Building Android Applications with ActionScript

Developing

Android Applications with Flex 4.5

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Rich Tretola

Developing Android Applications with Flex 4.5

Ready to put your ActionScript 3 skills to work on mobile apps? This hands-on book walks you through the process of creating an Adobe AIR application from start to finish, using the Flex 4.5 framework. Move quickly from a basic Hello World application to complex interactions with Android APIs, and get complete code examples for working with Android device components—GPS, camera, gallery, accelerometer, multitouch display, and OS interactions. No matter how much Flex experience you have, this book is the ideal resource.

- Use Flash Builder 4.5 to create and debug a Flex Mobile project
- Choose a layout option to determine which files Flash Builder auto-generates
- Select permissions that control which devices can install your app from the Android Market
- Explore APIs that enable your app to interact with specific Android OS features
- Learn how to read and write text files, browse the file system for media files, and create and write to an SQLite database
- Use the URLRequest class to open your app in the browser, place calls, and create emails and text messages
- Load web and video content into your app with StageWebView
- Publish your app to an Android installer file with Flash Builder

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Beijing • Cambridge • Farnham • Köln • Sebastopol • Tokyo

Developing Android Applications with Flex 4.5
by Rich Tretola

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Preface

Introduction to Android

The Android mobile operating system was first introduced in the fall of 2008 as part of the G1 handset. Android began to gain some momentum as major device manufactures like Motorola, HTC, Sony, and Samsung adopted Android to run on their hardware. As the number of available devices began to grow (allowing mobile customers a wide range of choices), the number of Android handsets being activated each day increased dramatically. Android's operating system continued to evolve through versions 1.0, 1.5, 1.6, 2.0, 2.1—and then 2.2, which was the point at which Adobe AIR became available within the Android market. The number of Android devices running 2.2 or higher continues to grow, which means that the user base for applications based on the methods discussed in this book is also expanding.

This book will walk you through the creation of your first Adobe AIR application using the Flex 4.5 framework, and provides examples of how to interact with the device's many components and features. These include GPS, the camera, the gallery, the accelerometer, the multitouch display, the `StageWebView`, operating system interactions, and more.

Who This Book Is For

Developing Android Applications with Adobe Flex 4.5 is a book targeting all levels of developers. It starts with a basic Hello World application and then quickly moves to more complicated examples where the Android APIs are explored.

Who This Book Is Not For

This book is not for developers who are interested in developing native Android applications with Java. This book will only provide examples of Android application development using Adobe Flex 4.5 and ActionScript 3.

Conventions Used in This Book

The following typographical conventions are used in this book:

Menu options
: Menu options are shown using the → character, such as File→Open.

Italic
: Indicates new terms, URLs, email addresses, filenames, and file extensions.

`Constant width`
: This is used for program listings, as well as within paragraphs, to refer to program elements such as variable or function names, databases, data types, environment variables, statements, and keywords.

`Constant width bold`
: This shows commands or other text that should be typed literally by the developer.

`Constant width italic`
: This shows text that should be replaced with user-supplied values or by values determined by context.

This Book's Example Files

You can download the example files for this book from this location:

http://oreilly.com/catalog/9781449305376

Where necessary, multiple code samples are provided for each recipe to correspond with different development environments. Each sample will be separated into a folder for the specific environment. Each application should include the necessary code for your environment, as well as an application descriptor file.

Using Code Examples

This book is here to help you get your job done. In general, you may use the code in this book in your programs and documentation. You do not need to contact us for permission unless you're reproducing a significant portion of the code. For example, writing a program that uses several chunks of code from this book does not require permission. Selling or distributing a CD-ROM of examples from O'Reilly books does require permission. Answering a question by citing this book and quoting example code does not require permission. Incorporating a significant amount of example code from this book into your product's documentation does require permission.

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