

Preface RE4SuSy: 7th International Workshop on Requirements Engineering for Sustainable Systems

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Abstract—The RE4SuSy workshop series has established a strong and growing research community around the different aspects of sustainability and how to support them in requirements engineering.

Since requirements define how and what a software will do, we maintain that requirements engineering is the key point in software engineering through which sustainability can be fostered. Thus, the RE4SuSy workshop series is concerned with research on techniques, tools, and processes for sustainability through requirements engineering.

Last year the workshop initiated an effort to start converging the RE for sustainability community to a common set of fundamentals. This edition of the RE4SuSy workshop will build on the the initial convergence effort, helping to clarify what characteristics a requirement should possess, or what constraints should it meet in order to be called a “sustainability requirement”.

RE4SuSy is an interactive workshop: the contributors and prospective participants will engage well before the workshop date through on-line collaborative writing, discussion, and peer feedback. The workshop aims to foster community growth by supporting new collaborations, holding preliminary case studies, discussions, and birds-of-a-feather group work.

Software is a main driver for change in business and society, in changing life styles as well as business practices. Since requirements are the starting point for defining software, requirements engineering is the key point in software engineering through which sustainability can be fostered.

This workshop aims to provide an interactive stage for researchers and practitioners to share and exchange their latest work, to collaboratively work on expanding the body of knowledge in RE for sustainable systems, and to jump start new collaborations through the live creation of teams that commit to work together on concrete topics and in-workshop case studies and experiments.

In addition, this year we will start on the work of consensus building around the key notions of RE for sustainability . Last year we initiated a discussion and arrived to a set of characteristics of a sustainability requirement. The focus of this year’s workshop will be to continue this discussion in order to integrate and converge to a common notion of sustainability requirement.

For the last few years, researchers have been exploring the notion of “sustainability requirements”, and how to support the elicitation, documentation, and conflict resolution of such requirements. Yet, there still is no common understanding as to *what makes a requirement into a “sustainability requirement”*.

Some, for instance, insist that only requirements that support environmental needs are “sustainability requirements”, others consider sustainability to be inclusive of social, individual, economic, and technical domains as well. So how then does a requirement become a “sustainability requirement”? A discussion towards addressing this question was initiated at the last year’s edition of the workshop, where a clear progress was made towards identification of some characteristics of sustainability requirements. The the key task of this edition of the workshop is to elicit a common ground amongst the workshop participants in answering this question.

The objective of the workshop is to establish a community of researchers and practitioners interested in collaborating on the topic of sustainability in requirements engineering. This community will expand and build on the work already initiated in the past editions of this workshop, such as the research agendas and the the Karlskrona Manifesto on Sustainability Design. The workshop also aims to establish a common ground on the key topics of RE for Sustainability. These objective shall be supported in the workshop through the following actions:

- Call for submission of key topics and definitions for Requirements Engineering in Sustainability (with the “sustainability requirement characteristics” provided as an example topic by the organisers of the workshop);
- Working sessions to discuss the submitted topics and apply the emerging ideas to a demonstrator case study;
- Provision of a platform for researchers and practitioners to present their current work and trigger discussion;
- Continued collaboration on the previously initiated topics (e.g., Karlskrona Manifesto on Sustainability Design);
- Support for group work and discussion on new topics;
- Kick start new collaborations between the workshop participants
- Publication of a white paper on the common fundamentals of RE for Sustainability;
- Dissemination of the workshop ideas and results at the main conference.

We hope you enjoy the workshop and its proceedings.