Web 3.0: Merging Semantic Web with Social Web (SW)^2

Preface

Web 2.0 introduced the remarkable phenomenon of user-generated content. Large numbers of most popular sites on the Web are currently mainstream Web 2.0 applications with rich user-generated content. Wikipedia, YouTube, Flickr, and del.icio.us are classical examples of those sites.

Web 2.0 allows users to do more than just retrieving information, since it is based upon architecture of participation that reduces the barriers of online collaboration and encourages the generation and distribution of content. For this reason it is also called as Social Web. Users are encouraged to provide data and metadata in simple ways such as tagging, ratings, comments, and blogging. As a result, Web 2.0 applications are collecting large amount of data. However, this data is poorly structured, highly subjective and often buried in a low-quality content. The more data, the more challenging it becomes for users to find relevant information.

Social web applications prefer not to deal with this problem and simply present this content to users as it is, in a form of fuzzy aggregations, such as scattered tag clouds and folksonomies that become very confusing and ineffective for users.

Adding formal semantics to tags can be an important step in the direction of a better navigation and searching and should help to transform tag clouds and folksonomies into valuable aggregations representing a sort of "collective knowledge". There is the opportunity to exploit such Web 2.0 collective knowledge (together with the individual user knowledge) in order to achieve the vision of Web 3.0. Web 3.0, also called the Intelligent Web, refers to the provision of a more productive, personalized and intuitive environment through the integration of Semantic Web and in general Artificial Intelligence technologies emphasizing the information understanding. Semantics seems a necessary part of the next generation of the Web. The information has to be structured in such a way that machines can read and understand it as much as humans can, without ambiguity.

Collective knowledge can also represent a useful source for adaptive applications, since tags (and folksonomies) represent a novel aspect to be considered in any collaborative scenario.

The main goal of the workshop is to provide a forum where current researchers and practitioners from different fields can meet and discuss the state of the art and latest ideas and issues in the use of collective knowledge, user modelling through semantic social web. The workshop focuses on trying to find a shared characterization of Web 3.0, highlighting the advantages of "semantic social web" over semantic or social web considered as stand-alone. It is also interest of the workshop to investigate the creation modalities of "structured" collective knowledge starting from users' contributions, and in particular, the opportunities and possibilities of the use of semantic tagging and annotation for the social web. The possible relationships between knowledge structures as folksonomies, controlled vocabularies and ontologies is also a core topic of the workshop. Finally, other workshop topics concern new modalities of information retrieval, personalization and recommender systems in the Web 3.0 scenario.

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