COBOL Programmers Swing with Java

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Cambridge
University Press

PUBLISHED BY THE PRESS SYNDICATE OF THE UNIVERSITY OF CAMBRIDGE
The Pitt Building, Trumpington Street, Cambridge, United Kingdom

CAMBRIDGE UNIVERSITY PRESS
The Edinburgh Building, Cambridge CB2 2RU, UK
40 West 20th Street, New York, NY 10011-4211, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
Ruiz de Alarcón 13, 28014 Madrid, Spain
Dock House, The Waterfront, Cape Town 8001, South Africa

http://www.cambridge.org

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First published 2005

Printed in the United States of America

Typefaces ITC Berkeley Oldstyle 11/13.5 pt. and ITC Franklin Gothic *System* LaTeX 2_ε [TB]

A catalog record for this book is available from the British Library.

Library of Congress Cataloging in Publication Data

Doke, E. Reed.

COBOL programmers swing with Java / E. Reed Doke, Bill C. Hardgrave, Richard A. Johnson.

p. cm.

Includes bibliographical references and index.

ISBN 0-521-54684-2 (alk. paper)

1. Java (Computer program language) 2. COBOL (Computer program language)

I. Hardgrave, Bill C. II. Johnson, Richard A. (Richard Allen), 1953 – III. Title.

QA76.73.J38D645 2004
005.13′3 – dc22 2004048885

ISBN 0 521 54684 2 paperback

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Introduction

We organized the chapters in this book to be read in sequence. However, each chapter begins with a clear statement of what we assume you know before reading the chapter, so you can jump around a little bit, depending on your background and experience. You can use the book as a reference and jump in anywhere once you have the fundamentals.

Chapter 1 presents reasons why you should learn Java and describes the many similarities between COBOL and Java.

Chapter 2 explains what OO is, and what it is not. OO terms and concepts are described using several everyday examples.

Chapter 3 describes the overall structure and format of a Java program. Several small programs are developed to show you how to create objects and call methods.

Chapter 4 shows you how to define Java data items and use them in a program. Java data definition is somewhat different than COBOL and these differences are clearly explained and demonstrated in the program examples.

Chapter 5 introduces Java computation and, again, several small programs are written to illustrate the ideas and concepts present. You will see that some Java computation is nearly identical to COBOL.

Chapter 6 illustrates how to use the Java decision-making statements. We develop programs using the Java `if` (sound familiar?) and the Java counterpart to the COBOL `EVALUATE` verb.

Chapter 7 describes how to write Java loops. As you will learn, Java looping is different from COBOL.

Chapter 8 shows you how to define and work with Java arrays, which are really the old COBOL tables with a more technical-sounding name. There are a lot of parallels between Java arrays and COBOL tables.

Chapter 9 explains how to access data in sequential files, relational databases, and networks. You will appreciate Java's approach to accessing relational databases using standard SQL statements.

Chapter 10 illustrates how to develop graphical user interfaces for user input and output using the Java Swing package. This is an interesting and important chapter, even though there are few COBOL similarities.

Chapter 11 discusses OO development in a broader context. Both software and hardware issues are explored. Three-tier software design is illustrated using a GUI front end and a relational database back end.

All code listings can be found on the Cambridge University Press web site: **http://publishing.cambridge.org/resources/0521546842/**