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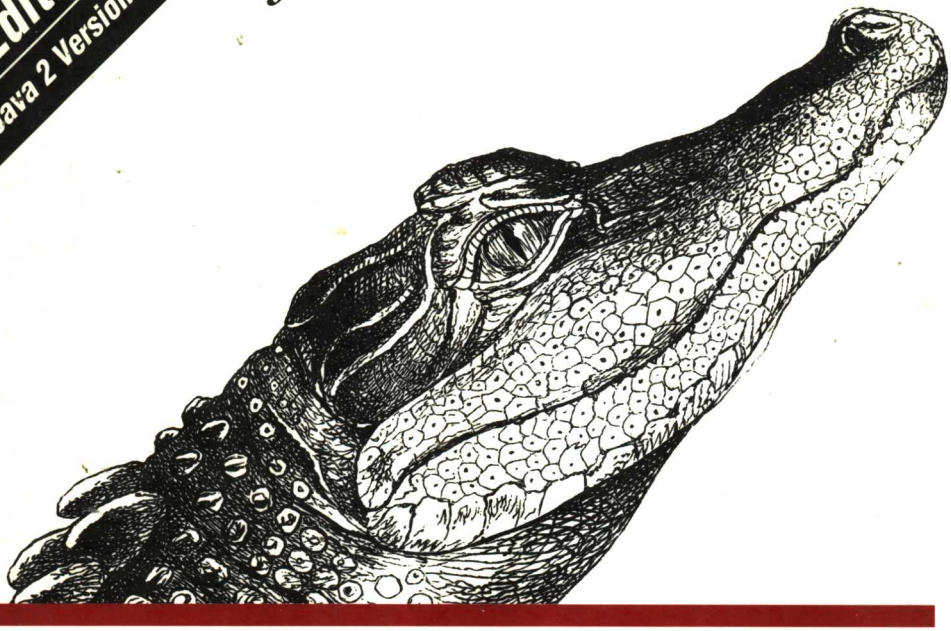

JAVA™ EXAMPLES IN A NUTSHELL

A Tutorial Companion to Java in a Nutshell

David Flanagan 著

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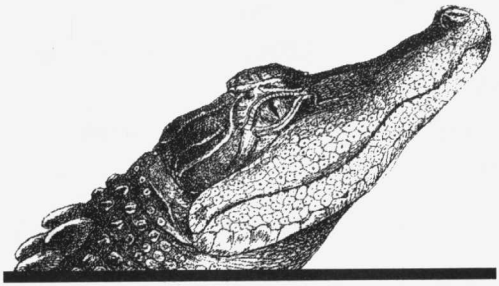

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图书在版编目（CIP）数据

JAVA™ 实例技术手册 /（美）富莱纳根（Flanagan, D.）编著 . －北京：清华大学出版社，2003.11
书名原文：Java Examples in a Nutshell, Second Edition
ISBN 7-302-06751-1

Ⅰ .J... Ⅱ . 富 ... Ⅲ .JAVA 语言－程序设计－技术手册－英文 Ⅳ .TP312-62

中国版本图书馆 CIP 数据核字（2003）第 046733 号

北京市版权局著作权合同登记
图字：01-2003-1922 号

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书　　名 / JAVA™ 实例技术手册（影印版）
书　　号 / ISBN 7-302-06751-1/TP · 5032
责任编辑 / 常晓波
封面设计 / Edie Freedman，张健
出版发行 / 清华大学出版社（www.tup.tsinghua.edu.cn）
地　　址 / 北京清华大学学研大厦（邮政编码 100084）
经　　销 / 各地新华书店
印　　刷 / 北京艺辉印刷有限公司
开　　本 / 787 毫米 × 980 毫米　16 开本　36.75 印张
版　　次 / 2003 年 11 月第一版　2003 年 11 月第一次印刷
印　　数 / 0001-3000 册
定　　价 / 68.00 元（册）

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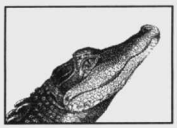

Preface

This book is a companion volume to my previous books *Java in a Nutshell*, *Java Foundation Classes in a Nutshell*, and *Java Enterprise in a Nutshell*. While those books are quick-references at heart, they also include accelerated introductions to various Java™ programming topics and small sets of example programs. I wrote *Java Examples in a Nutshell* to pick up where those books leave off, providing a suite of example programs for novice Java programmers and experts alike.

This book was a lot of fun to write. The first edition came about when Java 1.1 was released at more than double the size of Java 1.0. While I was busy writing additional examples for the second edition of *Java in a Nutshell*, the engineers at Sun were busy turning Java into something that could no longer quite fit in a nutshell. With its quick-reference section expanding so much, *Java in a Nutshell* could no longer hold many examples. We were able to include some examples of new Java 1.1 features, but we had to cut many more than we could include. This was a hard decision; the examples in *Java in a Nutshell* were one of its most popular features.

