Preface

The fifth international workshop on Software Quality and Maintainability (SQM 2011) offered a forum to researchers to present their original work and to practitioners to relate their experiences on issues pertaining to software quality and maintainability. Moreover, the theme of the workshop invited discussion on how to bridge the gap between end user expectations, business requirements, vendor performance, and engineering constraints regarding software quality.

SQM 2011 was held as a satellite event of the 15th European Conference on Software Maintenance and Reengineering (CSMR 2011). In 2010, the fourth SQM workshop was held as a satellite event of CSMR 2010.

In this volume, you will find the articles accepted for presentation at the workshop. Out of 8 full-paper submissions, 6 papers were selected. The accepted papers will be published at CEUR-WS\(^1\).

Theme & Goals

Software is playing a crucial role in modern societies. Not only do people rely on it for their daily operations or business, but for their lives as well. For this reason, correct and consistent behaviour of software systems is a fundamental part of end user expectations. Additionally, businesses require cost-effective production, maintenance, and operation of their systems. Thus, the demand for good quality software is increasing and is setting it as a differentiator for the success or failure of a software product. In fact, high quality software is becoming not just a competitive advantage but a necessary factor for companies to be successful.

The main question that arises now is how quality is measured. What, where and when we assess and assure quality, are still open issues. Many views have been expressed about software quality attributes, including maintainability, evolvability, portability, robustness, reliability, usability, and efficiency. These have been formulated in standards such as ISO/IEC-9126 and CMMI. However, the debate about quality and maintainability between software producers, vendors and users is ongoing, while organizations need the ability to evaluate the software systems that they use or develop from multiple angles.

So, is “Software quality in the eye of the beholder”? This workshop session aims at feeding into this debate by establishing what the state of the practice and the way forward is.

Accepted papers

- **Automated Quality Defect Detection in Software Development Documents**, Andreas Dautovic, Reinhold Ploesch and Matthias Saft.
- **On the measurement of activity distribution in open source software communities**, Mathieu Goeminne and Tom Mens.
- **Using the Tropos Methodology to Increase the Quality of Software Design**, Andrea Capiluppi and Cornelia Boldyreff.

\(^1\)http://ceur-ws.org

Organization

Chairs
- Magiel Bruntink, Software Improvement Group, The Netherlands
- Kostas Kontogiannis, National Technical University of Athens, Greece
- Miguel Alexandre Ferreira (publicity chair), Software Improvement Group, The Netherlands

Program Committee
- Árpád Beszédes, University of Szeged, Hungary
- Andrea De Lucia, University of Salerno, Italy
- Florian Deissenboeck, Technische Universität München, Germany
- Massimiliano Di Penta, University of Sannio, Italy
- Juergen Ebert, University of Koblenz-Landau, Germany
- Slinger Jansen, Utrecht University, the Netherlands
- Rainer Koschke, University of Bremen, Germany
- Robert Lagerström, the Royal Institute of Technology, Sweden
- Radu Marinescu, Politehnica University of Timisoara, Romania
- Liam O’Brien, National ICT Australia Limited, Australia
- Ladan Tahvildari, University of Waterloo, Canada
- Arie van Deursen, Delft University of Technology, the Netherlands
- Jurgen Vinju, Centrum Wiskunde & Informatica, the Netherlands
- Joost Visser, Software Improvement Group, the Netherlands
- Carl Worms, Credit Suisse, Switzerland
- Hongyu Zhang, Tsinghua University, China
- Christos Tjortjis, University of Ioannina & University of Western Macedonia, Greece
- Alexander Chatzigeorgiou, University of Macedonia, Greece
- Jesus M. Gonzalez-Barahona, Universidad Rey Juan Carlos, Spain
- Rudolf Ferenc, University of Szeged, Hungary

Sub-reviewers
- Markus Buschle
- Péter Hegedüs
- Giuseppe Scanniello
- Gabriella Tóth

Sponsors

Software Improvement Group
Amsterdam, The Netherlands

Acknowledgements

We are grateful to all members of the Program Committee and to their sub-reviewers for helping to make SQM 2011 a success. Also we would like to thank the Software Improvement Group for sponsoring and hosting our website, and EasyChair.org for their invaluable conference organization tool.

January 2011,
Magiel Bruntink and Kostas Kontogiannis
Chairs SQM 2011