The 3rd Workshop on Continuous Requirements Engineering – CRE'17

February 27, 2017 Essen, Germany
In conjunction with REFSQ 2017.

Preface

During the last years, we had successful workshops on Continuous Requirements Engineering. They were organized in conjunction with the Working Conference on Requirements Engineering: Foundation for Software Quality. We started in Essen, in 2015, went to Gothenburg in 2016, and were back to Essen in 2017. We are very glad that REFSQ 2017 provided us the opportunity to organize the third version of the Continuous Requirements Engineering workshop.

Current engineering-based approaches are rooted in well elaborated systems models, enterprise architectures, ontologies, and information logistics representations. They provide transparency, reliability, and security in the whole lifecycle of the system. Currently such approaches are designed and mainly applied for large enterprises that have relatively long change cycles. In case such changes have to be performed more frequently, a much higher level of flexibility is required; and the systems engineering processes grow into continuous engineering that, in turn, requires continuous requirements engineering (CRE). CRE can only be successful if it combines rigid engineering principles with agility, emergence, and spontaneity to support sustainability and viability of the systems under development.

Also Smaller scale enterprises need new approaches, methods and tools to be capable to embrace the growing variety of opportunities and challenges offered by fast changing and hardly predictable environment. In this type of systems, CRE also can be a solution if integrated with management and design approaches applicable for smaller scale enterprises.

In the call for papers of the workshop it was mentioned, that the challenge is to support continuous requirements engineering approaches, methods, models, and tools for multi-scale fast changing enterprises and predictable and unpredictable configurations of enterprise networks.

It was asked for reports about new ideas and experience reports. Also welcomed were reports about continuous requirements engineering approaches that not yet have been applied to continuous engineering but have the potential for that. A cross-pollination of experiences in modeling and requirements management was assumed.

The selection of papers was based on the reviews of an international program committee that included the following scientists

- Robert Andrei Buchmann, Babes-Bolyai University of Cluj-Napoca, Rumania
- Neil Ernst, Carnegie Mellon University, United States of America
- Peter Forbrig, University of Rostock, Germany

Special thanks go to all our reviewers. They provided very helpful hints to the authors and delivered their reviews within a very short time period. From 9 submissions the PC accepted 7 papers. Two papers made it into the program with an updated shorter version. All papers together filled two sessions.

The first session consists of four presentations. The first paper is entitled "Analytics in Continuous Requirements Engineering". It was submitted by Marite Kirikova and Kaspars Purmalietis. They come to the conclusion that Requirements engineering for analytics in continuous requirements engineering can be regarded as meta-requirements engineering.

The second presentation by Rashidah Kasauli, Eric Knauss, Agneta Nilsson, and Sara Klug has the title: "Adding Value Every Sprint: a Case Study on Large-Scale Continuous Requirements Engineering". They recommend e.g. the practices in continuous requirements engineering of adding value every sprint, establishing a definition of done for each user story, and linking user stories to requirements and tests as beneficial for continuous delivery.

Anita Finke provides the third presentation with the title "Socialization Aspect in Requirements Engineering". The author discusses knowledge management approaches which can support requirement management process and improve knowledge availability.

The specifics of requirements engineering for mobile applications is discussed in the fourth paper. It is presented by Elza Stepanova and Marite Kirikova. It has the title "Continuous Requirements Engineering for Mobile Application Development".

The second session consists of three presentations. The first one is about involving a crowd of end users in continuous requirements engineering. It was submitted by Jonathan Seesink and Stijn Hoppenbrouwers and has the title "Using a Liquid Democracy Tool for End-user Involvement in Continuous RE". Their research confirms that online requirements gathering can contribute positively to the requirements engineering processes.

Christian Stary provides the second presentation with the title "Requirements Elicitation and Specification using the S-BPM Paradigm". It discusses the subject-oriented approach and comes to the conclusion that it overcomes deficiencies in application development due to incomplete specifications.

The final presentation is about the relation of continuous requirements engineering and continuous software engineering. It is provided by Peter Forbrig and has the title "Does Continuous Requirements Engineering need Continuous Software Engineering?". One of its conclusions is that none of both concepts makes sense without the other. It tries to initiate a discussions about a model of BizDevOps.

The accepted papers provide were excellent basis for the discussions in the workshop. Additionally, the CEUR publication gives scientists the opportunity to catch some interesting ideas and to contact authors for further discussions, even that they were not able to participate in the workshop in Essen.

Special thanks go to the authors for their excellent cooperation in preparing papers.

Many thanks go to the workshop organizers of REFSQ Eric Knauss and Angelo Susi. Both supported the organization of the workshop in an excellent way.

We hope that interesting discussions in the workshop will cause fruitful follow up activities.

Rostock, Riga, Lappeenranta, 10th February, 2017

Peter Forbrig, Marite Kirikova, and Ahmed Seffah