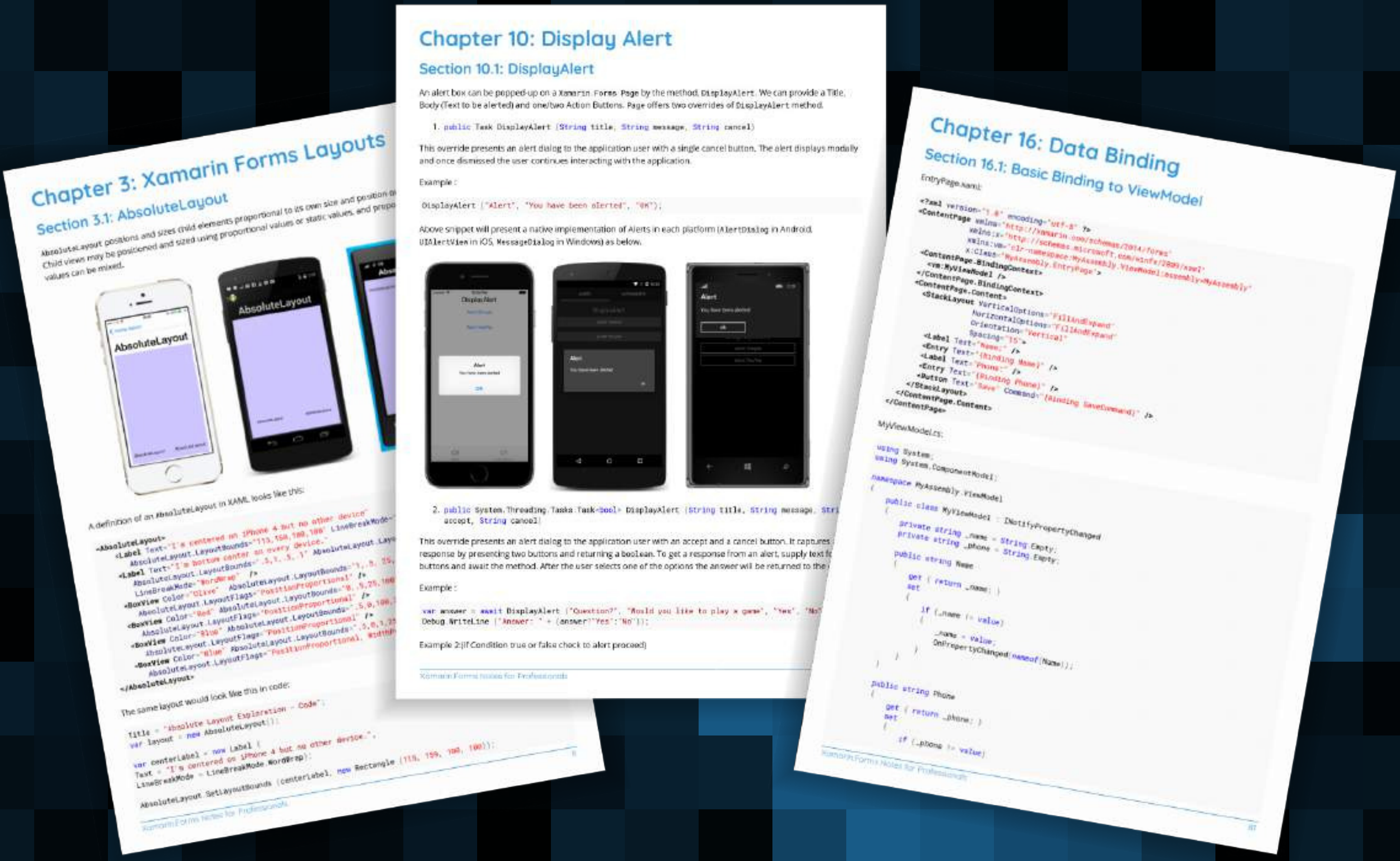
Xamarin .Forms

Notes for Professionals



Chapter 3: Xamarin Forms Layouts

Section 3.1: AbsoluteLayout

Chapter 10: Display Alert

Section 10.1: DisplayAlert

An alert box can be popped-up on a `Xamarin.Forms Page` by the method `DisplayAlert`. We can provide a Title, Body (Text to be alerted) and one/two Action Buttons. `Page` offers two overrides of `DisplayAlert` method.

1. `public Task DisplayAlert (String title, String message, String cancel)`

This override presents an alert dialog to the application user with a single cancel button. The alert displays modally and once dismissed the user continues interacting with the application.

