



iOS User Interface Design with FireMonkey in Delphi XE4

Presented by:

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How to access the Samples

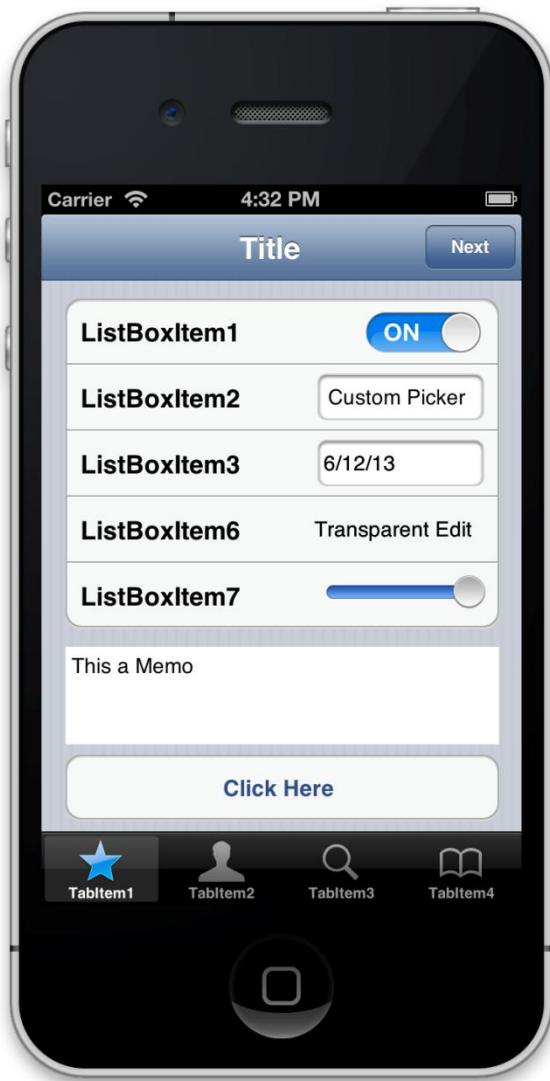
Most Samples that are referenced throughout this document ship with RAD Studio XE4 and are installed with your product in the following directory:

- C:\Users\Public\Documents\RAD Studio\11.0\Samples

Additional samples and the latest versions of all of our samples can also be accessed via our SourceForge directory:

- http://sourceforge.net/p/radstudiodeemos/code/HEAD/tree/branches/RadStudio_XE4/

Preferred Mobile UI Components



TButton

TEdit

TCalendarEdit

TListView

TTrackBar

TTabControl

TSpeedButton

TMemo

TSwitch

TComboBox

TToolBar

TScrollBar

TLabel

TNumberBox

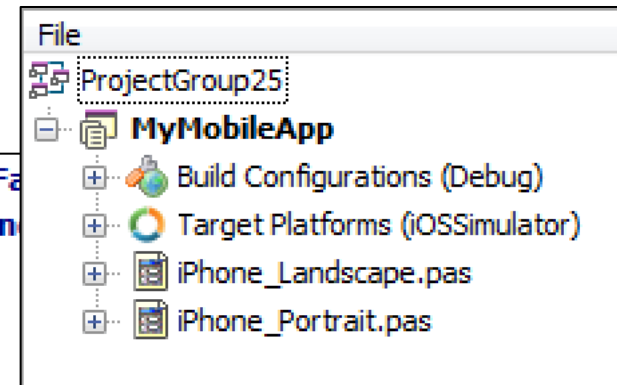
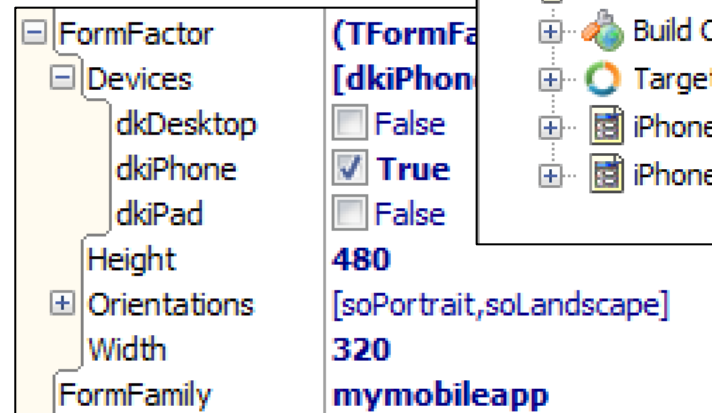
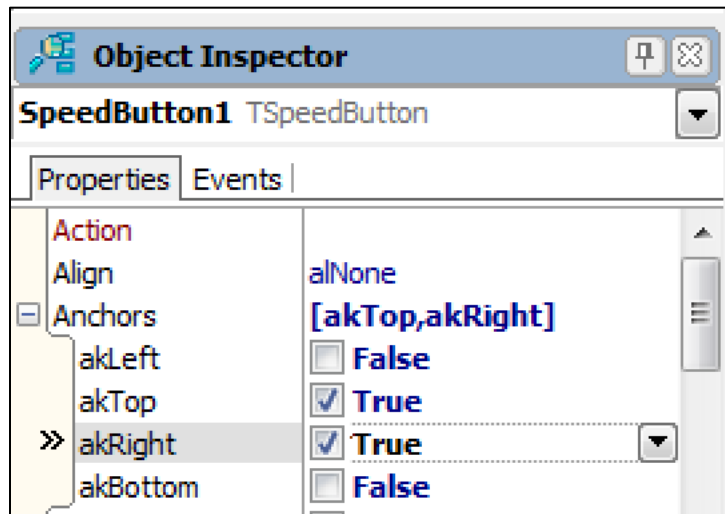
TListBox

TProgressBar

TPanel

Designing for different form factors

- Use Alignment and Anchors
- Leverage Form Family Property
- Use a separate form for each orientation



Designing for different form factors - Reference Samples

Alignment and Anchors

>> This is demonstrated through our iOS FireMonkeyMobile samples, code snippets and mobile project templates.

Leverage the Form Family Property

>> A detailed tutorial on leveraging the form family property in your mobile apps can be found [here](#).

