplatedPage.ControlTemplate. Page.BusySetSignalName. Page.AlertSignalName. Page.AlertSignalName. Page.PromptSignalName. Page.ActionSheetSignalName. Page.BackgroundImageSourceProperty. Page.IsBusyProperty. Page.PaddingProperty. Page.TitleProperty. Page.BackgroundImageSourceProperty. Page.IconImageSourceProperty. Page.OnNavigatedTo(NavigatedToEventArgs). Page.OnNavigatingFrom(NavigatingFromEventArgs). Page.GetParentWindow(). Page.DisplayActionSheet(string, string, string, params string[]). Page.DisplayActionSheet(string, string, string, FlowDirection, params string, str

Page.DisplayAlert(string, string, string, string, FlowDirection) ,

```
Page.DisplayPromptAsync(string, string, string, string, string, int, Keyboard, string) ,
Page.ForceLayout() □ , Page.SendBackButtonPressed() □ ,
Page.OnChildMeasureInvalidated(object, EventArgs)  , Page.OnParentSet()  , ,
Page.OnSizeAllocated(double, double) ☑, Page.UpdateChildrenLayout() ☑, Page.On<T>() ☑,
Page.BackgroundImageSource , Page.IconImageSource , Page.IsBusy , Page.Padding ,
Page.Title down, Page.Toolbarltems down, Page.MenuBarltems down, Page.Navigated To down, Page.Navigating From down,
Page.NavigatedFrom , Page.LayoutChanged , Page.Appearing , Page.Disappearing ,
VisualElement.ControlsVisualElementMapper

☐ , VisualElement.ShadowProperty

☐ ,
<u>VisualElement.ZIndexProperty</u> do disualElement.NavigationProperty do disualElement.StyleProperty do disualElement.StylePro
VisualElement.InputTransparentProperty □ , VisualElement.IsEnabledProperty □ ,
VisualElement.XProperty , VisualElement.YProperty , VisualElement.AnchorXProperty ,
<u>VisualElement.AnchorYProperty</u> ♂, <u>VisualElement.TranslationXProperty</u> ♂,
<u>VisualElement.TranslationYProperty</u> , <u>VisualElement.WidthProperty</u> , <u>VisualElement.HeightProperty</u> ,
<u>VisualElement.RotationProperty</u> , <u>VisualElement.RotationXProperty</u> ,
<u>VisualElement.RotationYProperty</u> ✓, <u>VisualElement.ScaleProperty</u> ✓, <u>VisualElement.ScaleXProperty</u> ✓,
VisualElement.ScaleYProperty 7, VisualElement.ClipProperty 7, VisualElement.VisualProperty 7,
VisualElement.IsVisibleProperty , VisualElement.OpacityProperty ,
VisualElement.BackgroundColorProperty 7, VisualElement.BackgroundProperty 7,
VisualElement.BehaviorsProperty □ , VisualElement.TriggersProperty □ ,
VisualElement.WidthRequestProperty , VisualElement.HeightRequestProperty ,
<u>VisualElement.MinimumWidthRequestProperty</u> ✓, <u>VisualElement.MinimumHeightRequestProperty</u> ✓,
VisualElement.MaximumWidthRequestProperty, VisualElement.MaximumHeightRequestProperty, ,
<u>VisualElement.IsFocusedProperty</u> , <u>VisualElement.FlowDirectionProperty</u> ,
<u>VisualElement.WindowProperty</u> ♂, <u>VisualElement.MapBackgroundColor(IViewHandler, IView)</u> ♂,
VisualElement.Layout(Rect) ☑ , VisualElement.BatchBegin() ☑ , VisualElement.BatchCommit() ☑ ,
VisualElement.Focus() ♂, VisualElement.Measure(double, double, MeasureFlags) ♂,
VisualElement.OnMeasure(double, double) ☑, VisualElement.SizeAllocated(double, double) ☑,
VisualElement.ChangeVisualState() ♂, VisualElement.Frame ♂, VisualElement.Handler ♂,
<u>VisualElement.IsLoaded</u> document. Visual document. Visual document. Flow Direction document. Visual Element. Visual Element. Flow Direction document. Visual Element. Visual
VisualElement.Window ☑, VisualElement.Anchor X ☑, VisualElement.Anchor Y ☑,
<u>VisualElement.BackgroundColor</u> , <u>VisualElement.Background</u> , <u>VisualElement.Behaviors</u> ,
<u>VisualElement.Bounds</u> , <u>VisualElement.Height</u> , <u>VisualElement.HeightRequest</u> ,
<u>VisualElement.InputTransparent</u> ☑ , <u>VisualElement.IsEnabled</u> ☑ , <u>VisualElement.IsFocused</u> ☑ ,
VisualElement.IsVisible ☑, VisualElement.MinimumHeightReguest ☑,
<u>VisualElement.MinimumWidthRequest</u> ♂, <u>VisualElement.MaximumHeightRequest</u> ♂,
```

```
<u>VisualElement.MaximumWidthRequest</u> ✓, <u>VisualElement.Opacity</u> ✓, <u>VisualElement.Rotation</u> ✓,
<u>VisualElement.RotationX</u> , <u>VisualElement.RotationY</u> , <u>VisualElement.Scale</u> , <u>VisualElement.Scale</u> ,
<u>VisualElement.ScaleY</u> , <u>VisualElement.TranslationX</u> , <u>VisualElement.TranslationY</u> ,
<u>VisualElement.Triggers</u> der , <u>VisualElement.Width</u> der , <u>VisualElement.WidthRequest</u> der , <u>VisualElement.X</u> der ,
<u>VisualElement.Y</u> , <u>VisualElement.Clip</u> , <u>VisualElement.Resources</u> , <u>VisualElement.Loaded</u> ,
VisualElement.Unloaded ☑, VisualElement.ChildrenReordered ☑, VisualElement.Focused ☑,
<u>VisualElement.MeasureInvalidated</u> domain description of the visualElement. VisualElement description of the visualElement description of the visualElement. VisualElement description of the visualElement description description of the visualElement description descript
NavigableElement.Navigation ☑, NavigableElement.Style ☑, NavigableElement.StyleClass ☑,
NavigableElement.class ☑, Element.AutomationIdProperty ☑, Element.ClassIdProperty ☑,
Element.ControlsElementMapper □ , Element.FindByName(string) □ ,
Element.RemoveDynamicResource(BindableProperty) ,
Element.SetDynamicResource(BindableProperty, string) , Element.OnPropertyChanged(string) , ,
Element.OnParentChanging(ParentChangingEventArgs) ☑ , Element.OnParentChanged() ☑ ,
Element.OnHandlerChanging(HandlerChangingEventArgs) d, Element.OnHandlerChanged() d,
Element.MapAutomationPropertiesIsInAccessibleTree(IElementHandler, Element) ,
Element.MapAutomationPropertiesExcludedWithChildren(IElementHandler, Element) ,
Element.AutomationId , Element.ClassId , Element.Effects , Element.Id , Element.StyleId ,
<u>Element.Parent</u> , <u>Element.ChildAdded</u> , <u>Element.ChildRemoved</u> , <u>Element.DescendantAdded</u> ,
<u>Element.DescendantRemoved</u> ☑ , <u>Element.ParentChanging</u> ☑ , <u>Element.ParentChanged</u> ☑ ,
Element.HandlerChanging ☑, Element.HandlerChanged ☑, BindableObject.BindingContextProperty ☑,
BindableObject.ClearValue(BindableProperty) , BindableObject.ClearValue(BindablePropertyKey) ,
BindableObject.GetValue(BindableProperty) , BindableObject.IsSet(BindableProperty) ,
BindableObject.RemoveBinding(BindableProperty) . ,
BindableObject.SetBinding(BindableProperty, BindingBase)  , BindableObject.ApplyBindings()  , ,
BindableObject.OnPropertyChanging(string) , BindableObject.UnapplyBindings() ,
<u>BindableObject.SetValue(BindableProperty, object)</u> 

✓ ,
BindableObject.SetValue(BindablePropertyKey, object) ≥ ,
BindableObject.CoerceValue(BindableProperty) , BindableObject.CoerceValue(BindablePropertyKey) ,
BindableObject.Dispatcher ☑, BindableObject.BindingContext ☑, BindableObject.PropertyChanged ☑,
BindableObject.PropertyChanging d, BindableObject.BindingContextChanged d,
object.Equals(object) ♂, object.Equals(object, object) ♂, object.GetHashCode() ♂, object.GetType() ♂,
```