Example :

```
DisplayAlert ("Alert", "You have been alerted", "OK");
```

Above snippet will present a native implementation of Alerts in each platform (`AlertDialog` in Android, `UIAlertView` in iOS, `MessageDialog` in Windows) as below.

2. `public System.Threading.Tasks.Task<bool> DisplayAlert (String title, String message, String accept, String cancel)`

This override presents an alert dialog to the application user with an accept and a cancel button. It captures a response by presenting two buttons and returning a boolean. To get a response from an alert, supply text for buttons and await the method. After the user selects one of the options the answer will be returned to the

Example :

```
var answer = await DisplayAlert ("Question?", "Would you like to play a game", "Yes", "No");
Debug.WriteLine ("Answer: " + (answer?"Yes":"No"));
```

Example 2:(If Condition true or false check to alert proceed)

Chapter 16: Data Binding

Section 16.1: Basic Binding to ViewModel

100+ pages

of professional hints and tricks

GoalKicker.com
Free Programming Books

Disclaimer
This is an unofficial free book created for educational purposes and is not affiliated with official Xamarin.Forms group(s) or company(s).
All trademarks and registered trademarks are the property of their respective owners

Contents

About ... 1

Chapter 1: Getting started with Xamarin.Forms ... 2

- Section 1.1: Installation (Visual Studio) ... 2
- Section 1.2: Hello World Xamarin Forms: Visual Studio ... 4

Chapter 2: Why Xamarin Forms and When to use Xamarin Forms ... 7

- Section 2.1: Why Xamarin Forms and When to use Xamarin Forms ... 7

Chapter 3: Xamarin Forms Layouts ... 8

- Section 3.1: AbsoluteLayout ... 8
- Section 3.2: Grid ... 10
- Section 3.3: ContentPresenter ... 11
- Section 3.4: ContentView ... 12
- Section 3.5: ScrollView ... 13
- Section 3.6: Frame ... 14
- Section 3.7: TemplatedView ... 14
- Section 3.8: RelativeLayout ... 15
- Section 3.9: StackLayout ... 16

Chapter 4: Xamarin Relative Layout ... 19

- Section 4.1: Box after box ... 19
- Section 4.2: Page with an simple label on the middle ... 21

Chapter 5: Navigation in Xamarin.Forms ... 23

- Section 5.1: NavigationPage flow with XAML ... 23
- Section 5.2: NavigationPage flow ... 24
- Section 5.3: Master Detail Navigation ... 25
- Section 5.4: Using INavigation from view model ... 26
- Section 5.5: Master Detail Root Page ... 28
- Section 5.6: Hierarchical navigation with XAML ... 29
- Section 5.7: Modal navigation with XAML ... 31

Chapter 6: Xamarin.Forms Page ... 32

- Section 6.1: TabbedPage ... 32
- Section 6.2: ContentPage ... 33
- Section 6.3: MasterDetailPage ... 34

Chapter 7: Xamarin.Forms Cells ... 36

- Section 7.1: EntryCell ... 36
- Section 7.2: SwitchCell ... 36
- Section 7.3: TextCell ... 37
- Section 7.4: ImageCell ... 38
- Section 7.5: ViewCell ... 39

Chapter 8: Xamarin.Forms Views ... 41

- Section 8.1: Button ... 41
- Section 8.2: DatePicker ... 42
- Section 8.3: Entry ... 43
- Section 8.4: Editor ... 43
- Section 8.5: Image ... 44
- Section 8.6: Label ... 45