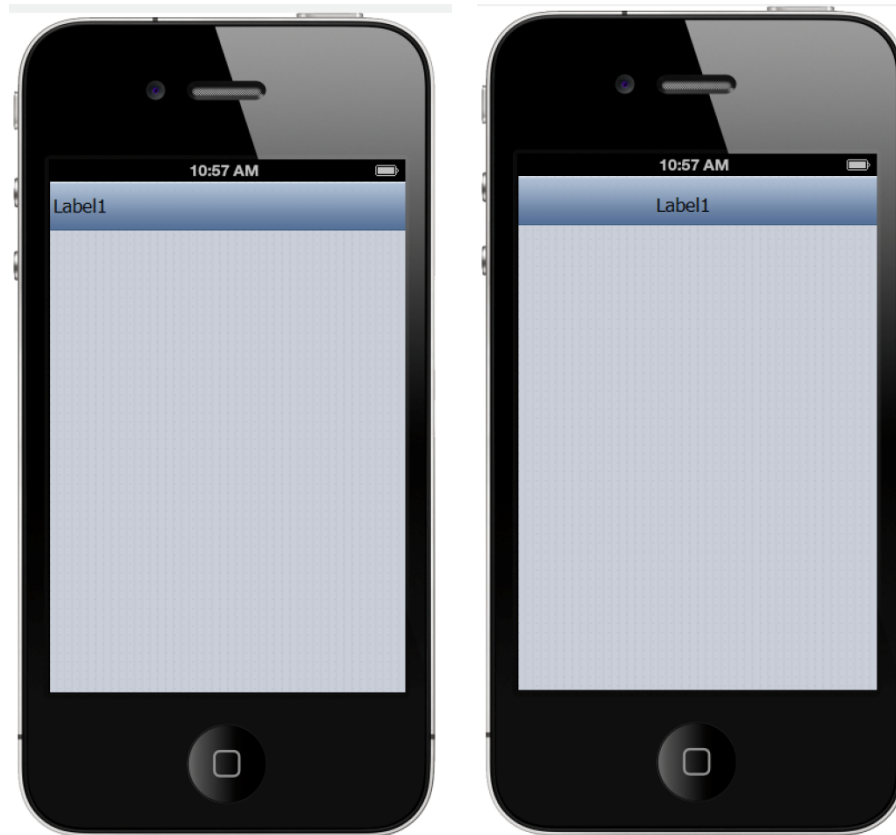
Use a separate form for each orientation

>> A sample demonstrating using separate forms for each orientation can be found [here](#).

Key Component Differences

Desktop	Mobile
TTreeView	TListView TListBox
TRadioGroup TRadioButton	Segmented Control (using TSpeedButtons) TListBox
TCheckbox	TSwitch
TMenuBar TMainMenu	TToolbar with TSpeedButtons TTabControl

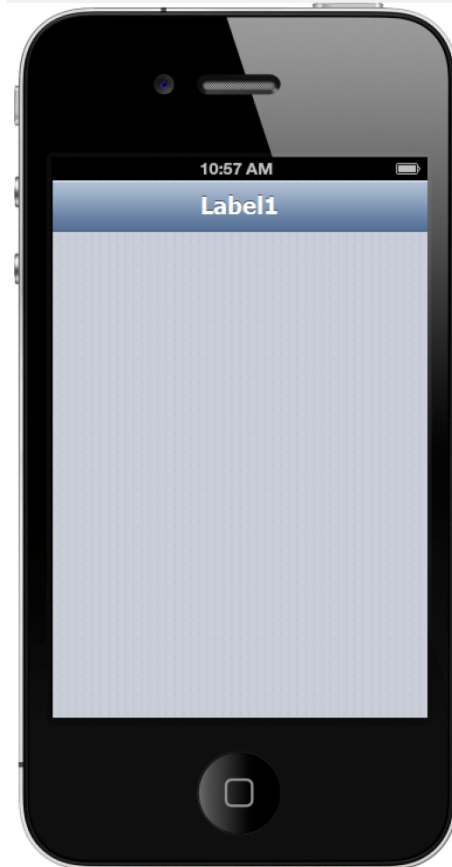
Application Title



Don't align application titles to the left

Don't use `stylelookup = labelstyle`, `embossedlabel` etc. for text styling on toolbars

Application Title



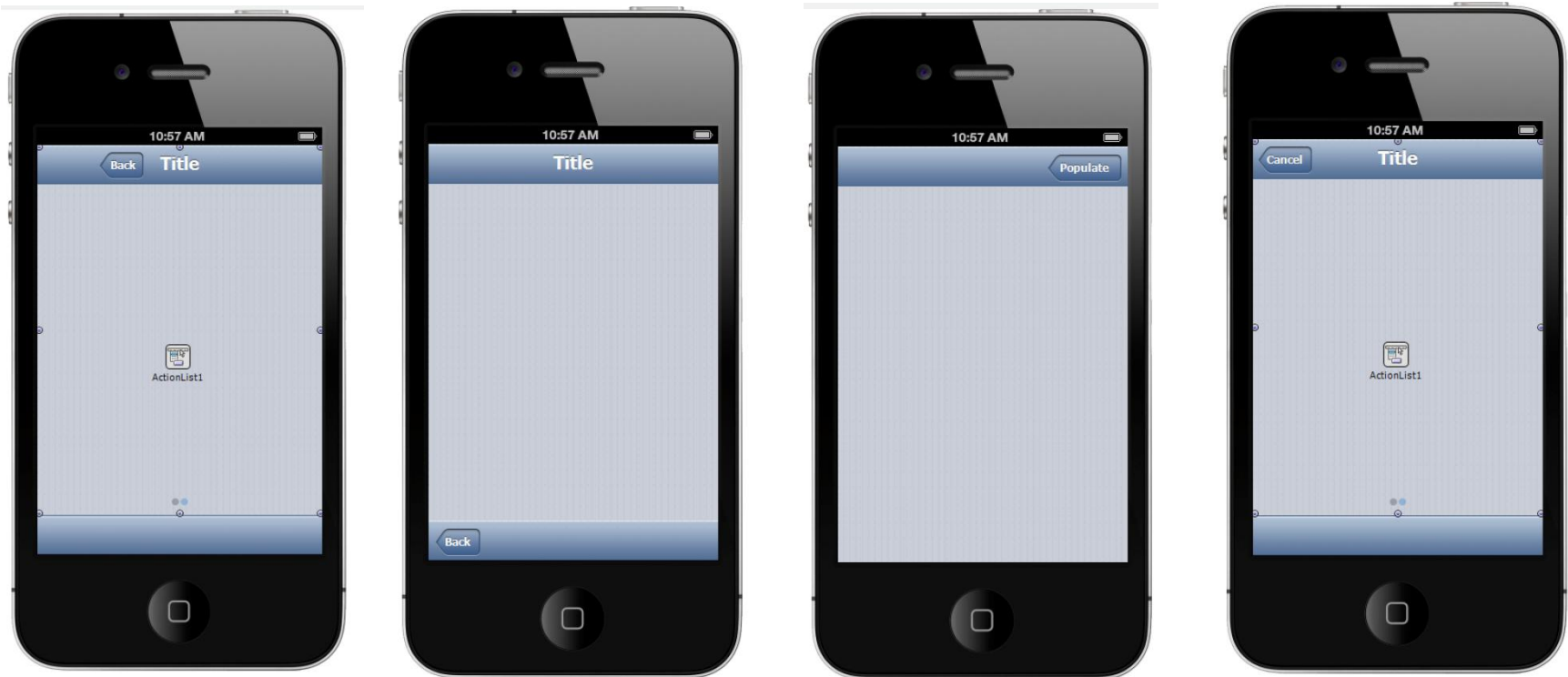
Component: TLabel
Stylelookup: toollabel
Align: alCenter
TextAlign: taCenter
VertTextAlign: taCenter