Constructors

TerminalPage()

Initializes a new instance of the <u>TerminalPage</u> class. Subscribes to NFC tag discovery events and sets up automatic scrolling of the output stack.

```
public TerminalPage()
```

Methods

OnAppearing()

Called when the page appears. Resumes NFC tag discovery.

protected override void OnAppearing()

OnDisappearing()

Called when the page is no longer visible. Pauses NFC tag discovery.

protected override void OnDisappearing()

Namespace NfcDemo.Lin

Classes

LinExtension

Provides extension functions for the LIN interpreter, including NFC operations and TLV parsing.

Class LinExtension

Namespace: NfcDemo.Lin
Assembly: NfcTerminal.dll

Provides extension functions for the LIN interpreter, including NFC operations and TLV parsing.

public class LinExtension

Inheritance

Inherited Members

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

Constructors

LinExtension(Page, INfcService, Action < string, Color >)

Initializes a new instance of the <u>LinExtension</u> class. Also contains definitions for new built-in functions (data processing,nfc,printing): adpu(hex) num(string,base) hex(int,counitng zeros) ascii(string) -> hex byres to asci substr(string,int bgin,count) replace(str,form,to) find(str,key) byte(string,index,count*) tlv(string) tree(TLV) tlv_read(tlv,string,*)

public LinExtension(Page page, INfcService nfc, Action<string, Color> onMessage)

Parameters

page <u>Page</u>♂

The page context in which to execute LIN commands.

nfc INfcService

The NFC service used for sending and receiving APDU commands.

onMessage <u>Action</u> < < string < , Color < >

Callback invoked when printing messages, with text and color.

Fields

cts

Cancellation token source for asynchronous operations.

public CancellationTokenSource? cts

Field Value

Methods

Execute(string)

Executes a single line of LIN script, ignoring lines that start with "//" (comments).

public object Execute(string line)

Parameters

line <u>string</u>

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The line of LIN script to execute.

Returns

The result of the LIN interpreter execution, or null if the line is a comment or there is no return value.