Workshop on Model-Driven Web Engineering (MDWE 2006)

In conjunction with <u>ICWE 2006</u>
Palo Alto, California, July 11, 2006
(http://www.lcc.uma.es/~av/mdwe2006/)

Call for Papers

Model-Driven Software Development (MDSD) is becoming a widely accepted approach for developing complex distributed applications. MDSD advocates the use of models as the key artefacts in all phases of development, from system specification and analysis, to design and testing. Each model usually addresses one concern, independently from the rest of the issues involved in the construction of the system. Thus, the basic functionality of the system can be separated from its final implementation; the business logic can be separated from the underlying platform technology, etc. The transformations between models enable the automated implementation of a system from the different models defined for it.

Web Engineering is a specific domain in which MDSD can be successfully applied. Most of the technology is here to implement systems that exploit the Web paradigm, but the effective design of Web applications is still a concern. The complexity and requirements on Web applications are constantly growing, while the supporting technologies and platforms rapidly evolve. Existing model-based Web engineering approaches already provide excellent methodologies and tools for the design and development of most kinds of Web applications. They address different concerns using separate models (navigation, presentation, data, etc.), and count with model compilers that produce most of the application's Web pages and logic based on these models. However, these proposals also present some limitations, especially when it comes to modelling further concerns, such as architectural styles or distribution. Furthermore, current Web applications need to interoperate with other external systems, which require their integration with third party Web-services, portals, portlets, and also with legacy systems. Finally, most of these Web Engineering proposals do not fully exploit all the potential benefits of MDSD, such as complete platform independence, model transformation and merging, or metamodelling.

Recently, the MDA initiative has introduced a new approach for organizing the design of an application into (yet another set of) separate models so portability, interoperability and reusability can be obtained through architectural separation of concerns. MDA covers a wide spectrum of topics and issues (MOF-based metamodels, UML profiles, model transformations, modelling languages and tools, etc.) that need to be yet solved. On the other camp, Software Factories provide effective concepts and resources for the model-based design of complex applications, and it is our belief that they can be successfully used for Web Engineering. At the same time, and specifically in the more data-intensive Web applications (usually called Web-based Information Systems) we see a trend towards the incorporation of emerging technologies like the Semantic Web, (Semantic) Web Services, and (Semantic) Web Rule Languages, which aim at fostering application interoperability. Semantic Web languages (like RDF(S) or OWL) facilitate the description of models for such. However, the integration of all these models with the rest of the model-based Web Engineering approaches is still unresolved.

This workshop 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 works.

Topics of interest

The main goal of this workshop is to offer a forum to exchange experiences and ideas related to the use of models for Web applications design, development, and maintenance, and tools to support these processes. Accordingly, we invite submissions from both academia and industry about any of the following topics of interest:

- Conceptual and data models for Web systems
- Model Driven Architecture (MDA) and other model-driven approaches (e.g., Software Factories) in the context of Web application development
- Potential problems or limitations of MDSD in the area of Web systems
- UML profiles for Web applications
- Web systems software architecture modelling
- Model-based Web design methods
- Model-driven code generation for Web applications

- Model and metamodel transformations in the context of Web Applications
- Interoperability models for Web applications and resources (Web pages, Web services, portlets, distributed components, etc.)
- Tools for model-driven Web development
- Model-driven quality analysis of Web applications
- Maintenance, evolution and management of model-based Web systems
- Model-based approaches to design distributions aspects in Web systems
- Use of Semantic Web-based approaches in model-based Web design
- Ontologies in Web application design.

Submission Format and Procedure

To enable lively and productive discussions, attendance will be limited to 25 participants and submission of a paper or a position statement is required. All submissions will be formally reviewed by at least two reviewers.

Submissions should be 4 to 10 pages long in the ACM Proceedings format (http://www.acm.org/sigs/pubs/proceed/template.html) and include the authors' names, affiliations and contact details. They should be submitted by e-mail in PDF format before April 15, 2006, to the Workshop Chairs (mdwe2006@lcc.uma.es).

Authors will be notified of acceptance by May 13, 2006. At least one author of every accepted paper should register for the conference and participate in the workshop. The workshop proceedings will be formally published with ISBN, and will be made available on-line to the participants at least one week before the workshop. In addition, we are in cooperation with IEE Software considering to publish extended versions of selected papers of the workshop.

Important Dates

Paper submission: April 15, 2006.
Notification of acceptance: May 13, 2006.
Final papers due: June 10, 2005.
Workshop date: July 11, 2006.

Workshop Organizers

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