Center the label on the toolbar
Use the 'toollabel' StyleLookup property

Application Title – Reference Samples

- Mobile Application Templates in the Mobile Application Wizard
- [iOS Code Snippets](#)
- [FireMonkeyMobile Samples](#)

Navigational Back Button

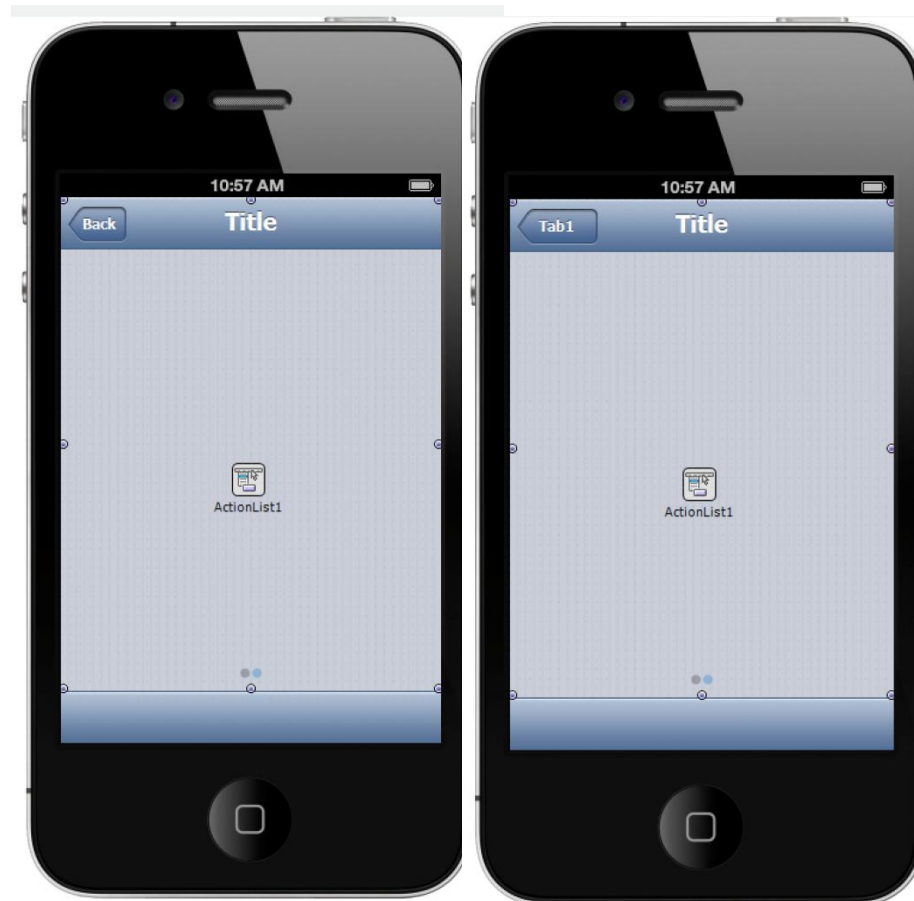


Don't place back buttons on bottom toolbars

Don't align navigational back buttons to the right or center

Don't use them as 'Cancel' buttons or in any context except for navigating to prior screen

Navigational Back Button



Component: TSpeedButton
Stylelookup: backtoolbutton
Width: 49px
Align: alNone
Anchors: akLeft; akTop
Position, x: 6; y :7

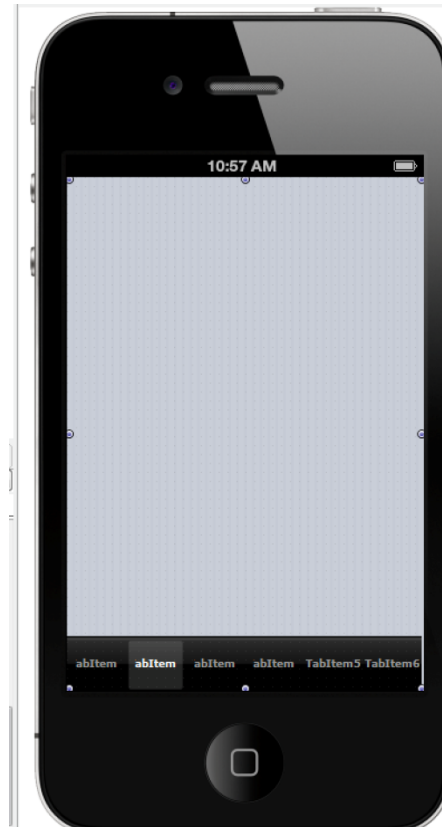
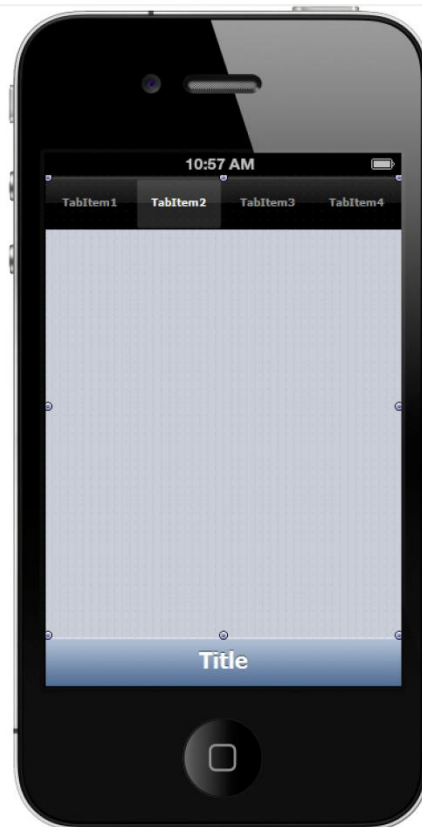
Note: TButton can also be used,
but TSpeedButton is
recommended