Chapter 9: Using ListViews ... 47

- Section 9.1: Pull to Refresh in XAML and Code behind ... 47

Chapter 10: Display Alert 48
Section 10.1: DisplayAlert 48
Section 10.2: Alert Example with only one button and action 49
Chapter 11: Accessing native features with DependencyService 50
Section 11.1: Implementing text-to-speech 50
Section 11.2: Getting Application and Device OS Version Numbers - Android & iOS - PCL 53
Chapter 12: DependencyService 55
Section 12.1: Android implementation 55
Section 12.2: Interface 56
Section 12.3: iOS implementation 56
Section 12.4: Shared code 57
Chapter 13: Custom Renderers 58
Section 13.1: Accessing renderer from a native project 58
Section 13.2: Rounded label with a custom renderer for Frame (PCL & iOS parts) 58
Section 13.3: Custom renderer for ListView 59
Section 13.4: Custom Renderer for BoxView 61
Section 13.5: Rounded BoxView with selectable background color 65
Chapter 14: Caching 68
Section 14.1: Caching using Akavache 68
Chapter 15: Gestures 70
Section 15.1: Make an Image tappable by adding a TapGestureRecognizer 70
Section 15.2: Gesture Event 70
Section 15.3: Zoom an Image with the Pinch gesture 78
Section 15.4: Show all of the zoomed Image content with the PanGestureRecognizer 78
Section 15.5: Tap Gesture 79
Section 15.6: Place a pin where the user touched the screen with MR.Gestures 79
Chapter 16: Data Binding 81
Section 16.1: Basic Binding to ViewModel 81
Chapter 17: Working with Maps 83
Section 17.1: Adding a map in Xamarin.Forms (Xamarin Studio) 83
Chapter 18: Custom Fonts in Styles 92
Section 18.1: Accessing custom Fonts in Syles 92
Chapter 19: Push Notifications 94
Section 19.1: Push notifications for Android with Azure 94
Section 19.2: Push notifications for iOS with Azure 96
Section 19.3: iOS Example 99
Chapter 20: Effects 101
Section 20.1: Adding platform specific Effect for an Entry control 101
Chapter 21: Triggers & Behaviours 105
Section 21.1: Xamarin Forms Trigger Example 105
Section 21.2: Multi Triggers 106
Chapter 22: AppSettings Reader in Xamarin.Forms 107
Section 22.1: Reading app.config file in a Xamarin.Forms Xaml project 107
Chapter 23: Creating custom controls 108
Section 23.1: Label with bindable collection of Spans 108
Section 23.2: Implementing a CheckBox Control 110
Section 23.3: Create an Xamarin Forms custom input control (no native required) 116
Section 23.4: Creating a custom Entry control with a MaxLength property 118

Section 23.5: Creating custom Button 119
Chapter 24: Working with local databases 121
Section 24.1: Using SQLite.NET in a Shared Project 121
Section 24.2: Working with local databases using xamarin.forms in visual studio 2015 123
Chapter 25: CarouselView - Pre-release version 133
Section 25.1: Import CarouselView 133
Section 25.2: Import CarouselView into a XAML Page 133
Chapter 26: Exception handling 135
Section 26.1: One way to report about exceptions on iOS 135
Chapter 27: SQL Database and API in Xamarin Forms. 137
Section 27.1: Create API using SQL database and implement in Xamarin forms, ... 137
Chapter 28: Contact Picker - Xamarin Forms (Android and iOS) 138
Section 28.1: contact_picker.cs 138
Section 28.2: MyPage.cs 138
Section 28.3: ChooseContactPicker.cs 139
Section 28.4: ChooseContactActivity.cs 139
Section 28.5: MainActivity.cs 140
Section 28.6: ChooseContactRenderer.cs 141
Chapter 29: Xamarin Plugin 144
Section 29.1: Media Plugin 144
Section 29.2: Share Plugin 146
Section 29.3: ExternalMaps 147
Section 29.4: Geolocator Plugin 148
Section 29.5: Messaging Plugin 150
Section 29.6: Permissions Plugin 151
Chapter 30: OAuth2 155
Section 30.1: Authentication by using Plugin 155
Chapter 31: MessagingCenter 157
Section 31.1: Simple example 157
Section 31.2: Passing arguments 157
Section 31.3: Unsubscribing 158
Chapter 32: Generic Xamarin.Forms app lifecycle? Platform-dependant! 159
Section 32.1: Xamarin.Forms lifecycle is not the actual app lifecycle but a cross-platform representation of it 159
Chapter 33: Platform-specific behaviour 161
Section 33.1: Removing icon in navigation header in Anroid 161
Section 33.2: Make label's font size smaller in iOS 161
Chapter 34: Platform specific visual adjustments 163
Section 34.1: Idiom adjustments 163
Section 34.2: Platform adjustments 163
Section 34.3: Using styles 164
Section 34.4: Using custom views 164
Chapter 35: Dependency Services 165
Section 35.1: Access Camera and Gallery 165
Chapter 36: Unit Testing 166
Section 36.1: Testing the view models 166
Chapter 37: BDD Unit Testing in Xamarin.Forms 172
Section 37.1: Simple Specflow to test commands and navigation with NUnit Test Runner 172

Section 37.2: Advanced Usage for MVVM 174
Credits 175
You may also like 176

Click here to download full PDF material