

# Pro Eclipse JST

## Plug-ins for J2EE Development



Christopher M. Judd  
and Hakeem Shittu

## **Pro Eclipse JST: Plug-ins for J2EE Development**

**Copyright © 2005 by Christopher M. Judd and Hakeem Shittu**

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): 1-59059-493-2

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: Ben Houston

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: Kylie Johnston

Copy Edit Manager: Nicole LeClerc

Copy Editor: Ami Knox

Assistant Production Director: Kari Brooks-Copony

Production Editor: Kelly Winquist

Compositor: Kinetic Publishing Services, LLC

Proofreader: April Eddy

Indexer: Michael Brinkman

Artist: Kinetic Publishing Services, LLC

Cover Designer: Kurt Krames

Manufacturing Manager: Tom Debolski

Distributed to the book trade worldwide by Springer-Verlag New York, Inc., 233 Spring Street, 6th Floor, New York, NY 10013. Phone 1-800-SPRINGER, fax 201-348-4505, e-mail [orders-ny@springer-sbm.com](mailto:orders-ny@springer-sbm.com), or visit <http://www.springeronline.com>.

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](mailto: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
<b>CHAPTER 1</b> J2EE Specification .....	1
<b>CHAPTER 2</b> Eclipse Plug-in Paradigm .....	11
<b>CHAPTER 3</b> Eclipse Web Tools Platform Project .....	19
<b>CHAPTER 4</b> Introduction to JST .....	25
<b>CHAPTER 5</b> Introduction to WST .....	45
<b>CHAPTER 6</b> Eclipse Web Tools Installation .....	65
<b>CHAPTER 7</b> J2EE Standard Tools Projects .....	73
<b>CHAPTER 8</b> Session Beans .....	89
<b>CHAPTER 9</b> Entity Beans .....	119
<b>CHAPTER 10</b> Message-Driven Beans .....	155
<b>CHAPTER 11</b> EJB Packaging and Deployment .....	177
<b>CHAPTER 12</b> JavaServer Pages .....	197
<b>CHAPTER 13</b> Servlets .....	217
<b>CHAPTER 14</b> Web Packaging and Deployment .....	241
<b>CHAPTER 15</b> Web Services .....	263
<b>CHAPTER 16</b> Relational Databases .....	289
<b>APPENDIX A</b> Apache Derby .....	303
<b>APPENDIX B</b> JBoss Application Server .....	311
<b>INDEX</b> .....	323