Use it for navigating to prior screen
Always parent the navigational back button to a top toolbar, and position it on the top left

Navigational Back Button – Reference Samples

- Mobile Application Templates in the Mobile Application Wizard in the IDE:
 - Phone Master Detail Application
 - Tablet Master Detail Application
 - Tabbed with Navigation

Tab Control



Don't position the tab control at the top

Don't use tab items without icons

Don't use more than five tab items on an iPhone form factor

Tab Control



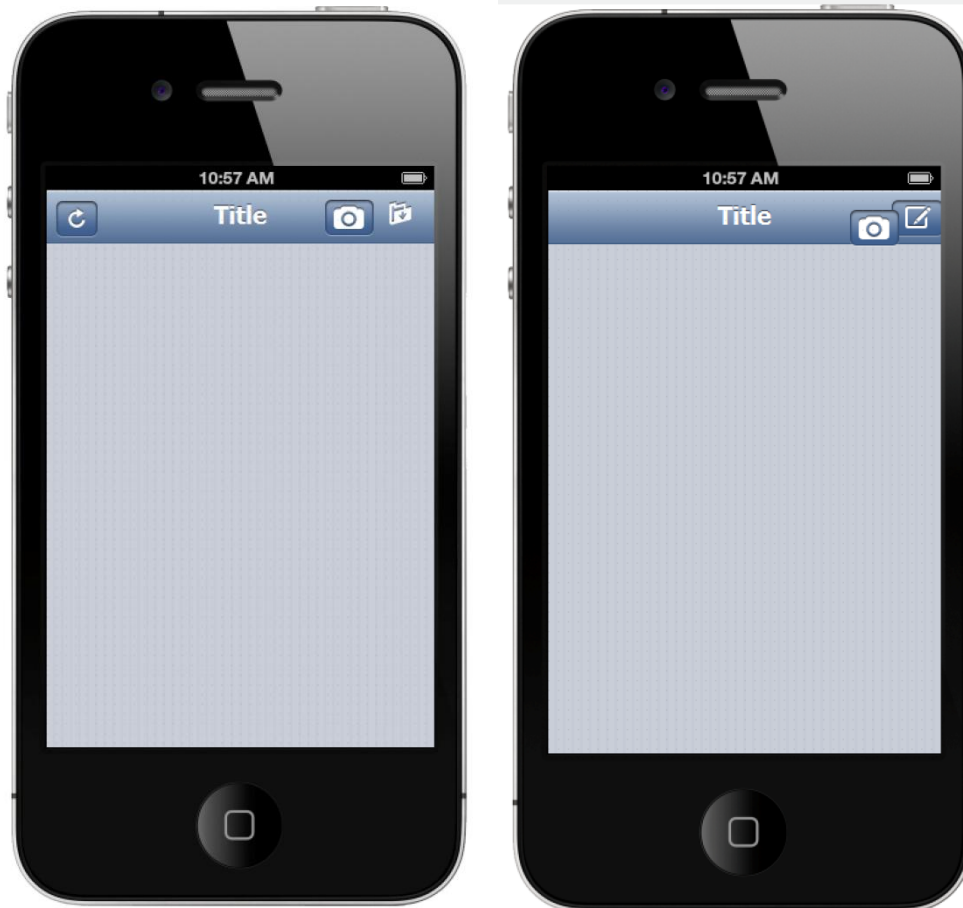
Use a TListBox with items for additional navigation

Component: TTabControl
Always align TTabControl to client
Use 5 or less tabs for the iPhone form factor
Use icons with text (default or custom icons)
Set TabControl's TabPosition to tpBottom, tpNone or tpDots

Tab Control– Reference Samples

- Various Samples:
 - [iOSControls](#)
 - [SettingsProject](#) (invisible tabs)
 - [iOS TabSliding](#) (design time/runtime dots)
- Mobile Application Templates in the Mobile Application Wizard in the IDE:
 - Tabbed Template
 - Tabbed with Navigation Template

