Social Semantic Web Support for Software Development

The aim of this Special Issue is to bring an overview of success cases as well as tools and methods to enable the use of Social Semantic Web in software development teams. The social semantic web is a new environment in which both organisations and software professionals could foster expertise sharing and enable software products and services cocreation. All included papers are briefly described below.

The first article, ‘Exploitation of social semantic technology for software development team configuration’, by Valencia-García, García-Sánchez, Castellanos-Nieves, Fernández-Breis and Toval proposes a knowledge-based system for assisting the managing software development projects, and more in depth staffing issues based on DOAP based profiles, ResumeRDF and FOAF.

‘Semantic Wiki for Quality Management in Software Development Projects’ by Roberto García, Rosa Gil, Juan Manuel Gimeno, Toni Granollers, Juan Miguel López, Marta Oliva and Afra Pascual adapt Semantic Wikis to Quality Management Systems managing all the documents created during project development.

Ricardo Martinho, Joao Varajao and Dulce Domingos’ paper ‘Using the semantic web to define a language for modelling controlled flexibility in software processes’ proposes the use of the semantic web and associated ontology-based technologies to develop and evolve controlled flexibility Domain Specific Language for software processes.

‘Usage of social and semantic web technologies to design a searching architecture for software requirements artifacts’ by Chicaiza, Piedra, López, Tovar and Bonastre propose an architecture designed for providing enhanced search of resources by means of social annotations and semantic technologies.

In the paper ‘AQUA: Hybrid Architecture for Question Answering Services’ María Vargas-Vera and Miltiadis D. Lytras propose AQUA, a tool that combines Natural Language processing, Ontologies, Logic, and Information Retrieval technologies in a uniform framework.

‘Knowledge repository to improve agile development processes learning’ by Antonio de Amescua, Leonardo Bermón, Javier García and María-Isabel Sánchez-Segura provide a set of guidelines to develop a knowledge based process asset libraries using a Wiki to store software engineering best practices.

Finally ‘Shaping human capital in software development teams. The case of mentoring enabled by semantics’ by Pedro Soto-Acosta, Cristina Casado-Lumbreras and Fernando Cabezas-Isla integrates semantic technologies in the process of mentoring pair matching in the context of software development projects.

The Editors would like to take this opportunity to thank the authors for their papers and the reviewers for their comments and suggestions. Finally, we would like to thank Paul Rowley for his endless support during the editorial process.

The collection of articles in this Special Issue has shown the importance of social semantic web for software development. We hope that readers find the papers of this volume useful and innovative.
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