

## Preface

<http://wise.vub.ac.be/aewse2007/>

Current Web applications are evolutionary in their nature: in several scenarios, such class of systems requires (sometimes frequent) changes of content, functionality, semantics, structure, navigation, presentation, or implementation. Application requirements indeed typically change over time due to new knowledge, practices, processes, and management approaches in the application domains. In addition, recent advances in communication and network technologies provide users the ability to access content with different types of (mobile) devices, at any time, from anywhere, and with any media. Examples of such applications are found in domains as eHealth, eGovernment, eLearning, and Business to Business interactions such as open marketplaces. In all these domains, the Web enables to do business or professional activities on the Internet.

The described needs demand for the development of *adaptive* Web systems, able to support more effective and efficient interactions in all those situations where the contents and services offered by the Web application are (rapidly) changing and/or strongly depend on the current environmental situation, users' (dis)abilities, and/or the actual purpose of the application.

Also, due to changes in the application domains Web applications have been developed for, the structure, navigation and presentation of Web applications, the content and its semantics are typically changing over time, i.e. they *evolve* due to a variety of reasons, such as:

- Changes to the design of the application (e.g. to correct design flaws, or to support new requirements);
- Adaptation to new technologies;
- Changes to maintain consistency with (changing) external sources (e.g. a referenced ontology, externally linked pages);
- Updates/changes (performed by the user) of for example content, structure, navigation, or presentation (e.g. relevant with the rise of blogs, wikis, etc.);
- Maintenance.

Properly dealing with evolution will clearly influence the quality of a Web site (e.g. through correcting links that are broken due to changes, re-connecting pages that have become unreachable, guaranteeing consistency, etc). Mechanisms to automatically deal with evolution and its consequences will thus become indispensable in large-scale Web applications where manual management of changes is infeasible and their impact is unpredictable. For example, when ontologies are used to describe or annotate content on Web sites, their evolution must be managed to avoid any inconsistency between the ontologies and the Web sites built atop.

Although highly relevant due to the intrinsic evolutionary nature of Web applications, the problem of dealing with adaptation and evolution of Web applications (during design, implementation, and deployment) and its impact is highly under-estimated. So far few works dealt with adaptation and evolution in Web

Engineering research. AEWSE therefore aims at promoting the discussion on the above issues, bringing together researchers and practitioners with different research interests and belonging to different communities.

As last year's edition, AEWSE'07 was held in conjunction with the International Conference on Web Engineering (ICWE), this year held in Como, Italy. AEWSE'07 was the workshop which received the highest number of submissions, ensuring a fine selection of high quality papers. Each paper was peer-reviewed by 3 reviewers. 5 papers were selected for long presentation, and 5 for short presentation. The addressed topics mainly focused on:

- Model-driven engineering approaches for adaptive and context-aware web applications (see Garrigós et al., Daniel et al., and Reina-Quintero et al.).
- The benefit and application of semantic Web and Web 2.0 tools and technologies (see Preciado et al, Barla et al.) .
- Web User interface migration and evolution (see Bandelloni et al., Preciado et al).
- The application of software engineering techniques, such as aspect orientation (see Bebjak et al., Mondéjar et al.) and object variance/versioning (see Grossniklaus et al.), for supporting adaptivity and evolution.

Starting from these contributions and the invited talk by Prof. Barbara Pernici (Politecnico di Milano), the workshop provided an excellent platform to facilitate the discussion of key issues, approaches, open problems, innovative applications, and trends in the methodologies and technologies to support adaptive access to and/or evolution in (the design of) Web applications.

We would like to thank all the people who helped make AEWSE'07 a success. First, all authors for their contribution and participation to the workshop. Second, our Program Committee, which ensured high quality reviews and feedback to the authors. The Program Committee for AEWSE'07 consisted of:

- Jaime Gomez, University of Alicante, Spain
- Nora Koch, Ludwig-Maximilian University München, Germany
- Gustavo Rossi, Universidad Nacional de La Plata, Argentina
- Schahram Dustdar, Technical University of Vienna, Austria
- Peter Plessers, Vrije Universiteit Brussel, Belgium
- Jeen Broekstra, Technische Universiteit Eindhoven, The Netherlands
- Moira Norrie, ETH Zurich, Switzerland

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