Toolbar Glyph Buttons

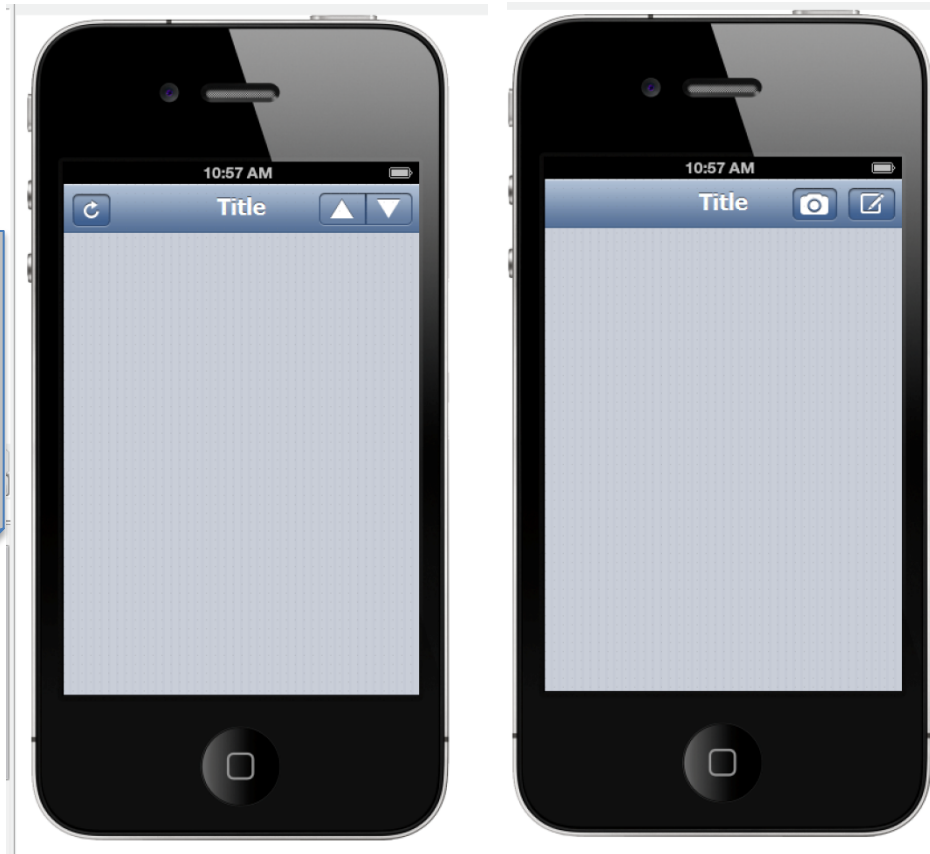


Don't mix bordered and non-bordered glyph buttons on a toolbar
Don't use uneven spacing for toolbar glyph buttons

Toolbar Glyph Buttons



Component: TSpeedButton
(recommended), TButton;
StyleLookUp : _toolbar_
Align: alNone; Anchors:
akTop,akLeft; akTop,
akRight; akBottom, akLeft;
akBottom, akRight

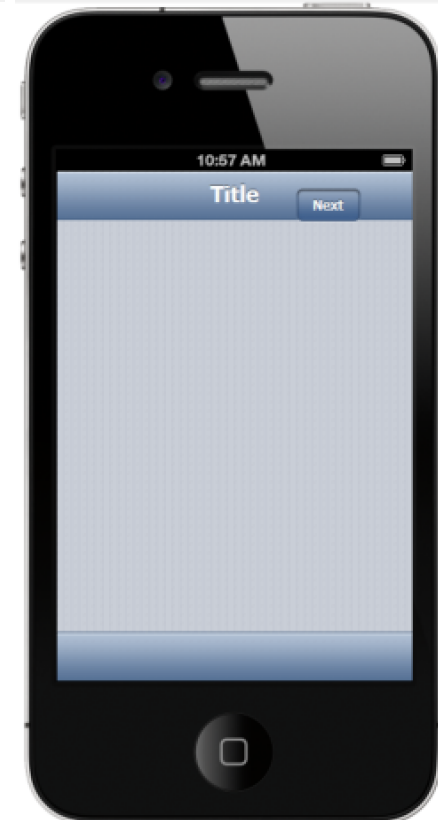
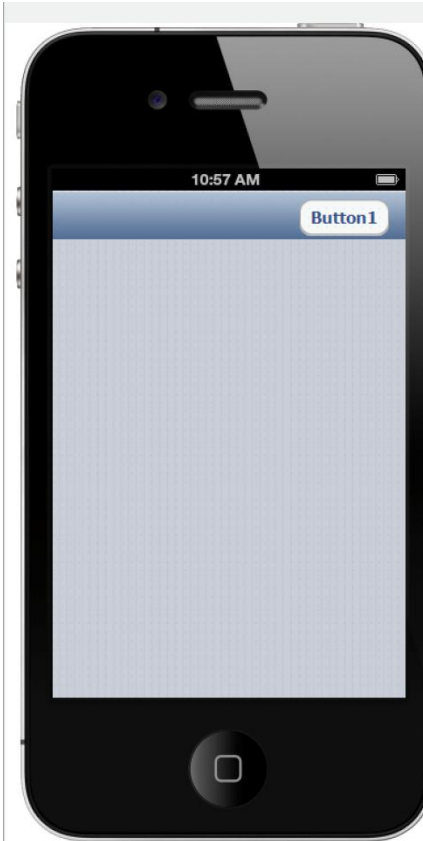
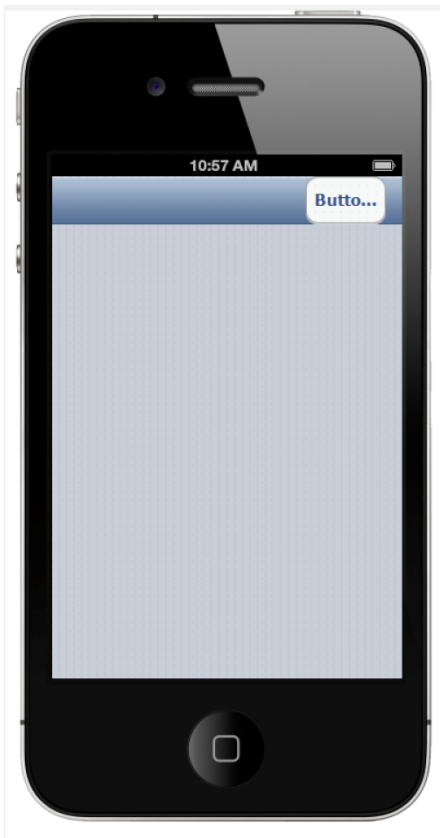


Provide even spacing between toolbar buttons
Use either bordered or non-bordered button styles

Toolbar Glyph Buttons – Reference Samples

- [iOSControls](#) Sample
- Mobile Application Templates in the Mobile Application Wizard in the IDE:
 - Tablet Master Detail Template

Toolbar Text Buttons



Don't use TButton for toolbar buttons

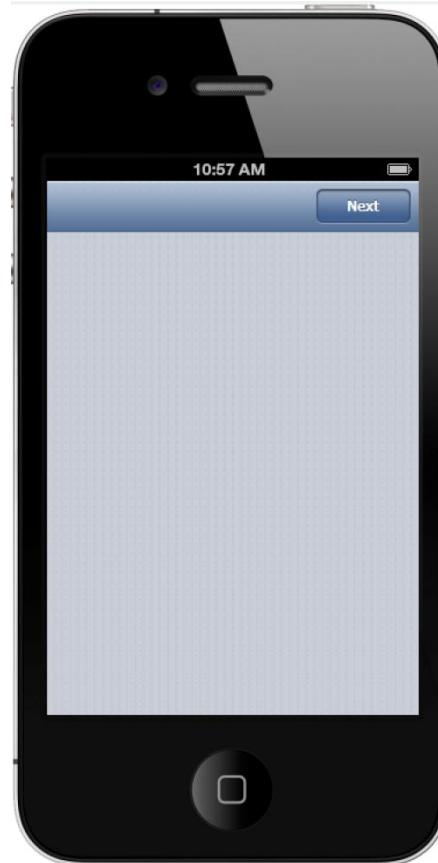
Don't use StyleLookup = buttonstyle

Don't place toolbar buttons too close to one another

Toolbar Text Buttons



Use 'toolbutton' styles
Use TSpeedButton for your
toolbar buttons
Align: alNone;
Anchors: akTop,akLeft;
akTop, akRight;
akBottom, akLeft;
akBottom, akRight

