

EESSMod 2011

First International Workshop on Experiences and Empirical Studies in Software Modelling

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Preface

Most software development projects apply modelling in some stages of development and to various degrees in order to take advantage of the many and varied benefits of it. Modelling is, for example, applied for facilitating communication by hiding technical details, analysing a system from different perspectives, specifying its structure and behaviour in an understandable way, or even for enabling simulations and generating test cases in a mode-driven engineering approach. Thus, the evaluation of modelling techniques, languages and tools is needed in order to assess their advantages and disadvantages, to ensure their applicability to different contexts, their ease of use, and other issues such as required skills and costs; either isolated or in comparison with other methods.

The need to reflect and advance on empirical methods and techniques that help improving the adoption of software modelling in industry led us to organize the first edition of the International Workshop on Experiences and Empirical Studies in Software Modelling (EESSMod 2011) that was held in conjunction with the ACM/IEEE 14th International Conference on Model Driven Engineering Languages and Systems (MoDELS 2011). The main purpose of the workshop was to bring together professionals

and researchers interested in software modelling to discuss in which way software modelling techniques may be evaluated, share experiences of performing such evaluations and discuss ideas for further research in this area. The workshop accepted both experience reports of applying software modelling in industry and research papers that describe more rigorous empirical studies performed in industry or academia.

These proceedings collect the papers presented at the Workshop. All the submitted papers were peer-reviewed by three independent reviewers. The accepted papers (5 regular papers) discuss theoretical and practical issues related to experimentation in software modelling or the use of modelling techniques in industry.

In particular, the paper by *Fernández-Sáez et al.* presents a controlled experiment for analysing the influence of the level of detail of UML models on the maintenance of the corresponding source code. The paper by *Zugal et al.* proposes a framework for assessing the impact of hierarchy on model understandability and discusses the implications for experiments investigating the impact of modularization on conceptual models. The paper by *Carver et al.* analyses the frequency with which empirical evaluation has been reported in the software modelling community. The results of an analysis of papers published in the MoDELS conference (from 2006-2010) showed that, of 266 papers, 195 of them (73%) performed no empirical evaluation. The paper by *Leotta et al.* presents an experience report on the use of a model-driven method for developing VECM-based systems in the context of two Italian companies. Finally, the paper by *Cadavid et al.* proposes a process for analysing meta-models expressed using MOF and OCL and reports on the pre-processing of 52 meta-models in order to get them ready for automatic empirical analysis.

We would like to thank the authors for submitting their papers to the Workshop. We are also grateful to the members of the Program Committee for their efforts in the reviewing process, and to the MoDELS2011 organizers for their support and assistance during the workshop organization. More details on the Workshop are available at <http://www.eesmod.org>.

Leiden, Ciudad Real, Valencia, Oslo,
Gothenburg
28 September 2011

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