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Linking of User Profiles and Applications in the Social Semantic Web (LUPAS)

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Preface

Nowadays, numerous Web applications rely on implicitly or explicitly collected data on their users and their behavior in order to provide adapted and personalized contents and services. As these applications become increasingly connected, a major challenge is to allow various applications to exchange, reuse, and integrate their user models, hence, to allow for user modeling and personalization across application boundaries. Consequently, we have to deal with syntactic and semantic heterogeneity of these models in which the traditional closed-corpus paradigm does not hold anymore. A great body of Semantic Web research on the use of well-defined standards, vocabularies, and ontologies is currently being adopted to provide extensibility, flexibility, interoperability, and reusability. On the one hand, the ability of exchanging, reusing, and integrating the user models allows applications to enhance and broaden their user models with additional data. On the other hand, it helps users to get the content and services that suit their needs and situations and to syndicate these services in so-called mashups. This type of open-world user modeling poses several challenges to the Semantic Web community:

- How can Semantic Web technology be employed to cope with semantic and syntactic heterogeneity in user modeling?
- How can personalization and user modeling techniques be beneficial for the Semantic Web?

There are a number of reasons why the topic is interesting and relevant to discuss now. There is a large community that works on user modeling and personalization and that does so in relation to the Semantic Web, especially when it comes to personalization in the global, open environment where semantic interoperability is a major challenge. This community has been involved in the top conferences in the user modeling and personalization field, like UM, AH and now UMAP¹ (and often had special workshops at such venues on this topic). The trend in this work clearly shows how semantic interoperability between Social Web applications is becoming increasingly important and semantic technology heavily used, and the exchange of experiences for common benefit is therefore urgent (and best served at a common venue). Mashups, such as the $iGoogle^2$ site, gain also in popularity. Where many applications provide RSS feeds or proprietary APIs, which can only be integrated to a limited extent, the existence of tools such as Yahoo Pipes³ and DERI Pipes⁴ show the need for better integration. Semantic Web and Social Web provide means to facilitate integration, for example, with the principles of Linked Data⁵ and Microformats⁶, vocabulary

¹ http://www.hawaii.edu/UMAP2010/

² http://www.google.com/ig

³ http://pipes.yahoo.com/pipes/

⁴ http://pipes.deri.org/

⁵ http://linkeddata.org/

⁶ http://microformats.org/

standards such as FOAF⁷ and SIOC⁸, or standardized APIs such as OpenSocial⁹, OpenID¹⁰, and Semantic Web Services. The role of user profiles and personalization in Mashup applications become increasingly important. Here the two fields—(Social) Semantic Web and User Modeling—again meet and become more intertwined. Applying the user modeling research experience with the more recent semantic technology advances can bring a lot of benefits.

Linking of user profiles and applications in the Social Semantic Web is relevant now, and researchers in the contributing fields should meet and work at ESWC to warrant an optimal research agenda that maximizes the joint results, through an intensive exchange of experiences that result from the recent advances in those fields. The workshop on *Linking User Profiles and Applications in the Social Semantic Web* (LUPAS) brings together academic and industrial researchers and practitioners in the fields of Semantic Web, user modeling, and personalization in order to discuss theoretical and practical knowledge, open research issues, applications, and experiences for common benefit.

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Fabian Abel Eelco Herder Geert-Jan Houben Erwin Leonardi *LUPAS Organizing Committee, May 2010*

⁷ http://xmlns.com/foaf/spec/

⁸ http://sioc-project.org/

⁹ http://code.google.com/apis/opensocial/

¹⁰ http://openid.net/

Organization

LUPAS 2010 is co-located with the 7th Extended Semantic Web Conference 2010, Heraklion, Crete, Greece.

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