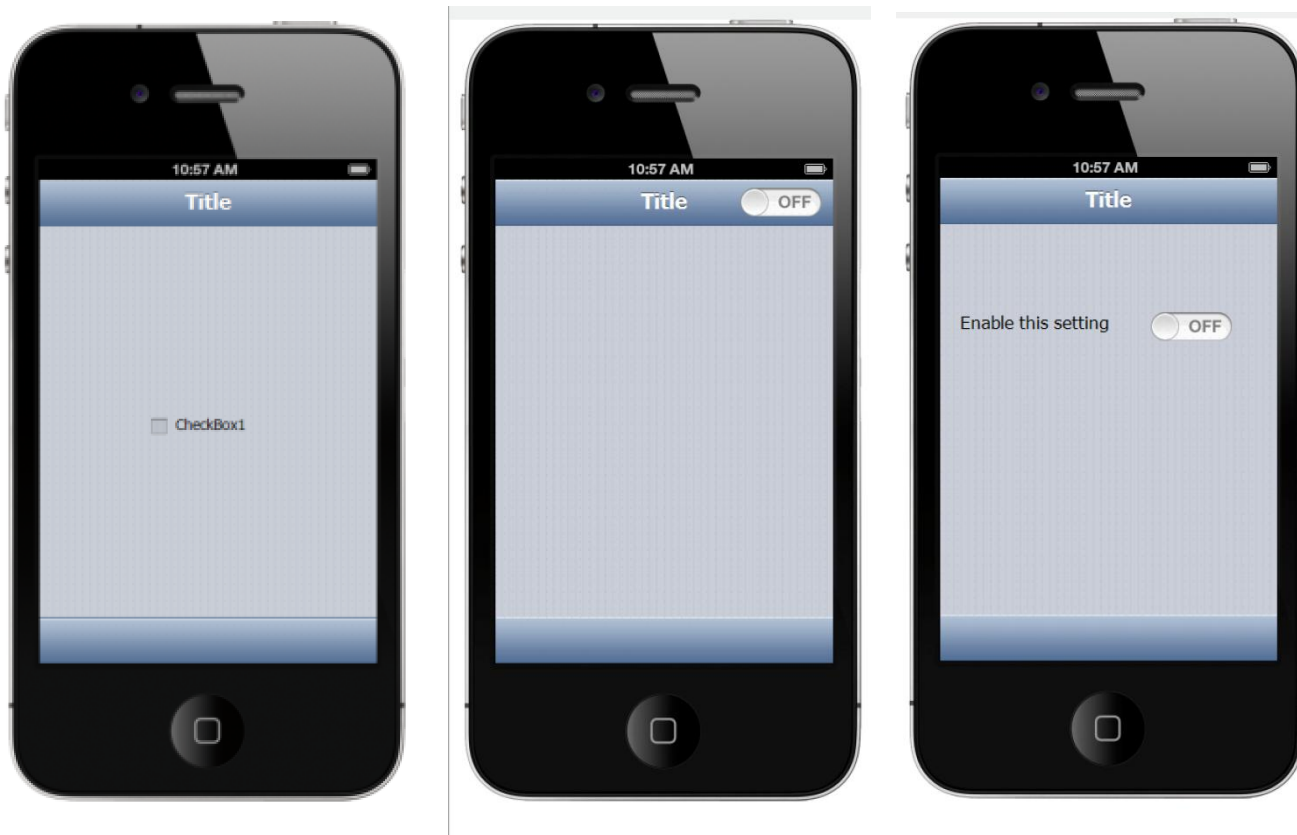


Use proper styling
Use proper alignment

Toolbar Text Buttons – Reference Samples

- Samples:
 - [iOSControls](#)
 - [AudioRecPlay](#)
- Mobile Application Templates in the Mobile Application Wizard in the IDE:
 - Header/Footer with Navigation Template
 - Tabbed with Navigation Template

