

Pro Hibernate 3

DAVE MINTER AND JEFF LINWOOD

Pro Hibernate 3

Copyright © 2005 by Dave Minter and Jeff Linwood

All rights reserved. No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage or retrieval system, without the prior written permission of the copyright owner and the publisher.

ISBN (pbk): 1-59059-511-4

Printed and bound in the United States of America 9 8 7 6 5 4 3 2 1

Trademarked names may appear in this book. Rather than use a trademark symbol with every occurrence of a trademarked name, we use the names only in an editorial fashion and to the benefit of the trademark owner, with no intention of infringement of the trademark.

Lead Editor: Steve Anglin

Technical Reviewer: Dilip Thomas

Editorial Board: Steve Anglin, Dan Appleman, Ewan Buckingham, Gary Cornell, Tony Davis,

Jason Gilmore, Jonathan Hassell, Chris Mills, Dominic Shakeshaft, Jim Sumser

Associate Publisher: Grace Wong

Project Manager: Beth Christmas

Copy Edit Manager: Nicole LeClerc

Copy Editor: Linda Marousek

Production Manager: Kari Brooks-Copony

Production Editor: Katie Stence

Compositor: Dina Quan

Proofreader: April Eddy

Indexer: Michael Brinkman

Artist: April Milne

Interior Designer: Van Winkle Design Group

Cover Designer: Kurt Krames

Manufacturing Manager: Tom Debolski

Distributed to the book trade in the United States by Springer-Verlag New York, Inc., 233 Spring Street, 6th Floor, New York, NY 10013, and outside the United States by Springer-Verlag GmbH & Co. KG, Tiergartenstr. 17, 69112 Heidelberg, Germany.

In the United States: phone 1-800-SPRINGER, fax 201-348-4505, e-mail orders@springer-ny.com, or visit <http://www.springer-ny.com>. Outside the United States: fax +49 6221 345229, e-mail orders@springer.de, or visit <http://www.springer.de>.

For information on translations, please contact Apress directly at 2560 Ninth Street, Suite 219, Berkeley, CA 94710. Phone 510-549-5930, fax 510-549-5939, e-mail info@apress.com, or visit <http://www.apress.com>.

The information in this book is distributed on an “as is” basis, without warranty. Although every precaution has been taken in the preparation of this work, neither the author(s) nor Apress shall have any liability to any person or entity with respect to any loss or damage caused or alleged to be caused directly or indirectly by the information contained in this work.

The source code for this book is available to readers at <http://www.apress.com> in the Downloads section.

Contents at a Glance

About the Authors	xiii
About the Technical Reviewer	xv
Acknowledgments	xvii
Introduction	xix

PART 1 ■ ■ ■ Hibernate 3 Primer

■ CHAPTER 1	An Introduction to Hibernate 3	3
■ CHAPTER 2	Integrating and Configuring Hibernate	13
■ CHAPTER 3	Building a Simple Application	27
■ CHAPTER 4	Using Annotations with Hibernate	65

PART 2 ■ ■ ■ Hibernate 3 Reference

■ CHAPTER 5	The Persistence Lifecycle	85
■ CHAPTER 6	Creating Mappings	93
■ CHAPTER 7	Querying Objects with Criteria	131
■ CHAPTER 8	Querying with HQL and SQL	145
■ CHAPTER 9	Using the Session	159
■ CHAPTER 10	Design Considerations with Hibernate 3	175
■ CHAPTER 11	Events and Interceptors	189
■ CHAPTER 12	Hibernate Filters	203
■ CHAPTER 13	Fitting Hibernate into the Existing Environment	213
■ CHAPTER 14	Upgrading from Hibernate 2	223
■ INDEX		229