3rd International Workshop on Adaptation and Evolution in Web Systems Engineering (AEWSE’08)

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Preface

In current and future Web applications, adaptation and evolution are important development issues. Adaptation is not only important for the purpose of personalization or accessibility but also for being able to adapt to the many different contexts in which a Web application may be used and to the varying types of devices (such as mobile devices) used to access the application in multi-channel deployments. Such new needs demand for the design of adaptive Web systems, able to support more effective and efficient content delivery techniques, services, and interactions in all those situations.

But it is important to note that adaptation (or change) is not limited to the design of Web applications; it is rather a concern that spans the whole life cycle of an application, as Web applications are typically highly evolutionary in their nature. They frequently require changes on content, functionality, semantics, structure, navigation, presentation or implementation. Web applications as a whole, and their services and content are thus typically highly volatile and evolve over time. Reasons for evolution include:

- Supporting new requirements (e.g., deriving from new knowledge, practices, processes, management approaches, or technologies);
- Maintaining an application’s hyperlink/navigation structure (e.g., repairing incorrect linking and connecting unreachable pages);
- Guaranteeing consistency with changing external sources (e.g., a referenced ontology or externally linked contents, whose change may have an impact on the validity of the Web site);
- Updating/changing (by the user) content, structure, navigation, presentation (e.g. relevant with the rise of blogs, wiki’s, etc.);
- Integrating new or alternative (sub-) systems.

Properly dealing with evolution clearly influences the quality of a Web system. Provisions to automatically deal with evolution and its consequences will become indispensable especially in large-scale Web applications, where manual management of changes and their impact is infeasible. Although highly relevant due to the intrinsic nature of Web applications, the problem of dealing with adaptation and evolution of Web applications (both during requirements analysis, design, implementation and deployment) and its impact is highly under-estimated.

In line with the two previous editions of AEWSE, this year’s workshop edition gathers researchers and practitioners concerned with adaptation and evolution in Web applications and presents the following high-quality contributions to shed some light on the field.

In Axon – An Adaptive Collaborative Web Portal, by Solomon Berhe, Steven Demurjian, Ren Haiying, Mahitha Devineni, Sushil Vegad and Krishna Polleini, authors describe their approach to adaptability at different levels of abstraction in the development of collaborative Web portals.

In Using Collective Intelligence for Adaptive Navigation in Web Portals, by Andreas Nauerz, Stefan Pietschmann and René Pietzsch, authors describe their approach of mining and utilizing user’s tagging behavior in order to adaptively build the navigation structure of a Web portal to better tailor it to the particular user.

In An Adaptive Push/Pull Algorithm for AJAX Applications, by Engin Bozdag and Arie van Deursen, authors present an adaptive algorithm to facilitate real-time data delivery in modern Web applications, uniting existing static approaches to reap the benefits of both.

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AEWSE’08 Organizers
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