Switch Control

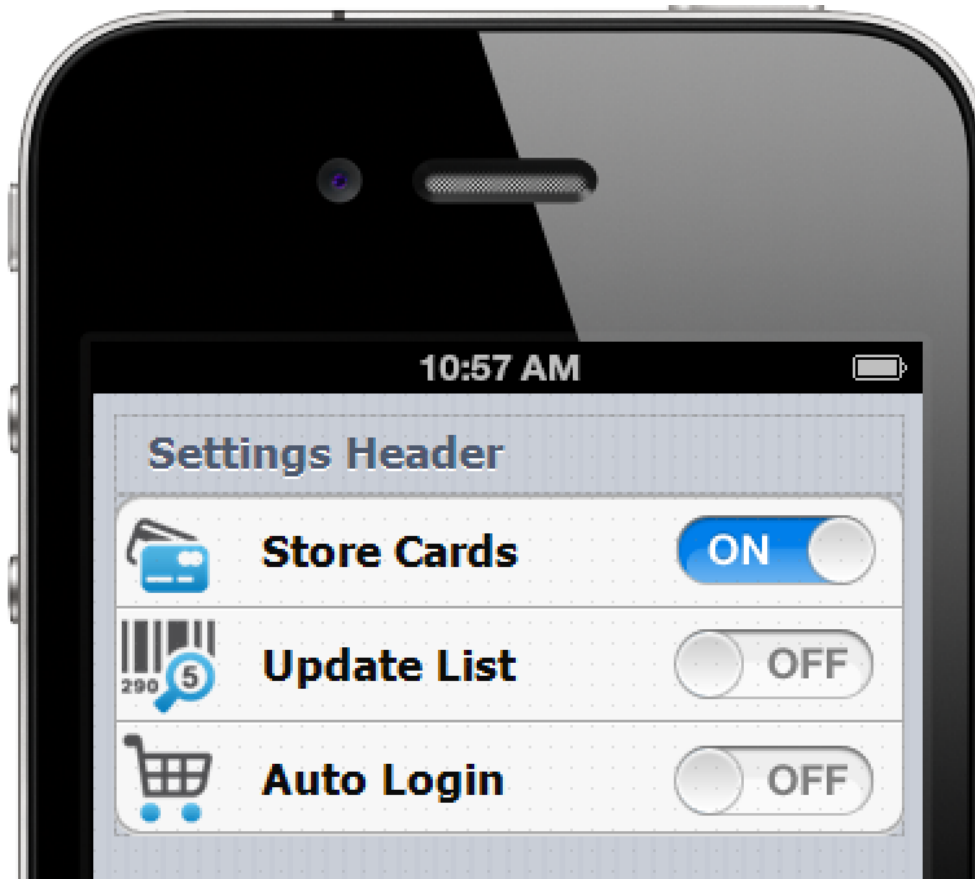


Don't use checkboxes on iOS

Don't place a TSwitch onto a blank form

Don't place a TSwitch onto a toolbar

Switch Control



Component: TListBox
GroupingKind = gsGrouped
StyleLookup = transparentlistboxstyle
Add a ListBox header by right-clicking the Listbox
Align: alTop
Margins: Top = 10;

Component: TSwitch
Parent a TSwitch to each Listbox item
TSwitch Position: y=9
TSwitch Align = alNone;
TSwitch Anchors: akTop, akRight;

Always use TSwitch in a list item, anchored to the top right

Switch Control – Reference Samples

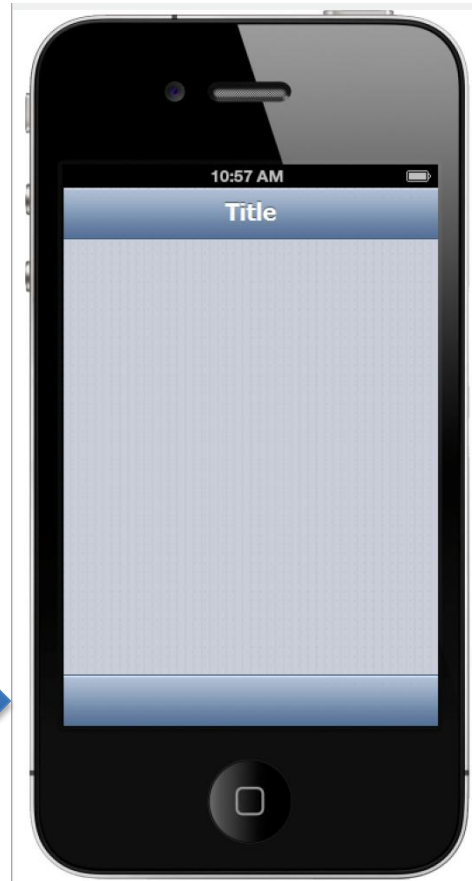
- [LocationDemo](#)
- [Settings Project](#)
- [iOS Location](#)
- [iOS Accelerometer](#)

Toolbar



Don't use the same StyleLookup property for both the top and bottom toolbar

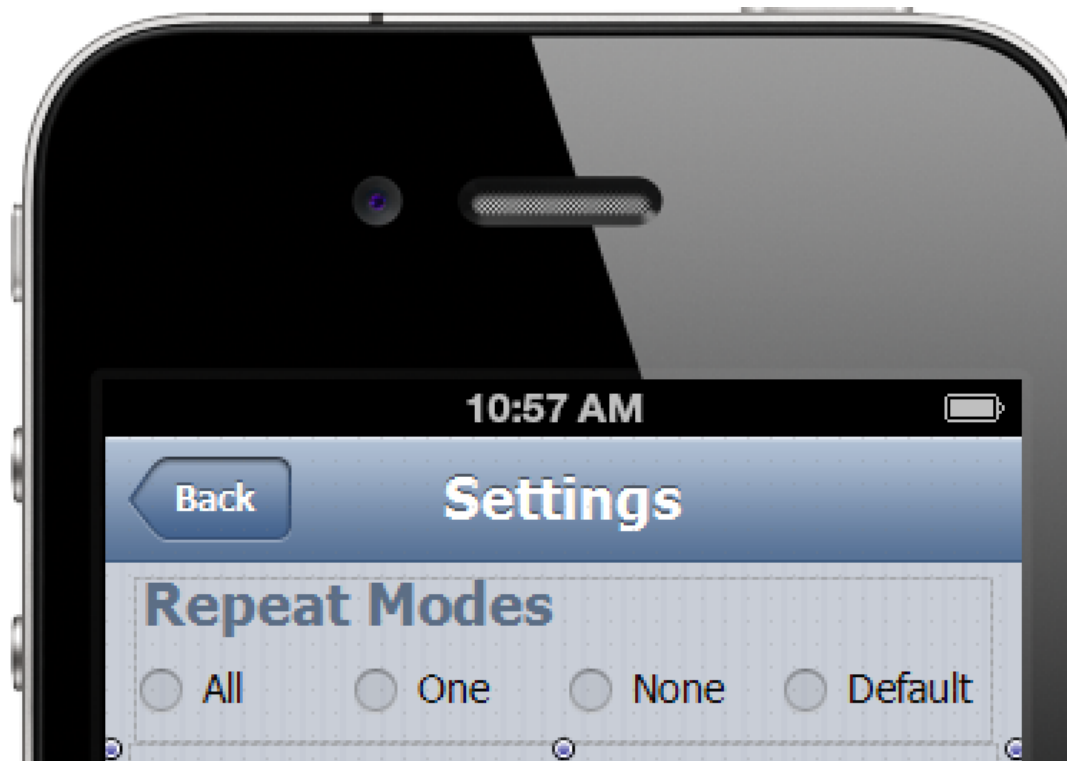
Toolbar



Component: TToolbar
StyleLookup: toolbarstyle (use
for top toolbar);
bottomtoolbar (use for bottom
toolbar)

Use separate style settings for the top and bottom toolbar

'RadioGroup'



Don't use Radio Buttons in iOS apps
Don't create Radio Groups for use in iOS apps

'RadioGroup'



Traditional Radio Groups don't exist in iOS applications. Instead, use either of the following approaches:

- Use a TListBox with the checkmark accessory
- Create a segmented control via a TSpeedButton Group and styling



