

Model-Driven Web Engineering (MDWE 2007)

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<http://wise.vub.ac.be/mdwe2007/>

Foreword

Web Engineering is a specific domain in which Model-Driven Software Development (MDS) can be successfully applied. Existing model-based Web engineering approaches already provide well-known methods and tools for the design and development of most kinds of Web applications. They address different concerns using separate models (content, navigation, presentation, business processes, etc.) and are supported by model compilers that produce most of the application's Web pages and logic based on these models. However, most of these Web Engineering proposals do not fully exploit all the potential benefits of MDS, such as complete platform independence, explicit and independent representation of the different aspects that intervene in the development of a Web application, or the ability to exchange models between the different tools.

Recently, the MDA initiative has introduced a new approach for organizing the design of an application into different models such that portability, interoperability and reusability can be obtained through architectural separation of concerns. MDA covers a wide spectrum of topics and issues like MOF-based metamodels, UML profiles, model transformations, modeling languages and tools. Another MDS approach, Software Factories, provides concepts and resources for the model-based design of complex applications. At the same time, we see a trend towards the incorporation of emerging technologies like the Semantic Web and (Semantic) Web Rule Languages, which aim at fostering application interoperability. However, the effective integration of all these techniques with the already existing model-based Web Engineering approaches is still unresolved.

This workshop, which builds on the success of the preceding 2005 and 2006 Workshops (held, respectively, in Sydney jointly with ICWE 2005, and in Menlo Park jointly with ICWE 2006) aims at providing a discussion forum where researchers and practitioners on these topics can meet, disseminate and exchange ideas and problems, identify some of the key issues related to the model-based and model-driven development of Web applications, and explore together possible solutions and future work.

The main goal of the MDWE 2007 workshop is to offer a forum to exchange experiences and ideas related to Model-Driven Software Development in the Web Engineering field. Accordingly, we invited submissions from both academia and industry about the wide list of topics of interest stated in the Call for Papers.

In addition to the Workshop Organizers (Geert-Jan Houben, Nora Koch and Antonio Vallecillo), a selected program committee was set up to help reviewing and selecting the papers to be presented at the workshop. Members of the MDWE2007 Program Committee were Luciano Baresi, Jean Bézivin, Olga De Troyer, Piero Fraternali, Martin Gaedke, Athula Ginige, Jaime Gómez, Gerti Kappel, Esperanza Marcos, Maristella Matera, Pierre-Alain Muller, Alfonso Pierantonio, Vicente Pelechano, Gustavo Rossi, and Hans-Albrecht Schmidt.

In response to the call for papers, a total of 10 submissions were received. Each submitted paper was formally peer reviewed by at least two referees, and six papers were finally accepted for presentation at the Workshop and publication in the proceedings.

The selected papers focus on the following topics, which constitute the basis for the discussions of the three workshop sessions.

Freudentstein et al. discuss in their paper the use of domain specific languages and a model-driven approach based on the construction of models of Web application and the interpretation of these workflow-based models.

Kraus et al. discuss in their paper both an interpretational and a translational approach. For static aspects of Web applications the authors propose the use of transformation rules; for workflows of Web application instead the use of a virtual machine that provides a seamless bridge between models and code.

The paper by Wimmer et al. presents an approach for the integration of Web modeling languages using model transformation rules. The authors selected three Web modeling methods and the model transformation language ATL for the proof of concept.

In the paper of Pau Giner et al. the focus is on model-to-model transformations also specified in ATL and which are applied to BPMN resulting in Web applications written in BPEL.

De Castro et al. propose the use of a graph transformation language for the transformation of platform independent models. The authors focus on service-oriented Web applications.

The final paper, by Toffetti, focuses on modeling collaborative Web applications. He proposes the extension of a Web modeling language to support enriched interactions following the new RIA paradigm.

An additional non-reviewed paper reports on the recent MDWEnet project. MDWEnet is an initiative in the scope of MDWE and that counts on the participation of many of the people and groups from the Universities of Alicante, Málaga, Linz, Munich, Vienna and the Politecnico di Milano related to the MDWE workshop from its origins.

Further information about the presented papers, together with the Call for Papers, and all the information relevant to the workshop, is available at the web site of the event, whose URL is <http://wise.vub.ac.be/mdwe2007/>. This web site contains the final workshop proceedings, and the latest information about the activities performed during the workshop.

Acknowledgements. We would like to thank the ICWE 2007 organization for giving us the opportunity to organize this Workshop, especially to the General Chair, Piero Fraternali, and the Workshops Chair, Emilia Mendes. They were always very helpful and supportive. Many thanks to all those that submitted papers, and particularly to the contributing authors. Our gratitude also goes to the reviewers and the members of the Program Committee, for their timely and accurate reviews and for their help in choosing and improving the selected papers. Finally we would like to specially thank Marco Brambilla, the ICWE 2007 Local Organization Chair, for his continuous assistance and support with all local arrangements, with the electronic submission system, and with the production of the workshops proceedings.

Como, Italy, July 2007
Geert-Jan Houben, Nora Koch, Antonio Vallecillo
MDWE 2007 Organizers

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