This book is the result of those cuts, and I am glad that we made the decision we did. Given the freedom to devote an entire book to examples, I was able to write the examples I really wanted to write. I was able to go into more depth than I ever would have before, and I found myself really enjoying the exploration and experimentation that went into developing the examples. For the second edition of the book, I had the pleasure of exploring and experimenting with new parts of the Java API: Swing™, Java 2D™, servlets, and XML. I hope you will use these examples as a starting point for your own explorations, and that you get a taste of the same excitement I felt while writing them.

As its name implies, this book teaches by example, which is how many people learn best. There is not a lot of hand-holding, nor will you find detailed documentation of the exact syntax and behavior of Java statements. This book is designed to work in tandem with *Java in a Nutshell*, *Java Foundation Classes in a Nutshell*, and *Java Enterprise in a Nutshell*. You'll probably find those volumes quite useful while studying the examples here. You may also be interested in the other books in the O'Reilly Java series. Those books are listed at *http://java.oreilly.com*.

This book is organized into three parts. Chapters 1 through 9 cover the core non-graphical parts of the Java API. The APIs covered in these chapters are documented in *Java in a Nutshell*. Chapters 10 through 15 form the second part of the book. These chapters demonstrate Java's graphics and graphical user interface APIs, which are documented in *Java Foundation Classes in a Nutshell*. Finally, Chapters 16 through 19 contain examples of Java enterprise APIs and complement the book *Java Enterprise in a Nutshell*.

You can read the chapters in this book in more or less whatever order they strike your interest. There are some interdependencies between the chapters, however, and some chapters really ought to be read in the order they are presented. For example, it is important to read Chapter 3, *Input/Output*, before you read Chapter 5, *Networking*. Chapter 1, *Java Basics*, and Chapter 2, *Objects, Classes, and Interfaces*, are aimed at programmers just starting out with Java. Seasoned Java programmers will probably want to skip them.

Java Examples Online

The examples in this book are available online, so you don't have to type them all in yourself! You can download them from the author's web site, *http://www.davidflanagan.com/javaexamples2*, or from the publisher's site, *http://www.oreilly.com/catalog/jenut2*. As typos and bugs are reported, you will also find an errata list at the publisher's site. The examples are free for noncommercial use. If you want to use them commercially, however, I ask that you pay a nominal commercial licensing fee. Visit *http://www.davidflanagan.com/javaexamples2* for licensing details.

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A related reference work is the *Java Power Reference*. It is an electronic Java quick reference on CD-ROM that uses the *Java in a Nutshell* style. But since it is designed for viewing in a web browser, it is fully hyperlinked and includes a powerful search engine. It is wider in scope but narrower in depth than the *Java in a Nutshell* books. The *Java Power Reference* covers all the APIs of the Java 2 platform, plus the APIs of many standard extensions. But it does not include tutorial chapters on the various APIs, nor does it include descriptions of the individual classes.

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Bold
: Occasionally used to refer to particular keys on a computer keyboard or to portions of a user interface, such as the **Back** button or the **Options** menu.

`Letter Gothic`
: Used in all Java code and generally for anything that you would type literally when programming, including keywords, data types, constants, method names, variables, class names, and interface names. Also used for command lines and options that should be typed verbatim on the screen, as well as tags that might appear in an HTML document.

`Letter Gothic Oblique`
: Used for the names of method parameters and generally as a placeholder to indicate an item that should be replaced with an actual value in your program. Also used for variable expressions in command-line options.

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Acknowledgments

My thanks, as always, to my editor Paula Ferguson for pulling everything together into one coherent book and for putting up with my repeated schedule slippages. Thanks also to Frank Willison and Tim O'Reilly for being willing and enthusiastic to try this all-example book format.

I've had the help of a number of O'Reilly's other Java authors with this book. Jonathan Knudsen, author of several Java books from O'Reilly, reviewed the graphics and the printing chapters. Bob Eckstein, coauthor of *Java Swing*, reviewed the Swing chapter. Jason Hunter, author of *Java Servlet Programming*, reviewed the servlets chapter. Hans Bergsten, author of a forthcoming book on JavaServer Pages™', also reviewed the servlets chapter but focused his review on the JSP examples in particular. Brett McLaughlin, author of *Java and XML*, reviewed the XML chapter. George Reese, author of *Database Programming with JDBC and Java*, was kind enough to look over the database chapter. Jim Farley, author of *Java Distributed Computing* and coauthor of *Java Enterprise in a Nutshell*, reviewed the RMI examples. The expertise contributed by these reviewers has dramatically improved the quality of my examples. I am indebted to them all and recommend their books highly!

The production team at O'Reilly & Associates has again done a great job of turning the manuscript I submitted into a honest-to-goodness book. As usual, I am grateful to and awestruck by them.

Finally, I want to thank Christie, for reasons too numerous to list here.

David Flanagan
http://www.davidflanagan.com
July 2000

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