Use TListBox with correct styling
Create a segmented control

'RadioGroup' – Reference Samples

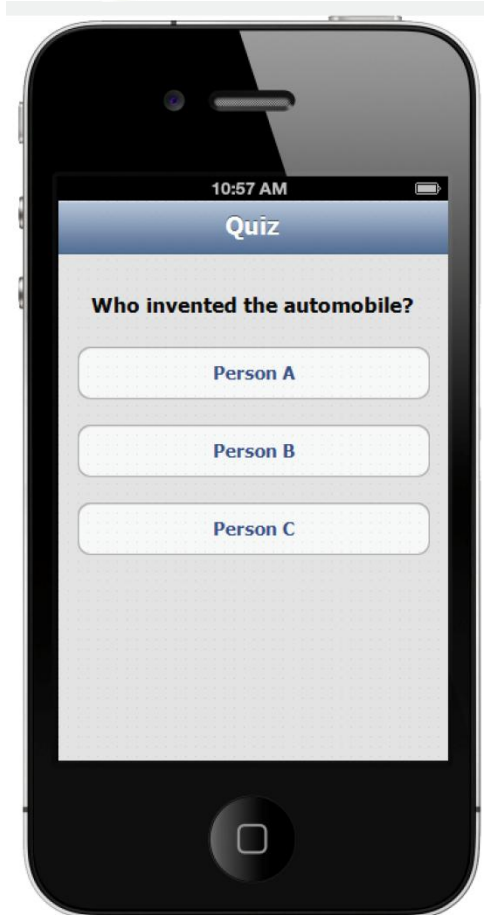
- 'Checked' TListBox Example: [iOSMediaPlayer Sample](#)
- Segmented Control Example #1: [iOS CameraComponent](#)
- Segmented Control Example #2: [Photo Editor Demo](#)

General Button Use



Don't use uneven spacing between buttons
Don't use varying heights and widths

General Button Use



Component: TButton
StyleLookup = Buttonstyle

Additional comments:

Use a TLabel for plain text on a solid colored form; StyleLookup = listboxitemlabel is recommended

All buttons should be the same height
Use even spacing and anchors

General Button Use – Reference Samples

- [iOS SendCancelNotification](#)

Creating Lists - Part 1

TListBox



Designed for short lists with no to minimal scrolling with rounded corners:

- Settings List
- Input Forms

Tips:

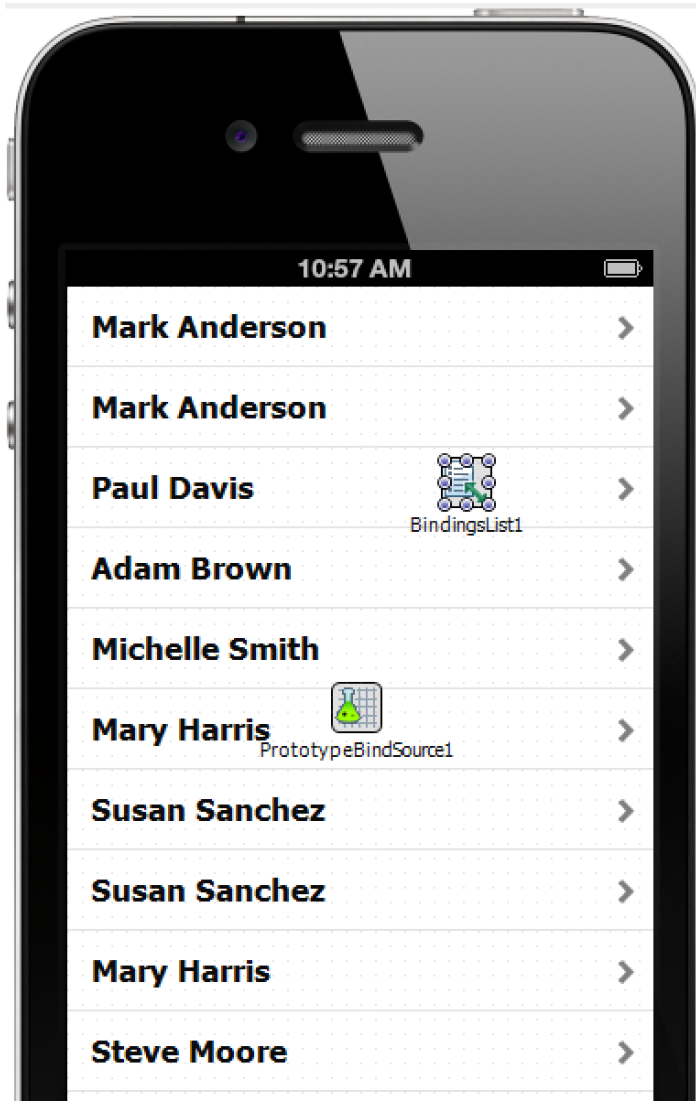
- Use the 'GroupHeader' item for listbox headers by right-clicking on TListBox on the form to add this item
- For additional descriptive text above or below a settings list, use a TLabel with the 'embossedlabel' StyleLookup property
- For Input Forms, use a TEdit with or without the 'transparentedit' StyleLookup property

TListBox - Reference Samples

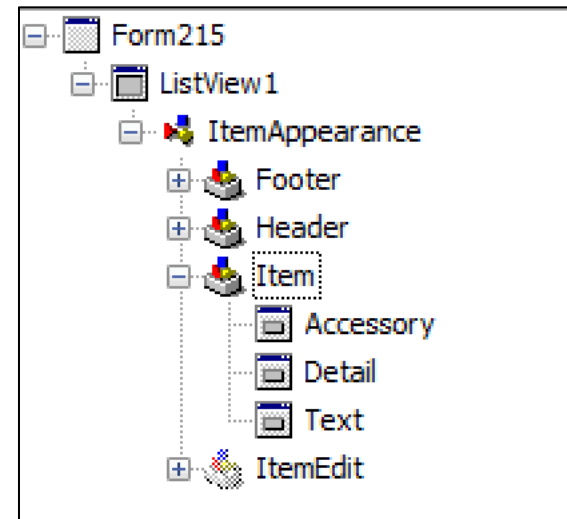
- [iOSMediaPlayer](#)
- [Settings Project](#)
- [TabSlideTransition](#)

Creating Lists - Part 2

TListView



- Designed for long, databound, scrollable lists
- ItemAppearance provides built-in appearance modes for displaying and editing lists



TListView– Reference Samples

- Mobile Application Templates in the Mobile Application Wizard in the IDE:
 - Phone Master Detail Application
 - Tablet Master Detail Application
- [TListView Custom Appearance Modes](#)
- [Invoking the edit mode and deleting items from the list](#)
- [Adding search to a list](#)