# Lecture Notes in Computer Science

Edited by G. Goos, J. Hartmanis, and J. van Leeuwen

2753

# Springer Berlin

Berlin Heidelberg New York Hong Kong London Milan Paris Tokyo

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# Extreme Programming and Agile Methods – XP/Agile Universe 2003

Third XP Agile Universe Conference New Orleans, LA, USA, August 10-13, 2003 Proceedings



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Cataloging-in-Publication Data applied for

A catalog record for this book is available from the Library of Congress

Bibliographic information published by Die Deutsche Bibliothek Die Deutsche Bibliothek lists this publication in the Deutsche Nationalbibliographie; detailed bibliographic data is available in the Internet at <a href="http://dnb.ddb.de">http://dnb.ddb.de</a>>.

CR Subject Classification (1998): D.1, D.2, D.3, F.3, K.4.3, K.6

ISSN 0302-9743

ISBN 3-540-40662-X Springer-Verlag Berlin Heidelberg New York

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http://www.springer.de

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Typesetting: Camera-ready by author, data conversion by PTP-Berlin GmbH Printed on acid-free paper SPIN: 10930663 06/3142 5 4 3 2 1 0

#### **Preface**

XP Agile Universe 2003 is the third conference in a series running in North America and attracting participants from all over the world who are interested in the research, development and application of agile software processes. Agile approaches value people and interaction over processes and tools – moving software engineering from the process-oriented software development approaches of the 1990s towards people-oriented approaches that we are starting to see more and more in this decade. Agile approaches stress a holistic view of software developers as being involved in analysis, design, implementation and testing activities, while more traditional, tayloristic approaches separate these tasks and assign them to different "resources." Tayloristic approaches create knowledge-sharing problems as information gathered by one person needs to be handed over – usually in the form of documentation – to the next person in the chain. Agile approaches reduce the number of hand-offs and, thus, decrease the amount of required documentation for knowledge sharing.

While deemed a novelty only a few years ago, agile methods are now becoming established in the software industry and are being applied in more and more application domains. While agile approaches move into the mainstream of software organizations, we are only now beginning to understand their benefits, areas of applicability, and also their dangers. This year's conference will increase this understanding and provide a better base for industry practitioners as they assess the effectiveness of agile methods in their environment. Researchers will use the work presented to create conceptual models of agile approaches that allow us to find new insights and steer future research.

Submissions to this year's conference mirror the breadth and the depth of agile approaches. Thirty-five technical papers were submitted while the conference proceedings now include 17 high-quality contributions (49% acceptance rate). Every submission was reviewed by at least three program committee members. The committee was a mix of industry practitioners and researchers. Papers submitted by program committee members were refereed separately to ensure objective feedback. Some papers were shepherded by committee members who spent quite a bit of effort to helping the authors improve their submissions. Our special thanks go to these shepherds: Hakan Erdogmus, Tom Kubit and Randy Miller.

The proceedings consist of six sections that reflect the breadth of the submissions.

The section "Becoming Agile" discusses how agile approaches can be introduced into new environments. The papers deal with extending the scope of agile methods towards larger and more distributed teams, teams involving multiple stakeholders, success stories of agile methods, and the boundaries between agile and more traditional, tayloristic approaches.

The next section, "Agile Methods and Processes," includes papers on the rules of and reflections on Extreme Programming, ISO certification while being agile, and indicators, instead of metrics, that can be used to help agile teams.

The section on "Agile Testing" discusses how test-driven approaches can be used in the context of database application development and with JNI, how system testing as well as user interface testing can be integrated into agile methods, and contains the test automation manifesto.

While agile approaches value people over tools, most agile teams use some tools anyway. The section on "Tool Support for Agile Teams" looks into new developments in this area. It discusses tools for scaling agile methods as well as for project coordination support. Another paper empirically analyzes distributed pair programming.

The "Educator Symposium" section includes recent developments on the introduction of agile methods into academic education. Papers in the section where peer reviewed by the Educator Symposium committee.

The "Workshop" section contains very brief overviews on the workshops that will be held at the conference.

No conference can be successful without volunteers who contribute their time to the endeavor. We want to thank all our program committee members who reviewed papers and provided valuable feedback to the authors. Specifically, we would like to thank Brian Button, Grigori Melnik and Don Reifer – all of whom spent a huge effort in helping to set up the conference program.

While the technical contributions included in this book represent an important part of the program, no conference is successful without the effective interaction among its participants, their sharing of knowledge and experience. To enable this, the program contained specialized workshops, a broad variety of tutorials, and the open-space sections. All these provided ample opportunity to interact and bring together experts and beginners in agile methods. We hope that you enjoyed the conference.

May 2003 Frank Maurer Don Wells

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