Android程序设计（影印版）

新生代移动设备的Java编程

Programming

Android

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Zigurd Mednieks, Laird Dornin,
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Preface

The purpose of this book is to enable you to create well-engineered Android applications that go beyond the scope of small example applications.

This book is for people coming to Android programming from a variety of backgrounds. If you have been programming iPhone or Mac OS applications in Objective-C, you will find coverage of Android tools and Java language features relevant to Android programming that will help you bring your knowledge of mobile application development to Android. If you are an experienced Java coder, you will find coverage of Android application architecture that will enable you to use your Java expertise in this newly vibrant world of client Java application development. In short, this is a book for people with some relevant experience in object-oriented languages, mobile applications, REST applications, and similar disciplines who want to go further than an introductory book or online tutorials will take them.

How This Book Is Organized

We want to get you off to a fast start. The chapters in the first part of this book will step you through using the SDK tools so that you can access example code in this book and in the SDK, even as you expand your knowledge of SDK tools, Java, and database design. The tools and basics covered in the first part might be familiar enough to you that you would want to skip to Part II where we build foundational knowledge for developing larger Android applications.

The central part of this book is an example of an application that uses web services to deliver information to the user—something many applications have at their core. We present an application architecture, and a novel approach to using Android's framework classes that enables you to do this particularly efficiently. You will be able to use this application as a framework for creating your own applications, and as a tool for learning about Android programming.

In the final part of this book, we explore Android APIs in specific application areas: multimedia, location, sensors, and communication, among others, in order to equip you to program applications in your specific area of interest.

By the time you reach the end of this book, we want you to have gained knowledge beyond reference material and a walk-through of examples. We want you to have a point of view on how to make great Android applications.

Conventions Used in This Book

The following typographical conventions are used in this book:

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

`Constant width`
: 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

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: Shows commands or other text that should be typed literally by the user

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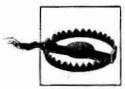

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PART I

Tools and Basics

Part I shows you how to install and use your tools, what you need to know about Java to write good Android code, and how to design and use SQL databases, which are central to the Android application model, persistence system, and implementation of key design patterns in Android programs.

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