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Web Engineering

4th International Conference, ICWE 2004
Munich, Germany, July 26-30, 2004
Proceedings

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Library of Congress Control Number: 2004109140

CR Subject Classification (1998): D.2, C.2, I.2.11, H.4, H.2, H.3, H.5, K.4, K.6

ISSN 0302-9743

ISBN 3-540-22511-0 Springer Berlin Heidelberg New York

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© Springer-Verlag Berlin Heidelberg 2004
Printed in Germany

Typesetting: Camera-ready by author, data conversion by PTP-Berlin, Protago-TeX-Production GmbH
Printed on acid-free paper SPIN: 11303220 06/3142 5 4 3 2 1 0

Preface

Web engineering is a new discipline that addresses the pressing need for systematic and tool-supported approaches for the development, maintenance and testing of Web applications. Web engineering builds upon well-known and successful software engineering principles and practices, adapting them to the special characteristics of Web applications. Even more relevant is the enrichment with methods and techniques stemming from related areas like hypertext authoring, human-computer interaction, content management, and usability engineering. The goal of the 4th International Conference on Web Engineering (ICWE 2004), in line with the previous ICWE conferences, was to work towards a better understanding of the issues related to Web application development. Special attention was paid to emerging trends, technologies and future visions, to help the academic and industrial communities identify the most challenging tasks for their research and projects.

Following a number of successful workshops on Web engineering since 1997 at well-known conferences, such as ICSE and WWW, the first conference on Web engineering was held in Cáceres, Spain in 2001. It was followed by ICWE 2002 in Santa Fe, Argentina and ICWE 2003 in Oviedo, Spain. In 2004 ICWE moved to the center of Europe and was held in Munich, Germany from July 26 to 30. ICWE 2004 was organized by the Institute for Informatics of the Ludwig-Maximilians-Universität (LMU) Munich.

The ICWE 2004 edition received a total of 204 submissions, out of which 25 papers were selected by the Program Committee as full papers (12% acceptance). Additionally, 60 papers describing ongoing research results were included, as either short papers or posters. The selected papers cover a wide spectrum of topics, including Web development processes, design methods, Web usability, security and performance, Web metrics, personalized and adaptive Web applications, the Semantic Web, and more.

ICWE 2004 attracted people from five continents, with a wide and uniform geographical distribution of the papers' authors. ICWE 2004 also hosted for the first time a tool demonstration track, and featured a two-day tutorial and workshop program, consisting of five tutorials and four workshops. Workshops and tutorials gave to the conference attendees the opportunity to enjoy a more informal forum for discussing the newest Web engineering topics, from Web quality, to the development of secure Web applications, to MDA applied to the construction of Web applications. Links to the workshops and tutorials can be found at the conference Web site: www.icwe2004.org

We wish to express our gratitude to all the individuals and institutions who made this conference possible. We are very grateful to Lutz Heuser, Gerti Kappel and Roel Wieringa for presenting their keynotes at the conference. We would like to acknowledge all workshop organizers and tutorial presenters and the local organizing committee. Our thank goes also to the workshop and tutorial co-chairs

as well as to the demo and poster chair for their engagement. In particular, Maristella Matera did an excellent job managing the workshops organization. Our special thanks go to the program committee members and additional referees for the very professional work done during the review process. The Online Conference System (OCS) was used during the review process for bidding and gathering submitted papers and reviews. We would like to thank the technical support team (Martin Karusseit and Markus Bajohr) at the University of Dortmund, which provided invaluable assistance on the use of the Online Conference Service of METAFrame Technologies. We are also grateful to Springer-Verlag for their helpful collaboration and quick publication schedule. Our deep recognition is due to Florian Hacklinger for his contribution in setting up and updating the conference Web site.

Last but not least, we want to thank the more than 450 authors from over 35 countries who contributed to this book and the conference. We thank them for their submissions and presentations and for providing us with the material in time. We count on them for the next conference edition, ICWE 2005, to be held in Sydney, Australia.

Munich and Milan, May 2004

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Web Quality

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DIWE 2004

Device Independent Web Engineering

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Developing Secure Web-Based Applications with UML: Methods and Tools

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MDA Standards for Ontology Development

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Using MDA for Designing and Implementing Web-Based Applications

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**Providing Interoperability of Information Systems Through
Semantically Enriched Web Services**

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University of Ankara, Turkey

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