

Foreword

First International Workshop on the Web and Requirements Engineering

Irene Garrigós, Jose-Norberto Mazón
Dept. of Software and Computing Systems
University of Alicante, Spain
{igarrigos, jnmazon}@dlsi.ua.es

Maria José Escalona
Dept. of Computer Languages and Systems
University of Seville, Spain
mjescalona@us.es

Nora Koch
Programming and Software Engineering Dept.
University of Munich, Germany
kochen@pst.ifi.lmu.de

John Mylopoulos
Information Engineering and Computer Science Dept.
University of Trento, Italy
jm@disi.unitn.it

A. Introduction

The International Workshop on the Web and Requirements Engineering (WeRE) was held in conjunction with the 18th International IEEE Requirements Engineering Conference (RE'10) in Sydney (Australia) on September 28th 2010. WeRE intends to be an international forum for exchanging ideas on both using Web technologies as a platform in the requirements engineering field, and applying requirements engineering in the development and use of websites. Papers focused on new domains and new experiences with the connection between requirements engineering and the Web were presented in WeRE.

B. The Web and Requirements Engineering

In the last decade, the number and complexity of web-based software systems and the amount of information they offer has been continuously growing. In the context of Software Engineering, design methods and methodologies were introduced to provide mechanisms to develop these complex Web applications and Rich Internet Applications (RIAs) in a systematic way. Most of these methodologies focus on implementation and neglect other tasks such as requirement analysis and quality management. However, in the development of traditional (non-Web) applications both practitioners and process experts regard requirements engineering as a phase of crucial relevance in the development process. It is well-known that the most common and time-consuming errors as well as the most expensive ones to repair, are errors that arise from inadequate engineering of requirements. Therefore, although the relevance of Requirements Engineering is well known these techniques should be studied more widely in the Web Engineering community due to the complexity of Web Engineering problems. This complexity is caused by the size and changing nature of the community of stakeholders

involved, as well as the diversity of requirements, including navigation requirements, self-adaptivity requirements, as well as usability and the user experience.

On the other hand, requirements engineering is a complex activity whose success depends on stakeholder participation. Therefore, the techniques proposed in the Requirements Engineering field need a more participative environment to support effective collaboration among stakeholders. In this context, the Web (especially Web 2.0 applications), provide a convenient platform that supports active participation by stakeholders in the requirements engineering process.

C. Program of the workshop

In response of the call for papers 10 high quality submissions were received from 12 different countries: Argentina, Belgium, Canada, Chile, China, Germany, Netherlands, Portugal, Spain, Thailand, United Kingdom and USA. Each paper was carefully reviewed by at least three members of the program committee. The result of the reviewing process included 6 accepted papers, 4 long and 2 short papers for presentation at the workshop and inclusion in these proceedings. In addition, we had an interesting keynote entitled "Web Engineering as Design Science" given by Prof. Roel Wieringa (University of Twente, The Netherlands).

Specifically, the program of the workshop was as follows:

Keynote: *Roel Wieringa*. Web Engineering as Design Science.

Abstract: The Web is a publicly accessible infrastructure for communication and coordination of human, organizational and artificial actors. Web engineering is the activity of creating value-adding networks over the web, creating a product or service valuable for some class of actors. In this talk we concentrate on the engineering of networks of

economic actors, such as various forms of virtual organizations or networked outsourcing relationships. In particular, we look at requirements engineering (RE) for these networks. Engineering such web-enabled cooperations calls for new methods of requirements engineering, that are cross-organizational, and take into account possibly conflicting business goals, a fair distribution of costs and benefits across the network, and a rational management of the risks of allowing partner companies access to one's information assets. This poses new challenges for RE researchers, who want to deliver tools and techniques for requirements engineering in case like this. In this talk we discuss how to manage the challenges of this new kind of RE research using a design science approach. I provide a general framework for design science and discuss three example RE research projects in the area of web engineering, each time exhibiting their methodological structure and discussing their methodological challenges.

Paper 1: *Bertrand Verlaine, Yves Dubois, Ivan J. Jureta, Stéphane Faulkner.* Towards Automated Alignment of Web Services to Requirements.

Paper 2: *Sheridan Jeary, Keith Phalp, Lai Xu, Paul de Vrieze.* A Requirements Framework for Novice Web Developers

Paper 3: *Davide Bolchini.* Exploring the Tension between User's and Main Stakeholder's Goals: The Role of Client Scenarios

Paper 4: *Esteban Robles Luna, Irene Garrigos, Gustavo Rossi.* Capturing and Validating Personalization Requirements in Web Applications

Paper 5: *Sotirios Liaskos, Marina Daoud Jungblut, John Mylopoulos.* From Goal Models to Three-layer Web-based Systems: an Exploratory Study.

Paper 6: *Nadine Blim, Nick Gehrke, Martina Peris, Markus Nüttgens, Torben Wolf.* From Conventional SME Networks to CoINs - Requirements Centered Transition Model and Case Study

Finally, we had an interesting last session where we further discussed several interesting topics that were raised during the presentations.

D. Program Committee

- Silvia Abrahao, Universidad Politecnica de Valencia, Spain
- Davide Bolchini, Indiana University, USA
- Marco Brambilla, Politecnico di Milano, Italy
- Travis Breaux, Dept. of Computer Science, North Carolina State University, USA
- Jordi Cabot, École des Mines de Nantes, France

- Sven Casteleyn, Vrije Universiteit Brussel, Belgium
- Jean Louis Cavarero, University of Nice, France
- Florian Daniel, University of Trento, Italy
- Xavier Franch, Universitat Politècnica de Catalunya
- Piero Fraternali, Politecnico di Milano, Italy
- Martin Gaedke, Chemnitz University of Technology, Germany
- Athula Ginige, University of Western Sydney, Australia
- Paolo Giorgini, University of Trento, Italy
- Emilio Insfran, Universidad Politecnica de Valencia, Spain
- Ivan Jureta, University of Namur, Belgium
- Manuel Mejías, University of Sevilla, Spain
- María Ángeles Moraga, University of Castilla La Mancha, Spain
- Ana Moreira, Universidade Nova de Lisboa, Portugal
- Óscar Pastor, Universitat Politècnica de Valencia, Spain
- Vicente Pelechano, Universitat Politècnica de Valencia, Spain
- Gustavo Rossi, University of La Plata, Argentina
- Norbert Seyff, City University London, UK
- Ambrosio Toval, University of Murcia, Spain
- Roel Wieringa, University of Twente, The Netherlands
- Marco Winckler, Université Toulouse, France
- Eric Yu, University of Toronto, Canada
- Konstantinos Zachos, City University London, UK
- Jose Jacobo Zubcoff, University of Alicante, Spain

E. Acknowledgments

We would like to express our gratitude to the authors, the WeRE Program Committee, and the RE'10 Organizing Committee for all their support. Special thanks to Prof. Roel Wieringa for accepting our invitation to give the keynote. We would also like to thank Miguel Ángel Varó for taking charge of the website of this workshop.

Finally, we would like to gratefully acknowledge the support of our sponsors Sadiel (<http://www.sadiel.es>) and Everis (<http://www.everis.com>), as well as the financial support of the MANTRA research project (GRE09-17) from the University of Alicante (Spain).

F. More information

For more information, please visit the website of WeRE 2010: <http://gplsi.dlsi.ua.es/congresos/were10>