The Definitive Guide to Apache MyFaces and Facelets

Zubin Wadia, Martin Marinschek, Hazem Saleh, and Dennis Byrne

Contributing Authors: Bruno Aranda, Mario Ivankovits, Cagatay Civici, Arvid Hülsebus, Detlef Bartetzko, and Allan Lykke Christensen

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ISBN-13 (pbk): 978-1-59059-737-8 ISBN-10 (pbk): 1-59059-737-0

ISBN-13 (electronic): 978-1-4302-0344-5

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

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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, or visit http://www.springeronline.com.

For information on translations, please contact Apress directly at 2855 Telegraph Avenue, Suite 600, Berkeley, CA 94705. Phone 510-549-5930, fax 510-549-5939, e-mail info@apress.com, or visit http://www.apress.com.

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My parents, Rustom and Avan, whose guidance and encouragement mean the world. —Zubin Wadia

For the prophet Muhammad, from whom I learnt all the good things in my life. —Hazem Saleh

Ainhoa, my wife, whose support and patience made this book possible. —Bruno Aranda

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Acknowledgments

his book would not have been possible without the MyFaces project founders—Manfred Geiler and Thomas Spiegl. Additionally, Jacob Hookom's seminal work with Facelets was a prime driver to increasing JSF adoption in the Java developer community. Without their vision, this comprehensive book would not have an audience.

Additionally, we would like to acknowledge the contributions of Simon Kitching, who is a regular committer to MyFaces and the Orchestra projects. His insight and attention to detail have been valuable to the continuing growth and applicability of Orchestra. Arash Rajaeeyan also provided valuable input, contributions, and insight into Tomahawk and the IDE setup. We are grateful for their inputs.

Finally, we would like to thank the MyFaces and JSF community as a whole for their tireless support and contributions to a variety of subprojects. Without this anarchic collaboration, MyFaces would cease to be competitively differentiated against the Sun Reference Implementation.

Introduction

In the four years that the Sun, IBM, and MyFaces implementations have been available, the MyFaces project has arguably been the front-runner when it comes to innovation and dexterity. It also is the most responsive to user issues and has a vibrant community that ensures progression (you can always find free support on the mailing lists). With JavaServer Faces (JSF) 2.0 around the corner, preparation is already under way as the committers quickly review the early access draft and plan for MyFaces 2.0.

This "anarchic collaboration," a term coined by Roy Fielding, is the essence of the Apache MyFaces project: many talented people share information with a single-minded objective to make JSF a pleasurable developer experience for all. The Tomahawk, Trinidad, Tobago, Orchestra, and MyFaces implementations have been downloaded over a million times. Before the Sun JSF 1.2 implementation was released, we could safely say the MyFaces implementation was the only reliable way to build production JSF applications. Even today, many developers are happy with simply using MyFaces 1.1.x and Facelets to form a potent combination.

This book assumes you are interested in JSF and component-oriented development. It takes you through a journey beginning with the unique aspects of JSF, introduces you to the MyFaces specification, and continues with building your first application. Once you've mastered that, this book advances your skill set further by taking you into the world of the Tomahawk component library. Here, you learn the power of componentization in JSF (you will be able to build a complex application with a few lines of code) and see the advantages of having a vibrant community like MyFaces continually developing new components into the sandbox like CAPTCHA-, media-, exporter-, and AJAX-enabled UI widgets.

Next, we take you into one of the most important chapters in the book—learning to leverage Facelets's powerful view-definition capabilities within your JSF application. After absorbing the material in this chapter, you will be able to write JSF view tiers with greater efficiency and yield more performance out of your applications, as compared to similar applications leveraging classic JSP. The patterns we encourage in this chapter are a result of our more than ten years of cumulative experience with JSF across two of the major Reference Implementations: Sun and MyFaces.

The second half of this book focuses on smaller but equally critical projects to the future of MyFaces: Trinidad, Tobago, and Orchestra. Trinidad and Tobago offer high-quality component libraries that are particularly adept at custom rendition, themes, and layouts. Trinidad's presence is also a testament to the commercial support of MyFaces

by Oracle for its Application Development Framework (ADF). Although a relatively young project, Orchestra offers powerful functionality like conversation scope for persistence-rich JSF applications.

The final chapter weaves together all your newfound knowledge and shows how to avoid some of the common antipatterns new JSF developers often end up pursuing. JSF is a complex specification augmented by a significant number of support frameworks to assist with development. We make sure the details in this book allow you to make educated decisions on which ones to leverage.

Finally, be sure to take advantage of the book's modular nature. We tried to strike a natural balance between this book being a *guide* and a *reference*. Refreshing your memory on a particular topic is extremely easy because of the atomic nature of each chapter. Enjoy!